LBP LEASING AND FINANCE CORPORATION

(A LANDBANK Subsidiary)

PHILIPPINE BIDDING DOCUMENTS FOR THE PROCUREMENT OF INFRASTRUCTURE PROJECTS

LLFC-GAP-21-003

Proposed Demolition of Existing Six (6) Storey Office and Design & Build of Thirteen (13) Storey Office Building with Roof Deck Located at Roxas Boulevard corner San Luis Street, Pasay City

SIXTH EDITION
JULY 2020

Preface

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

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

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

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

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

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

printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.

f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

TABLE OF CONTENTS

Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.
ARCC – Allowable Range of Contract Cost.
BAC – Bids and Awards Committee.
Bid – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])
Bidder – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])
Bidding Documents – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])
BIR – Bureau of Internal Revenue.
BSP – Bangko Sentral ng Pilipinas.
CDA – Cooperative Development Authority.
Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])
Contract – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
Contractor – is a natural or juridical entity whose proposal was accepted by the Procuring Entity and to whom the Contract to execute the Work was awarded. Contractor as used in these Bidding Documents may likewise refer to a supplier, distributor, manufacturer, or consultant.
CPI – Consumer Price Index.
DOLE – Department of Labor and Employment.
DTI – Department of Trade and Industry.
Foreign-funded Procurement or Foreign-Assisted Project – Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).
GFI – Government Financial Institution.
GOCC – Government-owned and/or –controlled corporation.
Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring

Entity for such services. The term "related" or "analogous services" shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

GOP – Government of the Philippines.

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

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

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

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Section I. Invitation to Bid

Notes on the Invitation to Bid

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

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

a. The date of availability of the Bidding Documents, which shall be from the time the IB is first advertised/posted until the deadline for the submission and receipt of bids;

b. The place where the Bidding Documents may be acquired or the website where it may be downloaded;

c. The deadline for the submission and receipt of bids; and

d. Any important bid evaluation criteria.

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

Invitation to Bid for the Proposed Demolition of Existing Six (6) Storey Office and Design & Build of Thirteen (13) Storey Office Building Located at Roxas Boulevard corner San Luis Street, Pasay City (LLFC-GAP-21-003)

1. LBP Leasing and Finance Corporation (LLFC), through its Approved Budget for the Contract (ABC), approved by its Board of Directors on 28 March 2019, intends to apply the sum of **₱ 880,150,000.00** (inclusive of all applicable taxes, charges, and fees) being the Approved Budget for the Contract (ABC) to payments under the contract for the **Proposed Demolition of Existing Six (6) Storey Office and Design & Build of Thirteen (13) Storey Office Building Located at Roxas Boulevard corner San Luis Street, Pasay City (LLFC-GAP-21-003).** Bids received in excess of the ABC shall be automatically rejected at bid opening.

2. LLFC now invites bids using Design and Build scheme for the construction of the "Core and Shell" of the proposed project. The project is expected to be completed within 900 calendar days upon receipt of Notice to Proceed. Bidders should have completed, for the past 4 years (1,460 calendar days) from the date of submission and receipt of bids, a similar contract as a General Contractor for building construction. The description of an eligible bidder is contained in the Bidding Documents, particularly in Section II. (Instruction to Bidders) and Section III (Bid Data Sheet) of the Bidding Document.

3. Bidding will be conducted through open competitive bidding procedures using non-discretionary "*pass/fail*" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

4. Interested bidders may obtain further information from LLFC and inspect the Bidding Documents at the address given below from 8:30 A.M. to 3:30 P.M.

5. A complete set of Bidding Documents may be acquired by interested bidders between Mondays to Fridays, from 8:30 A.M. to 3:30 P.M., starting on **12 June 2021 until 12 July 2021** from the given address and websites below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of **₱ 75,000.00.** LLFC shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.

6. LLFC will hold a Pre-Bid Conference[1] on **21 June 2021, 1:30 P.M.** at 15th Floor, Sycip Law Center, 105 Paseo de Roxas Street, Makati City and through videoconferencing/webcasting via ***https://teams.microsoft.com/l/meetup-join/19%3ameeting_MjExZTQ3ODMtYzM2MC00MmMzLWIyMjYtMWI5MmY2NzE1N2Vk%40thread.v2/0?context=%7b%22Tid%22%3a%22544e57a9-92fe-4775-ba03-8422d7f2e182%22%2c%22Oid%22%3a%22bbee48ec-a712-4e1a-a6ac-aa269c3d6ac5%22%7d*** which shall be open to prospective bidders.

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

7. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below on or before **12 July 2021, 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 15.

9. Bid opening shall be on **12 July 2021, 1:30 P.M**. at 15th Floor, Sycip Law Center, 105 Paseo de Roxas Street, Makati City, and through videoconferencing/webcasting via ***https://teams.microsoft.com/l/meetup-join/19%3ameeting_N2U4ZDliZjqtZDAzNS00ZDIzLTq5MWEtZGQzZDZmMjNlMWVh%40thread.v2/0?context=%7b%22Tid%22%3a%22544e57a9-92fe-4775-ba03-8422d7f2e182%22%2c%22Oid%22%3a%22bbee48ec-a712-4e1a-a6ac-aa269c3d6ac5%22%7d***. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

10. LLFC reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised Implementing Rules and Regulations (IRR) of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.

11. For further information, please refer to:
    Ms. Maria Christelyn M. Uy (LLFC BAC Secretariat)
    15th Floor SyCip Law Center, No. 105 Paseo de Roxas Street, Makati City
    Telephone Number: (02) 8818 2000 loc. 325
    Fax Number: (02) 8819 6176
    E-mail Address: **cmuy@lbpleasing.com**

12. You may visit the following websites for downloading of Bidding Documents:
    - http://notices.ps-philgeps.gov.ph/main/
    - https://notices.philgeps.gov.ph/GEPS/
    - http://www.lbpleasing.com/procurement

Date of Issue: **11 June 2021**

_____
ATTY. MARLA A. BARCENILLA
Chairperson, Bids and Awards Committee

Section II. Instructions to Bidders

Notes on the Instructions to Bidders

This Section on the Instruction to Bidders (ITB) provides the information necessary for bidders to prepare responsive bids, in accordance with the requirements of the Procuring Entity. It also provides information on bid submission, eligibility check, opening and evaluation of bids, post-qualification, and on the award of contract.

1. Scope of Bid

The Procuring Entity, **LBP Leasing and Finance Corporation (LLFC)** invites Bids for the **Proposed Demolition of Existing Six (6) Storey Office and Design & Build of Thirteen (13) Storey Office Building Located at Roxas Boulevard corner San Luis Street, Pasay City** with Project Identification Number **LLFC-GAP-21-003.**

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

2. Funding Information

2.1. The GOP through the source of funding as indicated below for **2021** in the amount of **₱ 880,150,000.00.**

2.2. The source of funding is:

GOCC and GFIs, the Corporate Operating Budget

3. Bidding Requirements

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

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

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

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

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

5. Eligible Bidders

5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.

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

A contract is considered to be "similar" to the contract to be bid if it has the major categories of work stated in the **BDS**.

5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.

5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Origin of Associated Goods

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

7. Subcontracts

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

The Procuring Entity has prescribed that:

Subcontracting is not allowed.

7.2. Subcontracting of any portion of the Project does not relieve the Contractor of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Contractor's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address at **15th Floor, Sycip Law Center, 105 Paseo de Roxas Street, Makati City** and through videoconferencing/webcasting via ***https://teams.microsoft.com/l/meetup-join/19%3ameeting_MjExZTQ3ODMtYzM2MC00MmMzLWIyMjYtMWI5MmY2NzE1N2Vk%40thread.v2/0?context=%7b%22Tid%22%3a%22544e57a9-92fe-4775-***

ba03-8422d7f2e182%22%2c%22Oid%22%3a%22bbee48ec-a712-4e1a-a6ac-aa269c3d6ac5%22%7d as indicated in paragraph 6 of the **IB.**

9. Clarification and Amendment of Bidding Documents

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

10. Documents Comprising the Bid: Eligibility and Technical Components

10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.

10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

10.3. A valid PCAB License is required, and in case of joint ventures, a valid special PCAB License, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.

10.4. A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.

10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.

11.2. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.

11.3. For Foreign-funded procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Alternative Bids

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

13. Bid Prices

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

14. Bid and Payment Currencies

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

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

Philippine Pesos.

15. Bid Security

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

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

16. Sealing and Marking of Bids

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

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

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

17. Deadline for Submission of Bids

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

18. Opening and Preliminary Examination of Bids

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

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

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

19. Detailed Evaluation and Comparison of Bids

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

19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid Security as required by **ITB** Clause 15 shall be submitted for each contract (lot) separately.

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

20. Post Qualification

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

21. Signing of the Contract

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

Section III. Bid Data Sheet

Notes on the Bid Data Sheet (BDS)

The Bid Data Sheet (BDS) consists of provisions that supplement, amend, or specify in detail, information, or requirements included in the ITB found in Section II, which are specific to each procurement.

This Section is intended to assist the Procuring Entity in providing the specific information in relation to corresponding clauses in the ITB and has to be prepared for each specific procurement.

The Procuring Entity should specify in the BDS information and requirements specific to the circumstances of the Procuring Entity, the processing of the procurement, and the bid evaluation criteria that will apply to the Bids. In preparing the BDS, the following aspects should be checked:

a. Information that specifies and complements provisions of the ITB must be incorporated.

b. Amendments and/or supplements, if any, to provisions of the ITB as necessitated by the circumstances of the specific procurement, must also be incorporated.

Bid Data Sheet

ITB Clause	
5.2	For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be: PCAB License Category AAA Registration of at least Large B in Building or Industrial Plant, Medium B in Electrical Work, Medium B in Air-conditioning or Refrigeration, with specialty in Electro-mechanical Work and Structural Demolition.
7.1	Subcontracting is not allowed
10.3	A valid Philippine Contractors Accreditation Board (PCAB) License and Registration for the type and cost of the contract for this project. License Category AAA Registration of at least Large B in Building or Industrial Plant, Medium B in Electrical Work, Medium B in Air-conditioning or Refrigeration, with specialty in Electro-mechanical Work and Structural Demolition. If applicable, the Joint Venture must have obtained and must submit as part of its bid special PCAB license for the Joint Venture.
10.4	The minimum work experience requirements for key personnel are the following: **LIST OF KEY PERSONNEL TO BE DEPLOYED FOR THE DESIGN PHASE** Key Personnel and Qualifications/Experience — Minimum Required **1) Team Leader/Project Design Manager** — **1** - Licensed Civil Engineer/Architect - Preferably 10 years work experience **2) Design/Principal Architect** — **1** - Licensed Architect - Preferably 15 years' experience in vertical structures - Proficient in AutoCAD & Calculation softwares **3) Structural/Civil Engineer** — **1** - Licensed Structural/Civil Engineer - Preferably 10 years' experience in vertical structures - Proficient in AutoCAD & Calculation softwares **4) Electrical Engineer** — **1** - Licensed Professional Electrical Engineer (PEE) - Preferably 10 years' experience in vertical structures - Proficient in AutoCAD & Calculation softwares **5) Mechanical Engineer** — **1** - Licensed Professional Mechanical Engineer (PME) - Preferably 10 years' experience in vertical structures - Proficient in AutoCAD & Calculation softwares **6) Drainage/Sanitary/Plumbing Engineer** — **1** - Licensed Sanitary Engineer - Preferably 10 years' experience in vertical structures - Proficient in AutoCAD & Calculation softwares **7) Professional Electronics & Communication Engineer** — **1**

	- Bachelor's Degree in Electronics & Communication Engineering - Preferably 10 years' experience, preferably in an ICT related field - Experience with enterprise network design including WAN and LAN topologies based mainly CISCO technology - Network trouble shooting experience - Experience with firewall configuration and IPS devices - Experience with design, configuration, and support of latest Networking technologies (Data, voice and video) - Strong security experience and familiarity with best security	
	8) CADD Operator (Preferably one for Architecture and one for each engineering specialty) - At least Bachelor's Degree in Architecture or Engineering - Proficient in AutoCAD software	**5**
	9) Geodetic Engineer - Licensed Geodetic Engineer - Preferably 5 years work experience - Proficient in AutoCAD & Calculation softwares	**1**
	10) Geotechnical Engineer - Licensed Geotechnical Engineer - Preferably 5 years work experience	**1**
	11) Quantity/Cost & Specification Engineer - Licensed Civil Engineer - Preferably 10 years work experience	**1**
	12) Green Building Professional - LEED Professional or Green Certified Architect and/ Engineer or equivalent - Preferably 5 years work experience	**1**
	13) Building Information Modelling (BIM) Specialist - Preferably 5 years work experience - Proficient in BIM Software - Was involved in at least 1 completed detailed design project	**1**
	14) Others as required for the project	
	LIST OF KEY PERSONNEL TO BE DEPLOYED AT THE CONSTRUCTION & DEMOLITION PHASE	
	Key Personnel	Minimum Required
	1) Project Manager - Licensed Civil Engineer/Architect - Preferably 10 years' experience in high-rise building construction and demolition	**1**

	2) Project Civil/Structural Engineer - Licensed Civil Engineer/Structural Engineer - Preferably 10 years' experience in high-rise building construction and demolition	**1**
	3) Project Electrical Engineer - Licensed Electrical Engineer - Preferably 5 years' experience in high-rise building construction and demolition	**1**
	4) Project Mechanical Engineer - Licensed Mechanical Engineer - Preferably 5 years' experience in high-rise building construction	**1**
	5) Drainage/Sanitary/Plumbing Engineer - Licensed Civil/Sanitary Engineer - Preferably 5 years' experience in high-rise building construction	**1**
	6) Materials Engineer II - DPWH Accredited - Preferably 5 years' experience in high-rise building construction	**1**
	7) Safety Officer - DOLE Accredited with a valid COSH certificate - Preferably 10 years' experience in high-rise building construction	**1**
	8) Construction Foreman - Preferably 10 years' experience in high-rise building construction and demolition	**1**
	9) Geodetic Engineer - Licensed Geodetic Engineer - Preferably 5 years' experience	**1**
	10) Geotechnical Engineer - Licensed Geotechnical Engineer - Preferably 5 years' experience	**1**
	11) Quantity/Cost & Specification Engineer - Licensed Civil Engineer - Preferably 10 years' experience	**1**
	12) Green Building Professional - LEED Professional or Green Certified Architect and/ Engineer or equivalent - Preferably 5 years work experience	**1**
	13) Building Information Modelling (BIM) Specialist - Preferably 5 years work experience - Proficient in BIM Software - Was involved in at least 1 completed detailed design project	**1**
	14) CADD Operator (Preferably one for Architecture and one for engineering specialty) - At least Bachelor's Degree in Architecture or Engineering	**2**

	- Proficient in AutoCAD software **15) Project Nurse 1**
10.5	The minimum major equipment requirements are the following: 1) One (1) unit Service vehicle 2) One (1) unit Tower Crane, 18T 3) One (1) unit Rough Terrain Crane, 25 T 4) Two (2) units Backhoe, .8 m3 bucket 5) One (1) unit Telescopic Boom Lift Truck 6) Four (4) units Dump truck, 10 cubic 7) Two (2) units Mini-dump truck 8) One (1) unit of Bored Piling/ Rotary Drilling Piling 9) One (1) unit Vibratory Roller 10) Two (2) units Plate compactor 11) Six (6) units Concrete vibrator 12) Two (2) units Transit Mixer 13) Six (6) units Welding machine at least 500 Amps. 14) Two (2) units Gas cutting outfit 15) Two (2) units Generator, 75 kVA 16) Three (3) units Mechanical Bar Bender & Cutter 17) Three (3) units Bar Cutter 18) One (1) unit Construction Passenger Elevator 19) Two (2) units Flatbed Trucks, 20T 20) One (1) unit Pay Loader 21) One (1) unit Walk Behind Roller Compactor 22) One (1) unit Mortar Mixers 23) One (1) unit Air Compressor 24) Two (2) units Gondolas 25) Two (2) units Jackhammer 26) One (1) unit Earth Compactors 27) One (1) unit Power Trowels 28) Four (4) unit Submersible Pumps 29) One (1) unit Water Tanker or Lorry Tanker 30) One (1) unit Total Station Surveying Equipment
	The bidder is also required to submit its list of material testing equipment in accordance with DO 11 SO 2017.
12	No further instructions
15.1	The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts: a. The amount of not less than two percent (2%) of the ABC (₱ 17,603,000.00) if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; b. The amount of not less than five percent (5%) of the ABC (₱ 44,007,500.00) if bid security is Surety Bond.
21	Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.

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 Contractor, 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.

2. Sectional Completion of Works

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

3. Possession of Site

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

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

4. The Contractor's Obligations

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

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

5. Performance Security

5.1. Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR.

5.2. The Contractor, by entering into the Contract with the Procuring Entity, acknowledges the right of the Procuring Entity to institute action pursuant to RA No. 3688 against any subcontractor be they an individual, firm, partnership, corporation, or association supplying the Contractor with labor, materials and/or equipment for the performance of this Contract.

6. Site Investigation Reports

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

7. Warranty

7.1. In case the Contractor fails to undertake the repair works under Section 62.2.2 of the 2016 revised IRR, the Procuring Entity shall forfeit its performance security, subject its property(ies) to attachment or garnishment proceedings, and perpetually disqualify it from participating in any public bidding. All payables of the GOP in his favor shall be offset to recover the costs.

7.2. The warranty against Structural Defects/Failures, except that occasioned-on force majeure, shall cover the period from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity. Specific duration of the warranty is found in the **SCC**.

8. Liability of the Contractor

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

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

9. Termination for Other Causes

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

10. Dayworks

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

11. Program of Work

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

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

12. Instructions, Inspections and Audits

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

13. Advance Payment

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

14. Progress Payments

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

15. Operating and Maintenance Manuals

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

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

Section V. Special Conditions of Contract

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 Works procured. 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	The Contract Price for the project is ₱ 880,150,000.00, inclusive of fees, taxes, or charges and shall be paid in tranches, according to the percentage of actual accomplished work, as examined and approved by representatives from the procuring entity.
4.1	The Contractor shall employ the following Key Personnel: **LIST OF KEY PERSONNEL TO BE DEPLOYED FOR THE DESIGN PHASE** Key Personnel and Qualifications/Experience — Minimum Required **1) Team Leader/Project Design Manager** - Licensed Civil Engineer/Architect - Preferably 10 years work experience — **1** **2) Design/Principal Architect** - Licensed Architect - Preferably 15 years' experience in vertical structures - Proficient in AutoCAD & Calculation softwares — **1** **3) Structural/Civil Engineer** - Licensed Structural/Civil Engineer - Preferably 10 years' experience in vertical structures - Proficient in AutoCAD & Calculation softwares — **1** **4) Electrical Engineer** - Licensed Professional Electrical Engineer (PEE) - Preferably 10 years' experience in vertical structures - Proficient in AutoCAD & Calculation softwares — **1** **5) Mechanical Engineer** - Licensed Professional Mechanical Engineer (PME) - Preferably 10 years' experience in vertical structures - Proficient in AutoCAD & Calculation softwares — **1** **6) Drainage/Sanitary/Plumbing Engineer** - Licensed Sanitary Engineer - Preferably 10 years' experience in vertical structures - Proficient in AutoCAD & Calculation softwares — **1** **7) Professional Electronics & Communication Engineer** - Bachelor's Degree in Electronics & Communication Engineering - Preferably 10 years' experience, preferably in an ICT related field - Experience with enterprise network design including WAN and LAN topologies based mainly — **1**

	CISCO technology - Network trouble shooting experience - Experience with firewall configuration and IPS devices - Experience with design, configuration, and support of latest Networking technologies (Data, voice and video) - Strong security experience and familiarity with best security	
	8) CADD Operator (Preferably one for Architecture and one for each engineering specialty) - At least Bachelor's Degree in Architecture or Engineering - Proficient in AutoCAD software	**5**
	9) Geodetic Engineer - Licensed Geodetic Engineer - Preferably 5 years work experience - Proficient in AutoCAD & Calculation softwares	**1**
	10) Geotechnical Engineer - Licensed Geotechnical Engineer - Preferably 5 years work experience	**1**
	11) Quantity/Cost & Specification Engineer - Licensed Civil Engineer - Preferably 10 years work experience	**1**
	12) Green Building Professional - LEED Professional or Green Certified Architect and/ Engineer or equivalent - Preferably 5 years work experience	**1**
	13) Building Information Modelling (BIM) Specialist - Preferably 5 years work experience - Proficient in BIM Software - Was involved in at least 1 completed detailed design project	**1**
	14) Others as required for the project	
	LIST OF KEY PERSONNEL TO BE DEPLOYED AT THE CONSTRUCTION & DEMOLITION PHASE	
	Key Personnel	Minimum Required
	1) Project Manager - Licensed Civil Engineer/Architect - Preferably 10 years' experience in high-rise building construction and demolition	**1**
	2) Project Civil/Structural Engineer - Licensed Civil Engineer/Structural Engineer - Preferably 10 years' experience in high-rise building construction and demolition	**1**
	3) Project Electrical Engineer - Licensed Electrical Engineer	**1**

	- Preferably 5 years' experience in high-rise building construction and demolition **4) Project Mechanical Engineer** - Licensed Mechanical Engineer - Preferably 5 years' experience in high-rise building construction	**1**
	5) Drainage/Sanitary/Plumbing Engineer - Licensed Civil/Sanitary Engineer - Preferably 5 years' experience in high-rise building construction	**1**
	6) Materials Engineer II - DPWH Accredited - Preferably 5 years' experience in high-rise building construction	**1**
	7) Safety Officer - DOLE Accredited with a valid COSH certificate - Preferably 10 years' experience in high-rise building construction	**1**
	8) Construction Foreman - Preferably 10 years' experience in high-rise building construction and demolition	**1**
	9) Geodetic Engineer - Licensed Geodetic Engineer - Preferably 5 years' experience	**1**
	10) Geotechnical Engineer - Licensed Geotechnical Engineer - Preferably 5 years' experience	**1**
	11) Quantity/Cost & Specification Engineer - Licensed Civil Engineer - Preferably 10 years' experience	**1**
	12) Green Building Professional - LEED Professional or Green Certified Architect and/ Engineer or equivalent - Preferably 5 years work experience	**1**
	13) Building Information Modelling (BIM) Specialist - Preferably 5 years work experience - Proficient in BIM Software - Was involved in at least 1 completed detailed design project	**1**
	14) CADD Operator (Preferably one for Architecture and one for engineering specialty) - At least Bachelor's Degree in Architecture or Engineering - Proficient in AutoCAD software	**2**
	15) Project Nurse	**1**
6	The site investigation reports are: Soil Investigation Report, CAAP Building Height Clearance, and Cadastral & Topographic Survey.	
7.2	In case of permanent structures, such as buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other	

	structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems, power plants, transmission and communication towers, railway system, and other similar permanent structures: Fifteen (15) years.
8	No employer-employee relationship exists between LLFC and the Contractor's personnel. The Contractor shall be answerable and hold LLFC free and harmless from any damage or liability arising from the actions of the Contractor's personnel. The Contractor shall pay taxes in full and on time and that failure to do so will entitle LLFC to suspend payment for the services delivered by the Contractor. Likewise, the Contractor shall regularly present, within the duration of this contract, a tax clearance from the Bureau of Internal Revenue as well as a copy of its income and business tax returns duly stamped and received by the Bureau of Internal Revenue and duly validated with the tax payments made thereon.
9	In the event that any party wishes to terminate the contract based on grounds provided for under law or contract, the venue of court action shall be exclusively with the Courts of Makati City.
10	Dayworks are applicable at the rate shown in the Contractor's original Bid.
11.1	The Contractor shall submit a detailed Program of Work to the procuring entity's representative for approval within fourteen (14) calendar days after the issuance of the Notice to Proceed (NTP).
11.2	The amount to be withheld for late submission of an updated Program of Work is **five percent (5%) of the contract amount**.
13	The amount of the advance payment is not to exceed fifteen percent (15%) of the total contract price to be made in lump sum.
14	No further instructions.
15.1	The date by which operating and maintenance manuals are required is five (5) days upon completion. The date by which "as built" drawings are required is five (5) days upon completion.
15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is equivalent to One Percent (1%) of the contract price.

