



NATIONAL COMMISSION FOR CULTURE AND THE ARTS

PHILIPPINE BIDDING DOCUMENTS

NCCA-ITB No. PB2024-006

PROCUREMENT OF THE PROPOSED CONVERSION OF ROOM A223 TO METROPOLITAN THEATER CONFERENCE ROOM (PB2024-006)

Sixth Edition
July 2020

Preface

These Philippine Bidding Documents (PBDs) for the procurement of Goods through Competitive Bidding have been prepared by the Government of the Philippines for use by any branch, constitutional commission or office, agency, department, bureau, office, or instrumentality of the Government of the Philippines, National Government Agencies, including Government-Owned and/or Controlled Corporations, Government Financing Institutions, State Universities and Colleges, and Local Government Unit. 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 of Republic Act No. 9184.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract or Framework Agreement, as the case may be; (ii) the eligibility requirements of Bidders; (iii) the expected contract or Framework Agreement duration, the estimated quantity in the case of procurement of goods, delivery schedule and/or time frame; 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 Goods 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 Goods. However, they should be adapted as necessary to the circumstances of the particular Procurement 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, Bid Data Sheet, General Conditions of Contract, Special Conditions of Contract, Schedule of Requirements, and Specifications 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 Procurement Project, Project Identification Number, and Procuring Entity, in addition to the 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 Acronyms, Terms, and Abbreviations

ABC – Approved Budget for the Contract.

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.

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])

CDA - Cooperative Development Authority.

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.

CIF – Cost Insurance and Freight.

CIP – Carriage and Insurance Paid.

CPI – Consumer Price Index.

DDP – Refers to the quoted price of the Goods, which means “delivered duty paid.”

DTI – Department of Trade and Industry.

EXW – Ex works.

FCA – “Free Carrier” shipping point.

FOB – “Free on Board” shipping point.

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]).

Framework Agreement – Refers to a written agreement between a procuring entity and a supplier or service provider that identifies the terms and conditions, under which specific purchases, otherwise known as “Call-Offs,” are made for the duration of the agreement. It is in the nature of an option contract between the procuring entity and the bidder(s) granting the procuring entity the option to either place an order for any of the goods or services identified in the Framework Agreement List or not buy at all, within a minimum period of one (1) year to a maximum period of three (3) years. (GPPB Resolution No. 27-2019)

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.

GPPB – Government Procurement Policy Board.

INCOTERMS – International Commercial Terms.

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.

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.

Supplier – refers to a citizen, or any corporate body or commercial company duly organized and registered under the laws where it is established, habitually established in business and engaged in the manufacture or sale of the merchandise or performance of the general services covered by his bid. (Item 3.8 of GPPB Resolution No. 13-2019, dated 23 May 2019). Supplier as used in these Bidding Documents may likewise refer to a distributor, manufacturer, contractor, or consultant.

UN – United Nations.

Section I. Invitation to Bid



NATIONAL COMMISSION FOR CULTURE AND THE ARTS

**INVITATION TO BID FOR THE PROCUREMENT OF THE PROPOSED
CONVERSION OF ROOM A223 TO METROPOLITAN THEATER CONFERENCE
ROOM (PB2024-006)**

1. The **NATIONAL COMMISSION FOR CULTURE AND THE ARTS (NCCA)**, through the CY 2024 National CY 2023 General Appropriation Act (GAA) intends to apply the sum of **Three Million Nine Hundred Seven Thousand Two Hundred Thirty-Two Pesos and Sixty-Seven Centavos Only (Php 3,907,232.67)** being the ABC to payments under the contract for **PROCUREMENT OF THE PROPOSED CONVERSION OF ROOM A223 TO METROPOLITAN THEATER CONFERENCE ROOM (PB2024-006)**. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The **NATIONAL COMMISSION FOR THE CULTURE AND THE ARTS (NCCA)** now invites bids for the above Procurement Project. Delivery of the Goods/Services shall be in accordance with the Delivery Schedule under Section VI Schedule of Requirements. Bidders should have completed, within **Five (5) years** from the date of submission and receipt of bids, 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 a non-discretionary "*pass/fail*" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
 - a. Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.
4. Prospective Bidders may obtain further information from **NATIONAL COMMISSION FOR CULTURE AND THE ARTS (NCCA)** and inspect the Bidding Documents at the address given below from Mondays to Thursdays, 8:00 a.m. to 5:00 p.m.
5. A complete set of Bidding Documents may be acquired by interested Bidders on October 21, 2024 from the given address and website(s) below *upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Five Thousand Pesos (Php 5,000.00)*. The Procuring Entity shall allow the bidder to present its proof of payment for the fees *in person*.
6. The **NATIONAL COMMISSION FOR CULTURE AND THE ARTS (NCCA)** will hold a Pre-Bid Conference on **October 23 at 1:30 PM** at **Room 7D, NCCA Building, Intramuros, Manila** and/or through videoconferencing/webcasting via Zoom which shall be open to prospective bidders.
7. Bids must be duly received by the BAC Secretariat through manual submission at Room 2D BAC Secretariat Office 2nd floor NCCA Building 633 General Luna

St. Intramuros, Manila on or before **November 5, 2024 at 12:00 NN**. 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 14.
9. Bid opening shall be on **November 5, 2024 at exactly 1:30 PM at Room 7D, NCCA Building 633 General Luna St. Intramuros Manila**. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. *The **NATIONAL COMMISSION FOR CULTURE AND THE ARTS (NCCA)** 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 IRR of R.A. No. 9184, without thereby incurring any liability to affected bidder or bidders;*
11. For further information, please refer to:

ROYSTON R. MANRIQUE

BAC Secretary

Room 2-D, 2nd Floor, NCCA Building

633 General Luna St. Intramuros, Manila

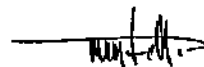
Email address; bids@ncca.gov.ph

Telephone No. 8527-21-92 loc 201

Website: ncca.gov.ph

12. For downloading of Bidding Document, please visit the NCCA website:
<https://ncca.gov.ph/invitation-to-bid/>

Issued this October 14, 2024



MARICHU G. TELLANO
Chairperson, Bids and Awards Committee

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, **NATIONAL COMMISSION FOR CULTURE AND THE ARTS (NCCA)** wishes to receive **Bids for the Procurement of the Proposed Conversion of Room A223 to Metropolitan Theater Conference Room (PB2024-006)**

The Procurement Project (referred to herein as "Project") is composed of Two Lot, the details of which are described in Section VII (Technical Specifications).

2. Funding Information

2.1. The GAA through the source of funding as indicated below for CY 2023 in the amount of **Three Million Nine Hundred Seven Thousand Two Hundred Thirty-Two Pesos and Sixty-Seven Centavos Only (Php 3,907,232.67)**

2.2. NGA, General Appropriations Act CY 2023

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 Manuals 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 **IB** 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 verified and accepted the general requirements of this Project, including 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, and Coercive Practices

The Procuring Entity, as well as the Bidders and Suppliers, 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

a. Foreign ownership exceeding those allowed under the rules may participate pursuant to:

i. When a Treaty or International or Executive Agreement as provided in Section 4 of the RA No. 9184 and its 2016 revised IRR allow foreign bidders to participate;

ii. Citizens, corporations, or associations of a country, included in the list issued by the GPPB, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines;

- iii. When the Goods sought to be procured are not available from local suppliers; or
- iv. When there is a need to prevent situations that defeat competition or restrain trade.

5.2. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project “**Improvement and Conversion works**” the value of which, adjusted to current prices using the PSA’s CPI, must be at least equivalent to:

- a. For the procurement of Non-expendable Supplies and Services: The Bidder must have completed a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC.

5.3. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

6. Origin of 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, subject to Domestic Preference requirements under **IB** Clause 18.

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 twenty percent (20%) 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 **October 23, 2024 at 1:30 PM** at its physical address Rm. 7D, NCCA Building, 633 General Luna St. Intramuros, Manila and/or through videoconferencing/webcasting via Zoom as indicated in paragraph 6 of the **ITB**.

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 **ITB**, 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 VIII (Checklist of Technical and Financial Documents)**.
- 10.2. The Bidder’s SLCC as indicated in **ITB** Clause 2 should have been completed within **Five (5) Years** prior to the deadline for the submission and receipt of bids.

- 10.3. 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. Similar to the required authentication above, 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.

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 VIII (Checklist of Technical and Financial Documents)**.
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the ITB shall not be accepted.

12. Bid Prices

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:
- a. For Goods offered from within the Procuring Entity's country:
 - i. The price of the Goods quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom, or off-the-shelf, as applicable);
 - ii. The cost of all customs duties and sales and other taxes already paid or payable;
 - iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
 - iv. The price of other (incidental) services, if any, listed in the **BDS**.
 - b. For Goods offered from abroad:
 - i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
 - ii. The price of other (incidental) services, if any, as listed in the **BDS**.

13. Bid and Payment Currencies

- 13.1. For Goods that the Bidder will supply from outside the Philippines, the 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.

13.2. Payment of the contract price shall be made in:

- a. Philippine Pesos.

14. Bid Security

14.1. The Bidder shall submit a Bid Securing Declaration¹ 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**.

14.2. The Bid and bid security shall be valid until *120 days*. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

15. 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 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.

16. Deadline for Submission of Bids

16.1. 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 **ITB**.

17. Opening and Preliminary Examination of Bids

17.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **ITB**. 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.

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

18. Domestic Preference

18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

¹ In the case of Framework Agreement, the undertaking shall refer to entering into contract with the Procuring Entity and furnishing of the performance security or the performance securing declaration within ten (10) calendar days from receipt of Notice to Execute Framework Agreement.

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 the 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **IB** Clause 14 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII (Technical Specifications)**, although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as follows:

One Project having several items that shall be awarded as one contract.

- 19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

20. Post-Qualification

- 20.1. 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

- 21.1. 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	
1	The Procuring Entity is National Commission for Culture and the Arts
	<p>Title: Procurement of the Proposed Conversion of Room A223 to Metropolitan Theater Conference Room (PB2024-006)</p> <p>The Procurement Project (referred to herein as "Project") is composed of <i>One (1)</i> Lot, the details of which are described in Section VII (Technical Specifications).</p>
1	The ABC is Any bid with a financial component exceeding this amount Three Million Nine Hundred Seven Thousand Two Hundred Thirty-Two Pesos and Sixty-Seven Centavos Only (Php 3,907,232.67) shall not be accepted.
2.2	Funding Source: The GOP through the source of funding as indicated below for CY 2024 General Appropriations Act;
5.2.	For this purpose, contracts similar to the Project shall be: "Improvement and Conversion Works"
7	<p>The address for submission of bids is at Room 2-D, 2nd Floor, NCCA Building, General Luna St. Intramuros Manila.</p> <p>Deadline for submission of Bids is on November 5, 2024 at exactly 12:00 NN. Late submission will not be accepted.</p>
7.1	<i>Sub-contracting is not allowed.</i>
8	The Procuring Entity will hold a Pre-Bid Conference for this Project on October 23, 2024 at 1:30 PM at Rm. 7D, NCCA Building 633 General Luna St. Intramuros Manila and/or through videoconferencing/webcasting via Zoom
9	Bid opening shall be on November 5, 2024 at exactly 1:30 PM at Rm. 7D, NCCA Building 633 General Luna St. Intramuros, Manila . Bids will be opened in the presence of the bidders' representatives who choose to attend the activity
10.2	<p>The Bidder's SLCC as indicated in ITB Clause 2 should have been completed within Five (5) Years prior to the deadline for the submission and receipt of bids.</p> <p>Bidder shall Include in their bids:</p> <p>a. a copy of Single Largest Completed Contract; and</p> <p>b. Proof of completion; Certificate of Final Acceptance/Completion from the bidder's client.</p>
12	The price of the Goods shall be quoted DDP <i>Intramuros, Manila</i> or the applicable International Commercial Terms (INCOTERMS) for this Project.
14.1	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:

	<p>a. The amount of not less than Seventy-Eight Thousand One Hundred Forty-Four Pesos and Sixty-Five Centavos Only (P78,144.65) or equivalent to two percent (2%) of ABC if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or</p> <p>b. The amount of not less than One Hundred Ninety-Five Thousand Three Hundred Sixty-One Pesos and Sixty-Three Centavos Only (Php 195,361.63) equivalent to five percent (5%) of ABC if bid security is in Surety Bond.</p>
14.2	The Bid and bid security shall be valid until <i>120 days</i>
19.3	The descriptions of the lots or items shall be indicated in Section VII (Technical Specifications) ,
19.5	<p>NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation</p> <p>For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder</p>
20.2	<i>Nothing as follows</i>
21.2	<i>Nothing as follows</i>

Section IV. General Conditions of Contract

Notes on the General Conditions of Contract

The General Conditions of Contract (GCC) in this Section, read in conjunction with the Special Conditions of Contract in Section V and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

Matters governing performance of the Supplier, payments under the contract, or matters affecting the risks, rights, and obligations of the parties under the contract are included in the GCC and Special Conditions of Contract.

Any complementary information, which may be needed, shall be introduced only through the Special 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.

Additional requirements for the completion of this Contract shall be provided in the **Special Conditions of Contract (SCC)**.

2. Advance Payment and Terms of Payment

2.1. Advance payment of the contract amount is provided under Annex "D" of the revised 2016 IRR of RA No. 9184.

2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

3. Performance Security

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder 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 of RA No. 9184.

4. Inspection and Tests

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the **SCC, Section VII (Technical Specifications)** shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

5. Warranty

5.1 In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.

- 5.2 The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

6. Liability of the Supplier

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

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

Section V. Special Conditions of Contract

Notes on the Special Conditions of Contract

Similar to the BDS, the clauses in this Section are intended to assist the Procuring Entity in providing contract-specific information in relation to corresponding clauses in the GCC found in Section IV.

The Special Conditions of Contract (SCC) complement the GCC, specifying contractual requirements linked to the special circumstances of the Procuring Entity, the Procuring Entity's country, the sector, and the Goods purchased. In preparing this Section, the following aspects should be checked:

- a. Information that complements provisions of the GCC must be incorporated.
- b. Amendments and/or supplements to provisions of the GCC as necessitated by the circumstances of the specific purchase, must also be incorporated.

However, no special condition which defeats or negates the general intent and purpose of the provisions of the GCC should be incorporated herein.

Special Conditions of Contract

GCC Clause	
1	<p><i>[List here any additional requirements for the completion of this Contract. The following requirements and the corresponding provisions may be deleted, amended, or retained depending on its applicability to this Contract:]</i></p> <p>Delivery and Documents –</p> <p>For purposes of the Contract, “EXW,” “FOB,” “FCA,” “CIF,” “CIP,” “DDP” and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:</p> <p><i>For Goods supplied from abroad, state:</i> “The delivery terms applicable to the Contract are DDP delivered to (PHLGOH) ODED Operations, NCCA Building, 633 General Luna St. Intramuros, Manila . In accordance with INCOTERMS.”</p> <p><i>For Goods supplied from within the Philippines,</i> “The delivery terms applicable to this Contract are delivered to (PHLGOH) ODED Operations, NCCA Building, 633 General Luna St. Intramuros, Manila. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination.”</p> <p>Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).</p> <p>For purposes of this Clause the Procuring Entity’s Representative at the Project Site is Mr. Manuel Agustin Z. Singson Delivery schedule shall be coordinated to Mr. Singson at least Three working days before the intended delivery date.</p> <p>Incidental Services –</p> <p>The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements:</p> <ol style="list-style-type: none"> a. performance or supervision of on-site assembly and/or start-up of the supplied Goods; and b. performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract.
	<p>The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.</p> <p>Spare Parts –</p> <p>The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:</p>

	<ol style="list-style-type: none"> 1. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and 2. in the event of termination of production of the spare parts: <ol style="list-style-type: none"> i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested. <p>The spare parts and other components required are listed in Section VI (Schedule of Requirements) and the costs thereof are included in the contract price.</p> <p>The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of <i>[indicate here the time period specified. If not used indicate a time period of three times the warranty period]</i>.</p> <p>Spare parts or components shall be supplied as promptly as possible, but in any case, within <i>[insert appropriate time period]</i> months of placing the order.</p>
	<p>Packaging –</p> <p>The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods’ final destination and the absence of heavy handling facilities at all points in transit.</p> <p>The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.</p> <p>The outer packaging must be clearly marked on at least four (4) sides as follows:</p> <p>Name of the Procuring Entity Name of the Supplier Contract Description Final Destination Gross weight Any special lifting instructions Any special handling instructions Any relevant HAZCHEM classifications</p>
	<p>A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.</p> <p>Transportation –</p>

	<p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.</p> <p>Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.</p>
	<p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.</p> <p>The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.</p> <p>Intellectual Property Rights –</p> <p>The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.</p>
2.2	The term of payment shall be made one-time upon full delivery.
4	The inspections and tests that will be conducted are: <i>[Indicate the applicable inspections and tests]</i>

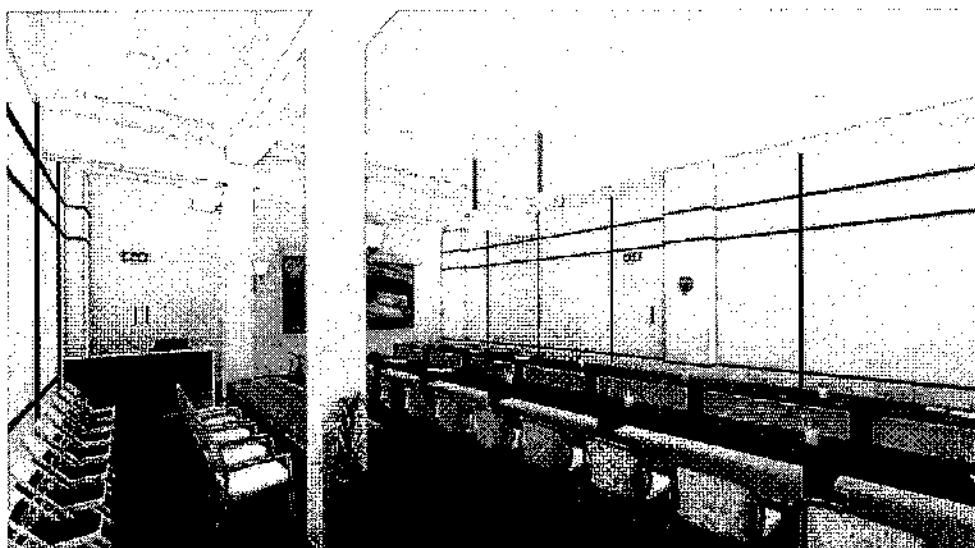
Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item Number	Description	Quantity	Total	Delivered, Weeks/Months
Lot 1	"Procurement of the Proposed Conversion of Room A223 to Metropolitan Theater Conference Room (PB2024-006)"	1	1	Procurement of the Proposed Conversion of Room A223 to Metropolitan Theater Conference Room. Period Implementation: Ninety (90) Calendar Days
	Total	1	1	
Nothing as Follows				
0				

Section VII. Technical Specification

TECHNICAL SPECIFICATIONS



METROPOLITAN THEATER

Padre Burgos corner Arroceros St.,
Plaza Lawton, Manila

Project Name: Proposed Conversion of Room A223 to
Metropolitan Theater Conference Room

SITE CONSTRUCTION (UTILITIES)

AND BUILDING WORKS

DIVISION 1 – GENERAL REQUIREMENTS

SECTION 01500 – GENERAL REQUIREMENTS

1.1 SCOPE OF WORK

This section shall include the mobilization and demobilization of Contractor's equipment, materials and employees to the site; construction and maintenance of Procuring Entity's office and facilities; compliance with the contract requirements, and provision for the health/safety and environmental protection during the entire project duration.

This section shall include the furnishing of labor, materials, transportation, tools, supplies, appurtenances, and equipment including but not limited to lighting and audio as well as other necessary installation to satisfactorily complete the construction of the proposed project.

1.2 MOBILIZATION AND DEMOBILIZATION

The Contractor upon receipt of the Notice-to-Proceed shall immediately mobilize and transport his equipment, materials and labor forces to the site and demobilize or remove the same at the completion of project and level/ clear the site acceptable to the procuring entity.

Mobilization and Demobilization are incidental to other items of work and will not be measured for separate payment.

1.3.5 Security

The Contractor shall make sure that equipment and ongoing work are not damaged during nights; holidays and other periods when work is not executed; and during working hours. The Contractor shall take ample precautions against fire by keeping away flammable materials, and ensure that such materials are properly handled and stored. Fires shall not be allowed within the area of construction, except when permitted by the procuring entity.

1.3.6 Disposal Area

Except for the items which are designated to be retained as mentioned under the proposed location of disposal area shall be at the site designated by the Procuring Entity. It is the responsibility of the Contractor to dispose of all construction debris off site and be considered in the preparation of his proposal.

1.3.7 Contractor's Maintenance Staff and Personnel to be assigned to the Project:

Personnel to be Assigned to Assist the Procuring Entity

The Contractor shall at all times during the duration of the contract provide for the use of the Procuring Entity all equipment, instruments and apparatus, all information and records and at least 1 qualified Technical Personnel (Project-in-Charge), chainmen and laborers required by the Procuring Entity for inspecting and measuring the works.

1.4.3 Photographs

The Contractor shall **provide record progress photographs** (at least 20-30 photographs per month) taken as, when and where directed by the Procuring Entity/Authorized representative. The photographs shall be sufficient in number with specific date markings to record the exact progress of the works. The Contractor shall provide one proof print of each photograph taken, and the electronic file and three (3) copies, in 3R size and printed on a clear paper, of any of the photographs selected as progress photographs. The photographs retained by the Procuring Entity will become the property of the Procuring Entity and the Contractor shall supply approved albums to accommodate them. Two copies are to be signed by the Contractor, one of which will be signed by the Procuring Entity and returned to the Contractor.

1.4.4 General Operation and Maintenance Manual

The Contractor shall produce and supply to the Procuring Entity **two (2) hard copies and digital copies (Microsoft Word and Microsoft Excel)** of an operation and maintenance manual on the target completion date for the contract.

No separate payment for the Operation and Maintenance Manual as this is deemed to be included as incidental to other items of work.

1.4.5 As-Built Drawings

The Contractor shall produce and supply to the Procuring Entity **two (2) hard copies of a full set of "As-Built" drawings at A1 size**. The Procuring Entity may allow up to 30 days after the target completion date for delivery of some of these drawings, but otherwise they shall be due on the completion date. These shall include correctly amended versions of all Contract Drawings to freely and accurately describe the As-built condition of all elements of the project within the Contractor's scope of work, to the approval of the Procuring Entity. All drawings shall be clearly marked "AS BUILT".

