

PHILIPPINE BIDDING DOCUMENTS

**Procurement of
INFRASTRUCTURE
PROJECTS**

Government of the Republic of the Philippines

**PROPOSED REHABILITATION OF DAY CARE CENTER AT
DISTRICT 5 AREA IX (CLUSTER 1)**

**Project number:
22-00007**

**Sixth Edition
July 2020**

Preface

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

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

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

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

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

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

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

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Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

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

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

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

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

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

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

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

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

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

GFI – Government Financial Institution.

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

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

GOP – Government of the Philippines.

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

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

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

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Section I. Invitation to Bid

Notes on the Invitation to Bid

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

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

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

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



REPUBLIC OF THE PHILIPPINES
QUEZON CITY GOVERNMENT
BIDS AND AWARDS COMMITTEE FOR INFRASTRUCTURE &
CONSULTANCY



2nd floor, Finance Building, Procurement Department, Quezon City Hall Complex, Elliptical Road, Quezon City

January 17, 2022

Invitation to Bid

No.	Project No.	Project Name	Location	Amount	Duration Cal. Days	Office	Source Fund
<i>Buildings – Small B</i>							
1	22-00001	Proposed Rehabilitation of Day Care Center at District 5 / Area IX (Cluster 2)	Novaliches Proper, Nagkaisang Nayon	3,596,040.51	60	Engineering Dept.	Engineering Department-Continuing Appropriation
2	22-00002	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 5 / Area VIII (Cluster 3)	Kailigayahan, Fairview	4,390,415.05	60	Engineering Dept.	Engineering Department-Continuing Appropriation
3	22-00003	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 6 / AREA X	Sauyo	4,513,739.69	75	Engineering Dept.	Engineering Department-Continuing Appropriation
4	22-00004	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 6 / Area XI	Balonbato, Sangandaan	5,659,364.94	90	Engineering Dept.	Engineering Department-Continuing Appropriation
5	22-00005	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 5 / AREA VIII (Cluster 2)	Pasong Putik Proper, Sta. Lucia	6,193,888.63	60	Engineering Dept.	Engineering Department-Continuing Appropriation
6	22-00006	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 5 Area X	Bagbag, San Bartolome, Gulod	6,734,114.50	60	Engineering Dept.	Engineering Department-Continuing Appropriation
7	22-00007	Proposed Rehabilitation of Day Care Center at District 5 Area IX (Cluster 1)	Nagkaisang Nayon, San Agustin	6,973,975.80	60	Engineering Dept.	Engineering Department-Continuing Appropriation
8	22-00008	Proposed Construction of Two (2) Storey Nomar II Day Care Center at Barangay San Bartolome	San Bartolome	9,776,081.57	180	Engineering Dept.	Engineering Department-Continuing Appropriation
9	22-00009	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 6 / Area XII	Pasong Tamo	9,855,463.80	75	Engineering Dept.	Engineering Department-Continuing Appropriation
10	22-00010	Proposed Renovation of ITDD, AMO and District Coordinators at Second Floor Main Building, QC Hall Compound	Central	13,236,971.37	180	Engineering Dept.	Engineering Department-Continuing Appropriation

<u>Buildings – Medium A</u>							
11	22-00011	Proposed Construction of Four (4) Storey with Deck Quirino 2-C Barangay Hall	Quirino 2-C	41,886,320.36	300	Engineering Dept.	Engineering Department-Continuing Appropriation
12	22-00012	Proposed Construction of Material Recovery and Composting Facility (MRCF) at Barangay Holy Spirit (Phase 1)	Holy Spirit	75,484,667.34	360	Engineering Dept.	Engineering Department-Continuing Appropriation
<u>Flood Control – Small B</u>							
13	22-00013	Proposed Construction of Retaining Wall at Housing No. 23	Greater Lagro	3,611,788.95	120	Engineering Dept.	Local Disaster Risk Reduction and Management Fund - Continuing Appropriation
<u>Flood Control – Medium A</u>							
14	22-00014	Proposed Construction of Reinforced Concrete Canal at Balingasa Creek (Old Samson Road)	Balingasa	39,226,171.70	240	Engineering Dept.	Local Disaster Risk Reduction and Management Fund - Continuing Appropriation
15	22-00015	Proposed Construction of Reinforce Concrete Canal at Culiat Creek (Mindanao Avenue to existing Bridge / Road 5)	Project 6	60,562,554.95	300	Engineering Dept.	Local Disaster Risk Reduction and Management Fund - Continuing Appropriation
<u>Parks – Small B</u>							
16	22-00016	Proposed Construction of Linear Park (Diamond HOA) at Kasunduan Street	Commonwealth	4,885,324.49	90	Parks Dept.	Engineering Department-Continuing Appropriation
<u>Roads – Small B</u>							
17	22-00017	Proposed Land Development of Human and Pet Crematorium and Columbarium Phase 2 at Barangay Bagong Silangan	Bagong Silangan	2,064,680.70	90	Engineering Dept.	Engineering Department-Continuing Appropriation
18	22-00018	Proposed Rehabilitation of Drainage System, Sidewalk and Surface Improvement at Economia Street	Bagumbayan	8,294,235.72	150	Engineering Dept.	OCM - 20% Community Development Fund
19	22-00019	Proposed Rehabilitation of Road and Drainage at Gozum Street (St. James Subdivision)	Nagkaisang Nayon	14,188,360.03	180	Engineering Dept.	OCM - 20% Community Development Fund (Previous Years Accom Balances)

1. The **QUEZON CITY LOCAL GOVERNMENT**, through *funding source of various years* intends to apply the sum stated above being the Approved Budget for the Contract (ABC) to payments under the contract *for the above stated Projects*. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The **QUEZON CITY LOCAL GOVERNMENT** now invites bids for the above Procurement Project. Completion of the Works is required *as stated above*. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using non-discretionary "*pass/fail*" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
4. Interested bidders may obtain further information from **QUEZON CITY LOCAL GOVERNMENT – BAC Secretariat** and inspect the Bidding Documents at the address given below *weekdays from 8:00 am. – 5:00 p.m.*
5. A complete set of Bidding Documents may be acquired by interested bidders on **18 January 2022 (Tuesday)** from given address and website/s below *and upon payment of a non-refundable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB*. The Procuring Entity shall allow the bidder to present its proof of payment for the fees *presented in person*.