Section VI. Specifications

Notes on Specifications

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

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

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

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

Sample Clause: Equivalency of Standards and Codes

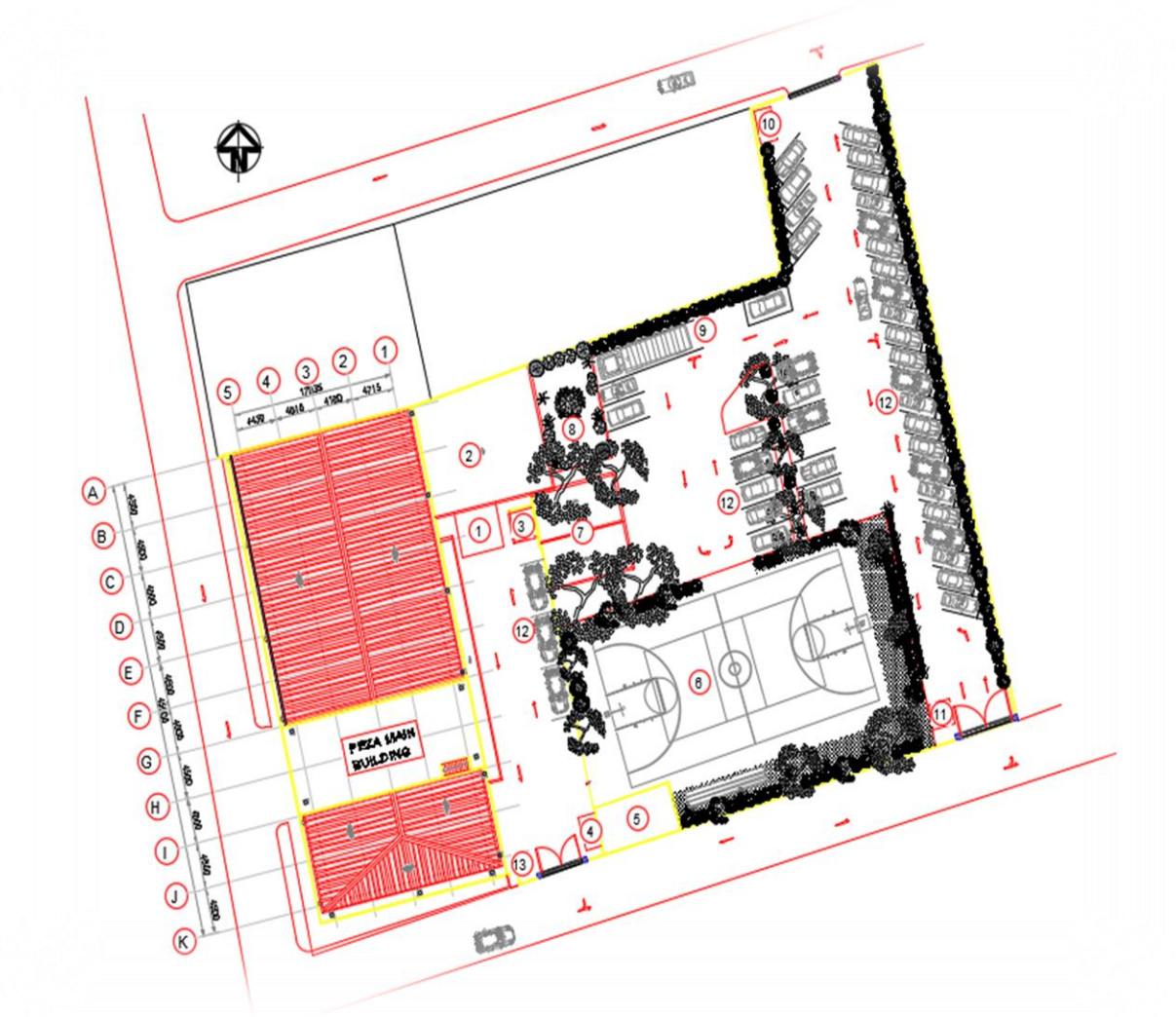
Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that ensure a substantially equal or higher quality than the standards and codes specified will be accepted subject to the Procuring Entity's Representative's prior review and written consent. Differences between the standards specified and the proposed alternative standards shall be fully described in writing by the Contractor and submitted to the Procuring Entity's

Representative at least twenty-eight (28) days prior to the date when the Contractor desires the Procuring Entity's Representative's consent. In the event the Procuring Entity's Representative determines that such proposed deviations do not ensure substantially equal or higher quality, the Contractor shall comply with the standards specified in the documents.

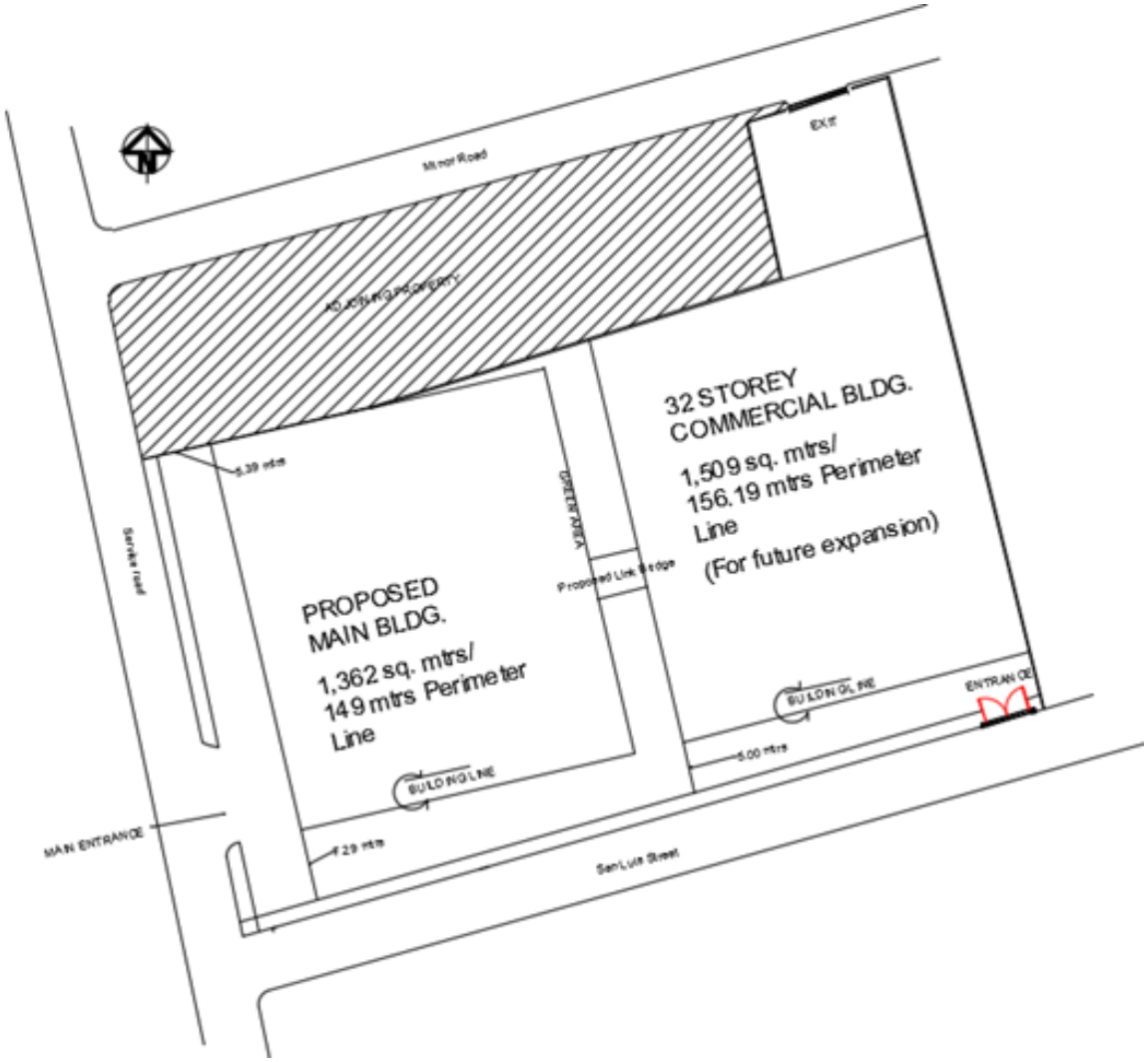
These notes are intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They should not be included in the final Bidding Documents.

1. REFERENCE DATA

A. SITE DEVELOPMENT PLAN (EXISTING)



B. SITE DEVELOPMENT PLAN (PROPOSED)



C. VICINITY MAP

D. Geotechnical Evaluation Report

1. INTRODUCTION

This assessment of geotechnical conditions for **The Proposed PEZA Business & Investment Center Building at PEZA Roxas Boulevard corner San Luis Street, Pasay City** site were based on the findings gathered from the field and laboratory test conducted by **PAR GEOTECHNICAL TESTING CENTER.**

The geotechnical investigation consisted of drilling eight (8) boreholes within the project site and is shown in Table 1.1

Borehole Number	Structure	Boring Depth (m)	Water Level Below Ground (m)
1	Commercial Business Building	50.69	2.91
2		50.48	1.56
3		49.92	2.79
4		50.90	2.89
5		50.70	4.96
6		50.11	4.65
7		50.56	3.65
8		50.50	5.09

Table 1.1 Summary of Borehole Location

In this report are soil properties & strength parameters, seismic design criteria & liquefaction potential of the site, allowable bearing capacity for foundation design, lateral earth pressure coefficient, pile capacities, and among other geotechnical information.

Geotechnical Evaluation Report for The Proposed PEZA Business & Investment Center Building
Philippine Economic Zone Authority (PEZA)

2. IN – SITU AND LABORATORY TESTING

For soil – type materials, Standard Penetration Test (SPT) are perform at regular interval and disturbed soil samples are then retrieved after the test. Upon encountering rock – type formation, coring will then be employ to penetrate through the hard strata and extract rock samples.

All recovered soil and/or rock samples are taken to the soil laboratory for various laboratory tests conforming to ASTM standards.

2.1. In – Situ Testing and Sampling

Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils (ASTM D 1586)

This test method describes the procedure, generally known as the Standard Penetration Test (SPT), for driving a split-barrel sampler to obtain a representative soil sample and a measure of the resistance of the soil to penetration of the sampler.

The SPT is perform by driving a standard split spoon sampler into the ground by blows from a drop hammer of mass 63.5 kg falling 760 mm (Figure 3.7). The sampler is driven 152 mm (6 in.) into the soil at the bottom of a borehole, and the number of blows (N) required to drive it an additional 304 mm is counted. The number of blows (N) is called the standard penetration number.

Standard Practice for Rock Core Drilling and Sampling of Rock for Site Investigation (ASTM D 2113)

Rock cores are samples of record of the existing subsurface conditions at given borehole locations. The samples was expected to yield significant indications about the geological, physical, and engineering nature of the subsurface for use in the design and construction of an engineered structure.

2.2. Laboratory Testing

Retrieved soil or cored samples at every intervals are subject to the following laboratory tests in conformance with the procedures given in the current ASTM standards as described below:

Standard Test Method for Particle – Size Analysis of Soil (ASTM D 422)

This test method covers the quantitative determination of the distribution of particle sizes in soils. The distribution of particle sizes larger than 75 µm (retained on the No. 200 sieve) is determined by sieving.

Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass (ASTM D 2216)

These test methods cover the laboratory determination of the water (moisture) content by mass of soil, rock, and similar materials where the reduction in mass by drying is due to loss of water except as noted in 1.4, 1.5, and 1.7 of ASTM D 2216.

Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils (ASTM D 4318)

These test methods cover the determination of the liquid limit, plastic limit, and the plasticity index of soils as defined in below.

Liquid Limit

The water content, in percent, of a soil at the arbitrarily defined boundary between the semiliquid and plastic states.

Plastic Limit

The water content, in percent, of a soil at the boundary between the plastic and semi-solid states.

Plasticity Index

The range of water content over which a soil behaves plastically. Numerically, it is the difference between the liquid limit and the plastic limit.

Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System) (ASTM D 2487)

This practice describes a system for classifying mineral and organo-mineral soils for engineering purposes based on laboratory determination of particle-size characteristics, liquid limit, and plasticity index and shall be used when precise classification is required.

Standard Test Method for Determining Rock Quality Designation (RQD) of Rock Core (ASTM D 6032)

This test method covers the determination of the rock quality designation (RQD) as a standard parameter in drill core logging.

The RQD denotes the percentage of intact and sound rock retrieved from a borehole of any orientation. All pieces of intact and sound rock core equal to or greater than 100 mm (4 in.) long are summed and divided by the total length of the core run.

$$\text{RQD} = \frac{[\,\Sigma(\text{length of intact and sound pieces} > 100\text{ mm (4 in.)}\,] \times 100\,\%}{\text{total core run length, mm}}$$

Rock Quality Designation (RQD)	Classification of Rock Quality
0 – 25 %	Very Poor
25 – 50 %	Poor
50 – 75 %	Fair
75 – 90 %	Good
90 – 100 %	Excellent

Table 2.2.1 Classification of Rock Quality

Standard Test Method for Unconfined Compressive Strength of Intact Rock Core Specimens (ASTM D 2938)

A rock core sample is cut to length and the ends are machined flat. The specimen is placed in a loading frame and, if required, heated to the desired test temperature. Axial load is continuously increased on the specimen until peak load and failure are obtained.

Unconfined compressive strength of rock is used in many design formulas and is sometimes used as an index property to select the appropriate excavation technique.

It should be noted that no UCS were performed for rock samples which did not pass the requirement as test specimen, e.g. not intact sample to fulfill the specified dimensioning.

3. GROUND STRATIGRAPHY

The result of site specific geotechnical investigation suggest that the general ground stratigraphy are as shown in Table 3.1 to Table 3.4

Stratum	Depth (m)	Description
1	0.0 – 3.0	Loose Silty Sand
2	3.0 – 5.0	Medium Dense Silty Sand
3	5.0 – 10.5	Loose Silty Sand with Medium Plasticity
4	10.5 – 25.5	Very Stiff Lean Clay/Elastic Silt with Medium to High Plasticity
5	25.5 – 50.7	Completely Weathered Siltstone

Table 3.4 Summary of Stratigraphy for BH-5, BH-6, and BH-7

Ground Water Table (GWT) was encountered between 1.56 to 5.09 meters below the top of the boreholes.

4. MATERIAL PROPERTIES AND GEOTECHNICAL PARAMETERS

The SPT N-value are correlated to various properties and parameters of soil like; unit weight (γ_{wet} & γ_{sat}), relative density & consistency, angle of internal friction (φ`), undrained compressive strength (qu; c = $\frac{qu}{2}$), and stress-strain modulus (E).

SPT N-value of cohesionless soils are correlated using Meyerhof Method (Meyerhof 1956) to determine its internal angle of friction, while for cohesive soils correlation were made using Terzaghi and Peck Method (Terzaghi and Peck 1967) to determine the undrained cohesion. Other properties of soils were correlated to commonly used correlations in the literature.

Values are summarized in Table 4.1 to Table 4.4.

Geotechnical Evaluation Report for The Proposed PEZA Business & Investment Center Building
Philippine Economic Zone Authority (PEZA)

Stratum	Depth (m)	γ_{wet} (kN/m^3)	γ_{sat} (kN/m^3)	φ' (deg)	c (kPa)	E (MPa)
1	0.0 – 10.5	15	17	28	-	5
2	10.5 – 16.5	-	18	-	66	11
3	16.5 – 35.0	-	20	-	100	15
4	35.0 – 50.69	-	20	15	45	35

Table 4.1 Summary of Geotechnical Properties and Parameters for BH-1 and BH-2

Stratum	Depth (m)	γ_{wet} (kN/m^3)	γ_{sat} (kN/m^3)	φ' (deg)	c (kPa)	E (MPa)
1	0.0 – 6.0	17	20	30	-	5
2	6.0 – 10.5	-	17	28	-	5
3	10.5 – 25.5	-	19	-	100	15
4	25.5 – 35.0	-	20	-	150	26
5	35.0 – 50.5	-	20	15	45	35

Table 4.2 Summary of Geotechnical Properties and Parameters for BH-3 and BH-8

Stratum	Depth (m)	γ_{wet} (kN/m^3)	γ_{sat} (kN/m^3)	φ' (deg)	c (kPa)	E (MPa)
1	0.0 – 4.0	17	20	32	-	10
2	4.0 – 9.0	-	16	-	11	2
3	9.0 – 22.5	-	19	-	130	22
4	22.5 – 50.9	-	20	15	40	35

Table 4.3 Summary of Geotechnical Properties and Parameters for BH-4

Geotechnical Evaluation Report for The Proposed PEZA Business & Investment Center Building
Philippine Economic Zone Authority (PEZA)

Stratum	Depth (m)	γ_{wet} (kN/m^3)	γ_{sat} (kN/m^3)	φ' (deg)	c (kPa)	E (MPa)
1	0.0 – 3.0	15	18	28	-	5
2	3.0 – 5.0	-	20	32	-	10
3	5.0 – 10.5	-	18	26	-	5
4	10.5 – 25.5	-	20	-	100	15
5	25.5 – 50.7	-	20	15	45	35

Table 4.4 Summary of Geotechnical Properties and Parameters for BH-5, BH-6, and BH-7

In lieu of any project-specific data, Poisson's Ratio can be considered conservatively as $\mu=0.20$ as suitable for design purposes.

5. GEOTECHNICAL DESIGN AND ENGINEERING CONSIDERATIONS

5.1. Recommended Seismic Design Criteria

Parameters	Value
Soil Profile Type	S_F
Seismic Zone	4
Seismic Source Type	A

Table 5.1.1 Recommended Seismic Design Parameters

The Philippine archipelago is located in a seismically active region. Thus, most of the country, except for Palawan, can be classified as under Seismic Zone IV (Z=0.4). Based on National Structural Code of the Philippines (NSCP 2015) 7th edition, the soil underneath the project site can be classified as Type S_F. The nearest seismic source that may directly affect the project site is the Valley Fault System and is approximately 8 kilometers from the site. Other seismic design parameters should be obtained by the design engineer.

5.2. Earthquake Induced Stress and Deformation

Liquefaction potential for cohesionless soils or Cyclic Softening for cohesive soils of a site is primarily determined by factors including the seismic region of the site, subsurface conditions, soil type, and loading conditions.

Liquefaction for cohesionless or cyclic softening for cohesive soils occurs when the soil experienced strength loss, thereafter causes deformation on the ground.

Liquefaction/ Cyclic Softening analysis at the site was done using I. M. Idriss & R. W. Boulanger (2008) Method. Based on initial criteria, and considering a 7.5M earthquake scenario that will be generated by Valley Fault System, liquefaction is probable.

5.3. Foundations

The various foundation types appropriate for this development are dependent upon the size of the structure, its anticipated structural loads, the tolerable (total and differential) settlement of the proposed structure and the ground conditions occurring at the project's location.

The allowable bearing capacity was calculated using Meyerhof's Method for shallow foundation with a Factor of Safety (FS) of 3.0 as shown in Table 5.3.1 to Table 5.3.4.

Meyerhof's Bearing Capacity Equation:

$$q_{ult} = cN_c s_c d_c + \bar{q} N_q s_q d_q + 0.5\gamma B' N_\gamma s_\gamma d_\gamma$$

Bearing Capacity Factor:

$$N_q = e^{\pi \tan \phi} \tan^2\left(45 + \frac{\phi}{2}\right)$$

$$N_c = (N_q - 1)\cot \phi$$

$$N_\gamma = (N_q - 1)\tan(1.4\phi)$$

Shape Factor:

$$s_c = 1 + 0.2K_p\frac{B}{L} \qquad \text{Any } \phi$$

$$s_q = s_\gamma = 1 + 0.1K_p\frac{B}{L} \qquad \phi > 10°$$

$$s_q = s_\gamma = 1 \qquad \phi = 0$$

Depth Factor:

$$d_c = 1 + 0.2\sqrt{K_p}\frac{D}{B} \qquad \text{Any } \phi$$

$$d_q = d_\gamma = 1 + 0.1\sqrt{K_p}\frac{D}{B} \qquad \phi > 10$$

$$d_q = d_\gamma = 1 \qquad \phi = 0$$

Embedment Depth (m)	Allowable Bearing Capacity (kPa)
0.5 – 1.0	55
1.0 – 2.0	110
2.0 – 3.0	170

Table 5.3.1 Allowable Bearing Capacity of Shallow Foundation for BH-1 and BH-2 (isolated, combined, and strip footing)

Embedment Depth (m)	Allowable Bearing Capacity (kPa)
0.5 – 1.0	80
1.0 – 2.0	160
2.0 – 3.0	200

Table 5.3.2 Allowable Bearing Capacity of Shallow Foundation for BH-3 and BH-8 (isolated, combined, and strip footing)

Embedment Depth (m)	Allowable Bearing Capacity (kPa)
0.5 – 1.0	90
1.0 – 2.0	160
2.0 – 3.0	200

Table 5.3.3 Allowable Bearing Capacity of Shallow Foundation for BH-4 (isolated, combined, and strip footing)

Embedment Depth (m)	Allowable Bearing Capacity (kPa)
0.5 – 1.0	55
1.0 – 2.0	110
2.0 – 3.0	160

Table 5.3.4 Allowable Bearing Capacity of Shallow Foundation for BH-5, BH-6, and BH-7 (isolated, combined, and strip footing)

It is recommended to integrate footing tie beams in the design of foundations to prevent differential settlement.

For footings located near or on slopes, the allowable bearing capacity shown in Table 5.3.1 to Table 5.3.4. should be reduce by half.

For the design of foundations as elastic beams based on Winkler slab analysis, a modulus of subgrade reaction (k1) at the bottom of the foundation of 1,000 KN/m^3 is recommended.

To adjust subgrade reaction with respect to footing size the ff equation from Bowles could be used with m= L/B;

$$ks = k1 \times \frac{m + 0.5}{1.5m}$$

ks= desired modulus of subgrade reaction for footing size

k_1 = subgrade reaction for a 0.3m x 0.3m plate

B= Foundation width

L= Foundation length

5.4. Deep Foundations

Allowable Axial Compression and Pullout load capacities was calculated using a Factor of Safety (FS) of 3.0. All pile lengths are reference to the Natural Ground Line (NGL) or top of the boreholes. As shown in Table 5.4.1 to Table 5.4.4 is the summary of allowable pile capacities.