No separate payment for the As-built Drawings as this is deemed to be included as incidental to other items of work.

1.5 MISCELLANEOUS ITEMS FOR THE PROCURING ENTITY'S QUARTERS

1.5.1 PAYMENT

- a) For all work executed or goods, materials, or services supplied by the Contractor under lump sum items, the quantities as determined above shall be paid for at the appropriate contract lump sum unit price as indicated in the Bid Schedule.
- b) The quantities determined as provided above for the maintenance of the combined field office, and quarter, the provision of transport for the Procuring Entity, the provision of operation and maintenance of the Procuring Entity transport and the provision of progress photographs, shall be paid for at the appropriate contract unit price for each of the particular pay item shown in the Bid Schedule.
- c) The quantities determined as provided above of the provision of furniture, consumable stores, Assistant to the Procuring Entity/Authorized representative, Photographs, Health and Safety and Environmental Compliance shall be paid for at actual cost plus a fixed eight percent (8%) to cover profit as a separate item.
- e) The requirement that the Procuring Entity ship of facilities shall revert to the Procuring Entity shall not apply if such facilities are provided on rental basis under terms approved by the Procuring Entity.

1.6 COMPLIANCE WITH CONTRACT REQUIREMENTS

1.6.1 Control of on Site Construction

Prior to the start of any definable feature of the work, the Contractor must perform the necessary inspection to include as follows:

- a) Review of Contract Documents to make sure that materials, equipment and products have been tested, submitted and approved.

- b) Physical examination of materials and equipment to assure its conformity to the specifications, plans, shop drawings and other data.
- c) As soon as the work has been started the Contractor shall conduct an initial inspection to check and review the workmanship in compliance with the contract requirements for a particular item of work.
- d) The Contractor shall perform these inspections on a regular basis to assure continuing compliance with the contract requirements until completion of a particular type of work.

1.6.2 Pre Construction Meetings

Prior to the start of construction, Contractor's material men or vendors whose presence are required, must attend pre construction meetings as directed for the purpose of discussing the execution of work.

1.6.3 Progress Meetings

Progress meetings shall be called upon by the following for the purpose of discussing the implementation of the work:

- a) When called upon by the Procuring Entity for the purpose of discussing the execution of work. Contractor's material men or vendors whose presence is necessary or requested must attend progress meetings. Each of such meetings shall be held at the time and place designated by the Procuring Entity or his representative. Decisions and instructions agreed on these meetings shall be binding and conclusive on the contract. Minutes of this meeting shall be recorded and a reasonable number of copies shall be furnished to the Contractor for distribution to various materials men and vendors involved.
- b) The Contractor may also call for a progress meeting for the purpose of coordinating, expediting and scheduling the work. In such meetings, Contractor's material men or vendors, whose presence is necessary or requested are required to attend.

1.6.4 Progress Reports

The Contractor shall faithfully prepare and submit progress reports to the Procuring Entity every 30 days after the start of the project up to its completion, showing the work completed, work remaining to be done, the status of construction equipment and materials at the site.

1.6.5 Survey Data

The Contractor shall layout his work from established based lines and bench mark indicated in the drawing and shall be responsible for all measurement in connection therewith. The Contractor shall furnish, at his own expense, all stakes, templates, platforms, equipment, tools, materials and labor as may be required in laying out any part of the work, out of established baselines and benchmarks. It shall be the responsibility of the Contractor to maintain and preserve all stakes and other marks until he is authorized to remove them. If such marks are destroyed by the Contractor through his negligence prior to the authorized removal, they shall be replaced at the expense of the Contractor.

1.6.6 Shop Drawings

The Contractor shall submit and furnish shop drawings and samples accompanied with transmittal forms in accordance with the provision of the Conditions of Contract. The term "Shop Drawings" as used herein shall be understood to include detailed design calculations, construction drawings, lists, graphs, and others.

- a) Transmittal forms shall be filled out in type-written or ink with no alterations or interlineations unless initiated and dated before submittal. Shop drawings shall be submitted the same size as the contract drawings when practicable, but in no case it shall exceed dimension of the contract drawings. The Contractor shall make a preliminary check of all shop drawings for compliance with the contract documents and he shall stamp each print with a statement of compliance with the

requirements. The Contractor may authorize his supplier to deal directly with the Procuring Entity with regard to shop drawings, however, ultimate responsibility for accuracy and completeness in the submittal shall remain with the Contractor.

- b) The said shop drawing and transmittal shall be submitted at a time sufficiently early, to allow review of the same by the Procuring Entity and to accommodate the rate of construction progress required under the contract. The contractor shall submit print copies of shop drawings with transmittal forms, and copies of brochures with transmittal forms, as required by the Procuring Entity.
- c) Any shop drawings and samples, submitted not accompanied by transmittal forms or where all applicable items on the forms are not completed will be returned for re-submittal. The Procuring Entity who will check and evaluate mentioned shop drawings will retain a print copy for his file and return the rest to the Contractor with notation. Returned shop drawings marked "No Exceptions Taken" or "Make Corrections Noted", means formal revision of said drawings will not be required. If it is marked "Amend-Resubmit" or "Rejected-Resubmit", the Contractor shall revise said drawing and shall submit revised drawing to the Procuring Entity.
- d) The Procuring Entity shall process the submission and indicate the appropriate action on the shop drawings and transmittal forms. Construction of an item shall not commence before the Procuring Entity has reviewed the pertinent shop drawing and returned it to the Contractor, marked as mentioned above. Revisions indicated on shop drawing shall be considered as changes necessary to meet the requirements of the contract drawings and specifications, and shall not be taken as the basis of claims for extra work. The Contractor shall have no claim for damages or extension of time due to any delay, resulting from having Contractors make the required revisions, unless reviewed by the Procuring Entity was delayed beyond a reasonable period of time and unless the Contractor can establish that such delay in revision resulted in delay of the project.

Re-submittal procedure shall follow the same procedure as the initial submittal.

1.6.7 Construction Photographs

The Contractor shall take photographs during the progress of the work indicating the date taken, all taken where directed by the Procuring Entity. At the completion of the project final photographs shall be taken by the Contractor as directed by the Procuring Entity. Two prints of each photograph shall be sent to the Procuring Entity. The photographs shall be neatly labeled, dated, and identified in a little box in the lower right hand corner, showing the date of exposure, project name, location and direction of view.

All electronic files shall be retained by the Contractor until completion of the work at which time they shall become the property of the Procuring Entity.

1.6.8 Cleaning-up

The Contractor shall at all times keep the construction area including storage area used by him free from accumulations of waste material or rubbish. Upon completion of construction, the Contractor shall leave the work and premises in clean, neat and workmanlike conditions satisfactory to the Procuring Entity.

1.6.9 Documents to be Submitted

The following documents shall be submitted by the Contractor to the Procuring Entity and the Procuring Entity prior to final payment and before issuance of final certificate of payment in accordance with the provisions of the conditions of contract.

- a) The guarantee required by the Conditions of Contract and any other extended guarantees stated in the technical sections of the specifications.
- b) A set of As-Built drawings shall be submitted showing an accurate record of changes or deviations from the contract documents and the shop drawings indicating the work as actually installed. Records shall be arranged in order, in accordance with the various sections of the specifications and properly indexed with certifications of endorsement thereof, that each of the revised prints of the drawings and specifications are complete and accurate. Prior to the application for final payment, and as a condition to its approval by the Procuring Entity and the Procuring Entity,

the Contractor shall deliver the records, drawings, and specifications arranged in proper order, indexed and endorsed as herein specified.

1.6.10 Protection of existing Historic Property.

Contractor shall take necessary precautions to avoid damage to existing historic items that are to remain in place, to be reused, or to remain the property of the Procuring Entity. Items damaged by the Contractor shall be repaired and restored to original conditions, or replaced, as approved by the Procuring Entity. The Contractor shall coordinate the work of this section with all other works and shall construct and maintain shoring, bracing and supports, as required.

1.7 OTHER REQUIREMENTS

1.7.1 Construction Health and Safety a)

Health and Safety Plan

Within one month of his arrival on the project site, the Contractor shall submit a Health and Safety Plan/Program with operational details of his proposals to the Procuring Entity for prior approval.

b) Accident Prevention Officer; Accidents

Due precautions shall be taken by the Contractor, at his own cost, to ensure the safety and protection against accidents of all staff and labor engaged on the Works, local residents in the vicinity of the Works, and the public traveling through the Works.

The Contractor shall have on his staff on Site a designated Safety Officer qualified to promote and maintain safe working practices. This Safety Officer shall have authority to issue instructions and shall take protective measures to prevent accidents, including but not limited to, the establishment of safe working practices and the training of staff and labor in their implementation.

The Contractor shall be responsible for all costs including medical treatment, transport, accommodation etc. incurred by any member of the public or his labor force whether on direct contract or subcontract as a result of injuries or illness arising from the execution of the Works.

c) Protective Clothing and Safety Equipment

The Contractor shall, at his own expense, provide protective clothing and safety equipment to all staff and labor engaged on the Works to the satisfaction of the Procuring Entity. Such clothing and equipment shall include, at a minimum, high visibility vests for workers, protective footwear, dust masks, and otherwise as appropriate to the job on hand and to the Procuring Entity's satisfaction.

d) Supply of Drinking Water, Sanitation

The Contractor shall provide on the Site at his expense, an adequate supply of drinking water for all staff and labor engaged on the Works, together with sanitary facilities (portable toilets or latrines), to the satisfaction of the Procuring Entity. The Contractor shall thoroughly disinfect and fill all latrine pits, sumps and trenches when no longer required.

Payment of the provision of construction safety and health shall be full compensation for fully satisfying the requirement of this item to the approval of the Procuring Entity.

1.8 ENVIRONMENTAL AND SOCIAL SAFEGUARDS

The following Environmental Protection and Social Safeguard Clauses are to be read in conjunction with the remainder of the Contract Documents.

1.8.1 General Provisions

The Contractor shall take all necessary measures and precautions to ensure that the execution of the Works and all associated operations are carried out.

a) Organization and Staffing

(1) List of Workers.

The Contractor shall submit the list of Workers identifying (by job title and by the name of the individual).

(2) Notification of Accidents

The Procuring Entity will be notified immediately of any accidents which occur whether on-site or off-site in which the Contractor, his personnel or construction area, or those of any subcontractors are directly or indirectly involved and which result in any injuries to any persons.

Such initial notification may be verbal and shall be followed by a written comprehensive report within 24 hours of the accident.

1.8.4 Environmental Control Provisions

a) Environmental Protection during Construction

The project area can experience inclement weather – fog, heavy rainfall, monsoons and earthquakes. It will be deemed that the Contractor is familiar with these conditions and has formulated his Works Program considering possible loss of time due to these causes, and it shall be the obligation of the Contractor to revise his program and enhance his construction efforts as necessary to ensure timely completion of the work schedule for each working season.

b) Prevention of Air and Water Pollution

The Contractor shall ensure that his activities do not result in any contamination of land or water by polluting substances. He shall implement physical and operational measures such as earth bunds of adequate capacity around fuel, oil and solvent storage tanks and stores, oil and greases traps in drainage systems from workshops, vehicle and washing facilities and service areas, the establishment of sanitary solid and liquid waste disposal systems, the maintenance in effective condition of these measures, the establishment of emergency response procedures for pollution, events, and dust suppressions, all in accordance with normal good practice and to the satisfaction of the Procuring Entity.

Should any pollution arise from the Contractor's activities including the improper deposition of sediment he shall clean up the affected area immediately at his own

cost and to the satisfaction of the Procuring Entity, and shall pay full compensation to any affected parties.

c) Noise Level Control

The Contractor shall control noise level from his construction operations to satisfy the Noise Standards of the "Rules and Regulations of the National Pollution Control Commission" (1978) for general areas as shown:

Noise standards in general areas are shown in the table:

MAXIMUM VALUES OF AIR POLLUTANTS

Category of Area ¹	Daytime ²	Morning ³ and Evening ⁴	Night Time ⁵
AA	50dB	45dB	40dB
A	55	50	45
B	65	60	55
C	70	65	60
D	75	70	65

Legend:

- AA - A section or contiguous area which requires quietness, such as an area within 100 meters from school sites, hospitals, and special homes for the aged.
 - B - A section or contiguous area which is primarily used for residential purposes.
 - C - A section primarily reserved as a light industrial area.
 - D - A section which is primarily reserved as a heavy industrial area
- Daytime² - 9:00 a.m. to 6:00 p.m.
Morning³ - 5:00 a.m. to 9:00 p.m. Evening⁴ - 6:00 a.m. to 10:00 p.m. Night Time⁵ - 10:00 p.m. to 5:00 a.m.

Noise control measures shall include:

- Selecting construction equipment used or the modes of operation adopted that produce less noise. For instance, rotating or impacting machines can be based on anti-vibration mountings. Noisy construction equipment or internal combustion engines must be fitted with silencers.
- Proper scheduling so that noisy construction activities will be done at daytime.
- Providing earmuffs to construction workers exposed to noise.
- Monitoring noise levels during construction.
- Management of pedestrian traffic during construction to produce a smooth flow instead of a noisier stop-and-start flow.
- The source can be enclosed to insulate or absorb the sound.

e) Disposal of all Rubbish, Demolition Waste etc.

The Contractor shall be entirely responsible for and ensure the safe and hygienic collection, transportation and disposal of all rubbish, tires, liquid/solid waste material off-site arising from construction activities and from site offices, canteen and etc., and for disposal of demolition waste that cannot be recycled. Fires and burning of rubbish and waste on the Site will not be permitted, nor the burying of rubbish and waste. Particular care shall be taken in identification and safe disposal of hazardous materials (if any).

f) Fire Prevention

In addition to the provision of adequate fire-fighting equipment at this area of work and other facilities to the satisfaction of the Procuring Entity, the Contractor shall take all precautions necessary to ensure that no vegetation along the line of the area of the permanent works is affected by fires arising from the execution of the Works. These precautions shall include the prevention of fires for any purposes in the vicinity of the Works except where expressly permitted by the Procuring Entity.

In the event of any other fire emergency in the vicinity of the Works, the Contractor shall render assistance to the civil authorities to the best of his ability.

g) Relationships with other building occupants and authorized entities

In siting and operating his facilities and in executing the Works, the Contractor shall, at all times, and to the extent possible, minimize the impact of his activities on other building occupants and offices in the vicinity. He shall liaise closely with concerned building occupants and, if so directed, shall attend additional meetings arranged by the Procuring Entity to resolve issues and claims and minimize negative impacts in the duration of the project.

Any problems arising from his operations and which cannot be resolved by the Contractor shall be referred to the Procuring Entity. The Contractor shall be responsible for any compensation due to reinstatements necessary with respect to any damage caused by him to areas outside the scope of the project and no separate payment will be made in this regard.

h) Privately or Community-Owned Services and Structures

The Contractor shall take all necessary precautions to ensure that no public or private services, utilities or similar facilities are damaged or interrupted by the Works. These precautions shall include but not be limited to liaison with public and private service providers, local government units, and private Procuring Entities; a condition survey of all affected services; provision of a satisfactory alternative service while the works are carried out; and reinstatement of a satisfactory permanent facility after completion of the Works in each area.

No service or utilities shall be disturbed or cut before arrangements have been made for a satisfactory alternative service, or the Contractor has obtained agreement in writing from the service provider or Procuring Entity to a temporary cessation of service.

Not less than 14 days before commencing site clearance on any particular section of the Project in accordance with his agreed Program of Work, the Contractor shall supply to the Procuring Entity for his prior approval, a copy of his condition survey of all utilities and services to be affected, copies of any agreements with service providers and Procuring Entities, his plans for providing temporary service, and his plans for reinstating permanent service following construction of the Works.

Provision of temporary and permanent services shall be to at least the pre-existing level of service and to the satisfaction of the Procuring Entity.

i) Water Supply for Construction

The Contractor shall make the necessary arrangements, at his own expense, for water supply for construction and other purposes. Only clean water, free from deleterious materials and appropriate quality for its intended use, shall be used. In providing water, the Contractor shall ensure that the rights of and supply to existing users are not affected either in quality or timing.

In the event of a dispute over the effect of the Contractor's arrangement on the water supply of others, the Procuring Entity shall be informed immediately and shall instruct the Contractor as to appropriate remedial actions to be undertaken at his expense.

1.9 PERMITS AND LICENSES

The Contractor shall secure all permits and licenses, and pay all charges, taxes and fees and shall give all notices necessary and incident to the due and lawful execution of the Works.

The Contractor shall also pay all tonnage and other royalties, rent and other payments or compensation, if any for getting stone, sand, gravel or other materials required for the Temporary Works or any of them.

The Contractor shall make application and be entirely responsible for obtaining the Occupancy Permit, and pay at his own expense for all processing fees and the like.

The Contractor shall only provide legwork for the application of permanent power. However, should there be expenses incurred, it will be shouldered by the Procuring Entity.

The requirements under this Section are incidental to other items of work and will not be paid separately unless otherwise specified in the Bill of Quantities.

1.10 INTERFERENCE WITH WORKS

The Contractor shall not interfere in any way with any existing works, whether the property of the Employer or of a third party and whether the position of such works is indicated to the Contractor by the Procuring Entity or not, except where such interference is specifically described as part of the Works, either in the Contract or in the Procuring Entity's instructions. He shall join his work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

APPENDIX B

(see attached COA Circular No. 2013-004 consisting of 6 pages)



Republic of the Philippines
COMMISSION ON AUDIT
Commonwealth Avenue, Quezon City, Philippines

CIRCULAR

No. : 2013-004

Date: JAN 30 2013

TO : All Heads of Departments, Bureaus, Offices, Agencies and Instrumentalities of the National Government; Heads of Local Government Units (LGUs); Managing Heads of Government-Owned and Controlled Corporations (GOCCs); COA Assistant Commissioners, Directors, Supervising Auditors, Audit Team Leaders, and All Others Concerned

SUBJECT : Information and Publicity on Programs/Projects/Activities of Government Agencies

1.0 Rationale

- 1.1 Subject to reasonable conditions prescribed by law, the State adopts and implements a policy of full disclosure of all transactions involving public interest (Section 28, Article II, 1987 Philippine Constitution) and recognizes the right of the people to information on matters of public concern (Section 7, Article III, 1987 Philippine Constitution).
- 1.2 It is also the declared policy of the State that all resources of the government shall be managed, expended or utilized in accordance with law and regulations, and safeguarded against loss or wastage through illegal or improper disposition, with a view to ensuring efficiency, economy and effectiveness in the operations of government. The responsibility to take care that such policy is faithfully adhered to rests directly with the chief or head of the government agency concerned (Section 2, Presidential Decree No. 1445).
- 1.3 The Commission on Audit has the exclusive authority to promulgate accounting and auditing rules and regulations, including those for the prevention and disallowance of irregular, unnecessary, excessive, extravagant, or unconscionable expenditures, or uses of government funds and properties (Section 2[2], Article IX-D, 1987 Philippine Constitution).

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2.0 General Guidelines

Consistent with the constitutional and legal mandate of the Commission on Audit to promote good governance through transparency and accountability; to encourage public participation therein; and to secure the right of the people to information on matters of public concern at the least possible cost on public funds or most economically effective means, the following guidelines are hereby restated with amendments and updated to cover all government projects/programs/activities:

- 2.1 At the beginning of the year, all government agencies shall provide their respective assigned Supervising Auditors (SAs) and Audit Team Leaders (ATLs) with a list of all on-going government projects/programs/activities ("PPA") and those that are to be implemented during the year. The list shall include the project name; implementing unit, office or division if it is not the agency as a whole; brief description of the PPA; contractor or supplier, if any; mode of procurement; funding source; cost or approved budget; project duration including start and completion dates; and location. Other information on the PPA may be requested by the SA or ATL anytime for audit purposes.
- 2.2 Notification to the public and other forms of announcement and/or publicity for or otherwise relating to the PPA shall be made at the least possible cost, taking into account that the nature of and purposes of such notification, announcement and/or publicity, is to inform the public of the essential features/elements of the PPA. Accordingly,
 - 2.2.1 All government agencies, or the implementing unit, office or division as the case may be, shall notify the public of their PPA through the posting of relevant information detailed in Item 2.1 above on signboards, blackboards, whiteboards, posters, tarpaulins, streamers, electronic boards or similar materials (collectively, "Signboards") not exceeding 3 feet by 2 feet, in conspicuous places within the agency premises, and in the venue where the PPA is located or carried out. This requirement applies to all government PPAs, regardless of amount or source of funds.
 - 2.2.2 If the PPAs are implemented through the assistance of foreign development agencies, the name and logo of such development agency/ies shall be prominently printed in the signboards and public notices.
 - 2.2.3 For infrastructure projects, a tarpaulin signboard must be suitably framed for outdoor display at the project location, and shall be posted as soon as the award has been made. The design and format of the tarpaulin, as shown in Annex "A," shall have the following specifications:

Tarpaulin, white, 8 ft x 8 ft
Resolution: 70 dpi
Font : Helvetica
Font Size: Main Information ~ 3"
Sub-Information ~ 1"
Font Color: Black





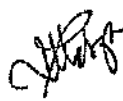
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- 2.2.4 For non-infrastructure PPAs, such as but not limited to medical and dental missions; distribution of relief goods and services; feeding programs; sports, athletic, and cultural/social events; employment and livelihood fairs and training; workshops and seminars; office anniversary celebrations, a tarpaulin signboard similar to Item 2.2.3 above may be displayed at the project site, but not to exceed 3 ft by 4 ft. Project Details may be omitted for PPA not exceeding 5 days; however, the start and end dates must be specified.
- 2.2.5 The cost of the public notices referred to above shall be charged against the project cost, provided such notices conform to the specifications set forth herein.
- 2.2.6 The display and/or affixture of the picture, image, motto, logo, color motif, initials or other symbol or graphic representation associated with the top leadership of the project proponent or implementing agency/unit/office, on Signboards, is considered unnecessary. This rule shall also apply to Signboards displaying and/or affixed with the picture, image, motto, logo, color motif, initials or other symbol or representation associated with Members of the Congress, Executive Officials or Local Officials where the PPA is implemented wholly or partially through the Priority Development Assistance Fund (PDAF) of Congress or through other forms of government fund transfers from the Executive Department or LGUs.
- 2.2.7 The display and/or affixture of the items mentioned in Item 2.2.6 above on equipment and facilities; vehicles of all type, whether engine, manpower or animal driven; wrappers, containers, and similar items; tokens, souvenir items, calendars, ballpens, T-shirts or other apparel, and other publicity materials relating to any PPA, is also considered unnecessary.
- 2.2.8 No election related expense or propaganda, even if lawful under existing laws and the rules and regulations of the Commission on Elections, shall be charged against public funds.