STANDARD RATES:

Approved Budget for the Contract	Maximum Cost of Bidding Documents (in Philippine Peso)
More than 1 Million up to 5 Million	5,000.00
More than 5 Million up to 10 Million	10,000.00
More than 10 Million up to 50 Million	25,000.00
More than 50 Million up to 500 Million	50,000.00
More than 500 Million	75,000.00

The following are the requirements for purchase of Bidding Documents;

1. PhilGEPS Registration Certificate (Platinum – 3 Pages)
2. Document Request List (DRL)
3. Authorization to purchase bidding documents
 - 3.1 Secretary's Certificate (for corporation)
 - 3.2 Special Power of Attorney (for sole proprietorship)
4. Notarized Joint Venture Agreement (if applicable)
5. Letter of Intent

It must be duly received by the BAC Secretariat at 2nd Floor, Procurement Department, Finance Building, Quezon City Hall Compound on or before **January 25, 2022 - 5:00PM**.

6. The **QC- BAC- INFRASTRUCTURE & CONSULTANCY** will hold a Pre-Bid Conference¹ on **January 26, 2022 at 10:00 AM at 2nd Floor, Procurement Department-Bidding Room, Finance Building, Quezon City Hall Compound** or we encourage the prospective bidders to join through our **Virtual Conference (ZOOM APP)** 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.

Virtual Conference (ZOOM APP)

Meeting ID: 854 9489 0133

Password: 273320

7. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below, on or before **February 9, 2022 – 9:00AM**. Late bids shall not be accepted.
8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB Clause 16**.
9. Bid opening shall be on **February 9, 2022 - 10:00 AM** at **2nd Floor, Procurement Department-Bidding Room, Finance Building, Quezon City Hall Compound** and/or via Zoom. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

Virtual Conference (ZOOM APP)

Meeting ID: 810 3646 5257

Password: 201522

10. The *Quezon City Local Government* 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:

ATTY. DOMINIC B. GARCIA

OIC, Procurement Department

2nd Floor, Procurement Department,

Finance Building, Quezon City Hall Compound

Elliptical Road, Barangay Central Diliman, Quezon City.

Tel. No. (02)8988-4242 loc. 8506/8710

Email Add: bacinfra.procurement@quezoncity.gov.ph

Website: www.quezoncity.gov.ph

12. You may visit the following websites:

For downloading of Bidding Documents: <https://quezoncity.gov.ph/public-notices/procurement/>

By:

ATTY. MARK DALE DIAMOND P. PERRAL

Chairman, BAC-Infra and Consultancy

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, **Quezon City Government** invites Bids for the **PROPOSED REHABILITATION OF DAY CARE CENTER AT DISTRICT 5 AREA IX (CLUSTER 1)**, with Project Identification Number **22-00007**.

[Note: The Project Identification Number is assigned by the Procuring Entity based on its own coding scheme and is not the same as the PhilGEPS reference number, which is generated after the posting of the bid opportunity on the PhilGEPS website.]

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 **2022** in the amount of **Six Million Nine Hundred Seventy-Three Thousand Nine Hundred Seventy-Five Pesos & 80/100 Cts. (P 6,973,975.80)**.

2.2. The source of funding is:

a. LGUs, the Annual or Supplemental Budget, as approved by the Sanggunian.

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 “P” of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

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

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

6. Origin of Associated Goods

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

7. Subcontracts

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

The Procuring Entity has prescribed that:

- a. **Subcontracting is not allowed.**

- 7.1. *[If Procuring Entity has determined that subcontracting is allowed during the bidding , state:]* The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criterial stated in **ITB** Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.
- 7.2. *[If subcontracting is allowed during the contract implementation stage, state:]* The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary

requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.

- 7.3. 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 on **January 26, 2022, 10:00 A.M. at 2nd Floor, Procurement Department-Bidding Room, Finance Building, Quezon City Hall Compound** and/or we encourage the prospective bidders to join through our Virtual Conference (**ZOOM APP**) Meeting ID: **854 9489 0133** Password: **273320**

9. Clarification and Amendment of Bidding Documents

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

10. Documents Comprising the Bid: Eligibility and Technical Components

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

complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.

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

11. Documents Comprising the Bid: Financial Component

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

12. Alternative Bids

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

13. Bid Prices

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

14. Bid and Payment Currencies

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

15. Bid Security

- 15.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 15.2. The Bid and bid security **in no case shall exceed One Hundred Twenty (120) calendar days from the date of opening of bids, unless duly extended by the bidder upon the request of the Head of the Procuring Entity (HoPE) of the Quezon City Local Government**. 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 5 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, similar contracts shall refer to contracts which have the same major categories of work.																																												
7.1	Subcontracting is not allowed.																																												
10.3	<p><i>No additional contractor license or permit is required</i></p> <p><i>In addition, eligible bidders shall qualify or comply with the following:</i></p> <p>1. Bidders with valid Philippine Contractors Accreditation Board (PCAB)</p> <p style="padding-left: 40px;">Type</p> <p style="text-align: center;">Building - Small B</p>																																												
10.4	<p>The minimum work experience requirements for key personnel are the following:</p> <p style="text-align: center;">PROPOSED REHABILITATION OF ST. ANDREW DAY CARE CENTER</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Qty.</th> <th style="text-align: center;">Key Personnel</th> <th style="text-align: center;">General Experience</th> <th style="text-align: center;">Relevant Experience</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Project Engineer</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">1</td> <td>DPWH duly accredited Materials Engineer</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">1</td> <td>Safety Officer</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">1</td> <td>Foreman</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">4</td> <td>Skilled Worker</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">1</td> <td>Driver</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">4</td> <td>Laborer</td> <td style="text-align: center;">1 year</td> <td style="text-align: center;">3 months</td> </tr> </tbody> </table> <p style="text-align: center;">PROPOSED REHABILITATION OF LAZARO DAY CARE CENTER</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Qty.</th> <th style="text-align: center;">Key Personnel</th> <th style="text-align: center;">General Experience</th> <th style="text-align: center;">Relevant Experience</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Project Engineer</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> <tr> <td style="text-align: center;">1</td> <td>DPWH duly accredited Materials Engineer</td> <td style="text-align: center;">3 years</td> <td style="text-align: center;">3 years</td> </tr> </tbody> </table>	Qty.	Key Personnel	General Experience	Relevant Experience	1	Project Engineer	3 years	3 years	1	DPWH duly accredited Materials Engineer	3 years	3 years	1	Safety Officer	3 years	3 years	1	Foreman	3 years	3 years	4	Skilled Worker	3 years	3 years	1	Driver	3 years	3 years	4	Laborer	1 year	3 months	Qty.	Key Personnel	General Experience	Relevant Experience	1	Project Engineer	3 years	3 years	1	DPWH duly accredited Materials Engineer	3 years	3 years
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1	Safety Officer	3 years	3 years
1	Foreman	3 years	3 years
7	Skilled Worker	3 years	3 years
1	Driver	3 years	3 years
7	Laborer	1 year	3 months