Bored Pile Dimensions		Allowable Single Pile Capacity	
Length (m)	Diameter (mm)	Axial Compression (kN)	Pullout (kN)
20	1,000	692	585
	1,200	875	720
	1,400	1,072	862
	1,600	1,294	1,009
25	1,000	1,099	1,010
	1,200	1,387	1,234

	1,400	1,702	1,466
	1,600	2,040	1,706
30	1,000	1,540	1,435
	1,200	1,936	1,749
	1,400	2,381	2,072
	1,600	2,854	2,404
35	1,000	1,979	1,858
	1,200	2,483	2,261
	1,400	3,043	2,674
	1,600	3,667	3,098
40	1,000	2,342	2,187
	1,200	2,955	2,680
	1,400	3,634	3,191
	1,600	4,390	3,722

Table 5.4.1 Allowable Bored Pile Capacities for BH-1 and BH-2

Bored Pile Dimensions		**Allowable Single Pile Capacity**	
Length (m)	**Diameter (mm)**	**Axial Compression (kN)**	**Pullout (kN)**
20	1,000	765	665
	1,200	884	817
	1,400	1,175	974
	1,600	1,414	1,138
25	1,000	1,144	1,053
	1,200	1,354	1,286
	1,400	1,771	1,527
	1,600	2,121	1,775
30	1,000	1,591	1,480
	1,200	1,890	1,803
	1,400	2,457	2,134

	1,600	2,944	2,476
35	1,000	2,039	1,909
	1,200	2,428	2,322
	1,400	3,133	2,745
	1,600	3,772	3,180
40	1,000	2,411	2,242
	1,200	2,909	2,746
	1,400	3,734	3,268
	1,600	4,507	3,809

Table 5.4.2 Allowable Bored Pile Capacities for BH-3 and BH-8

Bored Pile Dimensions		Allowable Single Pile Capacity	
Length (m)	Diameter (mm)	Axial Compression (kN)	Pullout (kN)
20	1,000	905	735
	1,200	1,149	901
	1,400	1,415	1,072
	1,600	1,702	1,250
25	1,000	1,318	1,118
	1,200	1,715	1,374
	1,400	2,108	1,630
	1,600	2,510	1,893
30	1,000	1,690	1,450
	1,200	2,201	1,799
	1,400	2,778	2,154
	1,600	3,349	2,501
35	1,000	2,061	1,779
	1,200	2,685	2,220
	1,400	3,396	2,680
	1,600	4,163	3,139

40	1,000	2,436	2,114
	1,200	3,173	2,648
	1,400	4,019	3,215
	1,600	4,935	3,791

Table 5.4.3 Allowable Bored Pile Capacities for BH-4

Bored Pile Dimensions		Allowable Single Pile Capacity	
Length (m)	Diameter (mm)	Axial Compression (kN)	Pullout (kN)
20	1,000	1,077	911
	1,200	1,353	1,111
	1,400	1,649	1,318
	1,600	1,965	1,531
25	1,000	1,609	1,453
	1,200	2,037	1,766
	1,400	2,472	2,086
	1,600	2,919	2,415
30	1,000	1,988	1,802
	1,200	2,526	2,207
	1,400	3,137	2,625
	1,600	3,753	3,040
35	1,000	2,346	2,122
	1,200	2,989	2,616
	1,400	3,727	3,135
	1,600	4,535	3,660
40	1,000	2,711	2,453
	1,200	3,463	3,037
	1,400	4,328	3,659
	1,600	5,282	4,299

Table 5.4.4 Allowable Bored Pile Capacities for BH-5, BH-6 and BH-7

Field test like static or dynamic load test for the piles should be perform to confirm the calculated pile capacities with the actual capacities. Design pile capacities may be adjusted after the field test is performed.

5.5. Lateral Earth Pressure

The Coefficient of Lateral Earth Pressure (K_o, K_a and K_p) was calculated using soil strength parameters obtained in Table 5.5.1 to Table 5.5.4. The calculated coefficients assumes a level ground, vertical back-faced wall and the friction angle between wall and soil (δ) $\delta=0.33\phi$.

Depth (m)	Coefficient of Lateral Earth Pressure		
	At Rest (K_0)	Active (K_a)	Passive (K_p)
0.0 – 5.0	0.62	0.45	2.73

Table 5.5.1 Coefficient of Lateral Earth Pressure for BH-1 and BH-2

Depth (m)	Coefficient of Lateral Earth Pressure		
	At Rest (K_0)	Active (K_a)	Passive (K_p)
0.0 – 5.0	0.52	0.35	3.89

Table 5.5.2 Coefficient of Lateral Earth Pressure for BH-3 and BH-8

Depth (m)	Coefficient of Lateral Earth Pressure		
	At Rest (K_0)	Active (K_a)	Passive (K_p)
0.0 – 4.0	0.46	0.3	3.57
4.0 – 5.0	0.51	0.34	4.01

Table 5.5.3 Coefficient of Lateral Earth Pressure for BH-4

Depth (m)	Coefficient of Lateral Earth Pressure		
	At Rest (K_0)	Active (K_a)	Passive (K_p)
0.0 – 3.0	0.54	0.37	3.57
3.0 – 5.0	0.46	0.3	4.81

Table 5.5.4 Coefficient of Lateral Earth Pressure for BH-5, BH-6, and BH-7

For cast-in-place walls, passive pressure may be neglected due to disturbance of soil during foundation excavation. Calculated active pressure should be increased by 20% to account for additional compaction stress during construction. At rest lateral earth pressure coefficient (K_o) should be used when structures adjacent to the wall are sensitive to lateral displacement.

5.6. Ground Improvement

For grounds that are sensitive to settlement or heavily loaded structures that may induce settlement, ground improvement is generally recommended up to 18 meters depth. The ff. ground improvement techniques may be employ:

- Jet Grouting/ Soil Cement
- Stone Column
- Compaction Grouting
- Permeation Grouting
- Micro Pile

Expected improved bearing capacity for an isolated foundation should be around 200-300kPa.

5.7. Site Preparation and Earthwork

The following specifications described Table 5.7.1 are shown in the DPWH Manual of Standard Specification (Vol. II Highways, Bridges and Airports, 2004).

All engineered fills should be compacted to at least 95% of its Maximum Dry Density (MDD). Backfilling should be carefully monitored and should be compacted in lifts not less than 0.3m.

Description	DPWH Item
Clearing and grubbing	100
Embankment	104
Subgrade Preparation	105
Compaction and Density Control	106

Table 5.7.1 DPWH Standard for Site Preparation and Earthwork

5.8. Slab on Grade and Pavement Design

For purpose of preliminary design a modulus of subgrade reaction of 1,000 kN/m^3 is recommended subject to field verification (field plate load test). Design of slab-on-grade should be revised depending on the field plate load test results.

Pavement could be designed using the procedure described in AASHTO "Guide for Design of Pavement Structures-1993". California Bearing Ratio test conducted to fully soaked samples needs to be performed as input. The subbase and base courses should be prepared in accordance with Items 200 and 201 respectively in the DPWH Manual of Standard Specifications.

6. LIMITATIONS

This report is based on the subsurface investigation carried out by PAR GEOTECHNICAL Testing Center. Should there be significant differences in the soil stratifications encountered during the construction phase, or any differences in the understanding of the requirements of the project, the undersigned could be reached at ***jbmamburam@yahoo.com*** so that additional recommendations and/or corrections can be made.

JONATHAN MAMBURAM, MSCE
Civil Engineer - Geotechnical
PRC 0107781

7. REFERENCES

American Society for Testing and Materials International (ASTM).

Kulhawy, F. H. and Mayne, P. W. (1990), Manual on Estimating Soil Properties for Foundation Design, Cornell Uinversity

Look, B.G. (2007), Handbook of Geotechnical Investigation and Design Tables, Taylor & Francis/Balkema.

Budhu, M. (2011), Soil Mechanics and Foundation Engineering, 3rd ed., John Wiley & Sons, Inc.

Bowles J.E. (1997), Foundation Analysis and Design, 5th ed., The McGraw-Hill Companies Inc.

E. GEODETIC SURVEY

GEODETIC ENGINEER'S CERTIFICATE

RASA SURVEYING
LAND SURVEY CONSULTANTS

CERTIFICATION

This is to certify that the position and elevation of Proposed 40-Storey Mixed-use Building (Lot 1, (LRC) Pcs-9508) located at Roxas Boulevard, Pasay City, Metro Manila based from WGS-84 coordinate system and EGM2008 respectively are as follows:

Latitude:	**N 14deg. 33min. 4.21620 sec.**
Longitude:	**E 120deg. 59min. 26.01760 sec.**
Ground Elevation:	**4.131 meters EGM2008**

This certification is being issued for whatever legal purpose it may serve.

Issued/Certified by:

RAYMUND ARNOLD S. ALBERTO
Geodetic Engineer
Lic. No.: 4048

9 Anlacan Compound Philand Subdivision Tandang Sora Q.C., 1116
935-7296 935-7297
" Traversing the path of Surveying Technology"

GEODETIC ENGINEER'S CERTIFICATE

FORM GE0313

OFFICE USE ONLY (To be filled up by CAAP)	Application number

1. Property details

	Lot owner, Lot number, Title number, Street number, Street name, Barangay, Municipality/City, Post code,
Property owner/address	Philippine Economic Zone Authority Lot 1, (LRC) Pcs-9508 TCT # 146946 Roxas Boulevard, Pasay City, Metro Manila
Name of Project/type of structure	Proposed 40-Storey Mixed-use Building

2. Survey details and Result

Geodetic coordinates of the proposed structure/site In World Geodetic System of 1984 (WGS-84) datum	Pt./Cor	Latitude			Longitude		
	1	14°	33 '	4.31470"	120°	59 '	24.55070"
	2	14°	33 '	4.99220"	120°	59 '	26.61100"
	3	14°	33 '	5.50850"	120°	59 '	26.47730"
	4	14°	33 '	5.66540"	120°	59 '	26.95450"

Ave. Elevation of the Site	GPS height (Ellipsoidal)	47.326	Meters
	Orthometric height (MSL)	2.500	Meters
Date of survey	From 02/20/2017	To 02/23/2017	
Type of survey/instrument used	Topcon Total Station / Hi-Target GPS Receiver / Sokkia Level		

Minimum 4-points/corners of the building shall be indicated, use additional sheets if more points are needed

3. Declaration

The undersign being a registered Geodetic Engineer hereby certifies that the above data is true and correct and the survey was made on the ground as indicated above.

Name	ENGR. RAYMUND ARNOLD S. ALBERTO		
Postal address	Street number, Street name, Barangay, Municipality/City, Post code # 9, Anlacan Comp. Philand Subd.,Tandang Sora, Quezon City 1116		
Email address	rasaglobe@gmail.com		
Phone/Fax	Phone (02) 935-7296	Fax (02) 935-7297	Mobile 0917-830-40-36
Signature		Date issue & seal here: March 17, 2017	
Registration number	4048	Date 03/10/1994	
PTR number	3806859	Date 01/06/2017	

Note: Raw data, field notes and computation shall be available upon request.

NAMRIA CERTIFICATION

Republic of the Philippines
Department of Environment and Natural Resources
NATIONAL MAPPING AND RESOURCE INFORMATION AUTHORITY

August 28, 2015

CERTIFICATION

To whom it may concern:

This is to certify that according to the records on file in this office, the requested survey information is as follows -

Province: **NCR - MANILA, FIRST DISTRICT**
Station Name: **MMA-3879**
Order: **4th**
Island: **LUZON**
Municipality: **MANILA**
Barangay: **BRGY. 725, ZONE 79**
MSL Elevation:

PRS92 Coordinates

Latitude:	**14° 34' 18.41267"**	Longitude:	**120° 59' 25.49802"**	Ellipsoidal Hgt:	**3.28300 m.**

WGS84 Coordinates

Latitude:	**14° 34' 13.00075"**	Longitude:	**120° 59' 30.39447"**	Ellipsoidal Hgt:	**46.88100 m.**

PTM / PRS92 Coordinates

Northing:	**1611428.92 m.**	Easting:	**498967.264 m.**	Zone:	**3**

UTM / PRS92 Coordinates

Northing:	**1,611,820.44**	Easting:	**283,488.87**	Zone:	**51**

Location Description

MMA-3879

The station is located at the sidewalk of San Andres Street about 40 meters NW of President Quirino Avenue corner of San Andres Street, 60 meters NW of Jollibee and 50 meters SE of McDonald.

Station mark is the head of 4" stainless bolt flushed in a 20cm. x 20cm. cement putty with inscription 'MMA-3879; 2011; LMS-NCR, FLS."

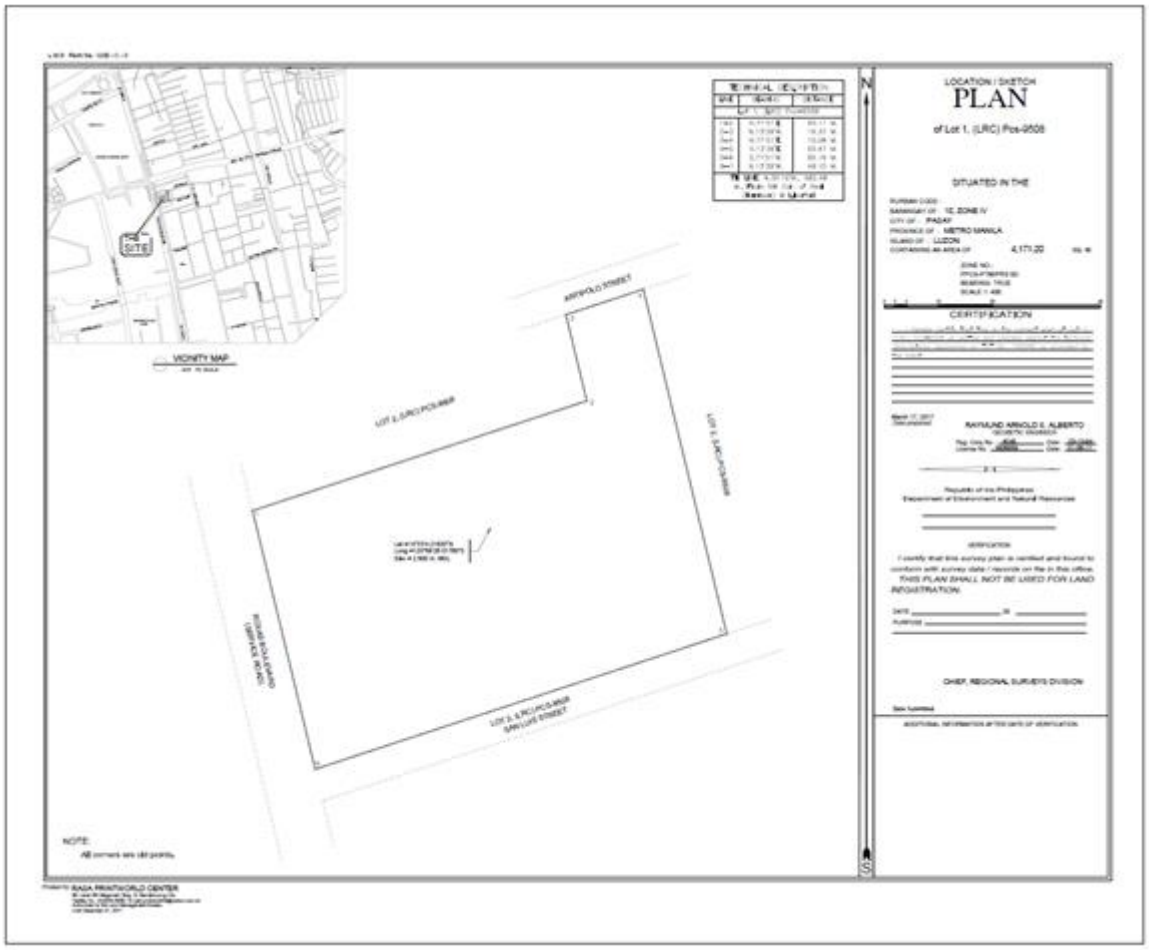
Requesting Party: **RASA Surveying**
Purpose: **Reference**
OR Number: **8087124 I**
T.N.: **2015-2249**

RUEL DM. BELEN, MNSA
Director, Mapping And Geodesy Branch

9908282015151730

NAMRIA OFFICES
Main : Lawton Avenue, Fort Bonifacio, 1634 Taguig City, Philippines Tel. No.: (632) 810-4831 to 41
Branch : 421 Barraca St. San Nicolas, 1010 Manila, Philippines, Tel. No. (632) 241-3494 to 98
www.namria.gov.ph

E. LOCATION/SKETCH PLAN



2. TERMS OF REFERENCE

Project Title: **The PROPOSED DEMOLITION OF EXISTING 6-STOREY OFFICE AND DESIGN & BUILD OF 13-STOREY OFFICE BUILDING with ROOF DECK**
Location: **Roxas Blvd., cor. San Luis St., Pasay City**

I. RATIONALE

The Philippine Economic Zone Authority (PEZA), created by virtue of Special Economic Zone Act of 1995 (Republic Act 7916), is a Government-Owned and Controlled Corporation (GOCC) responsible for encouraging, promoting, inducing and accelerating a sound and balanced industrial, economic and social development of the country.

The existing 51-year old PEZA Building in Roxas Blvd., cor. San Luis St.., Pasay City became the home of PEZA since 1995. Hence, in compliance with the government order to subject all older government buildings to examination for structural integrity, PEZA initiated the conduct of a structural analysis on its building in the year 2015 and engaged P-Square for the study. In its final report, it concluded that the PEZA building in Pasay is highly vulnerable in terms of poor material strength resulting to a very low capacity to resist anticipated earthquake loads.

II. PROJECT OBJECTIVE

The proposed PEZA building is envisioned to be the permanent home office of PEZA. As a world class business investment center, it will cater to the needs of agencies, valued customers and other stakeholders. It shall serve as an industry excellence center and a model of sustainable development in the heart of Pasay City owing to PEZA's status as the leading investment promotion agency and the proponent of eco-industrial parks, smart towns and digital cities.

III. DESCRIPTION OF THE PROJECT

a. The PEZA property has a total land area of 4,171 sq mtrs, located at Roxas Blvd., cor. San Luis St.., Pasay City. A total of approximately 1,500 sq.m. shall be allocated for the proposed 13-storey PEZA building.

b. The project cost incorporates the Demolition of Existing Six (6) Storey Office and Design & Build of 13 Storey Office Building with Roof Deck with minimum standards.

   Items for handover to PEZA during demolition:

   - Exposed structural steels, wooden doors
   - All exposed metal pipes
   - Steel roof trusses and roofing
   - Any identified items with value

a. The design & build project is for the construction of the "core and shell". The following definitions shall apply:

   - "Core and Shell" generally covers ONLY base building elements.

   - "Core" refers to fitted common areas such as but not limited to parking areas, fire exits, main lobby, elevator lobbies, Telco Rooms and

Mechanical, Electrical, Plumbing/sanitary Fire Protection (MEPF) equipment rooms and risers.

- "Shell" refers to the overall structural frame including foundation systems, exterior walls, floor slabs, floor finishing and roof decks, complete with common areas, staircases, elevator shafts, service ducts and fire detection and suppression systems compliant with local and national statutory requirements.

b. As far as practicable and within the parameters of the approved budget of PhP880,150,000.00 for the contract, the building design shall be iconic in terms of its unique look and as a PEZA symbol of what the institution stands for. A sustainable design that can take the PEZA to the next generation and beyond.

c. Green Building Requirements

- The new PEZA Building shall be compliant to the Philippine Green Building Code.

- The new PEZA Building shall reduce the overall impact of the built environment on human health and the natural environment by:

1. Efficiently using energy, water and other resources;
2. Using solar energy or other renewable forms of energy;
3. Implementing pollution and waste reduction measures;
4. Providing good indoor environmental air quality;
5. Using non-toxic, ethical and sustainable materials;
6. Considering the environment in design, construction and operation;
7. Considering the quality of life of occupants in design, construction and operation, and/or;
8. Enabling adaptability and sustainability to a changing environment

IV. THE SCOPE OF THE PROJECT

1. Demolition of Existing Six (6) Storey Office Building.
2. Design and Build of Thirteen (13) Storey Office Building with Roof Deck.

V. SPACE REQUIREMENTS

PEZA's minimum requirement for employees is 460 persons (at minimum 9.3 sq.m. per person). A provision of 30% additional for the area shall be provided for the circulation and common areas.

Note: This proposed space allocation is based on PEZA minimum space requirements only, which are subject to changes depending on the designer' s preference upon analysis during proper planning to attain maximum habitability and usage of the proposed office building. Other amenities not included in this representation identified by the designer which are deemed necessary for the completeness of the structure may be added as long as it will not exceed the approved area per floor and the required circulation or common areas.

	SPACE DESCRIPTION	EMPLOYEES (NOS.)	CORE AND SHELL	ESTIMATED AREA (SQ.M.)
	EXTERIOR SPACES			
1	**FRONT**			
	a Drop Off / Porte Cochere		Y	Variable
	b Entrance to Parking Area		Y	
	c Landscaping		Y	
	d Pavement / Walkways		Y	
	e Guard House		Y	
2	**BACK**			
	a Driveway		Y	Variable
	b Service Area / Delivery		Y	
	c Exit from Parking Area		Y	
	PODIUM			
	Minimum of 1,325 sq.m. per Floor			
3	**GROUND FLOOR**	**10**		**1,325.00**
	a Main Lobby (High Ceiling)			Variable
	i Reception Area / Client Lounge			
	ii Common Rest Rooms (Including PWD)			
	b Land Bank of the Philippines - PEZA Branch	10		
	c Business Centers			
	i Leasable Units			
	d Main Utility Rooms		Y	
	i Mechanical		Y	
	ii Electrical		Y	
	Transformer Room		Y	
	Generator Set Room		Y	
	Power Room (Switchboards, Capacitor Bank and other major Electrical Equipment)		Y	
	iii Fire Pump		Y	
	e Security Office		Y	
	f Fire Command Center		Y	
	g Telco Rooms		Y	
	h Underground STP		Y	
	i Cisterns		Y	
	i Underground Domestic		Y	
	ii Fire Water Tank		Y	
	j Access to Elevators, Service Stairs and Emergency Exit Stairs		Y	
	SECOND FLOOR			**1,325.00**
	a Business Centers			Variable
	i Leasable Units			
	b Common Areas		Y	
	i Reception Area / Concierge		Y	

	ii Common Rest Rooms (Including PWD)		Y	
	c Access to Elevators, Service Stairs and Emergency Exit Stairs		Y	
	d Typical Utility / Service Rooms		Y	
5	**THIRD FLOOR**			**1,325.00**
	a Parking Area		Y	Variable
	i Bicycle Parking		Y	
	ii Motorcycle Parking		Y	
	iii Parking Slots		Y	
	iv Parking Slot for PWD		Y	
	b Common Area		Y	
	i Common Rest Rooms (Including PWD)		Y	
	c Access to Elevators, Service Stairs and Emergency Exit Stairs		Y	
	e Typical Utility / Service Rooms		Y	
6	**FOURTH FLOOR**			**1,325.00**
	a Parking Area		Y	Variable
	i Parking Slots for PEZA Vehicles (20 slots)		Y	
	ii Parking Slots		Y	
	iii Parking Slot for PWD		Y	
	b General Services Division Workshop and Motor Pool			
	c Supply and Property Management Division Storage			
	d Drivers' Lounge			
	e Access to Elevators, Service Stairs and Emergency Exit Stairs		Y	
	f Canteen		Y	
	g Janitorial Room		Y	
	h Typical Utility/ Service Rooms		Y	

TOWER				
Minimum of 1,000 sq.m. per Floor				
7	**FIFTH FLOOR**	**50**		**1,000.00**
	a Infirmary (4-bed capacity)			Variable
	i Physicians' Consultation Rooms (2)	2		
	ii Nurse's Area	1		
	iii Dental Clinic	1		
	iv Rest Room			
	b Inter Faith / Prayer Room			
	c Gender and Development Office			

	i Office Area	5		
	ii Lactation / Breastfeeding Room			
	iii Daycare Center			
	d Rooms for PEZA Employees			
	i Studio Type Rooms (4 pax per room)			
	Kitchenette			
	Toilet and Bath			
	ii Sleeping Quarters			
	Male Sleeping Quarters			
	Toilet and Bath			
	Female Sleeping Quarters			
	Toilet and Bath			
	e PEZA-LGU Ecozone Development Coordinating Office	10		
	f Bureau of Immigration			
	i Office Area			
	BI PEZA Head (Enclosed)	1		
	Cashier	2		
	Staff Area	15		
	ii Pantry			
	iii Storage			
	g Foreign Nationals Unit			
	i Reception Area			
	ii Huddle Area			
	iii Office Area			
	Department Manager (Low Partition)	1		
	Staff Area	12		
	iv Pantry			
	v Storage			
	h Conference Room (15 seating capacity)			
	i Common Areas		Y	
	i Reception Area / Client Lounge		Y	
	ii Common Rest Rooms (Including PWD)		Y	
	j Access to Elevators, Service Stairs and Emergency Exit Stairs		Y	
	k Typical Utility/ Service Rooms		Y	
8	**SIXTH FLOOR**	**70**		**1,000.00**
	a Support Services Department			Variable
	i Reception Area / Client Lounge	3		
	ii Huddle Area			
	iii Office Area			
	Department Manager (Low Partition)	1		
	Division Chief	2		
	Staff Area	18		
	iv Bureau of Fire Protection			