3.0 Reporting and Monitoring

- 3.1 The Head of Agency shall inform its SA and ATL within ten (10) days after the award of the infrastructure project or before the start of the program/activity that the appropriate project signboards and/or public notices are already posted, and the SA and ATL shall validate the same.
- 3.2 Based on the data sourced from the monthly monitoring report prepared by the agency and verified by the Technical Audit Specialist of this Commission, the Project Status (in Annex "A") should be maintained as current as possible and updated, using the following schedule:

Contract Duration	Frequency of Verification	Interval of Verification (% of Work Accomplished)
90 days or less	2 times	50% and 100%
91-180 days	3 times	30%, 50% and 100%
181-240 days	4 times	25%, 50%, 75% and 100%
241-360 days	5 times	20%, 40%, 60%, 80% and 100%
361-720 days	7 times	15%, 30%, 45%, 60%, 75%, 90% and 100%
More than 720 days	10 times	Every 10%

- 3.3 The ATLs/SAs shall submit to their respective Regional/Cluster Directors a Quarterly Report of the Publicized Government Projects/Programs/Activities for consolidation and transmittal to the Office of the Chairperson, this Commission, for monitoring compliance, using the form prescribed in Annex "B."
- 3.4 The public is encouraged to report any violation of this Circular by sending a text message to the COA Citizen's Desk at cell phone number 0915-5391957 or email at citizensdesk@coa.gov.ph.

4.0 Penalty Clause


All expenses incurred in violation of this Circular shall be disallowed in audit. Failure of the concerned agency or COA officials to comply with any of the provisions of this Circular shall be subject of administrative disciplinary action provided under Section 127 of Presidential Decree No. 1445 without prejudice to the filing of a criminal action, if warranted by existing laws.


5.0 Saving Clause


This Circular supersedes COA Memorandum Nos. 87-492 dated July 27, 1987; 88-492A dated January 6, 1988; and 98-016 dated June 16, 1998. All other issuances inconsistent herewith are hereby repealed or amended accordingly.

6.0 Effectivity

This Circular shall take effect after fifteen (15) days from publication in a newspaper of general circulation.


MA. GRACIA M. PULIDO TAN
 Chairperson


JUANITO E. ESPINO, JR.
 Commissioner


REIDI L. MENDOZA
 Commissioner

Name of Agency
Business Address

Project: _____ Cost: _____
Location: _____ Fund Source/s: _____

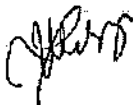
Implementing Agency/ies: _____
Development Partner/s: _____
Contractor/Supplier: _____
Brief Description of Project: _____

Project Details:

Project Date			Project Status				Remarks
Duration	Started	Target Date of Completion	Percentage of Completion	As of (Date)	Cost Incurred to Date	Date Completed	

For particulars or complaints about this project, please contact the Regional Office or Cluster which has audit jurisdiction on this project:

COA Regional Office No./Cluster: _____
Address : _____
Contact No. : _____ or Text COA Citizen's Desk at 0915-5391957



DIVISION 2 – WORK AREA CLEARING

SECTION 02000 - WORK AREA CLEARING

1.1 DESCRIPTION

This Section shall consist of clearing, removing and disposing all unnecessary objects and debris as designated in the Contract, except those that are designated to remain in place or are to be removed in consonance with other provisions of this Specification. The work shall also include the preservation from injury or defacement of all objects designated to remain.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.1 GENERAL

The Procuring Entity shall establish the limits of work. The Contractor shall preserve all objects designated to remain.

PART 4 – MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENTS

Contractor shall make use of the bid documents to identify the objects to be retained and consult with the Procuring Entity for confirmation.

4.2 BASIS OF PAYMENT

Payment will be made in accordance with the Bill of Quantities.

- End of Section -

SECTION 02250 - TERMITE PROOFING

PART 1 - GENERAL

1.1 SCOPE OF WORK

The Contractor shall hire the services of an approved or accredited pesticide company to furnish all labor, materials, equipment, tools, and services to complete the termite proofing work hereinafter described.

1.2 EXAMINATION OF SITE

Conduct general survey and thorough inspection of the entire premises to determine location of other unseen termite infestations.

PART 2 - PRODUCTS

2.1 CHEMICALS AND EQUIPMENT

a. Dilution ratings: according to manufacturer's recommendation.

b. Dilutions shall be done only at the jobsite in the presence of the project supervisor. The strength of the mixture or solutions shall be made uniformly by thorough sippings.

c. Application of solution shall be done by means of POWER SPRAYERS ONLY, fitted with FLOW METERS for accurate monitoring of actual quantity used.

2.2 APPROVED BRANDS/MANUFACTURERS

For Wood Treatment, use only Deltamethrin Concentrate or approved equal.

For Entry/Exit Points in Cracks and Crevices, Outlets and Others, use only Permethrin or approved equal.

The pest control Contractor shall submit the specified chemicals in their original manufacturer sealed containers to the Project Inspector for inspection, sampling and safekeeping. Containers with broken seals shall not be accepted.

PART 3 - EXECUTION

3.1 CONTRACTOR LICENSE AND CERTIFICATION REQUIREMENT

The pesticide company should have a valid license from Fertilizer and Pesticide Authority (FPA) of the Department of agriculture.

All pesticides shall be applied by or under the direct supervision of a certified pesticide applicator.

3.2 ENVIRONMENTAL AND SAFETY CONDITIONS

Formulation, treatment, storage and disposal of pesticide shall be in accordance with label directions. Water for formulation shall be drawn only from site(s) designated by the Project Inspector, and the filling hose shall be fitted with a backflow preventer meeting local plumbing codes/standards. The filling operation shall be under the direct and continuous observation of the Project Inspector to prevent overflow.

3.3 APPLICATION AND TREATMENT

(1) Strategic drilling and spraying of termiticide solution on infested areas and possible entry and exit points such as wall cracks and crevices.

(2) Perimeter drilling, 20 mm diameter holes and 50 cm apart at 75mm distance from the inside/outside flooring of the building with the use of portable automatic roto- hammer drill as far as safety will allow.

- (3) Application by pressure of Termiticide Solution into each drilled hole at the rate of five (5) liters per linear meter guided by a flow meter gauge to ensure the right volume of solution recommended. Sub-slab injector will be used, driven by a power sprayer to spread the solution effectively.

Do not apply pesticide during or immediately following heavy rains, or when conditions will cause run-off and create an environmental hazard.

- (4) After the completion of the treatment, all drilled holes will be patched-up with a cement matching color and material of the floor.
- (5) For critical areas, areas that are not recommended for spraying (liquid application), dusting will be used. Spraying/dusting inside perimeter including partition walls, wooden structures (i.e. post, beams, trusses, ceiling joists, partitions), cabinets, bookshelves, floors, cracks and crevices on woods where termites may pass through.
- (6) Spot spraying will be done on areas where infestation of termites has been recorded and areas that are possible areas for termite infestation.
- (7) Destruction and treatment of every termite mounds within the premises if there is any.

3.4 ARCHITECT'S APPROVAL

The Contractor shall submit to the Architect for approval, a copy of the pest control company's proposal and chemical application, method/procedure including the description of the equipment to be used before start of work.

3.5 INSPECTION AND TEST

Sampling shall be done only in the presence of the Project Inspector.
Amount of sample to be taken: From Original container - 50 cc each.

3.6 CONTRACTOR'S GUARANTEE

Upon completion of work, and on a condition for final acceptance, the Contractor shall submit to Procuring Entity a written guarantee from the pesticide company which shall provide that:

- a. The Contractor shall thereby warrant all works in pest control that all materials and workmanship applied under the contract are of good quality in every respect and will remain as such for not less than one (1) year.
- b. Should there be termite infestation within the specified period, the Contractor thereby agrees to do all necessary repairs on the damaged portions of the buildings caused by termite infestation to the satisfaction of the Procuring Entity, at the Contractor's expense. Retreatment shall also be done by the Contractor after completion of the repairs and at his expense. Such repairs and corrective works shall be done within five (5) days after a written notice from the Procuring Entity has been received by the Contractor.
- c. The pesticide company shall contact the Procuring Entity with a written notice to conduct inspection of the area and surrounding to check any infestation during the guarantee period at least once (1) in every six (6) months. Notice shall be given by the pesticide company to the Procuring Entity in case there is presence of termites in the surroundings.

PART 4 - MEASUREMENT AND PAYMENT

Liquid termite control chemicals or toxicants shall be measured by the actual number of liters used in the cordoning and drenching wood surfaces. The quantity to be paid for shall be determined and accepted by the Procuring Entity.

- End of Section -

DIVISION 3 – WOODS AND PLASTIC

SECTION 06070 - WOOD TREATMENT

PART 1 - GENERAL

1.1 SCOPE

The Contractor shall hire the services of an approved pesticide company to furnish all labor, materials, equipment, tools, and services to complete the wood treatment work hereinafter described.

1.2 EXAMINATION OF THE SITE

Visit the site of work and examine the premises to fully understand existing conditions with respect to the work involved. Inquire from the local authorities, the presence of termites in the vicinity for more information.

PART 2 – PRODUCTS

2.1 CHEMICALS AND EQUIPMENT

- a. Use pyrethrin based insecticide containing deltamethrin.
- b. Dilution ratings: 1 liter of chemical to 100 liters of kerosene.
- c. Dilutions shall be done only at the jobsite in the presence of the project supervisor. The strength of the mixture or solutions shall be made uniformly by thorough sippings. All solutions prepared for treatment shall be used within 24 hours.
- d. Application of solution shall be done by means of sprayers or brushing.
- e. The pest control Contractor shall submit the specified chemicals in their original manufacturer-sealed containers to the Architect for inspection, sampling and safekeeping. No container with a broken seal shall be accepted.

PART 3 - EXECUTION

All works shall be strictly as per manufacturer's instructions and applied only by qualified contractors.

3.1 CONTRACTOR LICENSE AND CERTIFICATION REQUIREMENT

The pesticide company should have a valid license from the Fertilizer and Pesticide Authority (FPA) of the Department of Agriculture.

All pesticides shall be applied by or under the direct supervision of a certified pesticide applicator.

3.2 ENVIRONMENTAL AND SAFETY CONDITIONS

Formulation, treatment, storage and disposal of pesticide shall be in accordance with label directions. Formulation shall be drawn only from site(s) designated by the Project Inspector, and the filling hose shall be fitted with a backflow preventer meeting local plumbing codes/standards. The filling operation shall be under the direct and continuous observation of the Project Inspector to prevent overflow.

3.3 APPLICATION AND TREATMENT

- a. Apply on all wooden parts of the project.

3.4 ARCHITECT'S APPROVAL

The Contractor shall submit to the Architect for approval a copy of the pest control company's proposal and chemical application method/procedure including the description of the equipment to be used before start of work.

3.5 INSPECTION AND TEST

Sampling shall be done only in the presence of the Architect's representative..

3.6 CONTRACTOR'S GUARANTEE

Upon completion of work, and on a condition for final acceptance, the Contractor shall submit the Procuring Entity a written guarantee which shall prove that:

- a. The wood treatment shall prevent termite from attacking any wooden part of the project for a period not less than one (1) year.
- b. The Contractor shall thereby warrant all works in pest control that all materials and workmanship applied under the contract are of good quality in every respect and will remain as such for not less than one (1) years.
- c. Should there be infestation within the specified period, the Contractor thereby agrees to do all necessary repairs on the damaged portions of the building caused by termite infestation to the satisfaction of the Procuring Entity and at the Contractor's expense. The Contractor shall also do re-treatment after completion of the repairs and at his expense such repairs and corrective works shall be done within five (5) days after a written notice from the Procuring Entity has been received by the Contractor.

PART 4 – MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

Liquid termite control chemicals or toxicants applied to wooden doors and other wooden structures will not be measured separately but will be included in other items of these specifications where the wood treatment will be applied.

4.2 BASIS OF PAYMENT

Payment will be made in accordance with the Bill of Quantities.

- End of Section -

SECTION 06100 – MILLWORKS

PART 1 - GENERAL

1.1 SCOPE

1.1.1 Furnish materials and equipment and perform labor required to complete:

Any finished carpentry work as indicated in the drawings and/or specified herein. Coordinate work with all other related trades.

1.1.2 Include in the works scaffolding, plates, straps, joints, hangers, rods, rough hardware, fasteners, and other miscellaneous iron and steel items pertinent to carpentry works.

1.2 STORAGE AND PROTECTION

1.2.1 Protect lumber both in transit and at jobsite. Material shall not be delivered unduly long before it is required for the proper conduct of work.

1.2.2 Stack framing lumber off the ground to insure against deformation and maintain proper ventilation.

1.2.3 Protect lumber from elements.

1.2.4 Lumber in contact with concrete or masonry shall be coated with 2 (two) coats of asphalt, applied hot.

1.2.5 Temporary Protection:

- a. Provide and maintain temporary protection of the work as required to safeguard completed or partially completed work during the progress of the construction.
- b. Provide all the necessary rough stairs, ladders, runways, for convenient access to all parts of the building until other permanent facilities are in place.

PART 2 - PRODUCTS

2.1 GENERAL

2.1.1 Lumber shall be of approved quality of the respective kinds required for the various parts of the work, well seasoned thoroughly dry, straight and free from large, loose or unsound knots, sap shakes or other imperfections impairing its strength, durability or appearance.

2.1.2 Lumber shall be of rough dimensions shown on the drawings.

2.1.3 All exposed wood work shall be smoothly dressed and well sand-papered.

2.2 MOISTURE CONTENT

Not to exceed 18 percent, unless otherwise specified.

2.3 GRADE AND TRADEMARK

Grade and trademark shall be required on each piece of lumber. All lumber, to be pressure treated, conforming to 67% stress grade lumber in accordance with the requirements of the National Building Code, latest edition.

2.4 LUMBER

- 2.4.1 Apitong or equivalent: Kiln Dried, sound and thoroughly-seasoned, warp-free, pressure treated with NALKO BOLIDEN, WOLMAN or approved preservatives. All T & G wood planks shall be of 80% stress grade Apitong.

Note: For equivalent type of wood members, submit material properties for Procuring Entity's approval.

- 2.4.2 Yacal or Guijo: Kiln Dried, sound and thoroughly-seasoned, warp-free, pressure treated with NALKO, BOLIDEN, WOLMAN or approved equal. All wood bearing plates shall be of 80% Stress Grade Yakal or Guijo which is strong, rot resistant, and/or capable of holding on firmly to driven nails or other connectors.
- 2.4.3 Apitong: Sound and thoroughly seasoned, warp free, pressure treated with NALKO BOLIDEN, WOLMAN or approved preservatives smooth and level on one side or wherever in contact with panelings. For shelves, nailers, cabinets and counters.
- 2.4.4 Tanguile: Kiln-dried, S4S, sound, hard and free from defects lumber. 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% maximum moisture content for all others. For framings of counters, closets, cabinets.

2.5 SUBSTITUTION LUMBER

Any lumber equally good for the purpose intended may be substituted for kinds specified, provided, however, that the substitution be authorized in writing by the Architect and that in the substitution of a cheaper kind of lumber from that specified a reduction in contract price will be made. Prevailing Manila market price will be the basis of price reduction.

2.6 ROUGH HARDWARE AND METAL FASTENERS

Plates, straps, nails, spikes, bolts, joints, hangers, rods, dowels, fasteners and miscellaneous iron and steel items shall be of sizes and types to rigidly secure members in place.

Use metal nails, screws, bolts, plates countersunk whenever called for, with size, shape and type indicated. Use water resistant glue for laminated items.

2.7 PLYWOOD

Note: Provide solid wood edging for all exposed sides of plywood 12mm thick and larger.

- a. 6mm (1/4") thick Class A Tanguile plywood. For miscellaneous components of wood based units such as closets and cabinets, and which are concealed or intended to be painted.
- b. 19mm (3/4") thick Class B Tanguile plywood. For base components of cabinets.
- c. Hardware and Fasteners: Use metal nails, screws, bolts, plates, straps, miscellaneous fasteners or anchorage concealed or countersunk whenever called for, with size, shape and type to ensure the rigid, permanent and neat secureance of members in place. Use water-resistant glue for cabinet framing joints.

2.7 MEDIUM DENSITY FIBERBOARD (MDF) IN WOOD LAMINATE FINISH.

MDF is a manufactured (Engineered) wood product composed of wood fibers that are mixed with resin and wax and pressed into a flat panel under high temperature and pressure. MDF cuts well and has a smooth surface. It accepts glue bonds very well and joins securely with nails and screws with minimal chances of fracturing. Refer to drawings for the location of its use.

PART 3 -- EXECUTION

3.1 CABINETS

Fabricate cabinets in accordance with details. Install level, plumb, and tight against adjacent walls. Secure cabinets to walls with concealed toggle bolts, and secure top to cabinet with concealed screws.

3.2 SHELVING

Wood shelf material or plywood shelf material shall be supported substantially with end and intermediate supports and arranged to prevent buckling and sagging. Provide cleats except where hook strips are specified or indicated. Where adjustable shelving is indicated, provide standards and brackets or shelf rests for each shelf.

3.3 WORKMANSHIP

3.3.1 Make all finish, and millwork to detail, clean and sharply defined.

3.3.2 Set panels to allow for free movement in case of swelling or shrinkage.

3.3.3 Conceal, means of fastening various parts together.

3.4 FINISH

3.4.1 Mill, fabricate and erect interior finish as indicated on the drawings. Machine sand at the mill and manual smooth at the job.

3.4.2 Separate with 6mm stone-cut joints all interior trims set against concrete, masonry or wood.

3.4.3 Make joints tight and in a manner to conceal shrinkage. Secure trim with fine finishing nails, screws, or glue where required.

3.4.4 Set nails for putty stopping.

3.5 WOOD SASHES

3.5.1 All wood sashes, where shown on drawings shall be kiln dried lumber of not more than 14% moisture content, 1-3/4 inches finished thickness, unless otherwise shown on drawings and of the kind of lumber specified herein.

3.5.2 Glass: See Division 8 Section 08800; Glass and Glazing.

3.6 HARDWARE

3.6.1 Accurately fit and install all required finished hardware items.

3.6.2 If surface-applied hardware is fitted and applied before painting, remove all such items, except butts, and reinstall after painting work is completed.

3.6.3 Finish Hardware: See Division 8, Section 08710.

3.7 PRESSURE TREATED LUMBER AND PLYWOOD, SALT TREATMENT

All lumber specified as pressure treated shall conform to the following requirements:

3.7.1 Lumber shall be pressure treated in a closed cylinder by means of the "fullcell" process. A vacuum of not less than 27 inches at sea level will be held for a minimum of 30 minutes after which time the wood preservative shall be introduced into the cylinder without breaking the vacuum. Upon filling the cylinder, the pressure will be applied gradually until the pressure 200 psi is reached. The pressure period must be at least eight hours at

working pressures from 180 - 200 psi. The vacuum and pressure must be substituted by automatic recording charts which will be presented to the Architect upon request.

- 3.7.2 After the pressure period is complete, a minimum of 20 bearings will be taken from each change to determine the amount of penetration of preservatives. Those bearings will be presented at the Architect's request. Each bearing must show penetration of not less than 1 inch.
- 3.7.3 In accordance with recommended practice, all treated lumber which is to be cut, bored, dapped, etc. should receive 2 coats of concentrated preservative, dope solution, after being cut. The supplier shall take this solution available to the Contractor and supply the necessary instructions regarding the usage.
- 3.7.4 All lumber supplied shall be covered in a certificate of treatment and origin.
- 3.7.5 The Procuring Entity reserves the right to apply any method for determining penetration and amount of chemicals retained as per manual issued by the American Food Preservers Association and to reject any and all such pressure treated lumber if found unsatisfactory. Final retention of chemicals in the wood shall be a minimum of 0.85 lbs. per cubic foot.
- 3.7.6 Pressure treated lumber certified by the Bureau of Public Works, that it complies with R.A. 912 will be acceptable.

PART 4 – MEASUREMENT AND PAYMENT

No separate payment shall be made for finish carpentry work as such work is deemed part of the specified woodwork items as indicated in the Bill of Quantities.

-End of Section-

DIVISION 4 – DOORS AND WINDOWS

SECTION 08590 – WOOD DOORS AND WINDOWS

PART 1 GENERAL

1.1 SCOPE

- a. Furnish materials and equipment and perform labor to complete the required replacement of wood doors /windows and refurbishment of wood doors /windows (including detached doors which are still functional) and rectify all defects prior to repainting or re-varnishing.
- b. Replacement of all missing wood doors.
- c. Provide acoustic gasket at special doors indicated on the drawings.

1.2 SUBMITTALS

The following shall be submitted:

1.2.1 Shop Drawings

Shop drawings indicating elevations of units, full-size sections, fastenings, methods of installation and anchorage, method of glazing, locations of operating hardware, mullion details, method and material for weatherstripping, details, connections with other work and doors and windows schedules showing location of each unit.

1.2.2 Product Data

- a. Installation

Manufacturer's installation instructions for each type of hardware and weatherstripping.
- b. Qualifications

Documentation showing qualifications of personnel proposed to perform the door repair and rehabilitation work, and a listing identifying prior installations completed by the Contractor.

1.2.3 Samples

- a. Hardware

Representative sample of each type of hardware with identifying tags. b.

Weatherstripping

A 300 mm long sample of each type of weatherstripping required with fasteners.

1.3 QUALIFICATIONS

The Contractor shall provide qualified workers trained and experienced in repairing, restoring, replicating, and replacing doors in historic buildings and shall submit documentation of 5 consecutive years of work of this type. A list of installations made shall also be provided identifying when, where and for whom the installations were made.

1.4 STORAGE

Materials shall be stored out of contact with the ground and under watertight covering.

PART 2 - PRODUCTS

2.1 MATERIALS

Unless otherwise indicated on the Drawings, existing materials shall be reused whenever possible in the repair and rehabilitation of wood doors. Replacement of door elements with new material shall be done only when originals are so deteriorated as to prohibit their useful function.

Where required, refer to the Drawings for STC rating of wood doors.

2.2 WOOD

Wood used to replace deteriorated door members shall be of the same species and grade as the original, unless otherwise noted.

2.3 WOOD DOORS WITH ACOUSTIC GASKET (FOR NEW DOOR)

For wood doors with acoustic gaskets, the door leaf shall be solid core wood throughout (honeycomb cores are not acceptable), with a minimum face density of 5 lb/ft². The surface weight of wood doors that require fire ratings shall be established by the door manufacturer.