PROPOSED REHABILITATION OF JONAVILLE DAY CARE CENTER

Qty.	Key Personnel	General Experience	Relevant Experience
1	Project Engineer	3 years	3 years
1	DPWH duly accredited Materials Engineer	3 years	3 years
1	Safety Officer	3 years	3 years
1	Foreman	3 years	3 years
5	Skilled Worker	3 years	3 years
1	Driver	3 years	3 years
3	Laborer	1 year	3 months

PROPOSED REHABILITATION OF NAGKAISANG NAYON I DAY CARE CENTER

Qty.	Key Personnel	General Experience	Relevant Experience
1	Project Engineer	3 years	3 years
1	DPWH duly accredited Materials Engineer	3 years	3 years
1	Safety Officer	3 years	3 years
1	Foreman	3 years	3 years
5	Skilled Worker	3 years	3 years
1	Driver	3 years	3 years
5	Laborer	1 year	3 months

PROPOSED REHABILITATION OF T.S. CRUZ DAY CARE CENTER

Qty.	Key Personnel	General Experience	Relevant Experience
1	Project Engineer	3 years	3 years
1	Safety Officer	3 years	3 years
1	Foreman	3 years	3 years
6	Skilled Worker	3 years	3 years
1	Driver	3 years	3 years
6	Laborer	1 year	3 months

In addition, the bidder must execute an affidavit of undertaking duly notarized stating that the foregoing personnel shall perform work exclusively for the project until its completion. Please see attached bid forms.

10.5

The minimum major equipment requirements are the following:

PROPOSED REHABILITATION OF ST. ANDREW DAY CARE CENTER

Equipment	Capacity	Number of Units
Elf Truck		1
Scaffolding		as needed
Power Tools		as needed
Minor Tools		as needed

PROPOSED REHABILITATION OF LAZARO DAY CARE CENTER

Equipment	Capacity	Number of Units
Elf Truck		1
Scaffolding		as needed
Power Tools		as needed
Minor Tools		as needed

PROPOSED REHABILITATION OF JONAVILLE DAY CARE CENTER

Equipment	Capacity	Number of Units
Welding Machine		1
Elf Truck		1
Power Tools		as needed
Minor Tools		as needed

	<p style="text-align: center;">PROPOSED REHABILITATION OF NAGKAISANG NAYON I DAY CARE CENTER</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Equipment</th> <th style="text-align: left;">Capacity</th> <th style="text-align: left;">Number of Units</th> </tr> </thead> <tbody> <tr> <td>Elf Truck</td> <td></td> <td style="text-align: center;">1</td> </tr> <tr> <td>Scaffolding</td> <td></td> <td style="text-align: center;">as needed</td> </tr> <tr> <td>Power Tools</td> <td></td> <td style="text-align: center;">as needed</td> </tr> <tr> <td>Minor Tools</td> <td></td> <td style="text-align: center;">as needed</td> </tr> </tbody> </table> <p style="text-align: center;">PROPOSED REHABILITATION OF T.S. CRUZ DAY CARE CENTER</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Equipment</th> <th style="text-align: left;">Capacity</th> <th style="text-align: left;">Number of Units</th> </tr> </thead> <tbody> <tr> <td>Elf Truck</td> <td></td> <td style="text-align: center;">1</td> </tr> <tr> <td>Scaffolding</td> <td></td> <td style="text-align: center;">as needed</td> </tr> <tr> <td>Power Tools</td> <td></td> <td style="text-align: center;">as needed</td> </tr> <tr> <td>Minor Tools</td> <td></td> <td style="text-align: center;">as needed</td> </tr> </tbody> </table> <p><i>In addition, the bidder must execute an affidavit of undertaking duly notarized stating that the foregoing equipment shall be used exclusively for the project until its completion. Please see attached bid forms.</i></p>	Equipment	Capacity	Number of Units	Elf Truck		1	Scaffolding		as needed	Power Tools		as needed	Minor Tools		as needed	Equipment	Capacity	Number of Units	Elf Truck		1	Scaffolding		as needed	Power Tools		as needed	Minor Tools		as needed
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12	<i>[Insert Value Engineering clause if allowed.]</i>																														
15.1	<p>The bid security shall be in the form of a Bid Securing Declaration with project number, or any of the following forms and amounts:</p> <p style="margin-left: 40px;">a) The amount of not less than Php 139,479.52 or equivalent to two percent (2%) of ABC if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or</p> <p style="margin-left: 40px;">b) The amount of not less than Php 348,698.79 or equivalent to five percent (5%) of ABC if bid security is in Surety Bond.</p>																														
19.2	Partial bid is not allowed. The infrastructure project is packaged in a single lot and the lot shall not be divided into sub-lots for the purpose of bidding, evaluation, and contract award.																														
20	No additional requirement.																														
21	Additional Contract Documents relevant to the Project as required: 1. Construction Schedule and S-curve, 2. Manpower Schedule, 3. Construction Methods, 4. Equipment Utilization Schedule, 5. PERT/CPM or other acceptable tools of project scheduling, shall be included in the submission of Technical Proposal.																														