	BFP-CLU PEZA Head	1		
	Staff Area	6		
	iv Pantry			
	v Storage			
	b Zone Office NCR			
	i Reception Area / Client Lounge	3		
	ii Huddle Area			
	iii Office Area			
	Zone Manager (Low Partition)	1		
	Division Chief	2		
	Staff Area	20		
	iv Bureau of Customs			
	BOC PEZA Head	1		
	Staff Area	3		
	v Pantry			
	vi Storage			
	c Security Services Department			
	i Office Area			
	Department Manager (Low Partition)	1		
	Staff Area	8		
	ii Pantry			
	iii Storage / Armory			
	d Conference Room (15 seating capacity)			
	e Common Areas		Y	
	i Reception Area / Client Lounge		Y	
	ii Common Rest Rooms (Including PWD)		Y	
	f Access to Elevators, Service Stairs and Emergency Exit Stairs		Y	
	g Typical Utility/ Service Rooms		Y	
9	**SEVENTH FLOOR**	**64**		**1,000.00**
	a Office of the DDG for Policy and Planning			Variable
	i Reception Area			
	ii Office Area	1		
	Secretary	1		
	Staff Area	5		
	Department Manager (Low Partition)	1		
	iii Conference Room (10 seating capacity)			
	iv Storage			
	v Pantry			
	vi Rest Room			
	b Management Information System and Corporate Planning Group			
	i Group Manager (Enclosed)	1		
	Staff Area	2		
	ii Corporate Planning Department			

	Department Manager (Low Partition)	1		
	Division Chief	2		
	Staff Area	8		
	Pantry			
	Storage			
	iii Ecozone Development Department			
	Department Manager (Low Partition)	1		
	Division Chief	2		
	Staff Area	10		
	Pantry			
	Storage			
	iv Environmental Safety Group			
	Department Manager (Low Partition)	1		
	Division Chief	1		
	Staff Area	10		
	Pantry			
	Storage			
	c Enterprise Assistance Group			
	i Group Manager (Enclosed)	1		
	Staff Area	2		
	ii Enterprise Operations Department			
	Department Manager (Low Partition)	1		
	Staff Area	10		
	Pantry			
	Storage			
	iii Industrial Relations Division			
	Division Chief	1		
	Staff Area	2		
	d Conference Room (15 seating capacity)			
	e Common Areas		Y	
	i Reception Area / Client Lounge		Y	
	ii Common Rest Rooms (Including PWD)		Y	
	f Access to Elevators, Service Stairs and Emergency Exit Stairs		Y	
	g Typical Utility/ Service Rooms		Y	
10	**EIGHTH FLOOR**	**49**		**1,000.00**
	a Personnel and Administration Group			Variable
	i Group Manager (Enclosed)	1		
	Staff Area	2		
	ii General Administrative Services Department			
	Department Manager (Low Partition)	1		
	Supply and Property Management Division			
	Division Chief	1		
	Staff Area	8		

	General Services Division			
	Division Chief	1		
	Staff Area	8		
	Pantry			
	Storage			
	iii Human Resource Development Department			
	Department Manager (Low Partition)			
	Human Resource Development Division			
	Division Chief	1		
	Staff Area	8		
	Personnel Services Division			
	Division Chief	1		
	Staff Area	8		
	Training Division			
	Division Chief	1		
	Staff Area	8		
	201 Files			
	Pantry			
	Storage			
	b Conference Room (15 seating capacity)			
	d Training Room (30 seating capacity)			
	e Common Areas		Y	
	i Reception Area / Client Lounge		Y	
	ii Common Rest Rooms (Including PWD)		Y	
	f Access to Elevators, Service Stairs and Emergency Exit Stairs		Y	
	e Typical Utility/ Service Rooms		Y	
11	**NINTH FLOOR**	**53**		**1,000.00**
	a Office of the DDG for Finance and Administration			Variable
	i Reception Area			
	ii Office Area	1		
	Staff Area	2		
	iii Conference Room (10 seating capacity)			
	iv Storage			
	v Pantry			
	vi Rest Room			
	b Finance Group			
	i Group Manager (Enclosed)	1		
	Staff Area	2		
	ii Accounting Department			
	Department Manager (Low Partition)	1		
	Division Chief	2		
	Staff Area	14		

	iii Budget and Treasury Department			
	Department Manager (Low Partition)	1		
	Division Chief	2		
	Staff Area	14		
	iv Cashier			
	Storage / Vault	2		
	v Pantry			
	vi Storage / Vault			
	c Office of the Resident Auditor (COA)			
	i Auditor (Enclosed)	1		
	ii Office Area	10		
	iii Huddle Area			
	iv Storage			
	v Pantry			
	d Conference Room (15 seating capacity)			
	e Common Areas		Y	
	i Reception Area / Client Lounge		Y	
	ii Common Rest Rooms (Including PWD)		Y	
	f Access to Elevators, Service Stairs and Emergency Exit Stairs		Y	
	g Typical Utility / Service Rooms		Y	
12	**TENTH FLOOR**	**74**		**1,000.00**
	a Office of the DDG for Operations			Variable
	i Reception Area			
	ii Office Area	1		
	Staff Area	2		
	iii Conference Room (10 seating capacity)			
	iv Storage			
	v Pantry			
	vi Rest Room			
	c Enterprise Regulation and Support Services Group			
	i Group Manager (Enclosed)	1		
	Staff Area	2		
	ii Enterprise Regulations Department			
	Reception Area / Client Lounge			
	Department Manager (Low Partition)	1		
	Staff Area	18		
	Pantry			
	Storage			
	iii Enterprise Services Division			
	Division Chief	1		
	Staff Area	20		
	Pantry			
	Storage			

	iv Incentives Management Division			
	Division Chief	1		
	Staff Area	20		
	Pantry			
	Storage			
	v Service Registration Unit			
	Reception Area / Client Lounge			
	Division Chief	1		
	Staff Area	6		
	Pantry			
	Storage			
	d Conference Room (15 seating capacity)			
	e Common Areas		Y	
	i Reception Area / Client Lounge		Y	
	ii Common Rest Rooms (Including PWD)		Y	
	f Access to Elevators, Service Stairs and Emergency Exit Stairs		Y	
	g Typical Utility / Service Rooms		Y	
13	**ELEVENTH FLOOR**	**46**		**1,000.00**
	a Office of the Board Secretary			Variable
	i Board Secretary (Enclosed)	1		
	ii Attorneys' Office Area (Cubicle Type)	2		
	Staff Area	4		
	iii Conference Area (6 seating capacity)			
	iv Pantry			
	v Storage			
	b Legal Affairs Group			
	i Group Manager (Enclosed)	1		
	ii Attorneys' Office Area (Cubicle Type)	6		
	Staff Area	4		
	iii Conference Area (10 seating capacity)			
	iv Pantry			
	v Storage			
	c Promotions and Public Relations Group			
	i Group Manager (Enclosed)	1		
	ii Department Manager (Low Partition)	1		
	iii Division Chief	2		
	iv Staff Area	8		
	v Huddle Area			
	vi Pantry			
	vii Storage			
	d Internal Control Group			
	i Group Manager (Enclosed)	1		
	ii Department Manager (Low Partition)	1		
	iii Division Chief	2		

	iv Staff Area	12		
	v Pantry			
	vi Storage			
	e Board Room			
	i Executive Lounge			
	ii Conference Area (30 seating capacity)			
	iii Pantry / Food Preparation Area			
	iv Rest Rooms			
	f Conference Room (15 seating capacity)			
	g Common Areas		Y	
	i Reception Area / Client Lounge		Y	
	ii Common Rest Rooms (Including PWD)		Y	
	h Access to Elevators, Service Stairs and Emergency Exit Stairs		Y	
	i Typical Utility / Service Rooms		Y	
14	**TWELVETH FLOOR**	**44**		**1,000.00**
	a Office of the Director General			Variable
	i Reception Area	1		
	ii Conference Room (10 seating capacity)			
	iii Storage			
	iv Pantry			
	v Rest Room			
	vi Office Area			
	Executive Assistant (Enclosed)	1		
	EAs / Private Secretaries	6		
	Staff Area	10		
	vii DG's Office	1		
	Office Area			
	Meeting Area (10 seating capacity)			
	Rest Room			
	Storage Area / Private Room			
	b Hall of Flags			
	i Executive Lounge			
	ii Meeting Area (10 seating capacity)			
	iii Rest Room			
	c PEZA Operations and Command Center			
	i Monitoring Area	6		
	ii Meeting / Huddle Area (15 seating capacity)			
	iii Server Room			
	d Management Information System Department			
	i Department Manager (Low Partition)	1		
	ii Division Chief	2		
	iii Staff Area	12		
	iv Huddle Area			

	v Technician's Area	4		
	vi Server Room			
	vii Pantry			
	viii Storage			
	e Common Areas		Y	
	i Reception Area / Client Lounge		Y	
	ii Common Rest Rooms (Including PWD)		Y	
	f Access to Elevators, Service Stairs and Emergency Exit Stairs		Y	
	g Typical Utility / Service Rooms		Y	
15	**THIRTEENTH FLOOR (High Ceiling)**			**1,000.00**
	a Multipurpose Hall (min. 200 seating capacity)			Variable
	i Auditorium			
	ii Audio Visual Control Room			
	iii Pantry / Food Preparation Area			
	b Suite Rooms / VIP Rooms			
	c Basketball Court			
	d Fitness Center / Gym			
	e Common Areas		Y	
	i Reception Area / Client Lounge		Y	
	ii Common Rest Rooms (Including PWD)		Y	
	f Access to Elevators, Service Stairs and Emergency Exit Stairs		Y	
	g Typical Utility / Service Rooms		Y	
16	**ROOF DECK**			
	a Solar Panels (Max. allowable capacity)		Y	Variable
	b Elevated Tank		Y	
	c Storm Water Tank		Y	
	d Outdoor Air-Conditioning Units		Y	
	e Access to Emergency Exit Stairs		Y	
	TOTAL EMPLOYEES	**460**		
	TOTAL FLOOR AREA			**14,300.00**

- **Actual Floor Area**

PODIUM	5,300.00
TOWER	9,000.00
TOTAL FLOOR AREA FOR PEZA BUILDING (MINIMUM)	**14,300.00**

VI. PROJECT REQUIREMENTS

A. Preliminary Information/Studies for Design Planning

VII. PROJECT COMPONENTS

Site and space planning shall be governed by the standards, rules and regulations on the design of an office. Building design shall conform to the provisions of the latest edition of National Building Code of the Philippines (PD 1096). Accessibility Law (BP 344), National Structural code of the Philippines, Electrical Engineering Law (RA 7920), Mechanical Engineering Law (RA 8495), Mechanical Engineering Code of Philippines (ME Code), Plumbing Code (RA 1378, 1993-1994 Revisions), Fire Code (RA 9514) and other laws and regulations covering environmental concerns and local ordinances and regulations.

A. Pre-Detailed Design

1. Engineering Surveys and Investigations

a. Surveys and investigations of the sites includes boundaries of the property, elevations and contours (at 0.50m interval), soil test, location, dimension, floor elevations and other pertinent data on the existing buildings and improvements (roads, parking areas, mature trees) and existing utility lines (e.g., water, power, telephone).
b. Risk Assessment

B. Conceptual Design Drawings

a. Preparation of the following drawings:
   i. Perspective Views and Rendering (Interior and Exterior)
   ii. Floor plans for all floors (including complete space allocation)
   iii. 4 Elevations
   iv. 2 Sections
   v. Site Development Plan
   vi. Structural Design Plans with structural analysis
   vii. Axonometric Floor Plans with Outline Materials Specifications
   viii. Schematic Design Plans for all Engineering Services (MEPF)

C. Detailed Design

1. Preparation of the following Detailed Design Drawings based on the design Development drawings and Design Parameters including any revisions and refinements as approved and required by the PEZA.

   a. Detailed Architectural Plans (refer to Checklist of Drawings Requirements and Design Parameters)

   b. Detailed Structural Plans (refer to Checklist of Drawings Requirements and Design Parameters)

   c. Detailed Electrical & Auxiliary Plans (refer to Checklist of Drawings Requirements and Design Parameters)

   d. Detailed Storm Drain, sanitary and Plumbing Plans (refer to Checklist of Drawings Requirements and Design Parameters)

   e. Detailed Mechanical Plans (refer to Checklist of Drawings Requirements and Design Parameters)

f. Detailed Fire Protection Plans (refer to Checklist of Drawings Requirements and Design Parameters)

g. Structural Computations, including Soil Boring Test Results and Seismic Analysis and Electrical Design Calculations & Design Analysis Computations.

h. Detailed Hardscape & Softscape Plans including Planting details

i. Detailed Plans for the removal/relocation of existing utilities (if any);

j. General Notes and Technical Specifications describing type and quality of materials and equipment to be used, manner of construction and the general conditions under which the project is to be constructed.

k. Detailed Bill of Quantities, Cost Estimates including a summary sheet indicating the unit prices of construction materials, labor rates and equipment rentals

l. Cover Sheet, Project Location and Vicinity Map, Drawing Index, Summary of Quantities, General Notes, Legends, Symbols, Definitions and Abbreviations; and

m. Other necessary plans/drawings, details and reports that may be required by PEZA/LLFC.

n. Summary of Works.

o. Testing & Commissioning Requirement

D. Construction

As a rule, contract implementation guidelines for procurement of infrastructure projects shall comply with Annex "E" and guidelines for the implementation of contracts for DESIGN AND BUILD infrastructure projects shall comply with Annex "G" of IRR, RA 9184. The following provisions shall supplement these procedures:

1. No works shall commence unless the contractor has submitted the prescribed detailed design document as requirements for the Building Permit and the Building Official has given written approval. Work execution shall be in accordance with reviewed and approved documents.

2. The contractor shall be responsible for obtaining all necessary information as to risks, contingencies and other circumstances which may affect the works and shall prepare and submit all necessary documents specified by the concerned Building Officials to meet all regulatory approvals as specified in the contract documents.

3. The contractor shall submit a detailed program of works within fourteen (14) calendar days after the issuance of the Notice to Commence for approval by procuring entity that shall include, among others:

   a. The order in which it intends to carry out the work including anticipated timing for each stage of design/detailed engineering and construction;

b. Periods for review of specific outputs and any other submissions and approvals;

c. Sequence of timing for inspection and tests;

d. General description of the design and construction methods to be adopted;

e. Number and names of personnel to be assigned for each stage of the work;

f. List of equipment required on site for each stage of the work; and

g. Description of the quality control system to be utilized for the project.

4. Any errors, omissions, inconsistencies, inadequacies or failure submitted by the contractor that do not comply with the requirements shall be rectified, resubmitted and reviewed at the contractor's cost. If the contractor wishes to modify and design or document which has been previously submitted, reviewed and approved, the contractor shall notify the PEZA within a reasonable period of time and shall shoulder the cost of such changes.

5. As a rule, changes in design and construction requirements shall be limited only to those that have not been anticipated in the contract documents prior to contract signing and approval. The following guidelines shall govern approval for change or variation orders;

    a. Change Orders resulting from design errors, omissions or non-conformance with the performance specifications and parameters and the contract documents by the contractor shall be implemented by the contractor at no additional cost to the PEZA.

    b. Provided that the contractor suffers delay and/or incurs costs due to changes or errors in the Project performance specifications and parameters, the contractor shall be entitled to either one of the following:

        i. An extension of time for any such delays under section 10 of Annex "E" of IRR (RA 9184); or

        ii. Payment for such costs as specified in the contract documents, provided, that the cumulative amount of the variation order does not exceed ten percent (10%) of the original project cost.

    c. The contract documents shall include the manner and schedule of payment specifying the estimated contract amount and installments in which the contract will be paid.

    d. The contractor shall be entitled to advance payment subject to the provisions of Section 4 of Annex "E", IRR (RA 9184).

    e. The design and build contractor shall define the quality control procedures for the design and construction in accordance with the approved guidelines

and shall issue the proper certificates of acceptance for sections of the works or whole of the work as provided for in the contract documents.

f. The contractor shall provide all necessary equipment, personnel, instruments, documents and others to carry out specified tests.

g. This design and build projects shall have a minimum Defects Liability Period of one (1) year after contract completion or as provided for in the contract documents. This is without prejudice to the liabilities imposed upon the engineer/architect who drew up the plans and specification for building sanctioned under Section 1723 of the New Civil Code of the Philippines.

h. The contractor shall be held liable for design and structural defects and/or failure of the completed project within the warranty period of 15 years for permanent structures/buildings as specified in Section 62.2.3.2 of the IRR (RA 9184)

VIII. IMPLEMENTATION and ARRANGEMENT

Land Bank of the Philippines Leasing and Finance Corporation (LBPLFC) shall enforce the Government Procurement Reform Act (GPRA) Under RA 9184 and its implementing Rules and Regulations (IRR). The Project Manager of PEZA shall overlook the project from the start of the construction Phase. Representative from the Technical Working Group (TWG) of PEZA for this said project shall attend the bid process under LBPLFC and shall play a vital role in evaluation of the plans and other technical documents submitted by the bidders. The TWG shall be present in every meeting concerning the completion of the project.

IX. ELIGIBILITY REQUIREMENTS

A. Basic

1. The eligibility requirements for the Design and Build Scheme shall comply with the applicable provisions of Section 23-24 of IRR of RA 9184.

2. A modified set of requirements integrating eligibility documents and criteria for infrastructure projects and consulting services shall be adopted in accordance with Annex “G” – Guidelines for the Procurement and Implementation of Contracts for Design and Build Infrastructure Projects Annex “G” of IRR of RA 9184.

B. Specialized

For the Pre-Detailed Design and Detailed Design Portion of the contract, the Bidder is required to enter into a joint venture agreement with an architectural firm that will design the project with the minimum number of professionals as shown below:

General Requirements:

- Must have previously designed and / or constructed other 10 to 15 storey structures;
- Must have previously designed and / or constructed at least one (1) Green Building;
- Must be a green certified architect and/ or engineer;
- Must be a PCAB Licensed Contractor (for contractors and demolition service providers) under the classification of; PCAB License Category AAA Registration of at

least Large B in Building or Industrial Plant, Medium B in Electrical Work, Medium B in Air-conditioning or Refrigeration, with specialty in Electro-mechanical Work and Structural Demolition.

- Specialty Contractors must also have their PCAB Licenses;
- Must have already been commended for a design and construction of similar superimposed structure depicting its iconic value with design characteristics of symbolic, smart, modern and natural; and,
- Must poses flexibility. (This refers to the contractor's ability to alter schedules necessary to complete the work with prior notice from the owner and willing to take on every aspect of the project within the time frame set forth by the PEZA to the extent of working on extra hours, evening, holidays or even weekends if necessary).

Specific Requirements per Discipline:

1. Team Leader/Project Design Manager
   a. Licensed Civil Engineer/Architect
   b. Preferably 10 years work experience

2. Design/Principal Architect
   a. Licensed Architect
   b. Preferably 15 years' experience in vertical structures
   c. Proficient in AutoCAD & Calculation softwares

3. Structural/Civil Engineer
   a. Licensed Structural/Civil Engineer
   b. Preferably 10 years' experience in vertical structures
   c. Proficient in AutoCAD & Calculation softwares

4. Electrical Engineer
   a. Licensed Professional Electrical Engineer (PEE)
   b. Preferably 10 years' experience in vertical structure
   c. Proficient in AutoCAD & Calculation softwares

5. Mechanical Engineer
   a. Licensed Professional Mechanical Engineer (PME)
   b. Preferably 10 years' experience in vertical structures
   c. Proficient in AutoCAD & Calculation softwares

6. Drainage/Sanitary/Plumbing Engineer
   a. Licensed Sanitary Engineer
   b. Preferably 10 years' experience in vertical structures
   c. Proficient in AutoCAD & Calculation softwares

7. Professional Electronics & Communication Engineer
   a. Bachelor's Degree in Electronics & Communication Engineering
   b. Preferably 10 year experience, preferably in an ICT related field.
   c. Experience with enterprise network design including WAN and LAN topologies based mainly CISCO technology.
   d. Network trouble shooting experience
   e. Experience with firewall configuration and IPS devices

f. Experience with design, configuration, and support of latest Networking technologies
(Data, voice and video)
g. Strong security experience and familiarity with best security

8. CADD Operator
(preferably one for Architecture and one for each engineering specialty)
a. At least Bachelor's Degree in Architecture or Engineering
b. Proficient in AutoCAD software

9. Geodetic Engineer
a. Licensed Geodetic Engineer
b. Preferably 5 years work experience

10. Geotechnical Engineer
a. Licensed Geotechnical Engineer
b. Preferably 5 years work experience

11. Quantity/Cost & Specification Engineer
a. Licensed Civil Engineer
b. Preferably 10 years work experience

12. Safety Officer
a. DOLE Accredited with a valid COSH certificate
b. Preferably 10 years' experience in high-rise building construction and demolition

13. Green Building Professional
a. LEED Professional or Green Certified Architect and/ Engineer or equivalent
b. Preferably 5 years work experience

14. Building Information Modelling (BIM) Specialist
a. Preferably 5 years work experience
b. Proficient in BIM Software
c. Was involved in at least 1 completed detailed design project

15. Others as required for the project

The bidder is required to prioritized the hiring of locally-based architects, engineers, and draftsmen especially if such have had experience and training in vertical projects and design.

X. APPROVED BUDGET COST

The total budget for the project involving the demolition of the existing building, design and construction of the new 13-storey PEZA building with roof deck is shown on table below. Provision of furniture is not included.

Item	Total
Design and Construction Cost of 13 Storey Office Building with Roof Deck (Including Installation of Board Piles and Demolition of Existing 6-Storey Building)	Php 880,150,000.00

XI. TIME FRAME

The Design and Build Contractor is required to complete the Project within 900 calendar days shown below, to start upon the contractor's receipt and signing of Notice to Proceed. The time frame to be followed for the project is as follows:

Implementation Schedule:

Activity	MONTHS									
	1	2	3	4	5	10	15	20	25	30
Pre-Design Phase including approval										
Detailed Design Phase including approval										
Demolition & Construction Phase including application and issuance of Building Permit and other Statutory Requirements										

The timeline for the completion of the project is 900 calendar days.