Frames for Gasketed Doors shall be continuously grout-filled when installed in masonry or concrete partition openings, or packed tightly with glass-fiber safing insulation or high density fiberglass (64kg/m³) and caulked with acoustical sealant around the perimeter of both sides of the frame when applied to drywall and stud partition openings.

2.4 GASKET

Provide Gasket material for existing wood doors as indicated on the drawings made of solid-extruded high-grade neoprene bulbs.

2.5 FINISHES

- a. Laminated Wood Doors and Windows

Refer to Section 06100, Millworks.

2.6 GLASS AND GLAZING

Existing intact original glass shall be reused. Any removed lights shall be reused in their original frames and positions. New glass and glazing materials shall conform to Section 08800 GLASS AND GLAZING.

2.7 HARDWARE

- a. All hardware for wood doors shall be replaced.
- b. For wood louver windows, existing original hardware shall be reused, when it is salvageable.
- c. Replacement hardware for doors and windows shall match original in design, material, and finish.

2.8 FASTENERS

Fasteners shall be stainless steel, galvanized, or non-ferrous metal.

2.9 GLAZING COMPOUND

Glazing compounds for single pane glass shall be oil-based, non-staining and non-bleeding, and shall pass the test requirements of ASTM C 741, and ASTM C 742.

2.10 GLAZING POINTS

Glazing points shall be stainless steel or galvanized steel.

2.11 EPOXY CONSOLIDANTS

2.11.1 Liquid Consolidant

Liquid wood consolidant shall consist of a two-part, low-viscosity liquid epoxy that meets the criteria of Table A.

2.11.2 Epoxy Paste

Epoxy paste shall consist of a two-part, thixotropic paste that meets the criteria of Table A.

Properties	Low-Viscosity Liquid	No-Slump, Paste	Thixotropic
Toxicity	Low	Very Low	
Toxicity Cured	Non-Toxic	Non-Toxic	
Ratios	1:1 by Volume	1:1 by Volume	
Pot Life @ Room Temp.	30 min. minimum	50 min. minimum	

Hardening @ Room Temp.	1 hr. or longer	1 hr. or longer
Hardening @ 60 deg. C	16 min. or less	18 min. or less
Viscosity Poises @ 22 deg. C	4.7 max.	Thixotropic paste
Solids	95% min	98% min.
Tensile Strength	26 MPa	16.2 MPa
Elongation (%)	50	4

PART 3 EXECUTION

3.1 GENERAL

The Contractor shall repair wood doors as indicated, and shall return them to proper operation and sound condition.

3.2 REPAIRS

3.2.1 Example Door and Window

An existing door and window of each type to serve as an example of the quality of repairs to be provided shall be prepared for inspection and approval by the Architect.

3.2.2 Sash Removal

The interior stops shall be removed first in a method so as to not scar the wood. Connecting hardware and operating mechanisms shall then be detached and the sash shall be removed from the frame. Removed sashes and frames shall be identified as to location to assure reinstallation in their original positions. The parting bead shall be removed so as to not scar the wood. Plastic covering or plywood shall be installed to cover the door opening during repairs.

3.2.3 Paint Removal

Areas on frame, sill, sash and muntins where paint or varnish has peeled, alligatored, blistered or crazed shall have paint removed to bare wood or first sound paint layer, using non-destructive means such as a chemical stripper or heat gun. If chemical strippers are used, wood shall be neutralized after stripping to a litmus pH of 5 to 8.5. Wood shall be allowed to dry to a moisture content of 8 to 12 percent before repainting. If heat methods are used for paint removal, glass shall be protected from sudden temperature change to avoid breakage.

3.2.4 Wood Repair

Badly decayed areas (with more than 30 percent wood decayed) shall be removed from wood sash, sill, frame, and trim assemblies. Moderately decayed areas (less than 30 percent decayed), weathered, or gouged wood shall be patched with approved patching compounds, and shall be sanded smooth. Intact sash rails and stiles that are loose shall be repaired with new dowels to make joints tight.

3.2.5 Epoxy Wood Repair

Epoxy wood repair materials shall be applied in accordance with manufacturer's written instructions. Health and safety instructions shall be followed in accordance with the manufacturer's instructions. The source or cause of wood decay shall be identified and corrected prior to application of patching materials. Wet wood shall be completely dried to

a moisture content of 8 to 12 percent to its full depth before patching. Wood that is to be patched shall be clean of dust, grease, and loose paint. Clean mixing equipment shall be used to avoid contamination. Mix and proportions shall be as directed by the manufacturer. Batches shall be only large enough to complete the specific job intended. Patching materials shall be completely cured before painting or reinstallation of patched pieces.

3.2.5.1 Epoxy Liquid Wood Consolidant

Epoxy liquid wood consolidant shall be used to penetrate and impregnate deteriorated wood sections to reinforce wood fibers that have become softened or absorbent.

3.2.5.2 Epoxy Paste

Epoxy paste shall be used to fill areas where portions of wood are missing such as holes, cracks, gaps, gouges, and other voids. Areas to receive epoxy paste patching material shall be primed with compatible epoxy liquid wood consolidant or a primer recommended by the manufacturer.

3.2.6 Wood Replacement

Pieces decayed beyond repair shall be replaced with new pieces that match originals in all respects. Joinery shall match that of existing. Muntins shall have coped mortise and tenon joints. Molded members shall have mitered or coped joints.

3.2.7 Hardware

Existing hardware which is in good condition shall be reused unless otherwise noted. Reused existing hardware shall be stripped of paint down to bare metal. New hardware shall be installed where original is missing, damaged, or unsuitable for new operation, per manufacturer's directions to provide a secure and smoothly operating window assembly.

3.2.8 Glazing

Lights to be reused shall be reinstalled in their original frames and positions. Rabbeted integral glazing recesses shall be brushed with boiled linseed oil prior to the application of bed glazing compound. Broken glass shall be replaced as specified in Section 08800 GLASS AND GLAZING.

3.2.9 Operating System

Windows with counter-weight systems shall be repaired to original operating function. Original sash weights (and sash chains, if applicable) shall be reused wherever possible. Missing weights and sash cords or chains shall be replaced. Missing or deteriorated sash cords shall be replaced with new cotton-polypropylene cord rated for sash weight. When new weights are required, they shall match the originals in weight. Replacement weights shall be cast iron or square milled steel bar stock.

3.2.10 Weatherstripping

Weatherstripping shall be installed on all operable windows. Weatherstripping shall consist of brass, compression or interlocking weather strips designed for permanent sealing under bumper or wiper action. Weatherstripping shall be provided at the perimeter of each sash including meeting rails and shall be installed per manufacturer's instructions. Weatherstripping shall be completely concealed when sash is closed.

3.3 PAINTING PREPARATION

Areas where paint was removed or where existing paint shows crazing, wrinkling, and intercoat peeling shall be scraped, sanded, and shall have edges feathered. Paint shall be removed to bare wood or first sound paint layer. All parts shall be cleaned by brush using bleach and/or trisodium phosphate (TSP) solution, and let dry. Existing finish shall be deglossed. Open joints and cracks shall be filled with epoxy repair materials. Perimeters of fixed sash shall be caulked.

3.4 PAINTING

Wood elements shall be primed and painted in accordance with Section 09900
PAINTS AND COATINGS.

3.5 REASSEMBLY

After repairs are completed, the door and window shall be reassembled with all parts tight, true and functioning properly. Wood surfaces shall be free of blemishes.

3.6 ADJUSTMENTS

Final adjustment for proper operation of the ventilating unit shall be made after reassembly. Adjustments shall be made to operating sash or ventilators to assure smooth operation and weathertight performance when locked closed.

3.7 CLEANING

Doors and windows shall be cleaned on both exterior and interior.

PART 4 - MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

The quantity of wood doors and windows to be paid for shall be measured and paid for by the number of sets of various kinds, types and size of wood doors and windows properly installed, complete with all the necessary hardware, jambs, and other incidentals as shown on the drawings ready to function and as indicated in the Bills of Quantities and accepted and certified for payment by the Procuring Entity.

4.2 BASIS OF PAYMENT

Payment of above item of work shall constitute full compensation for completed work and certified for payment by the Procuring Entity.

-- End of Section --

DIVISION 5 – FINISHES

SECTION 09100 - METAL SUPPORT SYSTEMS

PART I - GENERAL

1.1 SUBMITTALS

Shop drawings for the erection of metal framing and furring. Drawings shall indicate materials, sizes, thicknesses and fastenings.

Manufacturer's printed instruction for the erection of metal furring and framing.

1.2 DELIVERY, STORAGE AND HANDLING

Delivery material to the jobsite and store in ventilated dry locations. Storage area shall permit easy access for inspection and handling. Handle materials carefully to prevent damage. Replace damaged items that cannot be restored to like-new condition.

PART 2 - PRODUCTS

2.1 PRODUCTS AND MANUFACTURE

Materials for use in suspended ceiling panels and as indicated on plans. ASTM C 754 (Aluminum T-runner (baked enamel finish), ceiling furring, and studs).

PART 3 - EXECUTION

3.1 INSTALLATION

Install metal support systems according to the direction of the manufacturer.

-End of Section-

SECTION 09260 - FIBER CEMENT BOARD

PART 1 - GENERAL

1.1 SCOPE

Furnish materials and equipment and perform labor required to complete the following:

- a. Fiber cement board with metal furring as replacement for plywood undersheeting for acoustic board wall/ceiling finish, native veneer and fabric wall covering at location designated on the Drawings.
- b. Fiber cement board as replacement for all damaged and dilapidated existing fiber cement ceiling board and all existing plywood ceiling boards.
- c. Fiber cement board with metal furring as replacement for all deteriorated wood partitions including its framing and moldings. All fiber cement boards shall be painted with the same color to match the original.
- d. See drawings for details and extent of application.

1.2 SAMPLES AND CATALOGS

- a. One of each type of cement board showing the texture, finish and color.
- b. Standard catalog data for cement board.
- c. Maintenance Manuals: Maintenance instructions for cement board ceiling.

PART 2 - PRODUCTS

2.1 MATERIALS

- a. Fiber Cement Board:
 - (1) For acoustical board undersheeting for walls and ceilings: use 6mm thick fiber cement board.
 - (2) For native veneer and fabric wall covering undersheeting: use 6mm thick fiber cement board.
 - (3) For replacement of existing damaged and dilapidated fiber cement ceiling board, all existing plywood ceiling boards and all deteriorated plywood partitions: use 6mm thick fiber cement board with the same finish, color and design of the existing ceiling/partition material.
- b. Fixings: Shall be rust proof screws.

2.2 CEILING BOARD ACCESSORIES

- a. Carrying Channel: C-channel, 38mm x 12mm.
- b. Furring Channel: Gauge 24 galvanized steel with Channel clips. Dimension as per manufacturer's standard.
- c. Angle Plate: 3mm x 50mm x 50 mm.
- d. Hanger rod: 6mm at 1200mm on center along the carrying channel.
- e. Fasteners:

1. Angle to concrete Wall: Drive pins for use of power driven tools.
2. Board to Framing: Type S Bugle Head for use with power driven tools.
3. Sealant and Caulking: As recommended by the ceiling board manufacturer.

2.3 FIBER CEMENT WALL BOARD ACCESSORIES

- a. Carrying Channel: C-channel, size as recommended by Fiber Cement Board Manufacturer
- b. Furring Channel: Gauge 24 galvanized steel with Channel clips. Dimension as recommended by Fiber Cement Board Manufacturer.
- c. Angle Plate: as recommended by Fiber Cement Board Manufacturer.
- d. Hanger rod: 6mm spacing along carrying channel as recommended by Fiber Cement Board Manufacturer. e.

Fasteners:

1. Angle to concrete Wall: Drive pins for use of power driven tools.
2. Board to Framing: Type S Bugle Head for use with power driven tools.
3. Sealant and Caulking: As recommended by the Fiber Cement Board manufacturer.

2.4 CONCEALMENT TREATED MATERIAL

Include joint tape, and embedding and finished types of joint compound, concealment treatment materials shall be the product of a single manufacturer.

PART 3 - EXECUTION

3.1 FIXING

- a. Boards are to be fixed as shown on plans.
- b. See details of plans for the installation of fiber cement board where it is applied as finishes.

3.2 FINISHING

The 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 Architect/Procuring Entity.

PART 4 - MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

The quantity of fiber cement board used as finishes on walls and ceiling to be paid for shall be measured by the number of square meters installed, completed and accepted by the Procuring Entity.

4.2 BASIS OF PAYMENT

Payment of above item of work shall constitute full compensation for completed work and accessories and certified for payment by the Procuring Entity.

- End of Section -

SECTION 09500 - ACOUSTICAL WALL AND CEILING TILES

PART 1 - GENERAL

1.1 SCOPE

Furnish materials and equipment and perform labor required to complete:

- a. Installation of new acoustical ceiling tiles on suspended ceiling and also new acoustical ceiling tiles glued on to the fiber cement backing at location indicated on the drawings.

1.2 SAMPLES AND CATALOGS

1.2.1 One of each type of acoustical unit showing the textures, finish and color.

1.2.2 Standard catalog data for acoustical units and suspension systems.

1.2.3 Maintenance Manuals: Maintenance instruction for acoustical units.

PART 2 - PRODUCTS

2.1 MATERIALS

2.1.1 Acoustic Panel Board for Wall and Ceiling:

a. Composition Lay-in Panels:

1. Wet-formed mineral, fiber with factory-applied vinyl latex paint finish. Color as specified by the Architect.
2. Class: A, frame spread 25 or less.
3. Pattern: to match existing.
4. Noise Reduction Coefficient (NRC) Grade: Minimum 0.55.
5. Light Reflectance (LR) Coefficient: minimum LR 0.80 (according to ASTM E1264 requirements)
6. Nominal Size:
To match actual size of existing ceiling tiles
7. Edge Detail: To match existing.
8. Early Fire Hazard Rating: Ignitability = 0
Spread of Flame = 0
Head Evolved = 0
Smoke Developed = 1

2.2 SUSPENSION SYSTEM

ASTM C 635 and the following requirements:

2.2.1 Type: Exposed Tee Grid (to match existing)

2.2.1.1 Structural Classification: Intermediate duty for main runners and cross tees.

2.2.1.2 Finish: Surface exposed to view shall be of uniform width and shall be enamel coated metal suspension system.

2.2.1.3 Accessories: Provide manufacturer's standard hold down clips and wall or edge moldings.

2.2.1.4 Seismic Requirements: ASTM E 580.

2.2.1.5 Hangers:

- a. Wires: Soft annealed, light zinc coated finish, 0.1055 in in diameter 12 gage.

2.2.2 Type: Concealed Tee grid, (to match existing)

2.2.2.1 Structural classification: Intermediate duty for main runners and cross tees

2.2.2.2 Accessories: Provide manufacturer's standard accessories.

2.2.2.3 Hangers: Soft annealed wires light zinc coated finish, 0.1055 inches in diameter gage 12.

2.3 FIBER CEMENT BOARD

Refer to Section 09260 of these Specifications.

PART 3 - EXECUTION

3.1 CONDITION OF SURFACES

Examine surfaces to receive directly attached acoustical units for unevenness, irregularities, and dampness that would affect quality and execution of the work. Areas to which acoustical units will be cemented shall be free of oils, from residue, or other materials that reduce bonding capabilities of the adhesive.

3.2 STORAGE

Handle materials carefully and store them under cover in dry, watertight enclosures. Immediately before installation, store acoustical units for not less than 24 hours at the same temperature and relative humidity as the space where they will be installed.

3.3 INSTALLATION

3.3.1 Acoustic Panel Board

a. Suspended Ceilings: ASTM C 636.

1. Hangers: Space hangers 1.20m in the center of each direction.

Hangers shall be laid out for each individual room or space. Install additional hangers where required to support framing around beams, ducts, columns, grilles and other penetrations through the ceiling.

2. Suspension Members: Keep main runners and carrying channels clear of abutting walls and partitions. Provide at least two or more runners for each ceiling span.
3. Acoustical Units: Edges of ceiling tiles shall be in close contact with metal supports and in true alignment. Arrange units so that units less than 1.2 width are minimized.
4. Wall or Edge Molding: Install wall molding at the intersection of suspended ceiling and vertical surfaces. Miter corners where wall moldings intersect or install corner caps.
5. Hold Down Clips: Provide hold down clips for all panels in ceiling systems around troffer lights.
6. Caulking: Seal all joints around pipes, ducts or electrical outlets penetrating the ceiling. Apply a continuous ribbon of acoustical sealant on the vertical web of wall or edge moldings.
7. Seismic Restraint System: Provide seismic restraint for the suspension system in accordance with ASTM E 580.

b. For Fiber cement-backed Acoustic Ceiling Tile :

1. Backing System : Provide 4.5mm thick fiber cement board as backing on metal frame.
2. Acoustical Tiles: Install tiles with patterns similar to existing. Glue tiles onto the fiber cement backing. Align all members for true level surface and straight lines.

3.2 CLEANING

3.2.1 Acoustical Panel Board

Clean soiled or discolored unit surfaces after installation. Touch up scratches, abrasions, voids and other defects in painted surfaces. Remove damaged or improperly installed units and install new materials.

3.3 TESTING

For acoustical spray on material, the applicator shall daily check the density of the material applied and shall keep records of such density tests which may be inspected by the Architect.

PART 4 – MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

Acoustical wall and ceiling tiles shall be measured by the number of square meters laid and accepted.

4.2 BASIS OF PAYMENT

The quantity measured as provided in Method of Measurement shall be paid for at the contract unit price, respectively for each of the Pay Items listed below and shown in the Bill of Quantities, which price and payment shall constitute full compensation for furnishing and placing all materials and for all labor, equipment, tools and incidentals to complete the work prescribed in this Section.

- End of Section -

SECTION 09611 - CARPET TILE

PART 1 - GENERAL

1.1 SCOPE

This specification covers the furnishing of materials and labor including equipment necessary to complete the installation of carpet tile as shown on the drawings and as specified herein.

1.2 SUBMITTALS

1.2.1 Product Data

Submit manufacturer's product literature and installation instructions for each type of carpet tile material and installation accessory required. Include methods of installation for each type of substrate.

1.2.2 Shop Drawings

Submit shop drawings showing carpet tile layout, clearly indicating carpet tile direction, pattern direction (if applicable), placement of cut tiles, and locations and types of edge strips.

1.2.3 Samples for Initial Selection Purposes

Submit manufacturer's standard size samples and color yarns showing full range of colors, textures and patterns available for each type of carpet tile required.

1.2.4 Samples for Verification Purposes

Submit the following:

- a. Actual samples of each type of carpet tile pattern module required.
- b. 6" long samples of each type of exposed edge stripping and accessory item.

1.2.5 Prepare samples from the same material to be used for the work.

1.3 DELIVERY, STORAGE AND HANDLING

1.3.1 Deliver materials to the project site in original factory wrappings and containers, clearly labeled with identification of manufacturer, brand name, quality or grade, fire hazard classification, and lot number. Store materials in original undamaged packages and containers, inside a well-ventilated area protected from weather, moisture, soiling, extreme temperatures, humidity, laid flat, blocked-off ground to prevent sagging and warping.

1.3.2 Comply with instructions and recommendations of manufacturers for special delivery, storage, and handling requirements.

1.4 SEQUENCING & SCHEDULING

1.4.1 Sequence carpet tile with other work to minimize possibility of damage and soiling during the remainder of the construction period.

1.5 WARRANTY

1.5.1 Special Project Warranty

Submit a written Warranty executed by the Contractor, Installer, and the Manufacturer, agreeing to repair or replace carpet tiling which fails in materials or workmanship within the specified warranty period. This warranty shall be in addition to and not a limitation of other rights the Procuring Entity may have against the Contractor under the Contract Documents.

- a. Warranty period is 2 years after the date of substantial completion.

1.6 MAINTENANCE

1.6.1 Maintenance Instructions

Submit manufacturer's printed instructions for maintenance of installed work, including methods and frequency recommended for maintaining optimum condition under anticipated traffic and use conditions. Include precautions against materials and methods which may be detrimental to finishes and performance.

1.6.2 Replacement Materials

After completion of work, deliver not less than 5% of each type, color, and pattern of carpet tiling, exclusive of material required to properly complete installation. Furnish accessory components as required. Furnish replacement materials with protective covering, identified with appropriate labels.

PART 2 - PRODUCTS

2.1 MATERIALS

2.1.1 General

The following carpet tile data shall be as selected by the Architect / Procuring Entity from the manufacturer's standard range.

- a. Pile Material: 100% nylon 6.6
- b. Carpet Tile Construction File: Flocked textile floor covering c.
- File Density: 80 million / m²
- d. Total Thickness: 5.3 mm
- e. Pile Face Weight: Approx. 4.5 kg/m²
- f. Tile Size: 500 mm x 500 mm g.

Backing material

Backing material shall be resilient waterproof backing carpet.

2.2 CARPET TILE ACCESSORIES

2.2.1 Installation Adhesive

Releasable type adhesive as recommended by carpet tile manufacturer and which complies with flammability requirements for installed carpet tile.

2.2.2 Carpet Edge Guard, Metallic

Extruded aluminum bend-down type edge guard with concealed gripper teeth and minimum 38 mm (1-1/2") wide anchorage flange and minimum 16 mm (5/8") wide face flange. Provide with anodized aluminum finish of colors as selected by the Architect / Procuring Entity, from standard colors available with the manufacturer.

2.2.3 Miscellaneous Materials

As recommended by the manufacturer of carpet tile and selected by Installer to meet project circumstances and requirements.

PART3 - EXECUTION

3.1 PRE-INSTALLATION REQUIREMENTS

3.1.1 Installation Adhesive

Releasable type adhesive as recommended by carpet tile manufacturer and which complies with flammability requirements for installed carpet tile.

3.1.2 Carpet Edge Guard, Metallic

Extruded aluminum bend-down type edge guard with concealed gripper teeth and minimum 38 mm (1-1/2") wide anchorage flange and minimum 15 mm (5/8") wide face flange. Provide with anodized aluminum finish of colors as selected by the Procuring Entity, from standard colors available with the manufacturer.

3.1.3 Miscellaneous Materials

As recommended by the manufacturer of carpet tile and selected by Installer to meet project circumstances and requirements.

3.2 PRE-INSTALLATION REQUIREMENTS

- a. Examine substrates for moisture content to verify a maximum allowable 65% corrective measures as required if moisture content exceeds 65%.
- b. Examine substrates for alkalinity. Corrective measures are required if pH reading is greater than 10.
- c. Do not proceed until unsatisfactory conditions have been corrected.
- d. Clear away debris and scrape up cementitious deposits from concrete surfaces to receive carpet tile; apply sealer to prevent dusting.
- e. Patch all holes and level to a smooth surface. If the previous finish was chemically stripped, re-seal concrete. Seal all powdery or porous surfaces with sealer recommended by carpet tile manufacturer.