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	
2	Completion of work shall be within 60 calendar days
4.1	The Procuring Entity shall give possession of all parts of the Site to the Contractor upon receipt of the Notice to Proceed.
6	The site investigation reports are: <i>[list here the required site investigation reports.]</i>
7.2	<p><i>[Select one, delete the other.]</i></p> <p><i>[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:]</i> Fifteen (15) years.</p> <p><i>[In case of semi-permanent structures, such as buildings of types 1, 2, and 3 as classified under the National Building Code of the Philippines, concrete/asphalt roads, concrete river control, drainage, irrigation lined canals, river landing, deep wells, rock causeway, pedestrian overpass, and other similar semi-permanent structures:]</i> Five (5) years.</p> <p><i>[In case of other structures, such as bailey and wooden bridges, shallow wells, spring developments, and other similar structures:]</i> Two (2) years.</p>
10	Dayworks are applicable at the rate shown in the Contractor's original Bid.
13	The amount of the advance payment is no more that fifteen percent (15%) of the Contract Price subject to approval by the HOPE and compliance with the conditions under RA 9184 and its IRR.
14	No further instructions.
15.1	<p>The date by which operating and maintenance manuals are required is <i>thirty (30) days</i></p> <p>The date by which "as built" drawings are required as part of final payment</p>
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 ten (10%) percent 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.



Republic of the Philippines
Quezon City

CITY ENGINEERING DEPARTMENT

Civic Center Building 8, Quezon City Hall Compound, Elliptical Road
Ortigas, Central 1100 Quezon City
Trunk line: +63 2 8988 4242



PROJECT NAME: PROPOSED REHABILITATION OF JONAVILLE DAYCARE CENTER
LOCATION: BARANGAY NAGKAISANG NAYON, DISTRICT 5, QUEZON CITY ✓

TECHNICAL SPECIFICATIONS **QUEZON CITY INFRASTRUCTURE PROJECT**

I. GENERAL REQUIREMENTS

- a. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations and standards. Any works perform contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost arising therefrom.
- b. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- c. Should there be any change(s) in drawings or specifications, it is required to comply with the governing regulations, notify the implementing agency.
- d. Photographs shall be taken as, when and where directed at intervals of not more than one month. The photographs shall be sufficient in number and location to record the exact progress of the works. The photographs shall be retained and will become the property of the Government.
- e. Site verification / inspection shall be conducted to validate the scope of works. No extra compensation and extension of time shall be given due to negligence or inadvertence.
- f. The quality of materials shall be of the best grade of their respective kinds for the purpose. The work shall also be performed in the best and most capable manner in strict accordance with requirements of the plans and details. All materials not conforming to the requirements of these specifications shall be considered as defective.
- g. All equipment and installations shall meet or exceed minimum requirements of the standards and codes.
- h. Mobilization and Demobilization (if applicable)
 - i. Mobilization shall include all activities and related costs for transportation of personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the operations at the site.
 - ii. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not anymore required within the construction site including the disassembly, removal and site clean-up of offices and other facilities assembled on the site specifically for this contract.
- i. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen. Provide a competent, experienced, full-time supervisor who is authorized to make decisions on behalf of the Contractor.
- j. Temporary Facilities and Utilities
 - i. All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.

- ii. Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations.
 - iii. Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication.
 - iv. Temporary enclosure shall be provided within the construction site with adequate guard lights, railings and proper signages.
 - v. Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period.
 - vi. Upon completion of the work, the temporary facilities shall be demolished, hauled-out and disposed properly.
- k. Adequate construction safety and health protection shall be provided at all times during the execution of work to both workers and property
 - i. A fully trained Medical Aide shall be employed permanently on the site who shall be engaged solely from medical duties.
 - ii. The medical room shall be provided in waterproof; it could be a building or room designated and used exclusively for the purpose and have a floor area of at least 15 square meters and a glazed window area of at least 2 square meters.
 - iii. The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations suitable notices in the site.
 - iv. Additional safety precautions shall be provided in the observance of pandemic. Protocols set-forth by the government shall be strictly followed.
- l. Necessary protections to the adjacent property shall be provided to avoid untoward incidents / accidents.
- m. Final cleaning of the work shall be employed prior to the final inspection for certification of final acceptance. Final cleaning shall be applied on each surface or unit of work and shall be of condition expected for a building cleaning and maintenance program.

II. SITE WORKS

- A. All grades, lines, levels and dimensions shall be verified as indicated on the plans and details. Any discrepancies or inconsistencies shall be reported before commencing to work.
- B. Removal / demolition of existing structures shall be done in accordance to safety procedures.
- C. All excavations shall be made to grade as indicated in the plans. Whenever water is encountered in the excavation process, it shall be removed by pumping, care being taken that the surrounding soil particles are not disturbed or removed.
- D. All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted wetting, tamping and rolling.

III. ARCHITECTURAL WORKS

A. PAINTING WORKS

- a. All primers, thinners and putty, also waterproofing for internal and external application shall be the same brand as the specified material.
- b. Application shall be as per paint Manufacturer's specification and recommendation.

- c. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass finishes and other works.
- d. All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications.
- e. All surfaces including masonry wall shall be thoroughly cleaned, puffed, sandpapered, rubbed and polished; masonry wall shall be treated with Neutralizer.
- f. All exposed finish hardware, lighting fixtures and accessories, glass and the like shall be adequately protected so that these are not stained with paint and other painting materials prior to painting works
- g. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper

IV. SANITARY / PLUMBING WORKS

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable)
- B. Supply, installation and testing of the following:
 - B.1 Potable water supply system complete in all respects including but not limited to submittals, shop drawings, piping, water meters, valves, bibbs, insulation, all accessories required for complete and operational of the system
 - B.2 Water service connections including but not limited to water meters, float valves. Any and all other works involve in providing the complete operation of the water supply system
 - B.3 Soil waste and vent system complete in all respect including but not limited to connection to existing sewer, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
 - B.4 Storm drainage system complete in all respect including but not limited to connection to existing storm drainage, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational
- C. Workmanship and installation methods shall conform to the best modern practice. Employ skilled tradesmen to perform work under the direct supervision of fully qualified personnel.
- D. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes as specified in plans and program of work.
- E. Install equipment in strict accordance with manufacturers written recommendations
- F. Physical sizes of all plant and equipment are to be suitable for the space allocated for the accommodation of such plant and equipment, taking into account the requirement of access for maintenance purposes.
- G. In selecting makes and types of equipment, the Contractor shall ascertain that facilities for proper maintenance, repair and replacement are provided
- H. Where the Contractor proposes to use an item of equipment other than that specified or detailed in the drawing, which requires any redesign of the system, drawings showing the layout of the equipment and such redesign as required therefore shall be prepared by the Contractor at his own expenses. Where such approved deviation necessitates a different quantity and arrangement of materials and equipment's from that originally specified or indicated in the drawings, the Contractor shall furnish and install any such additional materials and equipment's required by the system at no additional cost.
- I. Equipment catalogue and manufacturer's specifications must be submitted for examination and details shall be submitted for approval before any equipment is to be ordered.