XII. SCOPE OF WORK

The **Works** consist of:

Description: **Demolition of Existing 6-Storey Office and Design & Build of Proposed 13-Storey Office Building with Roof Deck**

Scope of Work:

1. Provide all the necessary industry standard practice of quality materials, necessary equipment and high quality of workmanship, incidental materials, equipment, consumables and ancillary items required for the total completion of the **Demolition of Existing 6-Storey Office and Design & Build of 13-Storey Office Building with Roof Deck** include the following:

A. General requirements, temporary facilities, site protection, mobilization, etc.

Temporary facilities for the Project Management and Client including maintenance:

- Field Office with office tables for 14 personnel (10 for PM, 4 for PEZA)
- Separate toilets for male and female
- 20 pax conference room
- Storage room for material samples and mock-ups
- 1 lot Furniture/Fixtures, Equipment & Appliances
- 3 units laptop with minimum 8gb ram and 1tb storage (1 for PM, 2 for PEZA)
- 1 lot office supplies
- 1-unit Service Vehicle for minimum of 7 seaters (including operations and maintenance with driver)
- 1-unit Multi Utility Vehicle for the PMT (including operations and maintenance with driver)
- 4-units Cellular phone capable to take high-definition photos with a 500 pesos monthly load. (1 for PM, 3 for PEZA)
- WIFI connectivity
- Parking lots

B. Construction safety, personnel/workers health and safety requirements.
C. Architectural Works
D. Structural Works
E. Electrical Works
F. Mechanical Works and Fire Protection Works
G. Sanitary & Plumbing Works.
H. Site Development Works.
I. Incidental works, ancillary utilities/facilities
J. Deferred Cost Items

Terms and Conditions:

A. Refer to Technical Specifications for additional information and details.

B. Inspect and familiarize to site conditions to augment missing information not clearly shown in the Bidding Documents and Terms of Reference and secure site ***Inspection Certificate*** from

Procuring Entity's Representative (to be include in the Technical Component).

C. Contractor/supplier/installer to supply labor and materials should have appropriate numbers and ratio of skilled and non-skilled manpower, tools & equipment with industry standards comparable quality and good operating condition, technical know-how and skills, and supervision expertise necessary to complete the project.

D. Project duration: **900 calendar days** to cover the period required for design and plan preparation, materials ordering, delivery, construction/installation, testing and commissioning.

E. The Cost Item: Construction Safety and Workers Safety and Health shall include provision of basic PPE to 14 members (PM and PEZA) consisting of safety shoes, safety vests, hard hats, face masks, face shield, etc. And provision of at least 10 pieces of stand-by ready spare hard hats and safety vests to guests and authorities visiting the site for inspection.

F. Submittals to include in the bid proposal as required in the Invitation to Bid, in addition, shall include as follows:

a) Pricing breakdown and derivation of unit costs:
a. Pricing breakdown in accordance with the Invitation to Bid and derivation of unit costs.

b) The cost estimates shall consider the following:

DIRECT COSTS

a) General requirements such as: Temporary facilities, site protection requirements, temporary fencing, temporary access, etc.
b) Construction Safety, Personnel/Workers Health and Safety requirements.
c) Cost of Materials to include cost of sources, transport, handling, storage, tests, miscellaneous expenses, and allowances for wastage.
d) Cost of labor, including salaries, wages, cost of living allowance, and all fringe benefits.
e) Other miscellaneous and incidental expenses necessary for the construction of the project.

INDIRECT COSTS

a. Overheads

b. Contingencies

c. Miscellaneous

d. Profit

e. Insurances and Bonds Premiums

f. Applicable Taxes

g. BOQ for Deferred Cost Items incorporating unit cost of materials, unit cost of labor, overhead, miscellaneous and profit and total unit cost per cost item.

G. Additional submittals of the winning bidder during the course of the construction to include among others:

1. Detailed shop drawings as required by Procuring Entity for proper execution of the works.

2. Submission of DOLE approved Construction Safety and Health Program for the project.

3. Submission of complete plans, drawings, specifications, and BOQ before the day 1 of the project construction.

4. Detailed ***As-Built*** drawing indicating actual and factual locations and positions of utilities, tapping points, valves, manholes, concealed accesses, etc. in five (5) sets of hard copies and one (1) CD copy.

5. Testing and Commissioning tests results.
6. Manufacturer's product data sheets for all equipment installed.
7. Equipment control handsets, operating and maintenance manuals.

Certification/permit to operate issued by concerned authority/agency to warrant the end-user that the finish building and its equipment and utilities is safe to occupy and operate.

BY:

_____	_____
Vice Chairman - TWG	Member – TWG
_____	_____
Member – TWG	Member – TWG

_____
Chairman - TWG

NOTED:

_____
BAC Chairman

3. PERFORMANCE SPECIFICATIONS AND PARAMETERS

SUBJECT : ARCHITECTURAL DESIGN PARAMETERS

I. Codes and Standards

The Architectural Works shall be in accordance with the following Laws, Codes and Standards.

A. **Laws and Codes:**

1. National Building Code of the Philippines and its Latest and Amended IRR
2. RA 9266 or Architecture Law and its Latest and Amended IRR
3. BP 344 or Accessibility Law and its Latest and Amended IRR
4. AO 35, s. 1994 or AO Pertaining to the Control of Radiation Hazards
5. RA 9514 Fire Code of the Philippines
6. Existing Local Codes and Ordinances.
7. Philippine Green Building Code
8. And other Laws that applies to the projects

B. **Standards:**

1. Bureau of Product Standards (BPS)
2. Underwriters Laboratory (UL)

II. General Drawing Guidelines

A. General

1. All drawings shall be computer-drafted. Drawings shall be submitted both in printed and electronic copies.
2. Keep the same orientation for all plans. The north orientation shall be indicated in all architectural floor plans. The orientation of the architectural plans shall be consistent with all the engineering plans.
3. Existing buildings and new works shall be clearly indicated and labeled in the site plans.
4. Detailed plans shall have a scale not smaller than 1: 50 meters.
5. Spot detailed plans, elevations, and sections shall have a scale not smaller than 1: 10 meters.
6. Avoid notes such as ‘see architectural detail’ or ‘see structural’. Always refer with a callout to the specific detail drawing and sheet number.

B. Site Plans

1. The site plans shall have a scale not smaller than 1: 400 meters.

C. Floor Plans

1. All plans shall be 1:100 meters. The same scale shall be used for the rest of the architectural, structural, sanitary, plumbing, electrical and mechanical plans, except for each trade's site plan, detailed plans and spot details.
2. Elevation callouts shall be indicated on the floor plans and shall be consistent with the elevation drawing.
3. Section line callouts on the floor plans shall be consistent with the section drawing.
4. Floor plans shall be indicated with boxed room callout numbers, including the callout for floor finishes and wall finishes.
5. Floor elevations shall be indicated in the floor plans. This shall be in reference to the natural grade line or the established finished floor lines of the adjoining existing buildings.
6. The location of mechanical equipment, e.g., air conditioning shall be indicated in the floor plans. This shall be consistent with the mechanical and electrical plans.
7. Door callouts shall be circles with the proper numbering, e.g., D-01.
8. Window callouts shall be hexagons with the proper numbering, e.g., W-01.

D. Elevations and Sections

1. Finish floor lines and top of truss lines shall be consistent in all the elevations, sections and structural plans and details.
2. All dimensions and finishing materials shall be indicated in all elevation and section and must be consistent with the specification.

E. Reflected Ceiling Plans

1. Reflected ceiling plans shall be indicated with boxed room callout numbers, including the callout for ceiling finishes and lighting fixtures.
2. Ceiling height relative and in reference to the finish floor line shall be indicated in the reflected ceiling plans in each room with boxed dimensions. This is to ensure that the ceiling heights of all rooms are established whether or not reflected in the sections.
3. The description and location of the fixtures, e.g., lighting, smoke detectors, air-condition vents, exhaust fans, in the reflected ceiling plans shall be consistent with the electrical and mechanical plans.

F. Roof Plans

1. Location of all downspouts shall be indicated in the roof plans.

G. Doors and Windows

1. Door and window schedules shall indicate the type of door or window, the number of sets, the location/s of the door or window, the materials and accessories included and other special specifications, e.g., color or finish.

H. Details

1. Provide a minimum of one (1) bay section of a scale not smaller than 1: 50 meters for each major building preferably cut along the area with special construction design.
2. Provide spot detail plans, elevations and sections of a scale not smaller than 1:10 meters for special designs with aesthetic treatment and ornamentation.
3. Provide detail plans of a scale not smaller than 1: 50 for all areas needing tile pattern, e.g., lobby, corridor, entrance walk, showing the position and pattern of tiles.
4. Centerline location of plumbing fixtures shall be indicated in detail plans with lines of reference and its corresponding dimensions. This is to indicate the exact locations of the plumbing/sanitary roughing-ins.

III. Site Works

A. The Master Site Development Plan of the PEZA shall include the following:

1. Contour and survey of the lot, including bearing and distance of the property line
2. Road network and curbs and sidewalks
3. Parking spaces, Hardscape & Softscape
4. Reference location of existing trees
5. Reference location and footprint of existing buildings, with the corresponding building names and dimensions, including distances between adjacent buildings, and distances between buildings and the nearest property line
6. Reference location of utilities, e.g., water reservoirs, septic tank, wastewater treatment plant, powerhouse, transformers, waste storage area, security outposts

B. There shall be a separate road network and entry/exit for the public and the service vehicles, e.g., ambulance, waste collection vans, delivery trucks.

a. In limited lot areas, buildings should at least be spaced four (4) meters apart to allow natural light and ventilation.
b. Covered walkways shall be provided for access and connection to all the buildings.
c. Ramps shall be provided in all main entrances of the buildings and other access openings to walkways leading to other buildings.

IV. Building Architectural Works

A. Floor Plans

1. The structural, sanitary, plumbing, electrical and mechanical designs are required to refer to the architectural plans and specifications in case of discrepancies. If an engineering design will have any possible conflict or interference on the architectural design, the latter may be adjusted provided that the aesthetic value will not be compromised.
2. The architectural and engineering plans shall be consistent all throughout in terms of dimensions and locations of columns, beams, walls, roof line, conduits, ducts, pipes, and fixtures, among others. Column and beam grid lines shall also be consistent in all the architectural and engineering plans.
3. Verify and coordinate floor plans with the mechanical, electrical and sanitary design with regard to the requirements for mechanical rooms, AHU rooms, electrical rooms, pipe chase, and other engineering requirements.
4. Public toilets shall have provisions and fixtures for persons with disability as required by BP 344. If enough space allows, toilets specially made and designated for persons with disability is preferable.
5. Provide Architectural Layout Plans

B. Walls

1. Exterior walls shall be 200mm. thick, while interior walls shall be 150mm. thick. This is indicative of the finishes wall thickness including the plastering and tile works.
2. Layout and work on wall and floor tiles must be aligned, plumb, level, and square.
3. All edges, corners and intersections of toilet tiles, including the top-most tile not reaching the ceiling shall be provided with polyvinyl chloride tile trims.
4. The color and design shall be approved first before installation.
5. Dry walls shall not be embedded with wet utilities.

C. Floors

1. If floor tiles in two adjacent rooms with different material, color or design meet at the door opening the cut shall be located middle of the door thickness when in a closed position. Provide details in the floor patter design.
2. Floors at the openings of toilets for persons with disability shall be sloping. Indicate in the plans and sections.
3. The size of the toilet floor tiles shall be at least 200mm x 200mm for areas of six (6) square meters or below. Toilet floor tiles shall be at least 300mm x 300mm for areas above six (6) square meters. Indicate the tile pattern.
4. The size of the kitchen non-skid floor tiles shall be 300mm x 300mm. Indicate the tile pattern.

5. The size of the floor tiles of the offices shall be 300mm x 300mm, or bigger depending on the proportion to the size of the room. Indicate the tile pattern.
6. The size of the floor tiles of the lobby and corridor shall not be less than 400mm x

   400mm. The tile size of 600mm x 600mm is recommended for bigger areas. Indicate the tile pattern.
7. Layout and work on wall and floor tiles must be aligned, plumb, level, and square.
8. All edges, corners and intersections of toilet tiles, shall be provided with polyvinyl chloride tile trims.
9. Tile color and design shall be approved first before installation.
10. Flooring of toilet to have a membrane waterproofing protection beneath the finish flooring and wall skirting. Sleeve, firestop, waterproof & caulk all penetrations of the floor.

D. Ceiling Works

The following rooms shall have a minimum ceiling height:

a. Ceiling height for areas with special aesthetic treatment, e.g., lobby, major conference room, auditorium, executive office, shall be proportional to the area or room or as required by the designer. However, this shall not be lower than 3000mm. Provide details.
b. If acoustic boards on aluminum T-runners would be used for the ceiling, layout should be on center and avoiding cut pieces. If the remaining perimeter of the ceiling is less than 600mm wide, it shall be designed complimentary with fiber cement boards on light gauge metal furrings. Likewise, with acoustic boards in big areas, e.g., offices, shall be designed in a way to break the redundancy. Provide details.
c. Soffit of exterior beams and slabs shall have drip moulds to prevent damage due to water sipping into the eaves or ceiling. Section details shall be required to show the drip mould.

E. Doors and Windows

1. Major rooms that require security shall have sturdy doors e.g., wood panel and metal.
2. Minor rooms that do not require security shall at least have wood flush doors with laminate.
3. Toilets and other wet areas shall have wood flush doors with laminate.
4. Heavy-use doors, e.g., kitchen should be provided with stainless steel kick or push plates and door closers.
5. Fire escape doors, should be provided with panic hardware and door closers, and shall conform with the requirements of the Fire Code of the Philippines.

6. Aluminum frames of glass doors shall powder-coated. Tempered glass shall be used.
7. Door finish and color shall be approved first before application.
8. Window sills shall be slightly sloped outwards to prevent damage to windows and paint due to water sippage. Section details shall be required to show this slope.
9. All doors of a high-occupancy room shall swing outwards and as required by the Fire Code of the Philippines.
10. Door jambs with no moulding/casing installed on concrete walls shall have construction grooves all around. Provide details
11. All doors and windows shall have reinforced concrete lintel beams. Provide details.
12. All mechanical, electrical, and server room doors shall be metal and conform with the requirements of the Fire Code of the Philippines.

F. Stairs, Ramps, and Corridors

1. Ramps for persons with disability shall have a slope not higher than 1:12. Handrails and clearances shall conform with the requirements of BP 344.
2. Regular stairs have riser at 150mm. high and treads at 300mm. wide. Fire stairs could have a minimum riser at 200mm. and tread at 250mm. Handrails shall be 1100mm high.
3. Clearance shall conform with the requirements of the Fire Code of the Philippines.
4. Corridors shall have a minimum unobstructed width of 2450mm. This shall be measured clear from the surface of the finished wall and not on-center of the rough CHB wall.
5. Corridors and exit doors shall conform with the requirements of the Fire Code of the Philippines.

G. Fixtures and Accessories

1. Three-way electrical light switches shall be provided at the foot and the top of the stairs per floor. Likewise, at both ends of a long corridor.
2. Electrical light switches shall be located by the knob side of the door.
3. Electrical switches and outlets shall be installed plumb and level.
4. Public toilets shall always be provided with heavy-duty soap dispenser, tissue holder and electric hand dryers.
5. Public toilets shall always be provided with stainless steel handrails in conformity to the requirements of BP 344.
6. A drainage line shall be provided for window-type air-conditioners. Likewise, split type air-conditioners located in the interior part of the building shall be so located adjacent to areas with drainage lines, e.g., toilets, downspouts, balconies.

H. Roof Deck Works

1. The section of the roof gutters shall be designed, in case of a clogged downspout, so that the overflow of water will be directed outside of the building and not towards the eaves or interior ceiling to prevent any damage. Provide details.
2. Avoid valley or inside gutters in roof design. But in cases required in aesthetic design, valley or inside gutters shall be in stainless steel or concrete gutters with waterproofing system using Cementitious Elastomeric Membrane with Bonded Polymer-Modified Screed, and the section shall be designed with a capacity for big volume to prevent any damage due to overflow. Provide details. Final paint coat of roof deck to conform to Philippine Green Building.
3. Parapets, designed as a roof protection from the winds, must be designed to satisfy the preceding parameters. Provide details.
4. The slope of the roof shall not be less than 30 degrees.
5. Flooring of roof deck to have a membrane waterproofing protection beneath the finish flooring and wall skirting. Sleeve, firestop, waterproof & caulk all penetrations of the floor.

I. Painting

1. Painted ceiling shall be in flat latex finish, while cornices and mouldings shall be in gloss enamel finish.
2. Painted interior wall shall be at least in semi-gloss finish for ordinary rooms, e.g., offices, unless specified to a higher type of paint.
3. Painted exterior wall shall be at least in moisture-resistant/water-repellant solvent-based paint finish, textured or smooth, unless otherwise specified.
4. Paint color and shade shall be approved first before application.

V. Specific Requirements

A. Provide spot detail plans and sections of the following:

1. Gutter, eaves, and parapet
2. Ceiling-coverlight, special connections and design, mouldings, valances
3. Stairs-handrail, and baluster design
4. Ramps - handrail design and floor pattern
5. Doors, windows and gates - grille works,
6. Special Architectural Treatment and Design, e.g., façade design, special window and door, counter/nurse station counter / kitchen & pantry counter.
7. Special Carpentry Works, e.g., partitions, cabinets
8. Other details as may be required

B. Provide Room Data Sheet for the common areas and amenities of the core and shell, including detail floor plan, ceiling plan and sections of the following rooms, in coordination with the requirements of the electrical, sanitary and mechanical designs.

VI. Summary of Materials

- Materials to be used shall be non-combustible, fire-resistant, non-toxic, moisture-resistant and termite resistant, e.g., fiber cement board, light-gauge steel frame, polyvinyl chloride ceiling panels, metal spar.
- Wet areas, e.g., toilets, and kitchen shall use non-skid/non-slip vitrified ceramic floor tiles.
- Heavy traffic areas, e.g., lobby, and corridor shall use metal heavy-duty seamless granite floor tiles or a higher type of floor material.
- Vinyl floor tiles for areas like offices shall be homogenous and not less 2mm. thick
- Ramps and stairs shall use non-skid/non-slip floor tiles, materials as specified.
- Aluminum T-runners shall be powder coated.
- Metal rod hangers with adjustable clips, and not galvanized iron wires, shall be used to support and suspend the aluminum T-runners and light gauge metal furrings.
- Roofing sheets shall be Ga.# 24 aluminum-coated, pre-painted, and pre-formed.

SUBJECT: DESIGN PARAMETERS (STRUCTURAL/CIVIL WORKS)

I. Codes and Standards

The Civil/Structural Design shall be in accordance with the following Codes and Standards

A. Codes

1. National Structural Code of the Philippines (NSCP) 2015
2. National Building Code of the Philippines and its revised IRR
3. Accessibility Law
4. Local Codes and Ordinances

B. Standards

1. Bureau of Product Standards (BPS)
2. Philippine National Standards (PNS)
3. DPWH Blue Book
4. American Concrete Institute (ACI)
5. American Society for Testing Materials (ASTM)
6. American Welding Society (AWS)

C. Structural Design Criteria

1. The site shall be soil investigated to determine the actual soil bearing capacity.
2. In summary, site suitability, conformity with structural code, shape and form subject to structural evaluation and monitoring shall be in effect.

II. Site Works

Based on Master Site Development Plan of the PEZA, provide where applicable complete design and details of road (concrete with curb and gutter, including drainage) network, walkways parking areas and fencing.

A. The main road shall be capable of one-way traffic (at least 3mts. width) with a minimum thickness of 200mm (8 inches). Concrete strength should be at least 3000psi. Interior road (leading to support facilities) shall be so designed to accommodate delivery vehicles, and garbage trucks and fire trucks in case of emergency.
B. Walkway should be at least 100mm thick. with concrete strength of 2500psi. Ramps should be provided, instead of steps, for any change in elevation.
C. Parking area slabs should be at least 150mm thick. With concrete strength of 3000psi. Parking Slots shall comply with LGU standards.

III. Buildings

A. The office buildings should be designed using seismic importance factor of 1.25 for immediate occupancy category. Buildings should be designated in accordance with NSCP Requirements up to Magnitude 7 (latest NSCP) for those near seismic source Type A. Seismic gaps between buildings (old and new) should be properly observed.
B. The PEZA Building should be designed also using wind importance factor of 1.15 (especially for design of trusses/roofing system). Concrete gutters and parapet walls should be provided as additional protection to the roofing system during strong typhoons.
C. The structural designer should verify the Philippine Volcanology and Seismology (PHIVOLCS) the distance of the proposed office building to nearest active fault lines and with the DENR for geo-hazard mapping.
D. Soil investigation (at least three bore holes) should be conducted to determine soil bearing capacity and recommended foundation design (applicable even for the one storey structure).
E. The structural designer is encouraged to use fire-resistive and non-toxic materials.

IV. Details – the following shall be provided:

A. Connection details of beams and columns following the requirements of NSCP on confined areas.
B. Connection of trusses to beams and columns.
C. Splicing details of reinforcing bars on columns and beams and the required bar cut-off points.

V. Summary of Materials

A. Concrete shall be Portland cement and conforming to ASTM Specification C150, Type I to Type II
B. Coarse Aggregates shall consist of washed gravel, crushed stone or rock or a combination thereof conforming to ASTM C33
C. Concrete Hollow Blocks shall be a standard product of recognized manufacturer conforming to PNS 16 with at least 350psi strength.
D. Reinforcing Bars shall conform with PNS Grade 40 for 16mm dia. and above and PNS Grade 40 for 12mm dia and below.
E. Structural steel shall conform with ASTM A36/A6M
F. Bolts and Studs shall conform with ASTM A 325
G. Welding electrodes shall be E60 or E 70 and conform with AWS

SUBJECT : SANITARY/PLUMBING DESIGN PARAMETERS

I. Codes and Standards

The Sanitary/Plumbing Design shall be in accordance with the latest adopted edition of the following Codes and Standards.

A. Codes:

1. National Building Code of the Philippines and Its New IRR
2. Fire Code of the Philippines
3. National Plumbing Code of the Philippines (NPCP)
4. Sanitation Code of the Philippines
5. Existing Local Codes and Ordinances.

B. Standards:

1. Bureau of Product Standards (BPS)
2. Philippine National Standards for Drinking-Water
3. Underwriters Laboratory (UL)
4. National Water Resources Board (NWRB)
5. National Plumbers Association of the Philippines (NAMPAP)
6. Philippine Society of Sanitary Engineers, Inc. (PSSE)

II. Site Works

A. The contractor to propose master site development for PEZA approval and the Site Works shall provide complete layout of the following:

1. Storm Drainage Network, indicating Drainage Manholes and Pipe Culvert;

2. Sewerage Pipe Network, indicating Sewage Manholes, Sewage pipes and the location of the proposed Sewage Treatment Plant; and

3. Water Supply Network, indicating the location of Water Service entrance, Cisterns, Elevated Water Tank and proposed Pump House and main water lines.

4. Site utilities connections/tapping points.

B. The Storm Drainage Network shall accommodate the magnitude of peak rates of surface run-off including drainage coming from the buildings. The system shall be capable of handling the design flows routing to the designated outfall;

For rainfall calculation and sizing of drainage pipes, refer to Table-D2, Appendix-D, National Plumbing Code of the Philippines and current rainfall record from PAGASA.

C. The Sewerage Pipe Network design shall accommodate all sewage coming from all the facilities, conveyed by gravitational flow leading to the proposed sewage Treatment Plant; Per capita wastewater demand: 150-250 gal/capita/day per bed.

D. The Water Supply Network shall include the provision of Fire Hydrants, accessible faucet that will serve as testing point for safe and potable water supply; Per capita water demand: 190-315 gal/capita/day per bed.

III. Building Facilities Sanitary/Plumbing System

A. Sewerline and Vent System

1. Provide complete Sewerline and Vent System from all (Domestic) plumbing fixtures and floor drains; laid by gravity flow or pumping from lift or transfer station leading to the Septic Tank (DENR Administrative Order Series 2018-08 compliant).
2. For Drainage Fixture Units; refer to Chapter 7, Table 7-2, NPCP

B. Wastewater line and Vent System

1. For all Areas dealing with Laboratory activities and generating infectious wastes, provide separate Wasteline and Vent System routing into a proposed Neutralization Tank prior to discharge to the Septic Tank (DENR Administrative Order Series 2018-08 compliant);
2. For all Wash Areas dealing and generating with oil/grease at the Dietary, provide separate Wasteline and Vent System and solely tap to the proposed Grease Trap and then connect its effluent to the Septic Tank.
3. For Estimated Demand Weight of Fixtures in Fixture Units; refer to Chapter 7, Table 7-2, NPCP

C. Waterline System

1. Provide complete cold water supply pipes to all plumbing fixtures. From the main water source to cistern, the water shall be pumped to the Elevated Water Tank (EWT) and conveyed to the fixtures by gravity system and or

distributed to fixtures by transfer pumped with constant pressure through a Pneumatic Storage Tank to plumbing fixture, whichever is feasible.