3.3 INSTALLATION

3.3.1 General

Comply with manufacturer's instructions and recommendations for direction of carpet tile; maintain uniformity of carpet tile direction and lay of pile.

- a. Extend carpet tile under open-bottomed obstructions and under removable flanges and furnishings, and into alcoves of each space, or as otherwise indicated.
- b. Install carpet edge guard where edge of carpet is exposed; anchor guards to substrate.
- c. Determine the center of the room using standard tile laying methods. The center chalk lines, dividing the room into quadrants, should be off-center, if necessary, to ensure that perimeter modules will be half-size or larger.
- d. On both sides of the chalk-line, apply a strip of adhesive at least 228 mm (9") in width, using a twist-textured paint roller. When adhesive is ready, lay modules firmly along these anchor lines. Fill in each quadrant section laying using the "stair step" technique, completing the installation from center to corner of the room in each quadrant, then moving to the next quadrant.
- e. In large areas, a control grid of adhesive should be laid every 3050 mm (10 feet) as control of the uniformity of the installation.
- f. As each module is installed, ensure that the installation remains square and conforms to chalk lines.

- g. Adhere perimeter tiles and cut tiles with a full spread of adhesive. Dry fit all cut tiles and apply adhesive to tile back after tile has been cut.

3.4 CLEANING

- a. Remove and dispose of debris, cartons and unusable tile scraps.
- b. Remove spots and smears of adhesive from the carpet surface with an approved cleaning agent. Replace any tile which cannot be cleaned.
- c. Vacuum carpet using a commercial machine. Remove any protruding face yarns with sharp scissors.

3.5 PROTECTION

- a. Advise the Contractor of protection methods and materials needed to ensure that carpet tiles will be without deterioration or damage at time of substantial completion.

3.6 INSPECTION

- a. Upon completion of the installation verify that work is complete, properly installed and acceptable. Remove and replace all work not found acceptable at the Installer's expense and to the satisfaction and acceptance of the Procuring Entity.

PART 4 - MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

The quantity of carpet tile to be paid for shall be measured by the number of square meters of various types of finishes installed, applied, completed and accepted by the Procuring Entity.

4.2 BASIS OF PAYMENT

Payment of above item of work shall constitute full compensation for completed work and certified for payment by the Procuring Entity.

-End of Section-

SECTION 09776 -- SPECIAL WALL COVERINGS

PART 1 - GENERAL

1.1 SCOPE

Work shall include all labor, materials and equipment necessary for the removal of existing fabric and native veneer materials and replace with new same fabric and native veneer type material, color and pattern. If the same type of material is not available, the Contractor shall submit to the Architect for approval of alternative fabric and native veneer material.

See Drawings and details for location, extent and other requirements.

1.2 SUBMITTALS

a. Product Data

Submit required product data for review and information. Provide data on covering and adhesive.

b. Shop Drawings

Indicate wall elevations with seaming layout.

c. Samples

Submit two samples of covering, illustrating color, finish, and texture

d. Manufacturer's Installation Instructions.

Indicate special procedures, and perimeter conditions requiring special attention.

1.3 Quality Assurance

a. Manufacturer Qualifications

Company specializing in manufacturing the Products specified in this section with five (5) years of documented experience.

b. Applicator Qualifications

Company specializing in performing the work of this section with five (5) years of documented experience.

1.4 Delivery, Storage And Protection

- a. Transport, handle, store and protect products.
- b. Inspect roll materials on site to verify acceptance.
- c. Protect package adhesive from temperature cycling.
- d. Do not store roll goods in the end.

1.5 ENVIRONMENTAL REQUIREMENTS

- a. Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the adhesive or vinyl covering product manufacturer.
- b. Maintain these conditions 24 hours before, during, and after installation of adhesive and covering.

PART 2 - PRODUCTS

2.1 MATERIALS

- a. Special Wall Covering

Provide the same fabric and native veneer type material, color and pattern to match existing. If the same type of material is not available, the Contractor shall submit to the Architect for approval of alternative fabric and native veneer material.

- b. Adhesive

Type recommended by covering manufacturer to suit application to substrate.

- c. Substrate Filler

As recommended by adhesive and covering manufacturers; compatible with substrate.

PART 3 - EXECUTION

3.1 EXAMINATION

- a. Examine the areas to receive the work and the conditions under which the work would be performed. Contractor shall remedy conditions detrimental to the proper and timely completion of the work. Do not proceed until satisfactory conditions have been corrected.
- b. Verify existing conditions before start of work.
- c. Verify that substrates are prime painted and ready to receive work, and conform to requirements of the covering manufacturer.

3.2 PREPARATION

- a. Fill cracks in substrate and smooth irregularities with filler; sand smooth.
- b. Wash impervious surfaces with tetra-sodium phosphate, rinse and neutralize; wipe dry.
- c. Surface Appurtenances

Remove or mask electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.

d. Surfaces

Correct defects and clean surfaces which affect work of this section. e.

Marks

Seal with shellac those which may bleed through surface finishes.

f. Apply one coat of primer sealer to substrate surfaces. Allow to dry. Lightly sand smooth.

g. Vacuum clean surfaces free of loose particles.

3.3 Installation

a. Apply adhesive and covering in accordance with the manufacturer's instructions.

b. Apply adhesive to the surface immediately prior to application of covering.

c. Razor trim edges on flat work tables. Do not razor cut on gypsum board surfaces.

d. Apply covering smooth, without wrinkles, gaps or overlaps. Eliminate air pockets and ensure full bond to the substrate surface. Butt edges tight.

e. Install covering before installation of bases, cabinets, hardware, or items attached to or spaced slightly from wall surface. Do not install covering more than 6mm below the top of the resilient base.

f. Where covering tucks into reveals, or metal wall board or plaster stops, apply covering with contact adhesive within 150mm of covering termination. Ensure full contact bond.

g. Install termination trim.

h. Remove excess adhesive while wet from the seam proceeding to the next covering sheet. Wipe clean with dry cloth.

3.4 Cleaning

a. Clean installed work.

b. Clean coverings of excess adhesive, dust, dirt and other contaminants.

c. Reinstall wall plates and accessories removed prior to work of this section.

3.5 Protection of Finished Work

a. Protect installed work.

b. Do not permit work at or near finished covered areas.

PART 4 – MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

The quantity of Special Wall Covering to be paid for shall be measured by the number of square meters of various types of finishes installed, applied, completed and accepted by the Procuring Entity.

4.2 BASIS OF PAYMENT

Payment of above item of work shall constitute full compensation for completed work and certified for payment by the Procuring Entity.

Payment will be made in accordance with the Bill of Quantities.

- End of Section -

SECTION 09803 – GYPSUM BOARD

PART 1 - GENERAL

1.1 SCOPE

The work includes the furnishing of materials including equipment and performing labor necessary to complete the installation of gypsum board for ceiling, acoustical wall panel and built-up post at grand hallway and veranda of the ballroom.

1.2 SUBMITTALS

1.2.1 Catalog Data

Submit catalog information for each type of plasterboard (ordinary, fire resistant and moisture resistance), fastener, joint treatment materials, adhesive, and metal trim. Clearly mark data that describe more than one type or item to indicate which type, or item will be provided.

1.2.2 Certificates of Compliance

Submit certificates attesting that the following materials meet the requirements specified:

- a. each type of gypsum board
- b. Fasteners
- c. Adhesive
- d. Metal or plastic trim
- e. Control joints

1.3 DELIVERY, HANDLING, AND STORAGE

1.3.1 Delivery

Deliver materials in the original packages, containers, or bundles with each bearing the brand name, applicable standard designation, and name of manufacturer, or supplier.

1.3.2 Handling

Neatly stock gypsum board flat to prevent sagging or damage to the edges, ends, and surfaces.

1.3.3 Storage

Keep materials dry by storing inside a sheltered building. Where necessary to store gypsum board outside, store off the ground, properly supported on a level platform, and protected from direct exposure to rain, sunlight and other extreme weather conditions. Provide adequate ventilation to prevent condensation.

1.4 ENVIRONMENTAL CONDITIONS

1.4.1 Temperature

Maintain a uniform temperature of 27 °C in the structure for at least 48 hours prior to, during, and following the application of plasterboard and joint treatment materials, or the bonding of adhesives.

1.4.2 Exposure to Weather

Protect plasterboard products from direct exposure to rain, sunlight, and other extreme weather conditions.

PART 2 - PRODUCTS

2.1 MATERIALS

Shall conform to the respective specifications and standards and to the requirements specified herein. Provide plasterboard manufactured from asbestos-free materials.

2.1.1 Gypsum Board for Ceiling

a. Regular: 1200 mm wide, 12 mm thick as shown on drawings, tapered edges. b.

Moisture resistant: 1200 mm wide, 12 mm thick, tapered edges

2.1.2 Acoustical Enhanced Gypsum Board for interior wall: ASTM C 1396/C 1396M. Two layers of gypsum board sandwiching rockwool insulation (60kg/m³). Refer to the drawing for thickness of rockwool insulation.

Note: The dropped ceiling system that covers the trusses of the operable partitions at Meeting Rooms 1 and 2 (Multi-purpose Rooms 1 & 2) must also be STC 55 or the same rating as the said operable partition. The Contractor will also be responsible for field testing, meaning they will do an STC test after installation that will show that they fulfill the STC mentioned in their product. STC 52 is acceptable as a passing mark.

2.1.3 Gypsum Board on Metal Stud for Built-up Post Installation

Refer to the drawings for the thickness.

2.1.4 Joint Treatment Materials

a. Embedding Compound

Specifically formulated and manufactured for use in embedding tape at gypsum board joints completely compatible with tape, substrate and fasteners.

b. Finishing or Topping Compound

Specifically formulated and manufactured for use as a finishing compound.

c. All-Purpose Compound

Specifically formulated and manufactured to serve as both a taping and finishing compound and compatible with tape, substrate and fasteners.

d. Joint Tape

Cross-laminated, tapered edge, reinforced paper, or special tape recommended by the manufacturer.

2.1.5 Screws

Type "G," Type "S" or Type "W" steel drill screws. Use specially designed steel screws as recommended by the manufacturer of the gypsum board for the screw application of gypsum board to gypsum board or to metal framing.

2.1.6 Corner bead and Edge Trim

Fabricate from corrosive protective coated steel or plastic design for its intended use. Flanges shall be free of dirt, grease, and other materials that may adversely affect the bond of joint treatment. Materials shall be pre-finished or job decorated.

2.1.7 Water

Clean, fresh, and potable.

PART 3 - EXECUTION

3.1 INSPECTION

3.1.1 Framing and Furring

Verify that framing and furring are securely attached and of sizes and spacing to provide a suitable substrate to receive gypsum board. Do not proceed with work until framing and furring are acceptable for application of gypsum board.

3.2 APPLICATION OF PLASTERBOARD

Apply gypsum board to framing and furring members. Apply gypsum board with separate boards in moderate contact; do not force in place. Stagger end joints of adjoining boards. Neatly fit abutting end and edge joints. Use gypsum board of maximum practical length. Cut out gypsum board as required making neat close joints around openings. In vertical application of gypsum board, panels shall be of length required to reach full height of vertical surfaces in one continuous piece. Surfaces of gypsum board and substrate members may be bonded together with an adhesive, except where prohibited by fire rating(s). Leave a space approximately 6 mm at the bottom gypsum board for caulking. Type of gypsum board for use in each system specified herein shall be as indicated.

3.3 FINISHING OF PLASTERBOARD

Tape and finish gypsum board in accordance with ASTM C 840. Provide joint, fastener depression, and corner treatment.

3.4 CAULKING

Caulk openings around pipes, fixtures, and other items projecting through gypsum board as specified in Section 07900, "Sealants and Caulking." Apply caulking material with exposed surface flush with gypsum board.

3.5 PATCHING

Patch surface defects in gypsum board to a smooth, uniform appearance, ready to receive finish as specified.

3.6 ACOUSTICAL JOINT SEALANT

Acoustical Joint Sealant: Manufacturer's standard non sag, paintable, non staining latex sealant complying with ASTM C 834. Product effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.

3.7 CLEAN-UP COMPLETION

Clean surfaces of acoustic wall panels that have become soiled during handling and installation according to manufacturer's recommended cleaning instructions.

Upon completion of the work, remove surplus materials, rubbish and debris resulting from the wall covering installation. Leave areas in neat clean and orderly condition

PART 4 – MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

The quantity of Gypsum Board to be paid for shall be measured by the number of square meters of various types of finishes installed, applied, completed and accepted by the Procuring Entity.

4.2 BASIS OF PAYMENT

Payment of above item of work shall constitute full compensation for completed work and certified for payment by the Procuring Entity.

Payment will be made in accordance with the Bill of Quantities.

- End of Section -

SECTION 09840 - ACOUSTICAL WALL PANEL SYSTEM

PART 1 - GENERAL

1.1 SCOPE

Furnish materials and equipment and perform labor required to complete the installation of a new acoustic wall panel system at location indicated on the drawings.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

1.2.1 ASTM INTERNATIONAL (ASTM)

ASTM C423	(2009a) Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method
ASTM D5034	(2009; R 2013) Breaking Strength and Elongation of Textile Fabrics (Grab Test)
ASTM E84	(2016) Standard Test Method for Surface Burning Characteristics of Building Materials

1.3 SUBMITTALS

Submit the following:

- a. Shop Drawings
- Approved Detail Drawings b.

Product Data

- (1) Installation
- (2) Acoustical Wall Panels c.

Certificates

- (1) Acoustical Wall Panels
- (2) Certified Sustainably Harvested Wood d.

SAMPLES AND CATALOGS

One of each type of acoustical unit showing the textures, finish and color.

- (1) Standard catalog data for acoustical units and suspension systems. (2)

Maintenance Manuals: Maintenance instruction for acoustical units.

e. Closeout Submittals

- (1) Warranty

1.4 DELIVERY, STORAGE, AND HANDLING

Protect materials delivered and placed in storage from the weather, humidity and temperature variations, dirt, dust, or other contaminants.

1.5 WARRANTY

Provide manufacturer's standard performance guarantees or warranties that extend beyond a one year period.

PART 2 – PRODUCTS

2.1 SYSTEM DESCRIPTION

2.1.1 Design

Provide wood and fabric wrapped fiberglass core acoustical wall panel materials in the manufacturer's standard sizes and finishes of the type, design and configuration indicated.

2.2.1 Panel Width

Widths must be as indicated on the drawings. End panels may vary in width as necessary to cover the wall. Panel width must be as detailed.

2.2.2 Panel Height

Heights must be indicated on the Drawings. Field measures panels for custom fit to ceiling. Tolerance at floor as detailed. Panel height must be as detailed.

2.2.3 Thickness

Panel thickness as required to meet the indicated NRC range 0.70 faced with an acoustic fabric.

2.2.4 Fabric Covering

Seamless non-woven, embossed texture, needle punched 100 percent polyester, minimum 0.034 kg/linear meter.

2.2.5 Fire Rating for the Complete Composite System

Class A, 200 or less smoke density and flame spread less than 25, when tested in accordance with ASTM E84.

2.2.6 Substrate

100mm (4") thick fiberglass.

2.2.7 Noise Reduction Coefficient (NRC) Range

NRC rating of 0.7. ASTM C423

2.2.8 Mounting Acoustical Panels

Mount acoustical panels by manufacturer's standard.

2.2.9 Color

As per approval of the Consultant's Interior Designer.

2.4 FABRIC PADDED WALL PANEL

A woven polyethylene with strength at its core. It achieves high durability and ease of maintenance without added coatings or finishes. It is sourced from rapidly renewable sugarcane and only bio based high performance interior textile. Fabric panels are crafted with beveled edges, contoured corners for superior fit and finish with functional tackable surfaces.

The acoustical substrate(1" thickness) is sound absorbing, formaldehyde-free and manufactured with 20% post-consumer recovered materials. It meets ASTM E84 Class A / Class 1.

Panels are lightweight and installed simply with a quick-grab adhesive or Velcro® fasteners, eliminating the high labor costs associated with rail and hardware systems.

PART 3 EXECUTION

3.1 SURFACE CONDITIONS

Surface Condition shall be clean, smooth, oil free and prepared in accordance with panel manufacturer's instructions. Do not begin installation until all wet work, such as, plastering, painting, and concrete are completely dry. The Contractor shall be responsible for the examination and acceptance of all surfaces and conditions prior to the acoustical panel installation. The panel should be acclimatized to the room where they are to be installed for 48 hours prior as they are natural wood products and are there susceptible to moisture.

3.2 INSTALLATION

Panel installation must be by personnel familiar with and normally engaged in installation of acoustical wall panels. Apply panels in accordance with the manufacturer's installation instructions. Submit manufacturer's installation instructions and recommended cleaning instructions. All necessary hardware and accessories for a complete installation are to be furnished by the Contractor.

For wood panels using nails, staples or screws into 75mm thick metal studs on the walls via tongue and groove joint. Provide all fasteners/furring strips for complete single source installation. The metal studs should be spaced at a minimum of 300mm distance between each other.

It is recommended to have a test installation to ensure that everything is satisfactory before proceeding with the full installation.

Panels should only be handled wearing clean, lightweight white gloves during the installation to avoid soiling the panels.

3.3 CLEANING

Following installation, clean dirty or stained panel surfaces in accordance with manufacturer's instructions and leave them free from defects. Remove and replace panels that are damaged, discolored, or improperly installed.

PART 4 – MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

Acoustical wall and ceiling tiles shall be measured by the number of square meters laid and accepted.

4.2 BASIS OF PAYMENT

The quantity measured as provided in Method of Measurement shall be paid for at the contract unit price, respectively for each of the Pay Items listed below and shown in the Bill of Quantities, which price and payment shall constitute full compensation for

furnishing and placing all materials and for all labor, equipment, tools and incidentals to complete the work prescribed in this Section.

- End of Section -

SECTION 09900 - PAINTS AND COATINGS

PART 1 - GENERAL

1.1 REFERENCES

The listed publications form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

1.1.1 American National Standards Institute (ANSI)

ANSI A13.1 Scheme for Identification of Piping Systems

1.1.2 American Society for Testing and Materials (ASTM)

ASTM C 669	Glazing Compounds for Back Bedding and Face Glazing of Metal Sash
ASTM C 920	Elastomeric Joint Sealants
ASTM D 2092	Preparation of Zinc-Coated (Galvanized) Steel Surfaces for Painting
ASTM D 2824	Aluminum-Pigmented Asphalt Roof Coatings, Non-Fibered, Asbestos Fibered, and Fibered Without Asbestos
ASTM D 4214	Evaluating the Degree of Chalking of Exterior Paint Films
ASTM D 4263	Indicating Moisture in Concrete by the Plastic Sheet Method

1.1.3 THE SOCIETY FOR PROTECTIVE COATINGS (SSPC)

SSPC PA Guide 5	Guide to Maintenance Coating of Steel Structures in Atmospheric Service
SSPC SP 1	Solvent Cleaning
SSPC SP 10	Near-White Blast Cleaning
SSPC SP 2	Hand Tool Cleaning
SSPC SP 3	Power Tool Cleaning
SSPC SP 5	White Metal Blast Cleaning SSPC
SP 6	Commercial Blast Cleaning SSPC SP
7	Brush-Off Blast Cleaning

1.2 SUBMITTALS

1.2.1 Shop Drawings

- a. Piping identification
- Submit color stencil codes

1.2.2 Product Data

- a. Coating

Manufacturer's Technical Data Sheets

- b. Sealant

1.2.3 Samples

- a. Color

Submit manufacturer's samples of paint colors. Cross reference
samples to color scheme as indicated. color

1.2.4 Manufacturer's Instructions

- a. Application instructions b.

Mixing

Detailed mixing instructions, minimum and maximum application temperature and humidity, pot life, and curing and drying times between coats.

- c. Manufacturer's Material Safety Data Sheets

Submit manufacturer's Material Safety Data Sheets for coatings, solvents, and other potentially hazardous materials.

1.2.6 Operation and Maintenance Data a.

Coatings

Preprinted cleaning and maintenance instructions for all coating systems shall be provided.

1.3 APPLICATOR'S QUALIFICATIONS

1.3.1 Contractor Qualification

Submit the name, address, telephone number, FAX number, and e-mail address of the Subcontractor that will be performing all surface preparation and coating application. Submit evidence that key personnel have successfully performed surface preparation and application of coatings on a minimum of three similar projects within the past three years. List information by individual and include the following:

- a. Name of individual and proposed position for this work. b.
Information about each previous assignment including: c.
Position or responsibility
- d. Employer (if other than the Contractor)
- e. Name of facility Procuring Entity
- f. Mailing address, telephone number, and telex number of facility Procuring Entity
- g. Name of individual in facility Procuring Entity's organization who can be contacted as a reference

- h. Location, size and description of structure i.

Dates work was carried out

- j. Description of work carried out on structure

1.4 QUALITY ASSURANCE

1.4.1 Field Samples and Tests

The Procuring Entity may choose up to two coatings that have been delivered to the site to be tested at no cost to the Procuring Entity. Take samples of each chosen product as specified in the paragraph "Sampling Procedures." Test each chosen product as specified in the paragraph "Testing Procedure." Products which do not conform, shall be removed from the job site and replaced with new products that conform to the referenced specification. Testing of replacement products that failed initial testing shall be at no cost to the Procuring Entity.

1.4.1.1 Sampling Procedure

The Procuring Entity will select paint at random from the products that have been delivered to the job site for sample testing. The Contractor shall provide one liter samples of the selected paint materials. The samples shall be taken in the presence of the Procuring Entity, and labeled, identifying each sample.

1.5 LOCATION AND SURFACE TYPE TO BE PAINTED

1.5.1 Painting Included

Where a space or surface is indicated to be painted, include the following unless indicated otherwise.

- a. Surfaces behind portable objects and surface mounted articles readily detachable by removal of fasteners, such as screws and bolts.
- b. New factory finished surfaces that require identification or color coding and factory finished surfaces that are damaged during performance of the work.
- c. Existing coated surfaces that are damaged during performance of the work.

PART 2 - PRODUCTS

2.1 MATERIALS

- a. Conform to the coating specifications and standards referenced in PART 3. Submit manufacturer's technical data sheets for specified coatings and solvents.
- b. Varnish shall be of homogeneous solution of resin, drying oil, drier and solvent. It shall be extremely durable, clear coating, highly resistant to wear and tear without cracking, peeling, whitening, spotting, etc.