- J. This shall include all information necessary to ascertain the equipment comply with the specification and drawings. Data and sales catalogue of a general nature will not be accepted.
- K. All materials, equipment, components and accessories shall be delivered to the Site in a new condition, properly packed and protected against damage or contamination or distortion, breakage or structural weakening due to handling, adverse weather or other circumstances and, as far as practicable, they shall be kept in the packing cases or under approved protective coverings until required for use.
- L. Any items suffering from damage during manufacture, or in transit or on site whilst in storage or during erection shall be rejected and replaced without extra cost
- M. All sanitary fittings and pipework shall be cleaned after installation and keep them in a new condition.
- N. All installed pipelines shall be flushed through with water, rodded when necessary to ensure clearance of debris.
- O. Cleaning and flushing shall be carried out in sections as the installation becomes completed.
- P. The Contractor shall carry out hydraulic test on the complete plumbing systems and the drainage system to show that it is functioning satisfactorily within the requirements of this Specification and local regulations.
- Q. The Contractor shall provide suitable test pumps and arrange for a supply of water required in connection with testing of pipework. The test pump shall be fitted with pressure gauges which shall be of suitable range for the pressure being applied.
- R. Hydraulic tests shall be carried out as the pipework is installed and shall be completed before chases in walls and ducts are closed. Also test shall be carried out prior to false ceilings and other finishes are installed
- S. Testing apparatus shall be provided by the Contractor. Where any section of pipework or equipment is unable to withstand the maximum pipework test pressure, it shall be isolated during the pipework test then that section of pipework or equipment shall be re-tested at the appropriate test pressure.
- T. The Sanitary Contractor must carry out any additional tests required by the end-user and/or approving agency.
- U. Drainage pipe shall be tested by filling the pipe with 3m. of water higher than the test section and wait for 15 min. then check for leakage at every joints.
- V. Testing of drainage systems shall be carried out in sections by dividing the system horizontally. Each section shall comprise pipework and fitting for three floors/storeys required for testing.
- W. Drainage pressure pipe shall be hydraulic tested at minimum pressure 50 psi
- X. Hangers and supports for plumbing piping and equipment shall withstand the effects of gravity loads and stresses within limits and under conditions indicated according to ASCE/SEI 7
- Y. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.
- Z. Install lateral bracing with pipe hangers and supports to prevent swaying.
- AA. Install building attachments within concrete slabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges, and strainers, NPS 2-1/2 (DN 65) and larger and at changes in direction of piping. Install concrete inserts before concrete is placed, fasten inserts to forms and install reinforcing bars through openings at top of inserts.

- BB Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment.
- CC Install hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping

V. ELECTRICAL WORKS

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- C. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes
- D. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen.
- E. When the tests and inspections have been completed, a label shall be attached to all devices tested. The label shall provide the name of the testing company, the date the tests were completed, and the initials of the person who performed the tests.

F. PANELBOARDS

- F.1 Fabricate and test panelboards according to IEEE 344 to withstand seismic forces defined in Division 16 Sections 16073 and 16074 "Hangers and Supports for Electrical Systems and Vibration and Seismic controls for Electrical Systems" respectively.
- F.2 Enclosures: Flush, Surface, Flush- and surface-mounted cabinets.
- F.2.1 Rated for environmental conditions at installed location
- i Indoor Dry and Clean Locations: NEMA 250, Type 1
 - ii Outdoor Locations: NEMA 250, Type 3R.
 - iii Kitchen and Wash-Down Areas: NEMA 250, Type 4X, stainless steel
 - iv Other Wet or Damp Indoor Locations: NEMA 250, Type 4
 - v Indoor Locations Subject to Dust, Falling Dirt, and Dripping Noncorrosive Liquids: NEMA 250, Type 5 or Type 12.
- F.2.2 Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions; for flush-mounted fronts, overlap box.
- F.2.3 Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover.
- F.2.4 Skirt for Surface-Mounted Panelboards: Same gage and finish as panelboard front with flanges for attachment to panelboard, wall, and ceiling or floor
- F.2.5 Gutter Extension and Barrier: Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections
- F.2.6 Finishes.
- i. Panels and Trim: Steel and galvanized steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat.
 - ii. Back Boxes: Galvanized steel Same finish as panels and trim

- ii. Fungus Proofing: Permanent fungicidal treatment for overcurrent protective devices and other components.
- F.2.7 Directory Card: Inside panelboard door, mounted in transparent card holder metal frame with transparent protective cover.
- F.3 Incoming Mains Location: Top or Bottom.
- F.4 Phase, Neutral, and Ground Buses:
- F.4.1 Material: Hard-drawn copper, 98 percent conductivity.
 - F.4.2 Equipment Ground Bus Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.
 - F.4.3 Neutral Bus: 100 percent of phase bus 4 Extra-Capacity Neutral Bus. Neutral bus rated 200 percent of phase bus and UL listed as suitable for nonlinear loads.