2. Provide complete hot water system with portable water heaters for selected areas as required and or specified by the Owner.
3. Provide water filtration system as required or as specified by the Owner.

D. Storm Drainage System

1. Complete Storm Drainage System shall be provided for all roofs, canopies, concrete ledges and balconies including condensate drains laid for gravity flow connected to a leader/pipe line leading to the natural ground level storm drainage network.

E. Condensate Drain System

1. Provide a complete condensate drain system as may be required for the AC system.

IV. Specific Requirements

A. Provide details of the following:
   1. Grease Trap (for Kitchen).
   2. Cistern Tanks (Domestic/Fire Water) and Elevated Water Tanks (c/o Mechanical)

V. Summary of Materials

A. Sewer and Vent pipes; Unplasticized Polyvinyl Chloride (uPVC) extra series 1000 (Conforming to ISO 3633 ASTM D2729 including Trims and Fittings)
B. Storm Drainage pipes; Downspouts, Unplasticized Polyvinyl Chloride (uPVC) extra series 1000(Conforming to ISO 3633 ASTM D2729 including Trims and Fittings, BPS Certified)
C. Drainage Pipes; 250mm dia. and below, Non-Reinforced Concrete Pipe (NRCDP) 300mm dia. and above, Reinforced Concrete Pipe (RCDP)
D. Drainage Manholes; Street Inlet, Curb Inlet, Traffic Type Reinforced Concrete Area drain/Catch Basin, Reinforced Load Bearing CHB
E. Sewage Manholes; Traffic Type Reinforced Concrete with Standard Steel Brass Cover
F. Wastewater pipeline; Extra Heavy (XH) Single Hub, Hubless Cast Iron Pipes and Fittings (CIP) conforming to ASTM Standard 888
G. Cleanouts; Cast Iron Brass with counter sunk plug (BPS Certified)
H. Floor Drains/Deck Drains; Cast Iron Brass (BPS Certified)
I. Gutter Drains; Cast Iron Dome Type Brass (BPS Certified)
J. Cold Waterline pipes; for buildings, Polypropylene Pn16/Pn20 Fusion Weld Pipes including Trims and Fittings (BPS Certified)

K. Trench Grating; Galvanized/Stainless Steel Iron grates

L. Plumbing Fixtures including Trims, fittings and accessories; (BPS certified)
   1. Water Closet-Tank Type Lever Flush
   2. Lavatory- (Pedestal/Counter Type)/semi-pedestal with C-spout spray faucet
   3. Kitchen sink-Ga#16 Stainless Steel seamless bowl with gooseneck faucet
   4. Urinal-Wall Hung Flush valve/lever/push button or waterless type

M. Plumbing Fixtures at Sterile Areas;
   a. Scrub-up Sink-Ga#16 Stainless Steel (single/double bowl) compartment with Foot operated and or censor-controlled spray faucet
   b. Surgical Soap Dispenser-Ga#16 Stainless Steel foot operated

      Laboratory Sink-Ga#16 Stainless Steel deep seated seamless bowl compartment with C-Spout spray faucet

N. All materials shall be suitable for purpose and that will satisfy Philippine Green Building Code requirement.

O. The sanitary/plumbing system shall be BMS ready for future connection to the BMS system during fit-out.

SUBJECT : ELECTRICAL AND AUXILIARY DESIGN PARAMETERS

I. Codes and Standards

The Electrical System Design Parameters shall be in accordance with the latest edition of the following Codes and Standards.

A. **Codes:**
   1. Philippine Electrical Code
   2. National Electrical Code
   3. Fire Code of the Philippines
   4. National Building Code of the Philippines and Its New IRR
   5. Existing Local Codes and Ordinances
   6. Philippine Green Building Code

B. **Standards:**
   1. Bureau of Product Standards (BPS)
   2. Underwriters Laboratory (UL)
   3. National Fire Protection Association (NFPA)
   4. International Electrotechnical Commission (IEC)
   5. Illumination Engineering Society (IES)
   6. National Electrical Manufacturer’s Association (NEMA)
   7. American National Standards Institute (ANSI)
   8. Institute of Electrical and Electronics Engineers (IEEE)

II. Site Works

Based on the Master Site Development of the PEZA, the Site Works shall provide complete Electrical layout of the following:

1. Substation (where required) Power Room to the new proposed structures.
2. Transformer complete w/ KVA rating and other specification.
3. MV/LV Switchgear requirements
4. Panelboard Layout
5. Electrical Metering Devices
6. Service Entrance Facility and Main Feeder Layout
7. Grounding System
8. Emergency/Standby Generators & associated Automatic Transfer Switch (ATS)
9. Street and Perimeter Lighting System

III. Building Facilities Electrical System

A. Lighting System

1. Provide and install adequate normal and emergency branch circuits for Lighting System to all areas using the standard Lighting Design Analysis. Utilize the standard Illumination requirements per area of concern using the preferred particular type of luminaires and controls that satisfy the Philippine Green Building Code requirement.

B. Power System

1. Provide and install adequate distribution system complete with transformers, power factor correction equipment, switching & distribution equipment, feeders, panelboards, branch circuits and power point up to utilization equipment. System to be designed should also satisfy the Philippine Green Building Code requirement.

C. Standby/Emergency Power System

1. Provide and install adequate life safety and critical emergency power system complete with diesel generator, fuel system, automatic transfer switch & distribution equipment, feeders, panelboards, branch circuits and power point up to utilization equipment. Minimum back-up time to be eight (8) hours with fuel refilling system.
2. Back-up Generator:
   a. The building shall be provided by a back-up generator with auto-start and auto-transfer capability. The generator shall be designed to come on line within (10) seconds after the primary source is lost.

b. Generator Capacity: The generator shall be sized to meet critical-technical power loads in addition to technical power loads, described above. These critical-technical power loads shall include power for control cab lighting and HVAC systems serving the control cab, electronic equipment rooms and the elevator.
c. Generator Fuel Supply: Fuel storage shall be sized accordingly. Design fuel storage and supply for emergency generators to ensure continuous operation during seismic events. This, for example, may require piping and flexible connections at the tank, building envelope, and generators that remain fuel tight throughout the seismic event and after. Consider the following when locating the tank: protection against damage (intentional or unintentional), protection against fuel spills, and containment of spills.
d. Diesel generator day tanks shall be provided
e. Generators shall be provided with critical type mufflers.

D. Auxiliary System

1. Provide and install the following Auxiliary Systems complete with hardware, software, programming and ancillaries for its proper operation and inter-system interfacing:
   a. Communication System
      i. Telephone System/IP Phone
      ii. Local Area Network System/Internet connection
      iii. Public Address & Paging System
      iv. Private Branch Exchange (PABX)
      v. Master or Cable Antenna Television
   b. Fire Detection & Alarm System
   c. Security System (Intrusion Detection, Access Control & CCTV)
   d. Seismic Monitoring System

E. Lightning Protection, Grounding & Earthing Systems and Surge Protection Device

1. The building lightning protection system shall include roof-mounted air terminals grounding and earthing conductors, ground rods, conduits, clamps, and auxiliary equipment as required for a complete and operational lightning protection system. Bonding to other systems to be provided as required
2. Provide a complete grounding and earthing system for electrical, auxiliaries and lightning protection
3. Surge protection devices (SPD) shall be provided where required by the Code and good Engineering practice.

IV. Provide Details of the following:

1. Lighting Fixtures/Luminares
2. Distribution Board, Panelboard and Circuit Breakers
3. Switchgear and other Metering Devices
4. Electrical and Office Equipment
5. Installation and Termination of Auxiliary and other Special Devices and Equipment
6. Power and Telephone Handholes (as may be required)
7. Pedestal and Service Entrance Facility to the Bldg.
8. Grounding and Earthing System Layout
9. Substation/Power Room and Electrical Room
10. Transformer and Generator Mounting complete with sections and elevations
11. Solar Power System
12. Feeder Distribution Layout
13. Coordinated Services Drawings for Clash Detection
14. Inter-system Interfaces
15. Others as may be required.

V. Summary of Materials

A. General

1. The equipment shall be designed, manufactured and equipped with accessories in accordance with applicable codes and standards. Materials and components not specifically stated but which are necessary for satisfactory and trouble-free operation and maintenance of the equipment shall be provided
2. The design and workmanship shall be in accordance with the best engineering practices to ensure satisfactory performance and service life
3. Equipment and materials shall be sourced from reputable brands and manufacturers with compliance to relevant codes and standards noted above
4. The electrical and auxiliary system shall be BMS ready for future connection to the BMS system during fit-out.

B. Transformers

1. Transformer(s) shall comply with ANSI C37 or other acceptable standards.
2. It shall be liquid filled with environment friendly fluid and equipment standard cooling.
3. Conductor shall be copper.
4. Input Voltage shall be 34.5 kV (as per site) and 400Y/230V 3-phase, 4-wires + Ground, 60Hz secondary with standard taps.

C. Standby/ Emergency Power System

1. Provide an engine driven Standby/ Emergency Power System complete with generator(s), synchronizing panel, day tank and associated pumps, piping to generator set, vibration isolation, acoustic requirement, etc.
2. The system shall comply with applicable portions of NEMA, ANSI, UL or IEC standards pertaining to generator sets
3. The engine speed shall be 1800 rpm and standby rated, with high efficiency at full load.
4. Voltage shall be 400Y/230V, 3-phase, 4-wires, + Ground at 60 Hz with minimum overload capacity of 10%.

D. General Lighting Luminaires: Fixtures type shall be as indicated on the Lighting Layout Plan.

1. Luminaires shall be low power, high output and high efficiency meeting the requirement of the Philippines Green Building Code.
2. Luminaires shall be complete with housing, lamp, driver or control gear, lamp holders, reflectors and diffusers, as required.
3. Luminaires shall be for indoor or outdoor use as required and suitable to the environment where they will be applied
4. Controls shall be as required by the application environment and shall employ energy conservation
5. Lighting levels shall be as per applicable codes and standards
6. Lamp color shall be approved by Client
7. Emergency and Exit Signs shall be provided
8. Troffer luminaire in general areas.
9. Other Special Lighting requirements shall be as approved by the implementing agency.

E. Wiring Devices: Wiring devices shall be non-automatic; the contact is guaranteed by the pressure of the special spiral springs.

1. Wiring devices shall be as called for by the equipment it serves.
2. Switches shall be of 15A, 250V or 300V except as otherwise noted and approved. Terminals shall be screw-type or quick-connected type.
3. General use receptacle shall be 15A, 240V Universal-grounding type unless otherwise specified.
4. Special purpose receptacles shall be as called for by the equipment it serves. Matching plugs shall be supplied.

F. Distribution Equipment: All distribution equipment (MVSG, LVSB, ATS, Distribution board, Panelboard and Circuit Breakers, etc.,) shall be the responsibility of one manufacturer. All component parts shall be from the same manufacturer. Sizes and rating shall be as required by the equipment it serves.

1. The complete distribution shall have coordination and discrimination to ensure continued operation
2. Adjustable trip units shall be specified for coordination and/or discrimination. 800A and above shall be Air Circuit Breakers with LSIG protection
3. Circuit breakers shall be from the same manufacturer, complying to relevant UL, ANSI/IEEE and NEMA or IEC standards.
4. The circuit breakers shall be quick-make, quick break, thermal-magnetic, trip-indicating and shall have common trip on all multi-pole breakers with internal trip mechanism.
5. RCD, RCCD or RCBO type circuit breakers will be used where required by the Code or equipment served
6. All current-carrying parts of the panelboards shall be plated. Provide solid neutral (S/N) assembly when required. The assembly shall be isolated from the enclosure.

G. Electrical Conduits, Boxes and Fittings: All conduits, boxes and fittings shall be standard rigid steel, zinc coated or galvanized.

1. Rigid Steel Conduits (RSC)
2. Rigid Metal Conduits (RMC)
3. Intermediate Metal Conduits (IMC)
4. Electrical Metallic Tubing (EMT)
5. Unplasticized Polyvinyl Chloride (uPVC) if required shall be schedule 40.
6. Flexible Metallic Conduits (FMC)

H. Conductors: Wires and cables shall be of the approved type and unless specified or indicated otherwise, all power and lighting conductors shall be insulated for 600 volts.

1. The conductors used in the wiring system shall be of soft-annealed copper having a conductivity of not less than 98% of that of pure copper and insulated for 60 □C Temperatures.
2. Small power ang lighting conductors shall be UL listed stranded copper, 90 degrees C minimum, Type THHN/THWN.

I. Master Antenna Television (MATV) and Cable Television (CATV) System:

1. Two sources of TV signals shall be provided to the building. One (1) shall be from a master antenna installed at the roof or within a suitable area of the building and the other will be from a commercial cable television service.
2. The master antenna system shall consist of FM, VHF and UHF antennas, combiner, distribution amplifier, coaxial cables, splitters, tap-offs and TV outlets.

3. There shall be individual trunking for master antenna and cable television riser in the building.

J. Structured Cabling & Telephone System:

1. The Structured Cabling System shall consist of service entrance facilities for three (3) Telco service providers, three (3) Telco rooms and a common Main Telco room, Administration subsystem, Riser Backbone Subsystem and Cabling Containment System
2. These rooms shall be air-conditioned and with dedicated power provisions
3. Provide conduits for fiber optic and copper riser cabling
4. Provide telco room/cabinet per floor
5. A minimum provision for estimated 500 mixed PABX extension and direct telephone lines.
6. Final details of the system shall follow specific requirements, quantity and type of service.

K. Fire Detection and Alarm System:

1. Provide a complete Fire Detection & Alarm System (FDAS) as required by Code and Local regulations.
2. The FDAS shall be of a fully addressable, multiplex, microprocessor-controlled system. It shall be expandable to cater for fit-out required devices.
3. The system shall consist of full integration automatic fire detection, voice alarm communication and fire fighters telephone system.
4. The system shall consist of a main control panel, mimic panel initiating devices notification appliance, monitor & control modules and system of wirings.
5. Actuation of the protective signaling system shall occur by manual pull station, automatic smoke or heat detector, sprinkler flow switch and tamper switch.
6. The system shall be able to monitor the status of flow switches and supervisory switches installed at the Sprinkler System risers. These monitoring points are also addressable or the conventional zonal in the same way as the detectors are making them easily recognizable at the control panel.
7. Occupant notification shall be accomplished automatically. Notification will be general, audible alarm type complying with appropriate section of NFPA.
8. The system shall be installed with provisions for future connection to the nearest fire services station in the locality.
9. Interfaces to other systems shall be provided for their operation in fire mode. A cause-and-effect matrix shall be provided in this effect.

L. Security System:

1. The Security system shall include intrusion detection and alarm, CCTV and access control or as may be required.
2. The CCTV System shall be IP based complete with IP cameras, routers, switches, digital video recorders, Monitors, controllers and other hardware and software necessary for programming, monitoring and control.
3. Cabling and hardware to be CAT 6 compliant
4. Areas to be provided with cameras shall include the following but not limited to:
    a. Main Entry and Exit points to the building
    b. External area
    c. Parking
    d. Main Lobby
    e. Elevator Cars
    f. Elevator Lobby
5. Recording capacity shall be for one month at HD (1080p) quality. The system shall be expandable to accommodate future cameras and equipment during fit-out.
6. Access Control and Intrusion Detection System shall be provided through-out the building.
7. It shall be complete with access control panel, magnetic door contacts, electro-magnetic locks, card readers, break glass unit, computer with software for monitoring/programming/control.
8. It shall be interfaced with the FDAS for operation in fire mode.
9. A printer will be provided for hardcopy of alarms and transaction report.

SUBJECT : LOCAL AREA NETWORK (LAN) PARAMETERS (as applicable)

I. Codes and Standards

The Local Area Network (LAN) Design shall be in accordance with the following Standards.

Standards:

1. IEEE 802
    a. IEEE 802.1 Bridging (networking) and Network management
    b. IEEE 802.2 Logical link control (upper part of data link layer)
    c. IEEE 802.3 Ethernet (CSMA/CD)
    d. IEEE 802.4 Token Bus (disbanded)
    e. IEEE 802.5 Defines the MAC layer for a Token Ring (inactive)
    f. IEEE 802.6 Metropolitan Area Networks (disbanded)

g. IEEE 802.7 Broadband LAN using Coaxial Cable (disbanded)
h. IEEE 802.8 Fiber Optic TAG (disbanded)
i. IEEE 802.9 Integrated services LAN (disbanded)
j. IEEE 802.10 Interoperable LAN Security (disbanded)
k. IEEE 802.11 Wireless LAN & Mesh (Wi-Fi- Certification)
l. IEEE 802.12 Demand Priority (disbanded)
m. IEEE 802.13 Not Used
n. IEEE 802.14 Cable Modems (disbanded)
o. IEEE 802.15 Wireless PAN
p. IEEE 802.15.1 (Bluetooth Certification)
q. IEEE 802.15.4 (ZigBee certification)
r. IEEE 802.16 Broadband Wireless Access (WiMAX Certification)
s. IEEE 802.16e (Mobile) Broadband Wireless Access
t. IEEE 802.17 Resilient packet ring
u. IEEE 802.18 Radio Regulatory TAG
v. IEEE 802.19 Coexistence TAG
w. IEEE 802.20 Mobile Broadband Wireless Access
x. IEEE 802.21 Media Independent Handoff
y. IEEE 802.22 Wireless Regional Area Network

2. ANSI/TIA/EIA-568

II. Site Works

Based on Master Site Development Plan of the PEZA, provide where applicable complete design and details of local network for voice and data connectivity.

III. Information and Communication Technology (ICT) Component

1. Installation of structured cabling system for Data and Voice Connectivity and wireless network (LAN)

a. 1000 data nodes distributed to office area
b. 1000 voice nodes distributed to office area
c. Cabling for CCTV security system
d. Packaged technical implementation and training services
e. LAN main distribution should be fiber optic technology

2. Structured Cabling System for Data and Voice Connectivity

Data Connectivity

a. 1000 data nodes distributed to the Offices
b. Category 6, 4-pair UTP cable shall be 23 AWG, 100-Ohm, 4-pair UTP
c. Category 6 Patch Panel

i. Shall be 1RU and provide 24 modular jack ports, with universal wiring that maybe terminated to T568A or T568B
ii. Shall terminate the building cabling on 100-style insulation displacement connectors

d. Category 6 Information Outlet/Modular Jack shall be terminated using a 100-style pc board connector, color-coded for both T568A and T568B wiring.
e. Category 6 Patch Cord:
   i. Equipment patch cable assemblies, 4 ft. in length, must be factory-manufactured with stranded CMR UTP cable and color-matched snag less rubber boots.
   ii. Work area patch cord shall be 5 ft. in length
   iii. One patch cord per user outlet and equipment connectivity must be provided
f. For Category 6 cabling installation – it shall all pass the following end-to-end Testing Parameters using Level III Cable Tester:
   i. Attenuation
   ii. Attenuation to Crosstalk Ration (ACR)
   iii. Power Sum Attenuation to Crosstalk Ratio (PSACR)
   iv. Near End Crosstalk (NEXT)
   v. Power Sum Near-End Crosstalk (PSNEXT)
   vi. Equal Level Far-End Crosstalk (ELFEXT)
   vii. Power Sum Equal Level Far-End Crosstalk (PSELEXT)
   viii. Return Loss ix. Propagation Delay
   x. Delay Skew
   xi. Transfer Impedance

Voice Connectivity

g. Voice backbone and horizontal cabling shall be Category 6, 4-pair UTP which are 24

   AWG, 100-Ohm, and shall meet or exceed the performance requirements of

   ASI/TIA/EIA-568-B.2
h. Category 6 Information Outlet/Modular Jack
i. Telecommunication Terminal Cabinet shall be wall-mounted and has sufficient space or dimension to accommodate required wiring components
j. Wiring blocks shall be 100-pair count, wall mountable, with legs and shall fir traditional cross-connect backboard space and layout.

3. Cabling for CCTV Security System

4. Other Requirement/s

5. Supply of Communication cabinets (intermediate Distribution Frame) for each floor of the building.

SUBJECT : MECHANICAL WORKS DESIGN PARAMETERS

I. Codes and Standards

The Mechanical Design shall be in accordance with the latest adopted edition of the following Codes and Standards.

A. **Codes:**

1. National Building Code of the Philippines and Its New IRR
2. RA 9514 Fire Code of the Philippines and Revised Implementing Rules and Regulations
3. Mechanical Engineering Code of the Philippines (ME Code)
4. Existing Local Government Codes and Ordinances.

B. **Standards:**

1. Bureau of Product Standards (BPS)
2. Philippine National Standards (PNS)
3. Underwriters Laboratory (UL)
4. International Electrotechnical Commission (IEC) 1988
5. National Fire Protection Association (NFPA)
6. American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE).
7. Factory Mutual (FM)
8. American Society of Mechanical Engineers (ASME)

II. Automatic Fire Sprinkler System

The automatic fire sprinkler system shall be composed of complete plans and drawings of the following:

1. Site Development Plan and Vicinity Map, indicating the location of the buildings, firewater reserve tank, firewater line, yard loop and private fire hydrant.
2. General Notes, Legends and Symbols including Schematic Diagram of the Fire Sprinkler System and Schematic Diagram of Alarm Monitoring System.
3. Floor Layout and Isometric Layout of the Automatic Fire Sprinkler System indicating pipe sizes and the location of the pipes, valves, sprinkler heads, riser nipples, fire hose cabinets, sprinkler main riser, drain pipes, cross mains, branchlines, inspector's test connections, hangers and sway braces.
4. Equipment Schedule, Detail drawings, fire pump and jockey pump layout.
5. Architectural, Structural, Electrical and Plumbing drawings of the Firewater tank and Pumphouse.
6. The Fire Protection Works shall include the following but not limited to:
   a. An automatic fire sprinkler shall be provided.

b. Fire Department connection, fire hose valves and roof manifold
c. Fire hose cabinets and fire extinguishers
d. Hazard Classification shall be Light Hazard Occupancy.
e. Area of coverage shall be 146 square meters and water density shall be 4.07 lps/sq. m.
f. Protection area per sprinkler head shall be 20 square meters at 2.2 meters minimum distance between sprinklers and 4.2 meters maximum spacing.
g. All floor control valves shall be equipped with supervisory switch, water flow detector and drain system.
h. Water supply shall be horizontal split case centrifugal firepump with diesel engine or AC motor and a vertical in-line jockey pump with controller.
i. Fire, Jockey pumps and controller shall be listed for purpose.
j. Firewater reserve tank shall be ground level monolithic concrete tank sized for a minimum of 30 minutes or as prescribed by Codes, whichever is longer.
k. Hydraulic calculations report shall be based on NPFA-13 format.
l. Interface details with other systems
m. The fire protection system shall be BMS ready for future connection to the BMS system during fit-out.