PART 3 - EXECUTION

3.1 PROTECTION OF AREAS AND SPACES NOT TO BE PAINTED

Prior to surface preparation and coating applications, remove, mask, or otherwise protect, hardware, hardware accessories, machined surfaces, radiator covers, plates, lighting fixtures, public and private property, and other such items not to be coated that are in contact

with surfaces to be coated. Following completion of painting, workmen skilled in the trades involved shall reinstall removed items. Restore surfaces contaminated by coating materials, to original condition and repair damaged items.

3.2 REPUTTYING AND REGLAZING

Remove cracked, loose, and defective putty or glazing compound on glazed sash and provide new putty or glazing compound. Where a defective putty or glazing compound constitutes 30 percent or more of the putty at any one light, remove the glass and putty or glazing compound and reset the glass. Remove putty or glazing compounds without damaging sash or glass. Clean rabbets to bare wood or metal and prime prior to reglazing. Putty for wood sash shall be a linseed oil putty. Glazing compounds for metal sash shall conform to ASTM C 669. Patch surfaces to provide smooth transition between existing and new surfaces. Finish putty or glazing compound to a neat and true bead. Allow glazing compound time to cure, in accordance with manufacturer's recommendation, prior to coating application. Allow the putty to set one week prior to coating application.

3.3 RESEALING OF EXISTING EXTERIOR JOINTS

3.3.1 Surface Condition

Surfaces shall be clean, dry to the touch, and free from frost and moisture; remove grease, oil, wax, lacquer, paint, defective backstop, or other foreign matter that would prevent or impair adhesion. Where adequate grooves have not been provided, clean out to a depth of 13 mm and grind to a minimum width of 6 mm without damage to adjoining work. Grinding shall not be required on metal surfaces.

3.3.2 Backstops

In joints more than 13 mm deep, install glass fiber roving or neoprene, butyl, polyurethane, or polyethylene foams free of oil or other staining elements as recommended by sealant manufacturers. Backstop material shall be compatible with sealant. Do not use oakum and other types of absorptive materials as backstops.

3.3.3 Primer and Bond Breaker

Install the type recommended by the sealant manufacturer.

3.3.4 Ambient Temperature

Not to exceed 35 degrees C when applying sealant.

3.3.5 Exterior Sealant

For joints in vertical surfaces, provide ASTM C 920, Type S or M, Grade NS, Class 25, Use NT. For joints in horizontal surfaces, provide ASTM C 920, Type S or M, Grade P, Class 25, Use T. Color(s) shall be selected by the Procuring Entity. Apply the sealant in accordance with the manufacturer's printed instructions. Force sealant into joints with sufficient pressure to fill the joints solidly. Sealant shall be uniformly smooth and free of wrinkles.

3.3.6 Cleaning

Immediately remove fresh sealant from adjacent areas using a solvent recommended by the sealant manufacturer. Upon completion of sealant application, remove remaining smears and stains and leave the work in a clean condition. Allow sealant time to cure, in accordance with manufacturer's recommendations, prior to coating.

3.4 SURFACE PREPARATION

Remove dirt, splinters, loose particles, grease, oil, disintegrated coatings, and other foreign matter and substances deleterious to coating performance as specified for each substrate before application of paint or surface treatments. Oil and grease shall be removed prior

to mechanical cleaning. Cleaning shall be programmed so that dust and other contaminants will not fall on wet, newly painted surfaces. Exposed ferrous metals such as nail heads on or in contact with surfaces to be painted with water-thinned paints, shall be spot-primed with a suitable corrosion-inhibitive primer capable of preventing flash rusting and compatible with the coating specified for the adjacent areas.

3.4.1 Additional Requirements for Preparation of Surfaces with Existing Coatings

Before application of coatings, perform the following on surfaces covered by soundly-adhered coatings, defined as those which cannot be removed with a putty knife:

- a. Wipe previously painted surfaces to receive solvent-based coatings, except stucco and similarly rough surfaces clean with a clean, dry cloth saturated with mineral spirits, ASTM D 235. Allow the surface to dry. Wiping shall immediately precede the application of the first coat of any coating, unless specified otherwise.
- b. Sand existing glossy surfaces to be painted to reduce gloss. Brush, and wipe clean with a damp cloth to remove dust.
- c. The requirements specified are minimum. Comply also with the application instructions of the paint manufacturer.
- d. Previously painted surfaces, specified to be repainted or damaged during construction shall be thoroughly cleaned of all grease, dirt, dust or other foreign matter.
- e. Blistering, cracking, flaking and peeling or other deteriorated coatings shall be removed.
- f. Chalk shall be removed so that when tested in accordance with ASTM D 4214, the chalk resistance rating is no less than 8.
- g. Slick surfaces shall be roughened. Damaged areas such as, but not limited to, nail holes, cracks, chips, and spalls shall be repaired with suitable material to match adjacent undamaged areas.
- h. Edges of chipped paint shall be feather edged and sanded smooth.
- i. Rusty metal surfaces shall be cleaned as per SSPC requirements. Solvent, mechanical, or chemical cleaning methods shall be used to provide surfaces suitable for painting.
- j. New proposed coatings shall be compatible with existing coatings.

3.4.2 Existing Coated Surfaces with Minor Defects

Sand, spackle, and treat minor defects to render them smooth. Minor defects are defined as scratches, nicks, cracks, gouges, spalls, alligatoring, chalking, and irregularities due to partial peeling of previous coatings. Remove chalking by sanding so that when tested in accordance with ASTM D 4214.

3.4.3 Removal of Existing Coatings

Remove existing coatings from the following surfaces:

- a. Surfaces containing large areas of minor defects;
- b. Surfaces containing more than 20 percent peeling area; and
- c. Surfaces designated by the Procuring Entity, such as surfaces where rust shows through existing coatings.

3.4.4 Substrate Repair

- a. Repair substrate surface damaged during coating removal;
- b. Sand edges of adjacent soundly-adhered existing coatings so they are tapered as smooth as practical to areas involved with coating removal; and
- c. Clean and prime the substrate as specified.

3.4.5 Surface Preparation for Concrete & Masonry - New Surfaces:

- a. All areas to be painted must be dry and free of dirt, grease, oil, dust, loose grit or mortar and other contaminants.
- b. Treat new masonry with Concrete Neutralizer at least a week before applying the first full coat of the preferred/recommended primer/finish coat.
- c. After a week curing, apply Acrylic Concrete Primer and Sealer if the surface is to be coated with latex paints.
- d. Apply one coat of Silicone Water Repellent.
- e. Fill up all hairline cracks and crevices with Concrete Putty to be mixed into putty consistency with Latex Paints or oil-based primers and paints. Allow to dry, sand, smooth, dust off, then spot prime before applying the recommended finish coats.

3.4.6 Surface Preparation for Concrete and Masonry - For old or previously painted surfaces.

- a. Scrape off loose, scaling and peeling old paints. Sand the whole surfaces including those where old paint still adheres very well.
- b. For areas with extreme chalking problems, steel brush, blow air from a compressor or wipe with a clean rag pre-wetted with water. Let dry, then apply one (1) coat of concrete scaler. Dry for at least 4 hours before applying subsequent coats.
- c. For areas affected by molds and mildew, wash the whole surface with water or with hypochlorite washing solution. Scrub using a stiff nylon brush, then rinse with water. Apply fungicidal washing compound. Leave overnight.
- d. For areas with mapping problems, properly prepare the surface then apply concrete sealer. Dry for at least 4 hours.
- e. Putty hairlines cracks.

3.4.7 Surface preparation for Wood - New Surfaces

- a. Dust off completely, then wipe with a clean rag. b.

Apply one coat of Lacquer Sanding Sealer.

- c. All areas to be painted must be dry and free of dirt, dust, grease, oil and other foreign matters.
- d. Sand surface holes, cracks, dents, and damaged areas with Plastic Wood Filler or Glazing Putty. Allow to dry, sand smooth, dust off, then spot prime before applying the recommended finish coats.

3.4.8 Steel/Aluminum Doors and Aluminum Windows

- a. All metal surfaces shall undergo a pre-treatment process which includes: desmutting, water-rinsing, degreasing/etching, water rinsing, zinc phosphating, water rinsing and acid rinsing.
- b. Powder coating application, shall be factory applied and shall be done in one operation using an electro-static powder gun. The materials to be coated should be well connected to earth. Coating thickness should be kept to a minimum of 60 microns for exposed areas. On details which are to be treated mechanically after coating (drilling, sawing, etc.), the coating film must not exceed 100 microns.
- c. The powder coating shall be oven cured in the range of 20 minutes at 220° Centigrade (metal temperature measured on the area with greatest metal thickness). The temperature variation in the oven should not exceed +/- 10° Centigrade.
- d. Handling: Coated items should be cooled to no less than 40° Centigrade before handling. Precautions should be taken to avoid damages on the finished coating during stacking, storing and transportation.
- e. Storage and Delivery: Inspect materials delivered to the site for damage. Unload and store with minimum handling. Provide storage space in dry location with adequate ventilation, free from dust or water and easily accessible for inspection and handling. Store materials neatly on the floor, properly stacked on non-absorptive strips or wood platforms. Protect finished surfaces during shipping and handling using the manufacturer's standard method.
- f. Decoration of plasterboard/cement boards should not proceed until all finished surfaces are dry and free from dust oil or grease stains. Surface imperfections should be made good with an approved filler. It is recommended that a suitable sealer be used to equalize the surface section between jointed and unjointed areas.
- g. Plasterboard which has been fixed and left standing for a very long period before painting may have discolored because of exposure to light. The quality of the product is not impaired but it is recommended that it should be thoroughly sanded and sealed in accordance with the paint manufacturer's specifications before the application of subsequent paint coats.

3.4.10 Wood Surfaces

Wood surfaces shall be cleaned of foreign matter. Wood surfaces adjacent to surfaces to receive water-thinned paints shall be primed and/or touched up before applying water-thinned paints. Small, dry seasoned knots shall be scraped, cleaned, and given a thin coat of commercial knot sealer before application of the priming coat. Pitch on large, open, unseasoned knots and all other beads or streaks of pitch shall be scraped off, or, if it is still soft, removed with mineral spirits or turpentine, and the resinous area shall be thinly coated with knot sealer.

3.4.10.1 Wood Repair

Badly decayed areas shall be removed and repaired. Areas and pieces decayed beyond repair shall be replaced with new pieces that match originals in all respects. Moderately decayed areas, weathered, or gouged wood shall be patched with approved patching compounds, and shall be sanded smooth. The source or cause of wood decay shall be identified and corrected prior to application of patching materials. Wet wood shall be completely dried to a moisture content not exceeding 12 percent, as measured by a moisture meter, to its full depth before patching, unless otherwise authorized. Wood that is to be patched shall be clean of dust, grease, and loose paint.

a. Epoxy Wood Repair

Epoxy wood repair materials shall be applied in accordance with manufacturer's written instructions. Health and safety instructions shall be followed in accordance with the manufacturer's instructions. Clean mixing equipment shall be used to avoid

contamination. Mix and proportions shall be as directed by the manufacturer. Batches shall be only large enough to complete the specific job intended. Patching materials shall be completely cured before painting or reinstallation of patched pieces.

b. Epoxy Consolidant and Epoxy Paste

Epoxy liquid wood consolidant shall be used: 1) to penetrate and impregnate deteriorated wood sections in order to reinforce wood fibers that have become softened or absorbent. 2) as a primer for areas that are to receive epoxy paste filler. Epoxy paste shall be used to fill areas where portions of wood are missing such as holes, cracks, gaps, gouges, and other voids.

3.4.10.2 Exposed Ferrous Metals

Exposed ferrous metals such as nail heads on or in contact with wood surfaces to be painted with water-thinned paints, shall be spot-primed with a suitable corrosion-inhibitive primer capable of preventing flash rusting and compatible with the coating specified for the adjacent areas.

3.4.10.3 Finishing Nails

Finishing nails shall be set, and all holes and surface imperfections shall be primed. After priming, holes and imperfections in finish surfaces shall be filled with putty or plastic wood filler, colored to match the finish coat if natural finish is required, allowed to dry, and sanded smooth. Putty or wood filler shall be compatible with subsequent coatings.

3.4.10.4 Wood Preservative

Areas of bare wood in exterior locations prone to excessive moisture or standing water shall be treated with a commercial, fungicide, paintable water repellent/preservative. Water repellent/preservatives shall not be used on interior surfaces.

3.4.11 Metal Surfaces

3.4.11.1 Cleaning/ Derusting of Metal Surfaces

Metal surfaces shall be cleaned of foreign matter. Programs for preparation of metal shall be per SSPC PA Guide 5. Grease, oil, and other soluble contaminants shall be removed by solvent cleaning per SSPC SP 1. Surfaces shall be free from soils and corrosion; e.g. grease, oil, solder flux, welding flux, weld spatter, sand, rust, scale, and other contaminants that might interfere with the application of the new finish. Cleaning methods shall be the gentlest possible to achieve the desired result. Metals which are soft, thin, or exhibit fine detail shall not be abrasively cleaned. Evidence of corrosion or contamination on a previously cleaned surface shall be cause for recleaning prior to painting.

Ferrous surfaces that contain loose rust, loose mill scale, and other foreign substances shall be cleaned mechanically with hand tools according to SSPC SP 2, power tools according to SSPC SP 3 or by blast cleaning according to SSPC SP 5, SSPC SP 6, SSPC SP 7, SSPC SP 10. Shop-coated ferrous surfaces shall be protected from corrosion by treating and touching up corroded areas immediately upon detection.

- a. All areas to be painted must be dry and free from all dirt, dust, oil, grease, wax and other contaminants.
- b. If the existing paint is sound and shows normal chalking, sand lightly and wipe surface dust-free.
- c. If the existing paint is cracked, alligatored, peeling or in a general poor condition, remove rust by scraping, wire brushing or sanding.
- d. Treat the surface with a rust converter. Allow to stand overnight, then wipe off white residue with a clean rag soaked in solvent.

- e. Allow one (1) coat of Primer. Allow to dry overnight before finishing with one or two coats of recommended topcoat."

3.4.11.2 Metals (New)

- a. All metal surfaces shall undergo a pre-treatment process which includes: desmutting, water-rinsing, degreasing/etching, water rinsing, zinc phosphating, water rinsing and acid rinsing.
- b. Handling: Coated items should be cooled to no less than 40° Centigrade before handling. Precautions should be taken to avoid damages on the finished coating during stacking, storing and transportation.
- e.. Storage and Delivery: Inspect materials delivered to the site for damage. Unload and store with minimum handling. Provide storage space in dry location with adequate ventilation, free from dust or water and easily accessible for inspection and handling. Store materials neatly on the floor, properly stacked on non-absorptive strips or wood platforms. Protect finished surfaces during shipping and handling using the manufacturer's standard method.

3.4.11.3 Nonferrous Metallic Surfaces

Galvanized, aluminum and aluminum-alloy, lead, copper, and other nonferrous metal surfaces shall be solvent-cleaned in accordance with SSPC SP 1.

a. Aluminum

Aluminum surfaces shall be treated per ASTM D 1730 or ASTM D 1731. Steel wool, steel brushes and uninhibited caustic etching solutions, such as sodium hydroxide, shall not be used on aluminum.

b. Zinc

Zinc surfaces including zinc-coated substrates, shall be cleaned prior to painting as follows: degrease, soak in a mild and inhibited alkaline cleaner, rinse with clean overflowing water, clean anodically in an acid (e.g. 0.25 to 0.75 percent sulfuric acid), and rinse with clean overflowing water.

3.5 TIMING

Surfaces that have been cleaned, pretreated, and otherwise prepared for painting shall be given a coat of the specified first coat as soon as practical after such pretreatment has been completed, but prior to any deterioration of the prepared surface. Unless otherwise directed, the first coat primer shall be applied within 48 hours of surface preparation.

3.6 SURFACES TO BE PREPARED FOR PAINTING

Surfaces shall be prepared as specified and as shown in the painting schedule on the drawings.

3.7 CLEANING

Cloths, cotton waste and other debris that might constitute a fire hazard shall be placed in closed metal containers and removed at the end of each day. Containers shall be removed from the site or destroyed in an approved manner. Preparation materials and other deposits on adjacent surfaces shall be removed and the entire job left clean and ready for painting.

3.8 APPLICATION

- a. Employ only experienced, skilled craftsmen and apply as per manufacturer's written specifications.
- b. Paint shall be applied by a brush, roller or spray in accordance with the manufacturer's directions. All materials when brushed, shall be evenly flowed on with brush best suited for the type of material being applied. When using roller, the covers shall be carpet, velvet back or high pile sheeps wool best suited for materials and texture specified by the Architect/Procuring Entity. Sprayed paint shall be uniformly applied with suitable equipment.
- c. Exposed surfaces shall mean all areas visible when all permanent or built in fixtures, etc., are in place in all areas specified or scheduled to be painted. Painted surfaces in back of movable equipment and furniture. Paint all inside metal and plastered surfaces visible through the above specified equipment covers.
- d. Access panels, electrical panels, louvers, exposed conduits, primed outlet covers, primed wall and ceiling plates and other primed items occur unless otherwise specified in the Painting Schedule. Paint the back sides of access panels, removable or hinged covers and the like.
- e. Do not apply exterior paint in damp, rainy weather. Do not apply interior paint when in the Architect/Procuring Entity's opinion, satisfactory results cannot be obtained due to high humidity and excessive temperature. However, failures of the Architect/Procuring Entity to notify the Contractor shall not relieve the Contractor of responsibility to produce satisfactory results.

3.9 PROTECTION

- a. Protect or remove all exposed finished hardware, lighting fixtures and accessories, plumbing fixtures and accessories, glasses and the like so that these are not stained during painting operations. Reinstall them after completion of work.
- b. Tape and cover with craft paper or equal all other surfaces which would be endangered by stains or paint marks.
- c. Repair any damage done. Refinish any work made necessary by defective workmanship for material or carelessness of other crafts.

3.10 WORKMANSHIP IN GENERAL

- a. Mix paint with proper consistency in accordance with the manufacturer's printed instructions. Apply paint evenly and smoothly without runs, sags, or other defects and brush efficiently to minimize brush marks. Make edges of points adjoining other material or color sharp and clean without overlapping.
- b. Stir paint thoroughly to keep pigment in even suspension when paint is being applied.
- c. Except as otherwise directed by the Architect/Procuring Entity, apply all paints in three coats (priming, body and finish). Allow each coat to dry thoroughly before the succeeding coat is applied. In general, unless otherwise instructed by the Architect/Procuring Entity provide not less than 48 hours as the time between the application of succeeding coats. Let the Architect/Procuring Entity inspect and approve each coat before the succeeding coat is applied.
- d. If surfaces are not fully covered or cannot be satisfactorily finished in the number of coats specified, apply subsequent coats to attain the desired evenness of paint without extra cost to the Procuring Entity.
- e. Before applying succeeding coats, primers and undercoats shall be completely integral and perform the functions for which they are specified. Properly prepare and touch up all scratches, abrasions or any other disfigurement and remove any foreign matter before proceeding with the following coats. All spot- priming and spot-coating shall be feather-edge in to the adjacent coatings to produce a smooth and level surface.
- f. Sand smooth woodwork to be finished with enamel. Use fine sandpaper between coats of enamel applied to wood or metal to produce an even smooth surface.
- g. Do not apply final coats until after other trades whose operations would be detrimental to finish painting have finished with their work in the areas to be painted and the areas have been approved for painting. Test concrete and plaster surfaces for moisture, using a moisture meter, prior to painting. Surfaces having meter reading above 15 shall not be painted.
- h. Do necessary puttying of nail holes, cracks, etc. after the prime coat has been applied. Bring putty flush with adjoining surface in a neat, workmanlike manner.
- i. Freshly painted areas shall be properly ventilated in air drying. Closets and cabinet doors shall be left open.

3.11 PIGMENTS FOR TINTING

- a. Tinting colors for oil paint shall be colors-in-oil, ground in pure linseed oil, and of the highest grade obtainable.
- b. Colors shall be non-fading.
- c. Color pigments shall be used to produce the exact shades of paint which shall conform to the approved color scheme of the building.
- d. Except as otherwise noted, the color of the priming coat shall be lighter than the body coat and the color of the body coat lighter than the finish coat. The first coat shall be white.

3.12 PROCEDURE FOR VARNISHING

- a. Sand surface thoroughly.
- b. Putty all crack and other wood imperfections with wood paste filler.
- c. Apply oil stain.

- d. Apply lacquer sanding sealer. e.

Sand surface along the grain.

- f. Spray three (3) coats of clear dead flat lacquer. g.

Polish surface coated using cloth pad.

- h. Spray gloss lacquer or flat lacquer whichever specified or required to match existing.

3.13 GALVANIZING

3.13.1 Preparation

Steel Checkered Plate and other steel structures specified on the drawings shall be galvanized after fabrication in accordance with the requirements of ASTM A 123 or ASTM 153. Prior to galvanizing, the surfaces shall be cleaned of dirt, weld splatter, grease, slag, oil, paint or other deleterious matters. The steel surfaces shall be chemically de-scaled and cleaned with the same abrasive blast or other suitable method as approved by the Procuring Entity.

3.13.1.1 Galvanizing

The zinc coating shall consist of uniform layers of commercially pure zinc free from abrasions, cracks, blisters, chemical spots or other imperfections, and shall adhere firmly to the surface of the steel. The weight of zinc coating per square meter of actual surface shall not be less than 550 grams. Any surface damaged subsequent to galvanizing shall be given two coats of approved zinc rich paints.

All galvanized steel work shall be treated with zinc chromate two-pack etch primer followed by one coat of non-etch zinc chromate primer.

3.14 CLEANING

Protect the work and adjacent work and materials at all times by a suitable covering or by other methods. Upon completion of the work, remove paint and varnish spots from floors, glass finish hardware, etc. Remove all surplus materials, scaffolds, etc. so as to leave the premises in perfect condition, acceptance to the Procuring Entity.

3.15 FINAL INSPECTION

- a. Finished surfaces shall be solid, even color and finished texture, free from drops, runs, lumps, brush marks, discoloration or other defects.
- b. Before final inspection, any work which has become damaged or discolored shall be touched up or refinished in a satisfactory manner.

PART 4 - MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

The quantity of Paints and Coatings to be paid for shall be measured by the number of square meters of various types of finishes applied, completed and accepted by the Procuring Entity.

4.2 BASIS OF PAYMENT

Payment of above item of work shall constitute full compensation for completed work and certified for payment by the Procuring Entity.