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TECHNICAL SPECIFICATIONS QUEZON CITY INFRASTRUCTURE PROJECT

PROJECT TITLE: PROPOSED REHABILITATION OF LAZARO DAYCARE CENTER

LOCATION : BARANGAY NAGKAISANG NAYON, DISTRICT 5, QUEZON CITY

I. GENERAL REQUIREMENTS

- a. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations and standards. Any works perform contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost arising therefrom.
- b. Drawings, specifications codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- c. Should there be any change(s) in drawings or specifications, it is required to comply with the governing regulations, notify the implementing agency.
- d. Photographs shall be taken as, when and where directed at intervals of not more than one month. The photographs shall be sufficient in number and location to record the exact progress of the works. The photographs shall be retained and will become the property of the Government.
- e. Site verification / inspection shall be conducted to validate the scope of works. No extra compensation and extension of time shall be given due to negligence or inadvertence.
- f. The quality of materials shall be of the best grade of their respective kinds for the purpose. The work shall also be performed in the best and most capable manner in strict accordance with requirements of the plans and details. All materials not conforming to the requirements of these specifications shall be considered as defective.
- g. All equipment and installations shall meet or exceed minimum requirements of the standards and codes.
- h. Mobilization and Demobilization (if applicable)
 - i. Mobilization shall include all activities and related costs for transportation of personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the operations at the site.
 - ii. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not anymore required within the construction site including the disassembly, removal and site clean-up of offices and other facilities assembled on the site specifically for this contract.
- i. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen. Provide a competent, experienced, full-time supervisor who is authorized to make decisions on behalf of the Contractor.
- j. Temporary Facilities and Utilities
 - i. All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.

- ii. Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations
 - iii. Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication
 - iv. Temporary enclosure shall be provided within the construction site with adequate guard lights, railings and proper signages.
 - v. Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period
 - vi. Upon completion of the work, the temporary facilities shall be demolished, hauled-out and disposed properly.
- k. Adequate construction safety and health protection shall be provided at all times during the execution of work to both workers and property
- i. A fully trained Medical Aide shall be employed permanently on the site who shall be engaged solely from medical duties
 - ii. The medical room shall be provided in waterproof it could be a building or room designated and used exclusively for the purpose and have a floor area of at least 15 square meters and a glazed window area of at least 2 square meters
 - iii. The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations suitable notices in the site.
 - iv. Additional safety precautions shall be provided in the observance of pandemic Protocols set-forth by the government shall be strictly followed.
- l. Necessary protections to the adjacent property shall be provided to avoid untoward incidents / accidents.
- m. Final cleaning of the work shall be employed prior to the final inspection for certification of final acceptance. Final cleaning shall be applied on each surface or unit of work and shall be of condition expected for a building cleaning and maintenance program.

II. SITE WORKS

- A. All grades, lines, levels and dimensions shall be verified as indicated on the plans and details. Any discrepancies or inconsistencies shall be reported before commencing to work.
- B. Removal / demolition of existing structures shall be done in accordance to safety procedures
- C. All excavations shall be made to grade as indicated in the plans. Whenever water is encountered in the excavation process, it shall be removed by pumping, care being taken that the surrounding soil particles are not disturbed or removed
- D. All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted wetting, tamping and rolling.

III. CIVIL / STRUCTURAL WORKS

A. CONCRETE WORK

- a. Delivery, Storage, and Handling: All materials shall be so delivered, stored, and handled as to prevent the inclusion of foreign materials and the damage of materials by water or breakage. Package materials shall be delivered and stored in original packages until ready to be used. Packages or materials showing evidence of water or other damage shall be rejected

- b. Unless otherwise specified herein, concrete works shall conform to the requirements of the ACI Building Code. Full cooperation shall be given on trades to install embedded items. Provisions shall be made for setting items not placed in the forms. Before concrete is placed, embedded items shall have been inspected and tested for concrete aggregates and other materials shall have been done

c. **Materials**

- i. Cement for concrete shall conform to the requirements of specifications for Portland Cement (ASTM C - 150).
- ii. Water used in mixing concrete shall be clean and free from other injurious amounts of oils, acids, alkaline, organic materials or other substances that may be deleterious to concrete or steel
- iii. Fine aggregates shall be beach or river sand conforming to ASTM C33, "Specification for Concrete Aggregates" Sand particle shall be coarse sharp, clean free from salt, dust, loam, dirt and all foreign matters
- iv. Coarse aggregates shall be either natural gravel or crushed rock conforming to the "Specifications for Concrete Aggregates (ASTM C33). The minimum size of aggregates shall be larger than one fifth (1/5) of the narrowest dimensions between sides of the forms within which the concrete is to be cast nor larger than three fourths (3/4) of the minimum clear spacing between reinforcing bars or between reinforcing bars and forms.

d. **Proportioning and Mixing**

- i. Proportioning and mixing of concrete shall conform to the requirements for Item 405 of the standard specification with the following proportions:

Cement : Sand : Gravel

- Class 'A' - 1 : 2 : 3
- Class 'B' - 1 : 2 : 4
- Class 'C' - 1 : 2 ½

- ii. Concrete mixture to be used for concrete shall conform with the structural requirements
- iii. Mixing – concrete shall be machine mixed. Mixing shall begin within 30 minutes after the cement has been added to the aggregates.

e. **Forms**

- i. **General** – Forms shall be used whatever necessary to confine the concrete and shape it to the required lines, or to insure the concrete of contamination with materials caving from adjacent excavated surfaces. Forms shall have sufficient strength to withstand the pressure resulting from placement and vibration of the concrete, and shall be maintained rigidly in correct position. Forms shall be sufficiently tight to prevent loss of mortar from the concrete. Forms shall be ½" waterproof plywood and form lumber.
- ii. **Cleaning of Forms** – before placing the concrete, the contact surfaces of the formed shall be cleaned of encrustations of mortar, the grout or other foreign material.
- iii. **Removal of Forms** – forms shall be removed in a manner which will prevent damage to the concrete. Forms shall not be removed without approval. Any repairs of surface imperfections shall be formed at once and curing shall be started as soon as the surface is sufficiently hard to permit it without further damage

f. **Placing Reinforcement:**

Steel reinforcement shall be provided as indicated, together with all necessary wire ties, chairs, spacer supported and other devices necessary to install and secure the reinforcement properly. All reinforcement, when placed, shall be free from loose, flaky

rust and scale, oil grease, clay and other coating and foreign substances that would reduce or destroy its bond with concrete. Reinforcement shall be placed accurately and secured in place by use of metal or concrete supports, spacers and ties. Such supports shall be used in such manner that they will not be exposed or contribute in any way, to the discoloration or deterioration of the concrete.