III. Ventilation and Air Conditioning System

The ventilation and air conditioning system shall be composed of complete plans and drawings of the following:

1. General Notes, Legends and Symbols including Schematic Diagram of the Ventilation and Air Conditioning System.
2. Floor Layout of the Ventilation and Air Conditioning System indicating the capacity and location of the air conditioners and fans.
3. Duct layout indicating duct sizes, route and location of the dampers, diffusers, return air register, hangers and sway braces.
4. Refrigerant piping layout indicating pipe sizes, location of valves, hangers and sway braces.
5. Equipment Schedule and Detailed drawings and calculations for Air Conditioning and Ventilating System.

a. Equipment shall be compliant to Philippine Green Building Code requirement.
b. Air conditioning system shall be provided in all rooms, and other areas where conditioned air is necessary.
c. Cooling Load calculations report shall be manual or computer generated, hourly analysis program which includes heat transmission coefficients, solar heat gain factors and corrected cooling load temperature difference calculations.

d. Split type air conditioners of the inverter type (VRF/VRV) with multiple indoor units will be used in all areas except as indicated in **item e**.
e. Window type air conditioners shall be used in smaller areas such as guard house and the like.
f. Appropriate design of air conditioning/ventilating systems shall be in accordance with existing codes and standards such as ASHRAE, Philippine Mechanical Engineering Code, among others.
g. Energy Recovery Ventilator (ERV) shall be considered.
h. Fans to include Supply Fans, Smoke Extract Fans, Pressurization fans, exhaust fans, etc., smoke/fire dampers, motorized dampers and other consumables for the proper operation of the system.
i. Interface details with other systems.
j. The ventilation and air-conditioning system shall be BMS ready for future connection to the BMS system during fit-out.

IV. Elevator System

The elevator system shall be composed of complete plans and drawings of the following:

1. The elevator system shall be done in compliance with all relevant Codes and Standards pertaining to vertical transportation systems.
2. General Notes, Legends and symbols including Schematic Diagram.
3. Floor Layout, Elevator Shaft Plan and Machine Room Plan.
4. Equipment Schedule, Detail Drawings and equipment Layout.
5. All calculations
6. Architectural, Structural, Electrical and Plumbing Drawings of the Elevator System.
   a. Passenger and Service type elevator shall be provided.
   b. The car door opening shall be not less than 1,100mm wide and 2,100mm high
7. New elevators shall conform to the requirements of Mechanical Engineering Code of the Philippines (ME Code), Safety Code for Elevators and Escalators, and shall include a ventilated shaft. The elevator speed shall be a minimum of 0.76 m/s (150 ft/min). The elevator capacity shall be sufficient to transport the personnel and equipment installed above the ground floor.
8. The elevator shall operate from ground floor up to the top most floor (or upper equipment room) whichever is higher, stopping at each intermediate floor. Elevators shall be interconnected with the fire alarm/detection telephone and emergency power systems to recall the elevator to the ground floor and hold it there until the alarm is reset and/or the facility is returned to commercial power with the following exception: A three-position (on, off, and bypass) key-operated switch shall be installed in the first-floor lobby to allow the elevator to operate on emergency power.

When the switch is in the "on" position, normal elevator service shall be provided. When the switch is in the "bypass" position, the elevator shall operate independently of the fire alarm/detection system and the commercial power source. The key shall be removable only from the "on" or "off" positions. The elevator will be used to transport personnel and equipment.

9. The elevator pit shall have pit light, ground fault indicator (GFI) electrical outlet, pit ladder, and a sump pump connected to industrial waste line. Provide a containment vessel in the absence of an industrial waste line. Smoke detectors shall be installed in the elevator machine room and hallway in front of the elevator doors.
10. Interface details with other systems.
11. The elevator system shall be BMS ready for future connection to the BMS system during fit-out.

V. Summary of Materials

1. AUTOMATIC FIRE SPRINKLER SYSTEM

a. The firepump shall be UL Listed/FM Approved, diesel engine and/or electric motor driven, designed specifically intended for an automatic water sprinkler protection system.
b. The jockey pump shall be UL Listed/FM Approved, electric motor driven
c. Sprinkler head shall be UL Listed/FM Approved, pendant, upright or sidewall unit, 83 LPM flow capacity per head and temperature fusing at 57.5° C to 74°C.
d. The alarm assembly shall be UL Listed/FM Approved, constructed and installed that any flow of water from the sprinkler system equal to or greater than that from the single automatic head shall result in an audible and visual signed in the vicinity of the building.
e. Alarm and supervision system of the automatic water sprinkler shall include the monitoring water flow switch at each floor of the building, fire pump and jockey pump running condition and power supplies, level of water in the reservoir and control valves.
f. Pipes shall be B.I. Schedule 40. Screw fittings shall be used for inside piping.

2. ELEVATOR SYSTEM

a. The passenger and service elevator shall be machine room less, or traction type only.

Section VII. Drawings

Section VIII. Bill of Quantities

Notes on the Bill of Quantities

Objectives

The objectives of the Bill of Quantities are:

a. to provide sufficient information on the quantities of Works to be performed to enable Bids to be prepared efficiently and accurately; and

b. when a Contract has been entered into, to provide a priced Bill of Quantities for use in the periodic valuation of Works executed.

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

Daywork Schedule

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

a. A list of the various classes of labor, materials, and Constructional Plant for which basic daywork rates or prices are to be inserted by the Bidder, together with a statement of the conditions under which the Contractor will be paid for work executed on a daywork basis.

b. Nominal quantities for each item of Daywork, to be priced by each Bidder at Daywork rates as Bid. The rate to be entered by the Bidder against each basic Daywork item should include the Contractor's profit, overheads, supervision, and other charges.

Provisional Sums

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the SCC should state the manner in which they will be used, and under whose authority (usually the Procuring Entity's Representative's).
The estimated cost of specialized work to be carried out, or of special goods to be supplied, by other contractors should be indicated in the relevant part of the Bill of Quantities as a particular provisional sum with an appropriate brief description. A separate procurement procedure is normally carried out by the Procuring Entity to select such specialized contractors. To provide an element of competition among the Bidders in respect of any facilities, amenities, attendance, etc., to be provided by the successful Bidder as prime Contractor for the use and convenience of the specialist contractors, each

related provisional sum should be followed by an item in the Bill of Quantities inviting the Bidder to quote a sum for such amenities, facilities, attendance, etc.

Signature Box

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

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

*To be formatted in Excel File.

Item No.	Item Description	Unit	Qty.	Unit Price (Peso)	Amount (Peso)	Remarks
PART A	**Detailed Architectural and Engineering Design**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
A.1	**Preliminary Conceptual Design**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.1	Engineering Surveys and Investigations			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.2	Design Development Drawings			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.2.1	Perspective Views (Interior and Exterior)			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.2.2	Site Development Plan			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
A.2	**Detailed Design**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
2.1	Permit Drawings			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
2.2	Construction Drawings			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
A.3	**Mock-ups / Materials Samples**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
PART B	**Demolition of Existing 6-Storey Building & Construction of 13-Storey Office Building**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
B.1	**Preliminaries / General Requirements**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.1	**Mobilization**			In words: Pesos	In words: Pesos	

				In figures: Pesos	In figures: Pesos	
1.2	**Demobilization**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.3	**Temporary Facilities**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.3.1	Power Connection/Consumption			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.3.2	Water Connection/Consumption			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.3.3	Contractors Field Office, Barracks, Warehouse, Equipments & Temp Facilities			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.3.4	Project Management Office & Equipment			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.3.5	Client Management Field Office & Equipment			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.3.6	Parking Areas			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.3.7	Others			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	

1.4	**Health & Safety**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.4.1	Clinic & Isolation Area			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.4.2	Safety Net Site Protection (Bldg. & Road net protection)			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	

1.4.3	Site Safety Enclosure			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.4.4	Service Vehicle			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.4.5	Housekeeping & Garbage Disposal			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.5	**Security**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.5.1	Security Posts/Guards			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.6	**Insurances (CARI / CGLI)**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.7	**Bonds (Construction Bonds, Performance, Surety, Warranty)**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.7.1	Performance/ Surety Bond			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.7.2	Warranty/ Surety Bond			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.8	**Permits and Clearances**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.8.1	Barangay Clearance			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.8.2	Locational Clearance			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.8.3	Demolition Permit			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	

1.8.4	Sidewalk Clearance / Fencing Permit			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.8.5	Environmental Compliance Certificate			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.8.6	Bldg. Permit			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.8.7	Occupancy Permit/			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.8.8	Other statutory compliance as required.			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
1.9	**Operations & Maintenance Manuals** (inclusive of As-Built plans, Testing & Commissioning Certificates, Certification / Permit to Operate, Equipment & Materials Warranty, and others)			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
B.2	**Demolition Works & Site Clearing**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	

B.3	**Building Construction**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.1	**Structural / Civil Works**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.1.1	Substructure			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.1.2	Superstructure			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.2	**Architectural Works**			In words: Pesos	In words: Pesos	

				In figures: Pesos	In figures: Pesos	
3.2.1	Floor Finishes			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.2.2	Wall Finishes			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.2.3	Ceiling Finishes			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.2.4	Doors and Windows			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.2.5	Stairs, Ramps & Corridors			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.2.6	Roofing works			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.2.7	Painting			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.2.8	Other items to complete			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.3	**Sanitary & Plumbing Works**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.3.1	Sewerline & Vent System			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.3.2	Wastewater line and Vent System			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.3.3	Waterline System			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.3.4	Storm Drainage System			In words: Pesos	In words: Pesos	

				In figures: Pesos	In figures: Pesos	
3.3.5	Other items to complete			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.4	**Electrical**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.4.1	Lighting System			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.4.2	Power System			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.4.3	Standby / Emergency System			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.4.4	Auxiliary System			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.4.5	Lighting Protection System			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.4.6	Other items to complete			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.5	**Local Area Network/ Information & Communication Technology**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.5.1	Installation of structured cabling system for Data & Voice			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.5.2	Structured Cabling System for Data & Voice			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.5.3	Cabling for CCTV Security System			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.5.4	Others to complete			In words: Pesos	In words: Pesos	

				In figures: Pesos	In figures: Pesos	
3.6	**Mechanical**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.6.1	Automatic Fire Sprinkler System			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.6.2	Ventilation & Air Conditioning System			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.6.3	Elevator System			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
3.6.4	Other items to complete			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
B.4	**Site Works / External Site Development Works**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.1	**Civil Works**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.1.1	Road Networks			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.1.2	Walkway			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.1.3	Parking Areas			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.1.4	Fencing			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.2	**Architectural Works**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.2.1	Hardscaping/ Softscaping			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	

4.3	**Sanitary & Plumbing Works**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.3.1	Storm Drainage Network			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.3.2	Sewerage Pipe Network			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.3.3	Water Supply Network			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.4	**Electrical Works**			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.4.1	Substation/ Power House to the new proposed structures			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.4.2	Street and Perimeter Lighting System			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
4.4.3	Other items to complete			In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	
GRAND TOTAL AMOUNT				In words: Pesos	In words: Pesos	
				In figures: Pesos	In figures: Pesos	

READ AND ACCEPTED AND GOOD FOR AGREEMENT

Date: _____

Signature: _____

For the Capacity as: _____

Duly authorized to sign Bids and on behalf of: _____

Section IX. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

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

a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or

b. any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

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

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

☐ (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);
or

☐ (b) Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document;
and

☐ (c) Mayor's or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas;
and

☐ (d) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

Technical Documents

☐ (e) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**

☐ (f) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules;
and

☐ (g) Philippine Contractors Accreditation Board (PCAB) License;
or
Special PCAB License in case of Joint Ventures;
and registration for the type and cost of the contract to be bid; **and**

☐ (h) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;
or
Original copy of Notarized Bid Securing Declaration; **and**

(i) Project Requirements, which shall include the following:

☐ a. Organizational chart for the contract to be bid;

☐ b. List of contractor's key personnel (*e.g.*, Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;

☐ c. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; **and**

☐ (j) Original duly signed Omnibus Sworn Statement (OSS);
and if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of

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

Financial Documents

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

☐ (l) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).

Class "B" Documents

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

II. FINANCIAL COMPONENT ENVELOPE

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

Other documentary requirements under RA No. 9184

☐ (o) Original of duly signed Bid Prices in the Bill of Quantities; **and**

☐ (p) Duly accomplished Detailed Estimates Form, including a summary shee indicating the unit prices of construction materials, labor rates, and equipmen rentals used in coming up with the Bid; **and**

☐ (q) Cash Flow by Quarter.

Annex

ANNEX 1. Checklist for Technical and Financial Documents

	PASS	FAIL
I. TECHNICAL COMPONENT ENVELOPE		
Class "A" Documents		
A. *Legal Documents*		
1. Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages); **or**		
2. Latest and valid Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document; **and**		
3. Latest and valid Mayor's or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas; **and**		
4. Latest and valid Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).		
B. *Technical Documents*		
1. 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 (refer to Annex 11.A); **and**		
2. Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules (refer to Annex 11.B); Must have previously designed and / or constructed other 10 to 15 storey structures and must have previously designed and / or constructed at least one (1) Green Building; **and**		
3. Philippine Contractors Accreditation Board (PCAB) License; latest and valid PCAB License Category AAA Registration of at least Large B in Building or Industrial Plant, Medium B in Electrical Work, Medium B in Air-conditioning or Refrigeration, with specialty in Electro-mechanical Work and Structural Demolition **or** unless otherwise provided in the BDS, a valid special PCAB License in case of joint ventures, and registration for the type and cost of the contract for this Project; **and**		
4. 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		
5. Project Requirements, which shall include the following:		
a. Organizational chart for the contract to be bid;		
b. List of contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data (refer to Annex 3);		

c. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be (refer to Annex 4);		
d. Preliminary Conceptual Design (Refer to Annex 2); **and**		
6. 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.		
7. Original Notarized Affidavit of No Pending Case		
C. *Financial Documents*		
1. Latest and valid prospective bidder's audited financial statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; **and**		
2. The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).		
Class "B" Documents		
3. If applicable, duly signed joint venture agreement (JVA) in accordance with RA No. 4566 and its IRR in case the joint venture is already in existence; **or** duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.		

II. FINANCIAL COMPONENT ENVELOPE		
1. Original of duly signed and accomplished Financial Bid Form; **and**		
Other documentary requirements under RA No. 9184		
2. Original of duly signed Bid Prices in the Bill of Quantities; **and**		
3. Duly accomplished Detailed Estimates Form, including a summary sheet indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the Bid; **and**		
4. Cash Flow by Quarter.		

ANNEX 2. Checklist for Preliminary Conceptual Design

		PASS	FAIL
1	PRELIMINARY CONCEPTUAL DESIGN (Hardcopy in A3 size: 1 original and 2 copies, and Softcopies in 2 flash drives)		
	A. Architectural Design Consideration		
	Design Narrative • Design Character - Write-up on the design including rationale and justification following these design criteria: Iconic, Symbolic, Smart, Modern and Natural; with relevance to PEZA's mandate • Design Innovations – Write-up on the design uniqueness in using new system, materials, processes or technology and potential world first features. • Design Environmental Impact – Write-up on the significant positive impact on the environment and benchmark on renewable energy, energy efficiency and sustainable design;		
	Drawing Requirements		
	• Perspective Views, Rendering and Design - Walk-thru Audio-Visual Presentation. - Proposed building perspective highlighting the iconic characteristics - The rendering of the proposed Building reflecting existing buildings within the vicinity. - Building design specifications highlighting the use of design innovations and environment impact.		
	• Floor plans for all floors (including complete space allocation)		
	• 4 Elevations		
	• 2 Sections		
	• Site Development Plan		
	• Axonometric Floor Plans with Outline Materials Specifications		
	B. Structural/Civil Design Consideration		
	Design Narrative		
	Drawing Requirements		
	• Conceptual plans of Podium and Office floors. Showing the columns' positions, core walls, elevators, stairs, fire exits, etc.		
	• Conceptual foundation plan		
	C. Sanitary/Plumbing Design Consideration		
	Design Narrative		
	Drawing Requirements		
	• Sewerline and Vent System Design Concept Layout		
	• Wastewater line and Vent System Design Concept Layout		
	• Waterline System Design Concept Layout		
	• Storm Drainage System Design Concept Layout		

	D. Electrical and Auxiliaries Design Consideration		
	Design Narrative		
	Drawing Requirements		
	• Power Single Line Diagram		
	• Lighting Control Schematic		
	• Fire Alarm Riser Diagram		
	• Access Control Riser Diagram		
	• CCTV Riser Diagram		
	• Structured Cabling Riser Diagram		
	E. Local Area Network (LAN) Design Consideration (as applicable)		
	Design Narrative		
	Drawing Requirements (AutoCAD)		
	• ICT		
	• Communication System		
	• CCTV Security System		
	F. Mechanical Design Consideration		
	Design Narrative		
	Drawing Requirements		
	• Automatic Fire Sprinkler Riser Diagram		
	• Ventilation and Airconditioning Riser Diagram		
	• Elevator System Design Concept Layout		
2	Certificate of Site Inspection Issued by the Procuring Entity's Representative		
3	Design and Construction Method		
4	Value Engineering Analysis		
5	Construction Schedule and S-curve		
6	Manpower Schedule		
7	Equipment Utilization Schedule		
8	PERT/CPM		
9	Construction Safety and Health Program for approval by the Department of Labor and Employment (Demolition Works and Building Construction)		
10	ISO 9001-2015 certificates		

Note:

a. Preliminary Conceptual Design Plans in:
- Hardcopy in A3 white print minimum size: 1 original & 2 copies.
- Softcopy in 2 flash drives.
- Building design in 2D and 3D presentation at suitable scale.

A Bidder who fails to submit any of the requirements or submits incomplete or insufficient information at any stage in the evaluation shall no longer qualify for the evaluation and shall be disqualified.

ANNEX 3. Bidder's Nominated Key Personnel

A. Bidder's Letters of Nominees for Key Personnel: Design and Construction & Demolition Stage.

The Bidder shall execute the attached sample Letter of Nomination for each of the Proposed Key Personnel for the Design and Construction & Demolition Stage of the Project.

List of Proposed Bidder's Key Personnel for Design and Construction & Demolition Stage	
Name of Personnel	**Designation**
Detailed Design Phase	
1	Team Leader / Project Design Manager
2	Design/Principal Architect
3	Structural/Civil Engineer
4	Electrical Engineer
5	Mechanical Engineer
6	Drainage / Sanitary / Plumbing Engineer
7	Electronics & Communication Engineer
8	CADD Operator
9	Geodetic Engineer
10	Geotechnical Engineer
11	Quantity / Cost / Specifications Engineer
12	LEED Professional or Green Certified Architect and/ Engineer
13	BIM Specialist
14	other as required for the project
Construction & Demolition Phase	
1	Project Manager
2	Project Civil/Structural Engineer
3	Project Electrical Engineer
4	Project Mechanical Engineer
5	Drainage / Sanitary / Plumbing Engineer
6	Materials Engineer II
7	Safety Officer
8	Construction Foreman
9	Geodetic Engineer
10	Geotechnical Engineer
11	Quantity / Cost & Specifications Engineer
12	LEED Professional or Green Certified Architect and/ Engineer
13	BIM Specialist
14	CADD Operator
15	Project Nurse

_____

Name and signature of Bidder's Authorized Representative

Sample Bidder's Letter of Nomination For [insert Position of Key Personnel]

[Date]
To : [name and address of project]
Address : [insert address]

Sir:

Supplementing our Confidential Application Statement for "Demolition of Existing 6-Storey Office and Design & Build of the 13-Storey Office Building with Roof Deck", I/we have the honor to submit and certify herewith to be true and correct, the following pertinent information:

1. That I/we have engaged and contracted the services Mr./Ms._____, hereinafter called [insert Position], a registered _____with Professional License Certificate No. [insert number] issued on_____and who has paid his/her Professional Tax for the current year, dated_____and who has performed the same duties in the construction of the projects enumerated in his/her Certificate of Employment and Bio-Data:
2. That said [insert Profession] shall be appointed and designated by us as [insert Position] to personally perform the same duties in the above-mentioned Project, if and when the same is awarded in our favor;
3. That said [insert Profession] shall employ the best care, skills and ability in performing his duties in accordance with the Contract Agreement, Conditions of Contract, Plans, Specifications, Special Provisions and other provisions embodied in the proposed Contract;
4. That said [insert Profession] shall be personally present at the jobsite to supervise the phase of construction work pertaining to his assignment as [insert Position] all thetime;
5. That, in order to guarantee that said [insert Profession] shall manage and supervise properly and be personally present in the Project, he/she is hereby required to secure a certification of appearance from the Procuring Entity at the end of every month; that I/we shall not start the work without the [insert Position]at thejobsite;
6. That in the event that I/we elect or choose to replace the said [insert Position] with another Engineer, the Procuring Entity will be notified by us accordingly in writing at least TWENTY-ONE [21] days before makingreplacement;
7. That the name of the proposed new [insert position], his/her qualifications, experience, list of projects undertaken and other relevant information, shall be submitted to Procuring Entity for prior approval; and
8. That any willful violation on my/our part of the herein conditions may prejudice my/our standing as a reliable contractor in future bidding of Procuring Entity.

Very truly yours,

[Contractor]
CONCURRED IN:
[insert name of Key Personnel]
[Address]

B. Certificates of Employment of Bidder's Key Personnel for Design and Construction & Demolition

Each Proposed Key Personnel shall execute a Certification of Employment using the attached format, attesting to the engagement of his/her Services for the Project.

List of Proposed Bidder's Key Personnel for Design and Construction & Demolition Stage	
Name of Personnel	**Designation**
Detailed Design Phase	
1	Team Leader / Project Design Manager
2	Design/Principal Architect
3	Structural/Civil Engineer
4	Electrical Engineer
5	Mechanical Engineer
6	Drainage / Sanitary / Plumbing Engineer
7	Electronics & Communication Engineer
8	CADD Operator
9	Geodetic Engineer
10	Geotechnical Engineer
11	Quantity / Cost / Specifications Engineer
12	LEED Professional or Green Certified Architect and/ Engineer
13	BIM Specialist
14	other as required for the project
Construction & Demolition Phase	
1	Project Manager
2	Project Civil/Structural Engineer
3	Project Electrical Engineer
4	Project Mechanical Engineer
5	Drainage / Sanitary / Plumbing Engineer
6	Materials Engineer II
7	Safety Officer
8	Construction Foreman
9	Geodetic Engineer
10	Geotechnical Engineer
11	Quantity / Cost & Specifications Engineer
12	LEED Professional or Green Certified Architect and/ Engineer
13	BIM Specialist
14	CADD Operator
15	Project Nurse

Certificates of Employment Of [insert Position of Key Personnel]

Date :
To : [name and address of Procuring Entity]
Address : [insert address]

Sir:

I am a licensed _____ with Professional License No._____issued on_____at_____.

I hereby certify that_____contracted my services as [insert Position] on the_____ _____, if awarded to the Bidder.

I have supervised similar projects as [insert Position].
[mention only projects of same nature as aforesaid Contract];
[Insert one delete the other]

At present, I am supervising the on-going project**;** or
At present, I am **not** supervising **any** going project;

In case of my separation for any reason whatsoever from the above-mentioned Contractor, I shall notify the Procuring Entity by at least Twenty-One [21] days before the effective date of my separation. I have read carefully and will abide by the conditions required of me in the Contractor's Confidential Application Statement for Pre-qualification of the above Contractor.

As [insert Position], I know I will have to stay in the Project all the time to supervise and manage the Project to the best of my ability, and am aware that I am authorized to handle only One [1] project at a time.

I did not allow the use of my name for the purpose only of enabling the above- mentioned Contractor to qualify for the Project without any firm intention on my part to assume the post as [insert Position] if the Project is awarded to the Bidder since I understand that to do so will be a sufficient ground for my disqualification as [insert Position] in any future bidding or employment for any Contractor doing business with Procuring Entity.

[Signature of Project Manager]

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

SUBSCRIBED AND SWORN TO BEFORE ME this, day of, affiant exhibiting to me his/her Community Tax Certificate No. _____issued on _____at_____.