-- End of Section --

DIVISION 6 – EQUIPMENT AND APPLIANCES

SECTION 11132 - AUDIO VIDEO EQUIPMENT

PART 1 - GENERAL

1.1 SECTION INCLUDES

- a. Furnish and install complete audio video equipment for Audio Visual Room

1.2 SUBMITTALS

- a. Product Data: Submit applicable reference standards, current performance data, and application recommendations and product limitations.
- b. Shop Drawings: Submit assembly and installation layout drawings showing product components in assembly with adjacent materials and products (digital project system, projection screen, projector pedestal & projector porthole and digital audio system).
- c. Operation and Maintenance Data.
- d. Warranty: Submit manufacturer's standard warranty statement.

1.3 QUALITY ASSURANCE

- a. Manufacturer Qualifications: Minimum 5 years experience in manufacture of similar products in use in similar environments, including project size, and complexity, and with the production capacity to meet the construction and installation schedule.
- b. Source Limitations: Obtain components and accessories through one source from a single approved manufacturer.
- c. Electrical Components: Listed and labeled per NFPA 70, Article 100 by a testing agency acceptable to authorities having jurisdiction.

1.4 DELIVERY, STORAGE, AND HANDLING

- a. Pack and ship in accordance with manufacturer's recommendations:
 - 1. Finish, assemble, and test all components in the factory before shipment.
 - 2. Rack components will be sub assembled before delivery to the jobsite.
 - 3. Deliver components to rooms designated for installation.
- b. Do not accept damaged products at the site. Do not install damaged products.
- c. Store products in heated indoor storage near the point of installation. Retain protective packaging until installing. Ship to jobsite only after roughing-in, painting work, and other related finish work has been completed and installation areas are ready to accept units and recommended temperature and humidity levels will be maintained during the remainder of construction.

1.5 PROJECT CONDITIONS

- a. Determine with the customer rack location(s).
- b. Where code permits, wiring may be run outside of conduit. Such wiring shall be coordinated either in a plenum space or by means of secondary enclosure that meets code requirements.
- c. Field Measurements: Obtain required field measurements and indicate performance setups, ceiling construction, wall construction, ventilation features, electrical systems, networks and potential obstacles on shop drawings.

1.6 WARRANTY

- a. Manufacturer's written warranty indicating manufacturer's intent to repair or replace components of system that fail in materials or workmanship within 1 year from date of Substantial Completion. Repair or replacement shall occur within 30 days following report of such defects by the Procuring Entity.

PART 2 - PRODUCT

ITEM NO.	AUDIO VIDEO EQUIPMENT COMPONENT	DESCRIPTION
1.0	DIGITAL PROJECTION SYSTEM	
1.1	MAIN CONTROL SYSTEM (1 UNIT)	<p>Description: Main Control System</p> <p>Functions: Zigbee wireless communication Technology, Control Up to 273 Wireless discussion units and 2 chairman units, adjustable sensitivity for audio inputs and outputs, easy to set up.</p> <p>Specification: Power supply: 110-220AV AC 50/60Hz, Audio Frequency Range: UHF 521.25MHz-936.85 Mhz, Maximum power consumption: 60 watts: Modulation Method: FM, Frequency Response: 65Hz-18Khz, Signal to Noise Ratio:>100dB, Audio output: XLR Balance output, 6.3mm unbalance output, RS-232</p> <p>Control interface can be connected to Camera Tracking system, Dimension: 426x88x263mm, Weight:4.5kg</p>

ITEM NO.	AUDIO VIDEO EQUIPMENT COMPONENT	DESCRIPTION
1.2	MICROPHONE CHAIRMAN UNIT (1 UNIT)	<p>Description: Advance Conferencing Technology, with Illuminated Ring, Unidirectional condenser microphone for Hi quality Sound pickup. Priority Button to Switch off the speaking unit, low battery indicator.</p>

1.3	MICROPHONE DELEGATE UNIT (29 UNITS)	Description: Conferencing Technology, with Illuminated Ring, Unidirectional condenser microphone for Hi quality Sound pickup. Priority Button to Switch off the speaking unit, low battery indicator.
1.4	SPEAKER (4 UNITS)	Specifications: 10" Full Range 2 way Loudspeaker. Max SPL: 124dB, Frequency Range: 52Hz-20Khz, coverage pattern: 110x60deg, Class D Amplifier 500 watts continuous power

1.5	WIRELESS HANDHELD MICROPHONE (1SET)	<p>Specifications: System: Analog UHF Wireless transmission, 1xhandheld transmitters, Antenna diversity,</p> <p>K3E:606 to 630 Mhz RF Frequency band, 24Mhz RF Bandwidth, Auto-scanning RF channel, 300ft/ 91.4m operating range (line of sight), 12 max systems per setup, 100 dBA dynamic range</p> <p>Receiver: Tabletop form factor, 2x internal antennae, 1 audio channel, x XLR: 3-pin male balanced output audio I/O, -27 dBV XLR Mic level, -13dBV 1/4" output instrument level, 50 Hz to 15kHz dependent on Mic, XLR output 200 Ohms and 50ohms 1/4" output impedance, AC/DC power adapter, 12 to 15 VDC at 160 mA, Center-positive included, 100-240 VAC, 50/ 60 Hz AC input power, 1x Multi segment LED and 2x LED AF level sync, ABS housing, 0-135deg F/ -17 to 57deg C, 7.4 x 1.6 x 4.1" / 188 x 40 x 103 mm, 8.5oz/241g</p> <p>Transmitter: Handheld, 10mw RF, no audio I/O, OFF/ON Switch muting, No Auto-level control, -20 to -10db gain range, manual sync method, 1x internal handheld antennae, battery 2 x AA included with 4 hours battery life (alkaline), 1 x multi segment LED and 1x LED battery status, ABS housing, 2.5 x 4.3 x 0.8"/ 64x110x21mm, 7.7 oz/ 218 g (without batteries)</p> <p>MICROPHONE: Handheld capsule, mono sound field, dynamic capsule, cardioid polar pattern, 50 Hz to 16 kHz frequency, -55 dBV/Pa at 1 Khz sensitivity</p>
2.0	PROJECTION SCREEN	
2.1	MOTORIZED PROJECTION SCREEN (2 UNITS)	<p>Specifications: Matte White Alu. 150" 16:9 Format with 12V Trigger. Motorized projection screen with wireless remote</p>
2.2	PROJECTOR (2 UNITS)	<p>Specifications: White and Colour Light Output at 5500 Lumens, Multi PC Projection, 2X HDMI, Split Screen</p>

2.3	VIDEO SWITCHER (1 UNIT)	Specifications: Mini + Streaming video switcher: USB Capture video complying with UVC for live, 2" TFT Display on board to live preview 4input. Control by PC or mobile, PTZ Control
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PART 3 EXECUTION

3.1 INSTALLATION

- b. Manufacturer's representative to install, calibrate and tune system for preset environments determined by the Procuring Entity.
 - c. All components are manufactured units, pre-wired where appropriate. d.
- Calibrate system for proper operation.
- e. Acceptance Testing shall be performed during a period designated and agreed upon by all parties. The minimum time required for Acceptance Testing is five working days of dedicated quiet. Following the testing period, the Procuring Entity or Procuring Entity's representative will work with the manufacturer's representative for final tuning and acceptance.

3.2 DEMONSTRATION

- a. Train Procuring Entity's personnel to operate, and maintain the projection and audio system as applicable.
- b. Turn over of operation and instructions manual to the Procuring Entity.

3.2 CERTIFICATION

- a. The Contractor shall provide a Certificate of Testing and Certificate of Training to the Procuring Entity's representative/Assigned Technician.
- b. The Procuring entity shall issue to the Contractor a Certificate of acceptance of the operational manual/brochures/guide upon endorsement of the project.

-End of Section-

DIVISION 7 – FURNISHING

SECTION 12500 – FURNITURE AND ACCESSORIES

PART 1 GENERAL

1.1 SCOPE OF WORK

The scope of work consists of the supply and installation of furnishing including accessories to complete all in accordance with the Specifications and Drawings at location indicated on the Drawings.

The Contractor shall also consider as part of its bid other furniture (i.e. built-in cabinets, etc.) that are not shown in this Specifications but are indicated in the Drawings.

1.2 SUBMITTALS

The following shall be submitted:

a. Shop Drawings

Submit shop drawings indicating material characteristics, details of construction, connections, and relationship with adjacent construction.

For Seats: Drawings indicating metal thickness, fastenings, details of hinge mechanism, seat and back dimensions, proposed finish, and including seating plans showing row spacing, row lengths, the varying lateral spacing at backs and seats, back pitch, and chair widths for the various section lengths, floor pitch, and riser height, where applicable.

b. Product Data

Manufacturer's descriptive data, catalog cuts, and installation instructions.

Samples

Samples of upholstery, plywood, paint, and plastic finish materials and one complete chair. Artificial leather samples shall be of sufficient size to show color range, pattern, and finish. Chair samples may be incorporated into the installation, provided it is identified and the location noted.

1.2 QUALITY ASSURANCE

Manufacturer Qualifications: Minimum 5 year experience manufacturing similar products.

1.3 DELIVERY AND STORAGE

a. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.

b. Materials shall be stored in a safe, dry, and clean location.

- c. Handling of items shall be in a manner that will protect the materials from damage.

1.4 WARRANTY

Manufacturer provides a one (1) year warranty for parts and labor. This warranty covers broken welds and defective gas lift occurred within one (1) year warranty period. However, warranty will not apply to any product failing/hitting the ground or damage incurred due to the fault of the Procuring Entity.

PART 2 – PRODUCTS

2.1 SEE DESIGN AND RATIONALE DOCUMENT PAGE 13. OTHER ATTACHMENTS

PART 3 - EXECUTION

3.1 INSTALLATION

Installation of furniture and accessories shall be in accordance with the Drawings and approved installation instructions.

-- End of Section

DIVISION 8 – ELECTRICAL WORKS

SECTION 16050 - BASIC ELECTRICAL MATERIALS AND METHODS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

1.1.1 AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D709 (2000) Laminated Thermosetting Materials

1.1.2 INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC. (IEEE)

IEEE 100 (1996) Dictionary of Electrical and Electronics Terms
(ANSI/IEEE)

IEEE C2 (1997) National Electrical Safety Code (ANSI/IEEE)

1.1.3 NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA C57.12.28 (1999) Pad-Mounted Equipment - Enclosure Integrity (Revision of ANSI C57.12.28-88)

NEMA ICS 6 (1993) Industrial Control and Systems Enclosures

NEMA MG 1 (1999) Motors and Generators

1.1.4 NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70 (2014) National Electrical Code

1.1.5 Institute of Integrated Electrical Procuring Entity (IIEE)

PEC (2009) Philippine Electrical Code

1.1.6 Philippine National Standard (PNS)

PNS (2002) Philippine National Standard

1.2 RELATED REQUIREMENTS

This section applies to certain sections of Division 13, "Special Construction. This section applies to all sections of Division 16, "Electrical," of this project specification unless specified otherwise in the individual sections.

1.3 DEFINITIONS

- a. Unless otherwise specified or indicated, electrical and electronics terms used in these specifications, and on the drawings, shall be as defined in IEEE 100.
- b. The technical sections referred to herein are those specification sections that describe products, installation procedures, and equipment operations and that refer to this section for detailed description of submittal types.
- c. The technical paragraphs referred to herein are those paragraphs in PART 2 - PRODUCTS and PART 3 - EXECUTION of the technical sections that describe products, systems, installation procedures, equipment, and test methods.

1.4 ELECTRICAL CHARACTERISTICS

Electrical characteristics for this project shall be 34.5 kV primary, three phase, three wire, 60 Hz, and 240 volts secondary, three phase, three wire.

1.5 SUBMITTALS

Submittals shall include the manufacturer's name, trade name, place of manufacture, catalog model or number, nameplate data, size, layout dimensions, capacity, project specification and technical paragraph reference. Submittals shall also include applicable industry, and technical society publication references, and years of satisfactory service, and other information necessary to establish contract compliance of each item to be provided. Photographs of existing installations are unacceptable and will be returned without approval.

1.5.1 Manufacturer's Catalog Data

Submittals for each manufactured item shall be the current manufacturer's descriptive literature of cataloged products, equipment drawings, diagrams, performance and characteristic curves, and catalog cuts. Handwritten and typed modifications and other notations not part of the manufacturer's preprinted data will result in the rejection of the submittal. Should manufacturer's data require supplemental information for clarification, the supplemental information shall be submitted as specified for certificates of compliance.

1.5.2 Drawings

Submit drawings a minimum of 355 by 510 mm in size using a minimum scale of one mm per 100 mm, except as specified otherwise. Include wiring diagrams and installation details of equipment indicating proposed location, layout and arrangement, control panels, accessories, piping, ductwork, and other items that must be shown to ensure a coordinated installation. Wiring diagrams shall identify circuit terminals and indicate the internal wiring for each item of equipment and the interconnection between each item of equipment. Drawings shall indicate adequate clearance for operation, maintenance, and replacement of operating equipment devices.

1.5.3 Instructions

Where installation procedures or part of the installation procedures are required to be in accordance with manufacturer's instructions, submit printed copies of those instructions prior to installation. Installation of the item shall not proceed until manufacturer's instructions are received. Failure to submit manufacturer's instructions shall be cause for rejection of the equipment or material.

1.5.4 Certificates

Submit manufacturer's certifications as required for products, materials, finishes, and equipment as specified in the technical sections. Certificates from material suppliers are not acceptable. Preprinted certifications and copies of previously submitted documents will not be acceptable. The manufacturer's certifications shall name the appropriate products, equipment, or materials and the publication specified as controlling the quality of that item. Certification shall not contain statements to imply that the item does not meet requirements specified, such as "as good as"; "achieve the same end use and results as materials formulated in accordance with the referenced publications"; or "equal or exceed the service and performance of the specified material." Certifications shall simply state that the item conforms to the requirements specified. Certificates shall be printed on the manufacturer's letterhead and shall be signed by the manufacturer's official authorized to sign certificates of compliance.

1.5.4.1 Reference Standard Compliance

Where equipment or materials are specified to conform to industry and technical society reference standards of the organizations such as American National Standards Institute (ANSI), American Society for Testing and Materials (ASTM), National Electrical Manufacturers Association (NEMA), Underwriters Laboratories Inc. (UL), and Association of Edison Illuminating Companies (AEIC), submit proof of such compliance. The label or listing by the specified organization will be acceptable evidence of compliance.

1.5.4.2 Independent Testing Organization Certificate

In lieu of the label or listing, submit a certificate from an independent testing organization, competent to perform testing, and approved by the Procuring Entity. The certificate shall state that the item has been tested in accordance with the specified organization's test methods and that the item complies with the specified organization's reference standard.

1.6 QUALITY ASSURANCE

1.6.1 Material and Equipment Qualifications

Provide materials and equipment that are products of manufacturers regularly engaged in the production of such products which are of equal material, design and workmanship. Products shall have been in satisfactory commercial or industrial use for 2 years prior to bid opening. The 2-year period shall include applications of equipment and materials under similar circumstances and of similar size. The product shall have been on sale on the commercial market through advertisements, manufacturers' catalogs, or brochures during the 2-year period. Where two or more items of the same class of equipment are required, these items shall be products of a single manufacturer; however, the component parts of the item need not be the products of the same manufacturer unless stated in the technical section.

1.6.2 Regulatory Requirements

Equipment, materials, installation, and workmanship shall be in accordance with the mandatory and advisory provisions of NFPA 70 and PEC.

1.6.3 Alternative Qualifications

Products having less than a 2-year field service record will be acceptable if a certified record of satisfactory field operation for not less than 6000 hours, exclusive of the manufacturers' factory or laboratory tests, is furnished.

1.6.4 Service Support

The equipment items shall be supported by service organizations which are reasonably convenient to the equipment installation in order to render satisfactory service to the equipment on a regular and emergency basis during the warranty period of the contract.

1.6.5 Manufacturer's Nameplate

Each item of equipment shall have a nameplate bearing the manufacturer's name, address, model number, and serial number securely affixed in a conspicuous place; the nameplate of the distributing agent will not be acceptable.

1.6.6 Modification of References

In each of the publications referred to herein, consider the advisory provisions to be mandatory, as though the word, "shall" had been substituted for "should" wherever it appears. Interpret references in these publications to the "authority having jurisdiction," or words of similar meaning, to mean the Procuring Entity.

1.6.7 Material and Equipment Manufacturing Date

Products manufactured more than 3 years prior to date of delivery to site shall not be used, unless specified otherwise.

1.7 POSTED OPERATING INSTRUCTIONS

Provide for each system and principal item of equipment as specified in the technical sections for use by operation and maintenance personnel. The operating instructions shall include the following:

- a. Wiring diagrams, control diagrams, and control sequence for each principal system and item of equipment.
- b. Start up, proper adjustment, operating, lubrication, and shutdown procedures.
- c. Safety precautions.
- d. The procedure in the event of equipment failure.
- e. Other items of instruction as recommended by the manufacturer of each system or item of equipment.

Print or engrave operating instructions and frame under glass or in approved laminated plastic. Post instructions where directed. For operating instructions exposed to the weather, provide weather-resistant materials or weatherproof enclosures. Operating instructions shall not fade when exposed to sunlight and shall be secured to prevent easy removal or peeling.

1.8 NAMEPLATES

ASTM D709. Provide laminated plastic nameplates for each panelboard, equipment enclosure, relay, switch, and device; as specified in the technical sections or as indicated on the drawings. Each nameplate inscription shall identify the function and, when applicable, the position. Nameplates shall be melamine plastic, 3 mm thick, white with black center core. Surface shall be matte finish. Corners shall be square. Accurately align lettering and engrave into the core. Minimum size of nameplates shall be 25 by 65 mm. Lettering shall be a minimum of 6.35 mm high normal block style.

1.9 ELECTRICAL REQUIREMENTS

Electrical installations shall conform to IEEE C2, NFPA 70, NEC and requirements specified herein.

1.9.1 Wiring and Conduit

Provide internal wiring for components of packaged equipment as an integral part of the equipment. Provide power wiring and conduit for field-installed equipment, and motor control equipment forming part of motor control centers or switchgear assemblies, the conduit and wiring connecting such centers, assemblies, or other power sources to equipment under Section 16402, "Interior Distribution System." Power wiring and conduit shall conform to Section 16402, "Interior Distribution System." Control wiring and conduit shall be provided under, and conform to the requirements of the section specifying the associated equipment.

1.9.2 Three-Phase Motor Protection

Provide controllers for motors rated 1-hp and above with electronic phase-voltage monitors designed to protect motors from phase-loss, undervoltage, and overvoltage. Provide protection for motors from immediate restart by a time adjustable restart relay.

PART 2 - PRODUCTS

Not used.

PART 3 EXECUTION

3.1 PAINTING OF EQUIPMENT

3.1.1 Factory Applied

Electrical equipment shall have factory-applied painting systems which shall, as a minimum, meet the requirements of NEMA ICS 6 corrosion-resistance test and the additional requirements specified in the technical sections.

3.1.2 Field Applied

Paint electrical equipment as required to match finish of adjacent surfaces or to meet the indicated or specified safety criteria.

3.2 NAMEPLATE MOUNTING

Provide number, location, and letter designation of nameplates as indicated. Fasten nameplates to the device with a minimum of two sheet-metal screws or two rivets.

PART 4 – MEASUREMENT AND PAYMENT

The work under this section shall be incidental to other items of work and shall not be measured for payment unless otherwise specified in the Bill of Quantities.

-- End of Section --

SECTION 16510 - INTERIOR LIGHTING

PART 1 - GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

1.1.1 American National Standards Institute (ANSI)

ANSI C78.1381 (1997) Electric Lamps - 70-Watt M85 Metal-Halide Lamps

ANSI C82.2 (1995) Fluorescent Lamp Ballasts - Methods of Measurement

1.1.2 American Society for Testing And Materials (ASTM)

ASTM A366/A366M (1997) Commercial Steel (CS) Sheet, Carbon, (0.15 Maximum Percent) Cold-Rolled E1-1998

ASTM A580/A580M (1998) Stainless Steel Wire

ASTM A641/A641M (1998) Zinc-Coated (Galvanized) Carbon Steel Wire

ASTM A653/A653M (2000) Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

ASTM B633 (1998) Electrodeposited Coatings of Zinc on Iron and Steel

1.1.3 Institute of Electrical and Electronics Engineers, Inc. (IEEE)

IEEE C2 (2017) National Electrical Safety
Code

1.1.4 National Electrical Manufacturers Association (NEMA)

ANSI ANSLG C78.43 (1995) Electric Lamps: Single =Ended Metal Halide Lamps

ANSI C82.4 (2002) Ballasts for High-Intensity-Discharge and Low-Pressure
Sodium Lamps (Multiple-Supply
Type)

NEMA C82.11 (2011) Lamp Ballasts - High-Frequency Fluorescent Lamp
Ballasts

NEMA C82.77 (2002) Harmonic Emission Limits – Related Power Quality
Requirements for Lighting
Equipment

NEMA ICS 2 (2000) Industrial Control and Systems Controllers, Contactors
and Overload Relays, Rated 600 Volts

NEMA ICS 6 (2016) Industrial Control and Systems Enclosures

NEMA SSL 1 (2010) Electronic Drivers for Led Devices, Arrays, or Systems
NEMA SSL 3 (2011) High-Power White LED Binning for General Illumination

NEMA SSL 7A (2015) Phase-Cut Dimming for Solid State Lighting: Basic
Compatibi
lity

NEMA WD 1 (2015) General Color Requirements for Wiring Devices

1.1.5 National Fire Protection Association (NFPA)

NFPA 70 (2014) National Electrical Code

NFPA 90A (1999) Installation of Air Conditioning and Ventilating Systems

NFPA 101 (2000) Life Safety Code

1.1.6 Institute of Integrated Electrical Engineers of the Philippines

(IIEE) PEC (2009) Philippine Electrical Code

1.1.7 Philippine National Standard (PNS)

PNS (2002) Philippine National Standard

1.1.8 Underwriters Laboratories Inc. (UL)

UL 20 (2010) General-Use Snap Switches

UL 1029 (2017) High-Intensity-Discharge Lamp Ballasts

UL 1472 (2015) Safety Solid-State Dimming Controls

UL 1570 (2000) Fluorescent Lighting Fixtures

UL 1571	(2000) Incandescent Lighting Fixtures
UL 1572	(2000) High Intensity Discharge Lighting Fixtures
UL 1598	(2012) Luminaires
UL 508	(2013) Industrial Control Equipment
UL 8750	(2016) Safety Light Emitting Diode (LED) Equipment for Use in Lighting Products
UL 924	(2000) Emergency Lighting and Power Equipment
UL 935	(2000) Fluorescent-Lamp Ballasts
UL 94	(2016) Safety Tests for Flammability of Plastic Materials for Parts in Devices and Appliances

1.2 RELATED REQUIREMENTS

Section 16050, "Basic Electrical Materials and Methods," applies to this section, with the additions and modifications specified herein. Materials not considered to be lighting equipment or lighting fixture accessories are specified in Section 16402, "Interior Distribution System." Lighting fixtures and accessories mounted on exterior surfaces of buildings are specified in this section.