g. Conveying and Placing Concrete:

- i. Conveying – concrete shall be conveyed from mixer to forms as rapidly as applicable, by methods which will prevent segregation, or loss of ingredients. There will be no vertical drop greater than 1.5 meters except where suitable equipment is provided to prevent segregation and where specifically authorized.
- ii. Placing – concrete shall be worked readily into the corners and angles of the forms and around all reinforcement and imbedded items without permitting the material to segregate, concrete shall be deposited as close as possible to its final position in the forms so that flow within the mass does not exceed two (2) meters and consequently segregation is reduced to a minimum near forms or embedded items, or elsewhere as directed, the discharge shall be so controlled that the concrete may be effectively compacted into horizontal layers not exceeding 30 centimeters in depth within the maximum lateral movement specified.
- iii. Time interval between mixing and placing. Concrete shall be placed before initial set has occurred and before it has contained its water content for more than 45 minutes. No concrete mix shall be placed before 60 complete revolution of the machine mixer.
- iv. Consolidation of Concrete – concrete shall be consolidated with the aid of mechanical vibrating equipment and supplemented by the hand spading and tamping. Vibrators shall not be inserted into lower courses that have commenced initial set; and reinforcement embedded in concrete beginning to set or already set shall not be disturbed by vibrators. Consolidation around major embedded parts shall be by hand spading and tamping and vibrators shall not be used.
- v. Placing Concrete through reinforcement – In placing concrete through reinforcement, care shall be taken that no segregation of the coarse aggregate occurs. On the bottom of beams and slabs, where the congestion of steel near the forms makes placing difficult, a layer of mortar of the same cement-sand ratios as used in concrete shall be first deposited to cover the surfaces.

h. Curing

- i. General – All concrete shall be moist cured for a period not less than seven (7) consecutive days by an approved method or combination applicable to local conditions.
- ii. Moist Curing – The surface of the concrete shall be kept continuously wet by covering with burlap plastic or other approved materials thoroughly saturated with water and keeping the covering spraying or intermittent hosing.

i. Finishing

- i. Concrete surfaces shall not be plastered unless otherwise indicated. Exposed concrete surfaces shall be formed with plywood, and after removal of forms, the surfaces shall be smooth, true to line and shall present a finished appearance except for minor defects which can be easily repaired with patching with cement mortar, or can be ground to a smooth surface to remove all joint marks of the form works.
- ii. Concrete Slabs on Fill. The concrete slabs on fill shall be laid on a prepared foundation consisting of sub grade and granular fill with thickness equal to the thickness of the overlaying slab except when indicated.

B. MASONRY**a. Masonry Units (CHB):**

100mm thick for all interior walls and 125mm thick for all exterior walls unless otherwise indicated.

Use 400 psi for non-load bearing blocks and 700 psi for load bearing blocks where required.

Where full height walls are constructed with concrete hollow blocks, these shall extend up to the bottom of beam or slab unless otherwise indicated on plans. Provide stiffener columns & lintel beams as specified in the structural drawings or as specified or as deemed required to ensure a stabilized wall due to height & other considerations.

b. Sand:

S-1, washed, clean and greenish in color.

c. Mortar

One part 'Portland' cement and two parts sand and water but not more than three parts sand and water.

d. Plaster bond

Apply plaster bond to all wall area.

C. METAL WORK**a. Description**

Metal works shall conform to the approved plans and to the Standard Specifications.

b. Reference Standards

Comply with the latest edition of the following as applicable, unless otherwise specified or modified.

1. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) 1978 Specification for the Design, Fabrication and Erection of Structural Steel for Buildings Code of Standard Practice for Steel Buildings and Bridges, Specification for Architecturally Exposed Structural Steel.
2. AMERICAN WELDING SOCIETY (AWS) Standard Welding Symbols A2.068; Standard Welding Code D1.1-1973 (Rev. 1-73 & 2-74) (To govern if in conflict with AISC)
3. RESEARCH COUNCIL ON RIVETED AND BOLTED JOINTS OF THE ENGINEERING FOUNDATION (RCRBJ) Specification for Structural Joists using ASTM A-325-76s Bolts.
4. STRUCTURAL STEEL PAINTING COUNCIL (SSPC) Painting Manual, Vol. 1; Good Painting Practice, Painting Manual, Vol. 2; Systems and Specifications

c. Source Quality Control

Errors of Shop Drawings, fabrication, correct fitting and alignment of the various metal items or component members shall be the responsibility of the Contractor. However, the Contractor shall permit the Architect or an independent inspection agency, if engaged by the Owner, to inspect work in progress in his shop. Such inspections shall not relieve the Contractor of his responsibility to furnish materials and workmanship in accordance with the Contract Documents.

d. Product Delivery, Handling and Storage

Handle and store in such manner as to prevent damage or disfigurement. Store finished items or components above ground on platforms, pallets or other supports and protect from harmful elements.

e. Protection

The Contractor shall protect any existing work subject to damage during the installation of the specified work and shall adequately protect specified work during installation.

f. Field Quality Control

Facilities shall be provided by the Contractor as needed for the proper inspection of the specified work, including temporary platforms, hoists, protective devices, electric current, etc. Improper workmanship, as determined by the Architect shall be corrected and replaced, at no additional cost to the Owner.

g. Materials

Products shall conform to the respective reference specifications and standards and to the requirements specified herein:

1. **STEEL AND IRON:** If not specified otherwise, use standard mill-finished structural steel shapes or bar iron in compliance with AISC Specifications for Design, Fabrication and Erection of Structural Steel for Buildings.
2. **BOLTS, NUTS, STUDS AND RIVETS:** ASTM A 307 & A 325
3. **SCREWS:** Fed. Spec. FF-S-85, Fed. Spec. FF-S-92, and Fed. Spec. FF-S-111

h. Fabrication

By mechanics skilled in the trade and in accordance with the manufacturer's directions, Metalwork shall be fabricated to allow for expansion and contraction of materials. Provide welding and bracing of adequate strength and durability, with tight, flush joints, dressed smooth and clean. Complete with bolts and nuts.