[Notary Public]
PTR No. _____
Valid Until _____
Doc. No. _____
Page No. _____
Book No. _____
Series of _____

C. Team Composition and Tasks in the Project.

Technical / Managerial Staff of Contractor - Designer (as applicable)		
Name of Personnel	**Position**	**Task**
Detailed Design Phase		
1	Team Leader / Project Design Manager	
2	Design/Principal Architect	
3	Structural/Civil Engineer	
4	Electrical Engineer	
5	Mechanical Engineer	
6	Drainage / Sanitary / Plumbing Engineer	
7	Electronics & Communication Engineer	
8	CADD Operator	
9	Geodetic Engineer	
10	Geotechnical Engineer	
11	Quantity / Cost / Specifications Engineer	
12	LEED Professional or Green Certified Architect and/ Engineer	
13	BIM Specialist	
14	other as required for the project	
Construction & Demolition Phase		
1	Project Manager	
2	Project Civil/Structural Engineer	
3	Project Electrical Engineer	
4	Project Mechanical Engineer	
5	Drainage / Sanitary / Plumbing Engineer	
6	Materials Engineer II	
7	Safety Officer	
8	Construction Foreman	
9	Geodetic Engineer	
10	Geotechnical Engineer	
11	Quantity / Cost & Specifications Engineer	
12	LEED Professional or Green Certified Architect and/ Engineer	
13	BIM Specialist	
14	CADD Operator	
15	Project Nurse	

Name and signature of Bidder's Authorized Representative

D. Summary Table of Contractor's Proposed Professional Personnel Education

Name of Employee	Position	Education	Years of Experience	No. of Projects in Same Position	Signed; Notarized Affidavit of Commitment
Design Phase					
1	Team Leader / Project Design Manager				
2	Design/Principal Architect				
3	Structural/Civil Engineer				
4	Electrical Engineer				
5	Mechanical Engineer				
6	Drainage / Sanitary / Plumbing Engineer				
7	Electronics & Communication Engineer				
8	CADD Operator				
9	Geodetic Engineer				
10	Geotechnical Engineer				
11	Quantity / Cost / Specifications Engineer				
12	LEED Professional or Green Certified Architect and/ Engineer				
13	BIM Specialist				
14	other as required for the project				
Construction & Demolition Phase					
1	Project Manager				
2	Project Civil/Structural Engineer				
3	Project Electrical Engineer				
4	Project Mechanical Engineer				
5	Drainage / Sanitary / Plumbing Engineer				
6	Materials Engineer II				
7	Safety Officer				
8	Construction Foreman				
9	Geodetic Engineer				
10	Geotechnical Engineer				
11	Quantity / Cost & Specifications Engineer				
12	LEED Professional or Green Certified Architect and/ Engineer				
13	BIM Specialist				
14	CADD Operator				
15	Project Nurse				

Format of Curriculum Vitae (CV) For Proposed Key Personnel

a. Proposed Position:

b. Name of Contractor:

b.1 Name of Designer [as applicable]:

c. Name of Staff:

d. Profession:

e. Date of Birth:

f. Years with Firm/Entity:

g. Nationality:

h. Membership in Professional Societies:

i. Detailed Tasks Assigned with Firm:

j. Key Qualifications: [Give an outline of staff member's experience and Describe degree of responsibility held by staff member on relevant previous projects and give dates and locations. Use about half a page.]

k. Education: [Summarize college/university and other specialized education of staff members, giving names of schools, dates attended, and degrees obtained. Use about one quarter of a page.]

k.1 Training/Seminars Attended: List at least three [3] related trainings/seminars.

l. Employment Record: [Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, titles of positions held, and locations of projects. For experience in last ten years, also give types of activities performed and client references, where appropriate. Use about two pages.]

m. Ongoing Projects if any:

Name of Project	Owner	Cost
_____	_____	_____
_____	_____	_____
_____	_____	_____

n. Languages: For each language, indicate proficiency: excellent, good, fair, or poor in speaking, reading, and writing.

o. Key Personnel's Certification and Affidavit of Commitment to Work on The Contract.

Date :

To : [name and address of Procuring Entity]

Address : [insert address]

Contract ID :

Contract Name : Demolition of Existing 6-Storey Office and Design & Build of the 13-Storey Office Building with Roof Deck

Location of the Contract : Roxas Blvd., cor. San Luis St., Pasay City

Sir/Madame:

1. I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

2. I hereby confirm that [insert name of Contractor] has engaged my services for the above particular positions in the above stated Contract if it is awarded to the Contractor.

3. I commit to assume the said position in the above stated Contract once it is awarded to the Contractor, and shall employ the best care, skill, and ability to perform the duties of such position in accordance with the Conditions of Contract, Specifications, Drawings, and other provisions of the Contract Agreement. I am aware that I have to stay in the Jobsite for the duration of my assignment.

Signature of Staff Member

Full Name and Position of Staff Member: _____

_____

Full Name and Signature of Bidder's Authorized Representative: _____

_____

REPUBLIC OF THE PHILIPPINES]
CITY OF_____] S.S.
SUBSCRIBED AND SWORN TO BEFORE ME this _____, day of, affiant exhibiting to me his/her Community Tax Certificate No. _____issued on _____at_____.

[Notary Public]
PTR No._____

Valid Until_____

Doc. No._____
Page No._____
Book No._____
Series of_____

ANNEX 4. Minimum Equipment Requirements

No.	Equipment	O	L	Total
1	Service vehicle			
2	Tower Crane, 18T			
3	Rough Terrain Crane, 25 T			
4	Backhoe, .8 m3 bucket			
5	Telescopic Boom Lift Truck			
6	Dump truck, 10 cubic			
7	Mini-dump truck			
8	Bored Piling/Rotary Drilling			
9	Vibratory Roller			
10	Plate compactor			
11	Concrete vibrator			
12	Transit Mixer			
13	Welding machine at least 500 Amps.			
14	Gas cutting outfit			
15	Generator, 75 kVA			
16	Mechanical Bar Bender & Cutter			
17	Bar Cutter			
18	Construction Passenger Elevator			
19	Flatbed Trucks, 20T			
20	Pay Loader			
21	Walk Behind Roller Compactor			
22	Mortar Mixers			
23	Air Compressor			
24	Gondolas			
25	Jackhammer			
26	Earth Compactors			
27	Power Trowels			
28	Submersible Pumps			
29	Water Tanker or Lorry Tanker			
30	Total Station Surveying Equipment			
	Total			
O or L - Owner or Lease				

ANNEX 5. Financial Bid Form

Financial Bid Form

Date: _____

IB[1]N[o]: _____

To : *[name and address of PROCURING ENTITY]*

Address : *[insert address]*

We, the undersigned, declare that:

1. We have examined and have no reservation to the Bidding Documents, including Addenda, for the Contract *[insert name of contract]*;

2. We offer to execute the Works for this Contract in accordance with the Bid and Bid Data Sheet, General and Special Conditions of Contract accompanying this Bid;

The total price of our Bid, excluding any discounts offered below is: *[insert information]*;

The discounts offered and the methodology for their application are: *[insert information]*;

3. Our Bid shall be valid for a period of *[insert number]* days from the date fixed for the Bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

4. If our Bid is accepted, we commit to obtain a Performance Security in the amount of [*insert percentage amount]* percent of the Contract Price for the due performance of the Contract;

5. Our firm, including any suppliers for any part of the Contract, have nationalities from the following eligible countries: *[insert information]*;

6. We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;

7. Our firm, its affiliates or subsidiaries, including any suppliers for any part of the Contract, has not been declared ineligible by the Funding Source;

8. We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed; and

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

10. **We likewise certify/confirm that the undersigned, is the duly authorized representative of the bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for the *[Name of Project]* of the *[Name of the Procuring Entity]*.**

11. **We acknowledge that failure to sign each and every page of this Bid Form, including the Bill of Quantities, shall be a ground for the rejection of our bid.**

Name: _____

In the capacity of: _____

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

Signed: _____

Date: _____

ANNEX 6. Form of Contract Agreement

CONTRACT AGREEMENT

THIS AGREEMENT, made this *[insert date]* day of *[insert month]*, *[insert year]* between *LBP LEASING AND FINANCE CORPORATION (LLFC), with principal office address at 15th Floor, SyCip Law Center, No. 105 Paseo de Roxas Street, Makati City* (hereinafter called the "Entity") and *[name and address of Contractor]* (hereinafter called the "Contractor").

WHEREAS, the Entity is desirous that the Contractor execute *Proposed Demolition of Existing Six (6) Storey Office and Design & Build of Thirteen (13) Storey Office Building with Roof Deck Located at Roxas Boulevard corner San Luis Street, Pasay City* under LLFC-GAP-21-003 (hereinafter called "the Works") and the Entity has accepted the Bid for *[contract price in words and figures in specified currency, inclusive of all applicable taxes, charges, and fees]* by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents as required by the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184 shall be deemed to form and be read and construed as part of this Agreement, *viz*.:

   a. Philippine Bidding Documents (PBDs);
      i. Drawings/Plans;
      ii. Specifications;
      iii. Bill of Quantities;
      iv. General and Special Conditions of Contract;
      v. Supplemental or Bid Bulletins, if any;

   b. Winning bidder's bid, including the Eligibility requirements, Technical and Financial Proposals, and all other documents or statements submitted;

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

   c. Performance Security;

   d. Notice of Award of Contract and the Bidder's conforme thereto; and

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

3. In consideration for the sum of [total contract price in words and figures, inclusive of all applicable taxes, charges, and fees] or such other sums as may be ascertained, the Contractor agrees to the Proposed Demolition of Existing Six (6) Storey Office and Design & Build of Thirteen (13) Storey Office Building with Roof Deck Located at Roxas Boulevard corner San Luis Street, Pasay City in accordance with his/her/its Bid.
4. The Entity agrees to pay the above-mentioned sum in accordance with the terms of the Bidding.

NAME OF WITNESS
NAME OF REPRESENTATIVE
JIMLYN I. ALMEÑE
EDWARD JOHN T. REYES

5. It is hereby expressly understood that the Contractor is an independent service contractor, and nothing herein shall be construed as establishing or creating the relationship of employer and employee or principal and agent between the Entity and the Contractor. As such, the Contractual Personnel shall not be considered employees of the Entity but employees of the Contractor.
6. The Contractor shall be answerable and hold the Entity free and harmless from any damage or liability arising from the actions of the former's personnel.
7. The Contractor shall pay taxes in full and on time and that failure to do so will entitle the Entity to suspend payment for the services delivered by the Contractor. Likewise, the Contractor shall regularly present, within the duration of this Agreement, a tax clearance from the Bureau of Internal Revenue as well as a copy of its income and business tax returns duly stamped and received by the Bureau of Internal Revenue and duly validated with the tax payments made thereon.
8. Venue of Legal Action.- Any legal action which may arise out of this Agreement shall be brought exclusively in the proper court of Makati City.

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

LBP LEASING AND FINANCE CORPORATION
By:

EDWARD JOHN T. REYES
Officer-in-Charge

CONTRACTOR
By:

NAME OF REPRESENTATIVE
Designation

SIGNED IN THE PRESENCE OF:

JIMLYN I. ALMEÑE

NAME OF WITNESS

ACKNOWLEDGMENT

NAME OF WITNESS

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

BEFORE ME, A Notary Public for and in the above stated locality, on this _____ day of _____, personally appeared:

NAME	TIN
LBP LEASING AND FINANCE CORPORATION	000-164-275-000
EDWARD JOHN T. REYES	139-604-137-000

NAME OF REPRESENTATIVE

known to me and to me known to be the same person who executed the foregoing instrument and he acknowledged to me that the same is his free and voluntary act and deed and that of the corporation he represents.

This instrument refers to a Contract Agreement which consists of three (3) pages including the page wherein this Acknowledgment is written. This Acknowledgment forms an integral part of the said document.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the date and at the place first-above-written.

Doc. No._____;
Page No._____;
Book No._____;
Series of 2021.

JIMLYN I. ALMEÑE

EDWARD JOHN T. REYES

ACKNOWLEDGMENT

NAME OF WITNESS

REPUBLIC OF THE PHILIPPINES)
) S.S.

BEFORE ME, A Notary Public for and in the above stated locality, on this _____ day of _____, personally appeared:

NAME	COMPETENT EVIDENCE OF IDENTITY

NAME OF REPRESENTATIVE

CONTRACTOR
REPRESENTATIVE

known to me and to me known to be the same person who executed the foregoing instrument and he acknowledged to me that the same is his free and voluntary act and deed and that of the corporation he represents.

This instrument refers to a Contract Agreement which consists of three (3) pages including the page wherein this Acknowledgment is written. This Acknowledgment forms an integral part of the said document.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the date and at the place first-above-written.

Doc. No._____;
Page No._____;
Book No._____;
Series of 2021.

JIMLYN I. ALMEÑE

EDWARD JOHN T. REYES

ANNEX 7. Omnibus Sworn Statement

Omnibus Sworn Statement

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

A F F I D A V I T

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:

A. ***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]*;

B. ***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] [insert "as shown in the attached duly notarized Special Power of Attorney" for the authorized representative]*;
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]*, accompanied by the duly notarized Special Power of Attorney, Board/Partnership Resolution, or Secretary's Certificate, whichever is applicable;

C. *[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;

D. 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;

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

F. ***Select one, delete the rest:***
If a sole proprietorship: The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;
If a partnership or cooperative: None of the officers and members of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;
If a corporation or joint venture: None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

G. *[Name of Bidder]* complies with existing labor laws and standards; and

H. *[Name of Bidder]* is aware of and has undertaken the following responsibilities as a Bidder:

a. Carefully examine all of the Bidding Documents;

b. Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;

c. Made an estimate of the facilities available and needed for the contract to be bid, if any; and

d. Inquire or secure Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.

[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.

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

_____
Bidder's Representative/Authorized Signatory

SUBSCRIBED AND SWORN to before me this ___ day of *[month] [year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no. _____ and his/her Community Tax Certificate No. _____ issued on ____ at _____.

Witness my hand and seal this ___ day of *[month] [year]*.

NAME OF NOTARY PUBLIC
Serial No. of Commission _____
Notary Public for _____ until _____
Roll of Attorneys No. _____
PTR No. _____ *[date issued], [place issued]*
IBP No. _____ [*date issued], [place issued]*

Doc. No. _____
Page No. _____
Book No. _____
Series of _____

* This form will not apply for WB funded projects.

ANNEX 8. Bid-Securing Declaration

Bid-Securing Declaration

(REPUBLIC OF THE PHILIPPINES)

CITY OF _____) S.S.

x----------x

Invitation to Bid [*Insert reference 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 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 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 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;

    c. I am/we are declared as 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'S AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]

Affiant

SUBSCRIBED AND SWORN to before me this __ day of *[month] [year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. _____.

Witness my hand and seal this ___ day of *[month] [year]*.

NAME OF NOTARY PUBLIC

Serial No. of Commission _____

Notary Public for _____ until _____

Roll of Attorneys No. _____

PTR No. _____, *[date issued], [place issued]*

IBP No. _____, *[date issued], [place issued]*

Doc. No. ___

Page No. ___

Book No. ___

Series of ____.

ANNEX 9. Time and Activity Work Schedule

A. Time Schedule for Key Personnel

Contractor			**Months (in the form of a Bar Chart)**					
Name	**Position**	**Reports Due/Activities**	**1**	**2**	**3**	**4**	**…23**	**No. of Months**
								Subtotal (1)
								Subtotal (2)
								Subtotal (3)
								Subtotal (4)

Designer (as applicable)			**Months (in the form of a Bar Chart)**					
Name	**Position**	**Reports Due/Activities**	**1**	**2**	**3**	**4**	**…23**	**No. of Months**
								Subtotal (1)
								Subtotal (2)
								Subtotal (3)
								Subtotal (4)

Full-time: _____ Part-time: _____

Reports Due: _____

Activities Duration: _____

Location: _____ Signature: _____
(Authorized Representative)

Full Name: _____
Title: _____
Address: _____

B. Activity (Work) Schedule (Bar Chart and S-Curve)

B.1. Field Investigation and Study Items

Contractor	**(1st, 2nd, etc. are months from the start of Project)**											
Designer (as applicable)	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
Activity (work)												

B.2. Completion and Submission of Reports

Reports	Date
1. Inception Report	
2. Interim Progress Report (a) First Status Report (b) Second Report	
3. Draft Report	
4. Final Report	

ANNEX 10. Affidavit of No Pending Case

R E P U B L I C O F T H E P H I L I P P I N E S)

C I T Y O F_____) S . S .

x----------x

A F F I D A V I T O F N O P E N D I N G C A S E

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:

1. That I am the *[State position in the company]* of *[Name of Company orBidder's Name]* with office address at *[State office address];*

2. That no pending civil, criminal and/or administrative case/s has been filed by the Government of the Republic of the Philippines against *[Name of Company or Bidder]*in any forum;

3. That I am executing this statement as part of the eligibility requirement for the project *[State project title];* and

4. That in the event of finding against the veracity hereof shall constitute a ground for the automatic disqualification of *[Name of Company or Bidder]* for theproject *[State project title]*.

IN WITNESS WHEREOF, I have hereunto set my hand this_____day of_____, Philippines. _, 20__ at

_____

Bidder's Representative/Authorized Signatory

(Affiant's name and signature)

SUBSCRIBED AND SWORN to before me this day of [month] [year] at [place of execution], Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no.

Witness my hand and seal this day of [month] [year].

NAME OF NOTARY PUBLIC

Serial No. of Commission_____
Notary Public for _____until_____ Roll of Attorneys No.
PTR No._____ [date issued], [place issued]
IBP No. _____ [date issued], [place issued]

Doc. No._____
Page No. _____
Book No_____
Series of _____

ANNEX 11. SLCC Forms

A. Statement 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;

Business Name: _____

Business Address: _____

Name of Contract	a. Owner's Name b. Address c. Telephone Nos. d. Date of Contract	Nature of Work	Contractor's Role		a. Total contract value at award b. Estimated completion time	a. Percentage of planned and actual accomplishment, if applicable b. Value of outstanding works, if applicable
			Description	%		
Government						
Private						

Note: This statement shall be supported with:

1. Certified True Copy of Notice of Award and Contract/ or /NTP
2. Certificate of Accomplishment from Project Owner or Representative for On-going Project

Submitted by:_____

(Printed Name & Signature)

Designation: _____

Date:_____

B. Statement of the Bidder's SLCC similar to the contract to be bid, in accordance with ITB Clause 5.2

Business Name:_____

Business Address: _____

Name of Contract	a. Owner's Name b. Address c. Telephone Nos. d. Date of Contract	Nature of Work	Contractor's Role		a. Total contract value at award b. Date of completion c. Total contract value at completion	a. Percentage of planned and actual accomplishment, if applicable b. Value of outstanding works, if applicable
			Description	%		
Government						
Private						

Note: This statement shall be supported with:

1. Certified True Copy of Notice of Award and/or Notice to Proceed
2. Project owner's Certificate of Final Acceptance issued by the owner or CPES Final rating (Constructors Performance Evaluation System)

Submitted by : _____

(Printed Name & Signature)

Designation : _____

Date : _____

ANNEX 12. Cash Flow by Quarter Form

Demolition of Existing 6-Storey Office and Design & Build of 13-Storey Office Building with Roof Deck

Located at Roxas Blvd., cor. San Luis St., Pasay City

Phase																TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	
1	Design															
	Amount [PhP]															
	Per Cent [%]															
2	Construction															
	Amount [PhP]															
	Per Cent [%]															
Total																

Submitted by:

Name and Signature of Contactor's Authorized Representative

Name of Contractor

ANNEX 13. Cost Estimate Form

PROJECT : Proposed Demolition of Existing Six (6) Storey Office and Design & Build of Thirteen (13) Storey Office Building with Roof Deck
LOCATION : Roxas Boulevard Corner San Luis Street, Pasay City
OWNER : PEZA
BIDDER : _____
DATE : _____

ITEM NO.	DESCRIPTION	UNIT	QTY	Materials		Labor		Total Direct Cost	Mark Up		VAT	Total Indirect Cost	Total Cost
				Unit Cost	Total Amount	Unit Cost	Total Amount		OCM	Profit			
A.	**Detailed Engineering and Architectural Design**	1											
B.	**General Requirements**	1											
	A. Mobilization/Demobilization												
	B. Temporary Facilities												
	C. Health Safety Requirements												
C.	**Architectural Works**	1											
	A. Floor Finishes												
	B. Wall Finishes												
	C. Ceiling Finishes												
	D. Painting												
	E. Water proofing												

ITEM NO.	DESCRIPTION	UNIT	QTY	Materials		Labor		Total Direct Cost	Mark Up		VAT	Total Indirect Cost	Total Cost
				Unit Cost	Total Amount	Unit Cost	Total Amount		OCM	Profit			
	F. Doors and Windows												
	G. Miscellaneous												
D.	**Formworks and Scaffolding**	1											
E.	**Structural Works**	1											
	A. Earthworks												
	B. Steel Works												
	C. Concrete Works												

READ AND ACCEPTED AND GOOD FOR AGREEMENT
Date: _____
Signature: _____
For the Capacity as: _____
Duly authorized to sign Bids and on behalf of: _____

ANNEX 14. Scope of Work Summary Cost: Proposed Demolition of Existing Six (6) Storey Office and Design & Build of Thirteen (13) Storey Office Building with Roof Deck Located at Roxas Boulevard Corner San Luis Street, Pasay City

[Note: Section VIII Bill of Quantities for the above-mentioned project is used as reference only; it may increase or decrease depending on the result of the detailed engineering design of the Contractor.]

Summary of Quantities and Cost					
Item Spec. No.	**Description**	**Unit**	**Qty.**	**Unit Cost**	**Total Cost (Peso)**
PART A	Detailed Architectural and Engineering Design	1	l.s		
PART B	**Demolition of Existing 6-Storey Building and Construction of 13-Storey Office Building**				
B.1	Preliminaries / General Requirements	1	l.s		
B.2	Demolition Works & Site Clearing	1	l.s		
B.3	**Building Construction**				
3.1	Structural / Civil Works	1	l.s		
3.2	Architectural Works	1	l.s		
3.3	Sanitary & Plumbing Works	1	l.s		
3.4	Electrical	1	l.s		
3.5	Local Area Network / Information & Communication Technology	1	l.s		
3.6	Mechanical	1	l.s		
B.4	**Site Works / External Site Development Works**				
4.1	Civil Works	1	l.s		
4.2	Architectural Works	1	l.s		
4.3	Sanitary & Plumbing Works	1	l.s		
4.4	Electrical Works	1	l.s		
	Estimated Direct Cost				

Description of Works and Breakdown of Estimates		**Total Cost (Peso)**
1	Profit	
2	Overhead, Contingency, Miscellaneous	
	Total	

TOTAL BID PRICE IN WORDS AND FIGURES:	

READ AND ACCEPTED AND GOOD FOR AGREEMENT

Date: _____

Signature: _____

For the Capacity as: _____

Duly authorized to sign Bids and on behalf of: _____

ANNEX 15. Summary of Detailed Unit Price Analysis [Design & Construction]

ITEM NO.	DESCRIPTION OF BOQ ITEM	UNIT OF MEASUREMENT	QUANTITY

A. DIRECT COST				
A.1 Cost of Materials	UNIT	QUANTITY	UNIT COST	AMOUNT
A.2 Cost of Labor	NO.	NO. OF HOURS	RATE PER HOUR	AMOUNT
A.3 Equipment Expenses	NO.	NO. OF HOURS	RATE PER HOUR	AMOUNT
ESTIMATED DIRECT COST (EDC) [A.1+A.2+A.3]				

B. INDIRECT COSTS	% of EDC	AMOUNT
B.1 Overhead Expense		
B.2 Contingencies		
B.3 Miscellaneous Expense		
B.4 Contractor's Profit		
TOTAL MARK-UP		

EDC + TOTAL MARK-UP	
VALUE ADDED TAX [12% (EDC+TOTAL MARK-UP)]	
TOTAL INDIRECT COST [TOTAL MARK-UP+VAT]	
TOTAL COST [EDC+TOTAL INDIRECT COST]	

UNIT COST [(TOTAL COST)/(QUANTITY)]	


Republic of the Philippines
gppb
Government Procurement Policy Board