1.3 DEFINITIONS

1.3.1 Average Life

Time after which 50 percent will have failed and 50 percent will have survived under normal conditions.

1.3.2 Total Harmonic Distortion (THD)

The root mean square (RMS) of all the harmonic components divided by the total fundamental current.

1.4 SUBMITTALS

Submit the following:

a. Product Data

- Fluorescent lighting fixtures
- Fluorescent electronic ballasts
- Fluorescent electromagnetic ballasts
- Fluorescent lamps
- High-intensity-discharge (HID) lighting fixtures
- HID ballasts
- High-pressure sodium (HPS) lamps

Low-pressure sodium
lamps Metal-halide lamps
Incandescent lighting
fixtures Incandescent
lamps
Dimmer switch
Power hook fixture hangers
Exit signs
Emergency lighting equipment
LED Luminaire
Lighting Control

Panel b. Samples

Lighting fixtures, complete with lamps and

ballasts c. Test Reports

Operating test

Submit test results as stated in the paragraph entitled "Field Quality Control."

1.5 QUALITY ASSURANCE

1.5.1 Fluorescent Electronic Ballasts

Submit ballast catalog data as required in the paragraph entitled "Fluorescent Lamp Electronic Ballasts" contained herein. As an option, submit the fluorescent fixture manufacturer's electronic ballast specification information in lieu of the actual ballast manufacturer's catalog data. This information shall include published specifications and sketches, which covers the information required by the paragraph entitled "Fluorescent Lamp Electronic Ballasts" herein. This information may be supplemented by catalog data if required, and shall contain a list of vendors with vendor part numbers.

1.5.2 Lighting Fixtures, Complete With Lamps and Ballasts

Submit one sample of each fixture type and large order item for inspection, review, and approval. The sample shall be retained for comparison against the remainder of the fixtures. The sample may be used in the final fixture installation.

1.5.3 Luminaire Design Data

- a. Provide safety certification and file number for the luminaire family that must be listed, labeled, or identified per the NFPA 70 (NEC). Applicable testing bodies are determined by the US Occupational Safety Health Administration (OSHA) as Nationally Recognized Testing Laboratories (NRTL) and include: CSA (Canadian Standards Association), ETL (Edison Testing Laboratory), and UL (Underwriters Laboratories).
- b. Provide long term lumen maintenance projections for each LED luminaire.

1.6 WARRANTY

1.6.1 Electronic Ballast Warranty

Furnish the electronic ballast manufacturer's warranty. The warranty period shall not be less than 5 years from the date of manufacture of the electronic ballast. Ballast assembly in the lighting fixture, transportation, and on-site storage shall not exceed

12 months, thereby permitting 4 years of the ballast 5 year warranty to be in service and energized. The warranty shall state that the malfunctioning ballast shall be exchanged by the manufacturer and promptly shipped to the using Procuring Entity facility. The replacement ballast shall be identical to, or an improvement upon, the original design of the malfunctioning ballast.

1.6.2 LED Luminaire Warranty

a. Provide a written 5 year on-site replacement warranty for material, fixture finish, and workmanship. On-site replacement includes transportation, removal, and installation of new products.

1. Include finish warranty to include failure and substantial deterioration such as blistering, cracking, peeling, chalking, or fading.

2. Material warranty must include: (a) All drivers.
(b) Replacement when more than 10 percent of LED sources in any lightbar or subassembly(s) are defective or non-starting.

PART 2 - PRODUCTS

2.1 FLUORESCENT LIGHTING FIXTURES

UL 1570. Fluorescent fixtures shall have electronic ballasts unless specifically indicated otherwise.

2.1.1 Fluorescent Lamp Electronic Ballasts

The electronic ballast shall as a minimum meet the following characteristics:

a. Ballast shall comply with UL 935, NEMA C82.11, and NFPA 70 unless specified otherwise. Ballast shall be designed for the wattage of the lamps used in the indicated application. Ballasts shall be designed to operate on the voltage system to which they are connected.

b. Power factor shall be 0.95 (minimum).

c. Ballast shall operate at a frequency of 20,000 Hertz (minimum).

d. Ballast shall have light regulation of plus or minus 10 percent lumen output with a plus or minus 10 percent input voltage regulation. Ballast shall have 10 percent flicker (maximum) using any compatible lamp.

e. Ballast shall be UL listed Class P with a sound rating of "A."

f. Ballast enclosure size shall conform to standards of electromagnetic ballasts. Ballast shall have circuit diagrams and lamp connections displayed on ballast packages. Ballast shall operate lamps in a parallel circuit configuration that permits the operation of remaining lamps if one or more lamps fail or are removed.

- g. Ballast shall operate in an instant start mode.
- h. Electronic ballast shall have a full replacement warranty of 5 years from date of manufacture as specified in paragraph entitled "Electronic Ballast Warranty" herein.

2.1.1.1 T-8 Lamp Ballast

- a. Ballast shall be capable of starting and maintaining operation at a minimum of 23 degrees C for F36T8 lamps, unless otherwise indicated.
- b. Total harmonic distortion (THD): Shall be 15 percent (maximum).
- c. Input wattage.
 - (1) 36 watts (maximum) when operating one F36T8 lamp.
 - (2) 66 watts (maximum) when operating two F36T8 lamps
 - (3) 96 watts (maximum) when operating three F36T8 lamps

2.1.2. T-8 Lamp Ballast

Input wattage, for indicated lamp quantity shall be:

- (1) 40 watts (maximum) when operating one F36T8 lamp.
- (2) 80 watts (maximum) when operating two F36T8 lamps.
- (3) 120 watts (maximum) when operating three F36T8 lamps.

2.1.3 Fluorescent Electromagnetic Ballasts

UL 935. Ballasts shall be high power factor type (0.9 minimum) and shall be designed to operate on the voltage system to which they are connected. Ballasts shall be Class P and shall have sound rating "A". Electromagnetic ballasts for T-8 lamps shall be energy saving. Fixtures and ballasts shall be designed and constructed to limit the ballast case temperature to 90 degrees C when installed in an ambient temperature of 30 degrees C. Provide three lamp fixtures with two ballasts per fixture.

2.1.3.1 Electromagnetic Energy-Saving Ballasts

NEMA C82.1. Provide energy-saving fluorescent ballasts of the CBM certified full light output type. Ballasts shall have an average input wattage of 40 or less when operating one 36-watt F36T8 lamp tested in accordance with ANSI C82.2 methods. Provide ballasts which are compatible with energy-saving lamps.

2.1.3.2 Electromagnetic Ballasts for Compact Fluorescent Lamps

Provide electromagnetic ballasts for compact fluorescent lamps.

2.1.4 Fluorescent Lamps

- a. T-8 rapid start lamps shall be rated 36 watts (maximum), 2800 initial lumens (minimum), CRI of 75 (minimum), color temperature of 3500 K, and an average rated life of 20,000 hours.

- b. Compact fluorescent lamps shall be: CRI 80, minimum, 3500 K, 10,000 hours average rated life, and as follows:
 - (1) T-4, twin tube, rated 9 watts, 600 initial lumens (minimum), and 13 watts, 825 initial lumens (minimum).
 - (2) T-4, double twin tube, rated 18 watts, 1200 initial lumens (minimum), and 26 watts, 1800 initial lumens (minimum).

Average rated life is based on 3 hours operating per start.

2.1.5 Compact Fluorescent Fixtures

Compact fluorescent fixtures shall be manufactured specifically for compact fluorescent lamps with ballasts integral to the fixture. Providing assemblies designed to retrofit incandescent fixtures is prohibited except when specifically indicated for renovation of existing fixtures. Fixtures shall use lamps as indicated.

2.1.6 Open-Tube Fluorescent Fixtures

Provide with self-locking sockets, or lamp retainers (two per lamp).

2.1.7 Air Handling Fixtures

Fixtures used as air handling registers shall meet requirements of NFPA 90A.

2.2 HIGH-INTENSITY-DISCHARGE (HID) LIGHTING FIXTURES

UL 1572. Provide HID fixtures with tempered glass lenses when using metal-halide lamps.

2.2.1 HID Ballasts

UL 1029 and NEMA C82.4 and shall be constant wattage autotransformer (CWA) or regulator, high power factor type. Provide single-lamp ballasts which shall have a minimum starting temperature of minus 30 degrees C. Ballasts shall be:

- a. Designed to operate on the voltage system to which they are connected.
- b. Designed for installation in a normal ambient temperature of 30 degrees
- C. c. Constructed so that open circuit operation will not reduce the average life.

2.2.2 Low-Pressure Sodium Lamps

NEMA
C78.41.

2.2.3 Metal-Halide Lamps

- a. 70 watt conforming to ANSI
C78.1381
- b. 100 watt conforming to NEMA C78.1382
- c. 150 watt conforming to NEMA C78.1384

- d. 175 watt conforming to NEMA C78.1377
- e. 250 watt conforming to NEMA C78.1378

2.3 INCANDESCENT LIGHTING

FIXTURES UL 1571.

2.3.1 Incandescent Lamps

Provide the number, type, and wattage indicated.

2.3.2 Incandescent Dimmer Switch

UL 20, single-pole, 600 watt, 240 volt ac, full-range rotary on-off type with built-in electromagnetic interference filter.

2.4 RECESS- AND FLUSH-MOUNTED FIXTURES

Provide type that can be relamped from the bottom. Access to ballast shall be from the bottom. Trim for the exposed surface of flush-mounted fixtures shall be as indicated.

2.5 SUSPENDED FIXTURES

Provide hangers capable of supporting twice the combined weight of fixtures supported by hangers. Hangers shall allow fixtures to swing within an angle of 0.3489 rad. Brace pendants 1219 mm or longer to limit swinging. Single-unit suspended fluorescent fixtures shall have twin-stem hangers. Multiple-unit or continuous row fluorescent fixtures shall have a tubing or stem for wiring at one point and a tubing or rod suspension provided for each unit length of chassis, including one at each end. Rods shall be a minimum 4.57 mm diameter.

2.6 EXIT SIGNS

UL 924, NFPA 70, and NFPA 101. Exit signs shall be self-powered type.

2.6.1 Self-Powered LED Type Exit Signs (Battery Backup)

Provide an automatic power failure device,[test switch, pilot light,][integral self-testing module] and fully automatic high/low trickle charger in a self-contained power pack. Battery shall be sealed electrolyte type, shall operate unattended, and require no maintenance, including no additional water, for a period of not less than 5 years. LED exit signs shall have an emergency run time of 1 1/2 hours (minimum).

2.7 EMERGENCY LIGHTING EQUIPMENT

UL 924, NFPA 70, and NFPA 101. Provide lamps in wattage indicated. Provide accessories required for remote-mounted lamps where indicated. Remote-mounted lamps shall be as indicated.

2.7.1 Emergency Lighting Unit

Provide as indicated. Emergency lighting units shall be rated for 12 volts, except units having no remote-mounted lamps and having no more than two unit-mounted lamps may be rated 6 volts. Equip units with brown-out sensitive circuit to activate battery when ac input falls to 75 percent of normal voltage.

2.8 LED LUMINAIRES

Provide luminaires complete with power supplies (drivers) and light sources. Provide design information including lumen output and design life in luminaire schedule on project plans for LED luminaires.

LED luminaires must also meet the following minimum requirements:

- a. Luminaires must have a minimum 5 year manufacturer's warranty.
- b. Luminaires must have a minimum L70 lumen maintenance value of 50,000 hours
- c. Luminaire drive current value must be identical to that provided by test data for luminaire in question.

2.8.1 LED Drives

NEMA SSL 1, UL 8750. LED drivers must be electronic, UL Class 1, constant-current type and comply with the following requirements:

- a. Output power (watts) and luminous flux (lumens) as shown in luminaire schedule for each luminaire type to meet minimum luminaire efficacy (LE) value provided)
- b. Power Factor (PF) greater than or equal to 0.9 over the full dimming range when provided.
- c. Current draw Total Harmonic Distortion (THD) of less than 20 percent.
- d. Class A sound rating.
- e. Operable at input voltage of 120-277 volts at 60 hertz.
- f. Minimum 5 year manufacturer's warranty.
- g. RoHS compliant.
- h. Integral thermal protection that reduces or eliminates the output power if case temperature exceeds a value detrimental to the driver.
- i. UL listed for dry or damp locations typical of interior installations.

2.9 SELF-TESTING MODULE

Self-testing module for exit signs and emergency lighting equipment shall perform the following functions:

- a. Continuous monitoring of charger operation and battery voltage with visual indication of normal operation and of malfunction.
- b. Monthly discharge cycling of battery with monitoring of transfer circuit function, battery capacity and emergency lamp operation with visual indication of malfunction. The battery capacity test may be conducted by using a synthetic load.
- c. Manual test switch to simulate a discharge test cycle.
- d. Module shall have a low voltage battery disconnect (LVD) and brown-out protection circuit.

2.10 SUPPORT HANGERS FOR LIGHTING FIXTURES IN SUSPENDED CEILINGS

2.10.1 Wires

ASTM A641/A641M, Class 3, soft temper, zinc-coated finish, 2.68 mm in diameter
12
gage.

2.10.2 Straps

Galvanized steel, 25 by 4.76 mm, conforming to ASTM A653/A653M, with a light commercial zinc coating or ASTM A366/A366M with an electrodeposited zinc coating conforming to ASTM B633, Type RS.

2.10.3 Rods

Threaded steel rods, 4.76 mm diameter, zinc or cadmium coated.

2.11 Appendix A Details and Location of Interior Special Lighting Fixtures:

Attached to this Section as Appendix A Details and Location of Interior Special Lighting Fixtures:

PART 3 - EXECUTION

3.1 INSTALLATION

Set lighting fixtures plumb, square, and level with ceiling and walls, in alignment with adjacent lighting fixtures, and secure in accordance with manufacturers' directions and approved drawings. Installation shall meet requirements of NFPA 70. Mounting heights specified or indicated shall be to the bottom of the fixture for ceiling-mounted fixtures and to the center of the fixture for wall-mounted fixtures. Obtain approval of the exact mounting for lighting fixtures on the job before commencing installation and, where applicable, after coordinating with the type, style, and pattern of the ceiling being installed. Recessed and semi-recessed fixtures may be supported from suspended ceiling support system ceiling tees when the ceiling system support wires or straps or rods are provided at a minimum of four wires or straps or rods per fixture and located not more than 150 mm from each corner of each fixture. For recessed fixtures, provide support clips securely fastened to ceiling grid members, a minimum of one at or near each corner of each fixture. For round fixtures or fixtures smaller in size than the ceiling grid, provide a minimum of four wires or straps or rods] per fixture and locate at each corner of the ceiling grid in which the fixture is located. Do not support fixtures by ceiling acoustical panels. Where fixtures of sizes less than the ceiling grid are indicated to be centered in the acoustical panel, support such fixtures independently or with at least two 19 mm metal channels spanning, and secured to, the ceiling tees. Provide wires or straps or rods for lighting fixture support in this section.

3.1.1 Electronic Dimming Ballast

All electronic dimming ballasts controlled by the same controller shall be of the same manufacturer. All fluorescent lamps on electronic dimming ballast control shall be seasoned or burned in at full light output for 100 hours before dimming.

3.1.2 Exit Signs and Emergency Lighting Units

Wire exit signs and emergency lighting units ahead of the switch to the normal lighting circuit located in the same room or area.

3.1.2.1 Exit Signs

Wire exit signs on separate circuits and serve from an emergency panel. Signs shall have only one control, which shall be the circuit breaker in the emergency panel. Paint control device red and provide lockout.

3.2 FIELD QUALITY CONTROL

Upon completion of installation, conduct an operating test to show that equipment operates in accordance with requirements of this section.

PART 4 – MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

- 1. The quantity of interior lighting system to be measured and paid for either by lengths, pairs, linear meter, each set actually placed and installed as shown on the approved drawings.
- 2. All works performed and measured and as provided for in the Bill of Quantities shall be paid or at the Contract Unit Price which payment shall constitute full compensation including labor, material, tools, equipment and incidentals necessary to complete this Section.

4.2 BASIS OF PAYMENT

Payment will be made in accordance with the Bill of Quantities.

-- End of Section -

Prepared by:

Checked by:

KARL ANTHONY V. TAN
Technical Secretariat Member

CHRISTIAN JOHN S. SERRANO
OIC, MET Theater Operations Office

Recommending Approval:

Approved by:

BERNAN JOSEPH R. CORPUZ
Deputy Executive Director for Operations

ERIC B. ZERRUDO, Ph.D.
Executive Director

CONFORME/ACCEPTANCE OF SUPPLIER:

Signature	:	
Company Name	:	
President/Authorized Representative	:	
Telephone and Mobile Number	:	
Email Address	:	

Project: **Proposed Conversion of Room A223 to Metropolitan Theater Conference Room**
Location: **Padre Burgos corner Arroceros Streets, Liwasang Bonifacio, Manila**
Duration: **Ninety (90) calendar days**
Subject: **SUMMARY (BILL OF QUANTITIES)**

SUMMARY				
ITEM NO.	DESCRIPTION	QTY	UNIT	TOTAL
I	ARCHITECTURAL WORKS			
I.I	Finishing Works	1	l.s.	
I.II	Specialty Works	1	l.s.	
I.I.VII	Total-Architectural Works			
II	ELECTRICAL WORKS	1	l.s.	
II.V	Total-Electrical Works			
TOTAL PROJECT COST :				₱ -

Name and Signature of Bidder's Representative

Position

Name of Firm

Address



Project:Proposed Conversion of Room A223 to Metropolitan Theater Conference Room
Location: Metropolitan Theater, Padre Burgos, Ermita, Manila
Duration: Ninety (90) days
Subject: Bill of Quantities (BOQ)

ITEM #	DESCRIPTION	QUANTITY		MATERIAL COST	TOTAL MATERIAL COST	LABOR COST	TOTAL LABOR COST	TOTAL DIRECT COST	OCM (%)	PROFIT (%)	VAT	UNIT COST	PROPOSAL COST
		A	B	C	D=AxC	E	F=AxE	G=D+F	H=Gx12%	I=Gx8%	J=5% x (G+H+I)	K=L/A	L=G+H+I+J
I	ARCHITECTURAL WORKS												
I.I	FINISHING WORKS												
I.I.I	Supply & Installation of PVC Cornice, Base Boards including adhesive, screw, nails, accessories and all Incidentals to complete	1.00	lot										
I.I.II	Supply & Installation of Fire-rated Acoustic Fabric Panels 600mm x 600mm x 25mm including adhesive, screw, nails, accessories and all Incidentals to complete	171.65	sq.m										
I.I.III	Supply & Installation of Fire-rated Carpet Tiles 500mm x 500mm x 5mm including adhesive, insulation, accessories and all Incidentals to complete as per plan and/or Technical Specification	114.94	sq.m										
I.I.IV	Refurbishing of Main Door & Installation of Frosted Sticker	3.78	sq.m										
I.I.V	Installation of board-up dry wall for False Column	2.10	sq.m										
I.I.VI	Supply & Installation of Backboard for Glass windows w/ Invisible Hinges	1.00	lot										
I.I.VII	SUB TOTAL-FINISHING WORKS												

Section VIII. 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) **in accordance with Section 8.5.2 of the IRR;**

Technical Documents

- ☐ (b) 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**
- ☐ (c) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided for in Sections 23.4.1.3 and 23.4.2.4 of the 2016 revised IRR of RA No. 9184, within the relevant period as provided in the Bidding Documents; **and**
- ☐ (d) 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**
- ☐ (e) Conformity with the Technical Specifications, which may include production/delivery schedule, manpower requirements, and/or after-sales/parts, if applicable; **and**
- ☐ (f) 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

- ☐ (g) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC) **or** A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.

Class "B" Documents

- ☐ (h) If applicable, a duly signed joint venture agreement (JVA) 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

- ☐ (i) Original of duly signed and accomplished Financial Bid Form; **and**
- ☐ (j) Original of duly signed and accomplished Price Schedule(s).

Other documentary requirements under RA No. 9184 (as applicable)

- ☐ (k) *[For foreign bidders claiming by reason of their country's extension of reciprocal rights to Filipinos]* Certification from the relevant government office of their country stating that Filipinos are allowed to participate in government procurement activities for the same item or product.

- ☐ (l) Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.
- (m) Bid must be properly tabbed and sealed.
- (n) Each Bidder shall Submit one copy of the first and second components of its Bid as original copy and 1 copy for additional.



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

BID FORM

Date : _____
Project Identification No. : _____

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

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, offer to *[supply/deliver/perform]* *[description of the Goods]* in conformity with the said PBDs for the sum of *[total Bid amount in words and figures]* or the total calculated bid price, as evaluated and corrected for computational errors, and other bid modifications in accordance with the Price Schedules attached herewith and made part of this Bid. 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 or in the Price Schedules,

If our Bid is accepted, we undertake:

- a. to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements of the Philippine Bidding Documents (PBDs);
- b. to provide a performance security in the form, amounts, and within the times prescribed in the PBDs;
- c. to abide by the Bid Validity Period specified in the PBDs and it shall remain binding upon us at any time before the expiration of that period.

[Insert this paragraph if Foreign-Assisted Project with the Development Partner:

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Name and address of agent	Amount or Commission or gratuity	Purpose of
---------------------------	----------------------------------	------------

(if none, state "None")]

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your Notice of Award, shall be binding upon us.

We understand that you are not bound to accept the Lowest Calculated Bid or any Bid you may receive.

We certify/confirm that we comply with the eligibility requirements pursuant to the PBDs.

The undersigned is authorized to submit the bid on behalf of *[name of the bidder]* as evidenced by the attached *[state the written authority]*.

We acknowledge that failure to sign each and every page of this Bid Form, including the attached Schedule of Prices, 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: _____

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.7

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]

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, Procurement Agent if engaged, 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, Procurement Agent if engaged, 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, Procurement Agent if engaged, 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:
- Carefully examining all of the Bidding Documents;
 - Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
 - Making an estimate of the facilities available and needed for the contract to be bid, if any; and
 - 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]