i. Measurements

Before fabrication, provide necessary field measurements and verify all measurements.

j. Metal Surfaces

Shall be clean and free from all scale, flake, rust, and rust pitting; well-formed and finished to shape and size, with sharp lines, angles and smooth surface. Shearing and punching shall leave clean true lines and surfaces. Weld or rivet permanent connections. Weld and flush rivets shall be used and finished flush smooth on surfaces that will be exposed after installation. Do not use screws or bolts where they can be avoided: when used, heads shall be countersunk, screwed up tight and threads nicked to prevent loosening.

k. Construction

Thickness of metals and details of assembly and supports shall give ample strength and stiffness for the minimum loads specified or indicated

Joints exposed to weather shall be formed to exclude water.

l. Shop Fabrication

Fabrication and assembly shall be done in the shop to the greatest extent possible.

m. Submittals

Shop Drawings. Submit along with catalogue, cuts, templates and erection and installation details, indicating thickness, type, grade, type of metal and dimensions. Show construction details, reinforcement, anchorage, and installation with relation to the construction.

n. Qualification of Welders

In accordance with AWS D1.1 with procedures, materials and equipment of the type required for the work.

o. Delivery and Storage

Protect from corrosion, deformation and other types of damage. Store items in an enclosed area free from contact with soil and weather. Contractor shall replace and removed damage items with new items.

p. Welding

Use welding electrode E70xx and perform welding, welding inspection and corrective welding in accordance with AWS D1.1. Weld in a manner to prevent permanent distortion of the connected parts. Weld continuously along the entire area of contact (except where lack welding is permitted. Do not lack weld exposed to connections.) Grind smooth visible weld in finished installation.

q. Metal Purlins

Metal purlins shall be of high grade galvanized steel with minimum tensile strength of 275 MPA, 1.4mm in thickness.

D. ROOFING WORKS

- a. The roof shall be covered with Ga. 24 pre-painted G.I. rib-type roofing sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 1/2" max. 3" long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the Ga. 24 pre-painted G.I. rib-type roofing sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
- b. The roof shall be covered with 6mm thick Rib-type polycarbonate sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 1/2" max. 3" long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the 6mm thick solid polycarbonate sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
- c. All roofing sheets adjacent to concrete hollow block and other masonry walls such as property line firewalls, shall be provided with Gauge 26 pre-painted plain G.I. Flashing to extend to the top and over to the other side of the wall. All fasteners shall be placed at the top of the corrugations of the roofing sheets to prevent water from standing around the fasteners.

E. WATERPROOFING**a. Waterproofing:**

Furnish all labor, materials, equipment, plant and other facilities required to complete all waterproofing work as shown on the drawings and herein specified. All applications shall be strictly performed by an approved waterproofing Contractor.

F. Testing:

Test waterproofed area by seventy-two (72) hours and check for any seepages.

Note Thickness should be as per Manufacturer's Specifications and Installation depending on the Areas to be applied with.

IV. ARCHITECTURAL WORKS**A. WALLS AND FLOOR FINISHES**

- a. 600mm x 600mm Homogeneous Floor Tiles including tile adhesive
- b. 50mm Concrete Topping for Tiles
- c. 300mm x 300mm Homogeneous Wall Tiles

B. CEILING FINISHES

- a. 6mm thick Fiber Cement Board including Metal Framing

C. DOORS & WINDOWS

- a. Follow as per approved plan and specifications

D. PAINTING WORKS

- a. All primers, thinners and putty, also waterproofing for internal and external application shall be the same brand as the specified material
- b. Application shall be as per paint Manufacturer's specification and recommendation
- c. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass, finishes and other works
- d. All applications and methods used shall strictly follow the Manufacturer's instructions and Specifications.
- e. All surfaces including masonry wall shall be thoroughly cleaned, puttied, sandpapered, rubbed and polished; masonry wall shall be treated with Neutralizer.
- f. All exposed finish hardware, lighting fixtures and accessories, glass and the like shall be adequately protected so that these are not stained with paint and other painting materials prior to painting works.
- g. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper.

V. SANITARY / PLUMBING WORKS

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).

- B Supply, installation and testing of the following
- B 1 Potable water supply system complete in all respects including but not limited to submittals, shop drawings, piping, water meters, valves, bibbs, insulation, all accessories required for complete and operational of the system.
 - B 2 Water service connections including but not limited to water meters, float valves. Any and all other works involve in providing the complete operation of the water supply system.
 - B 3 Soil waste and vent system complete in all respect including but not limited to connection to existing sewer, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
 - B 4 Storm drainage system complete in all respect including but not limited to connection to existing storm drainage, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
- C. Workmanship and installation methods shall conform to the best modern practice. Employ skilled tradesmen to perform work under the direct supervision of fully qualified personnel.
- D. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes as specified in plans and program of work.
- E. Install equipment in strict accordance with manufacturers written recommendations
- F. Physical sizes of all plant and equipment are to be suitable for the space allocated for the accommodation of such plant and equipment, taking into account the requirement of access for maintenance purposes.
- G. In selecting makes and types of equipment, the Contractor shall ascertain that facilities for proper maintenance, repair and replacement are provided
- H. Where the Contractor proposes to use an item of equipment other than that specified or detailed in the drawing, which requires any redesign of the system, drawings showing the layout of the equipment and such redesign as required therefore shall be prepared by the Contractor at his own expenses. Where such approved deviation necessitates a different quantity and arrangement of materials and equipment's from that originally specified or indicated in the drawings, the Contractor shall furnish and install any such additional materials and equipment's required by the system at no additional cost.
- I. Equipment catalogue and manufacturer's specifications must be submitted for examination, and details shall be submitted for approval before any equipment is to be ordered.
- J. This shall include all information necessary to ascertain the equipment comply with this specification and drawings. Data and sales catalogue of a general nature will not be accepted
- K. All materials, equipment, components and accessories shall be delivered to the Site in a new condition, properly packed and protected against damage or contamination or distortion, breakage or structural weakening due to handling, adverse weather or other circumstances and, as far as practicable, they shall be kept in the packing cases or under approved protective coverings until required for use.
- L. Any items suffering from damage during manufacture, or in transit, or on site whilst in storage or during erection shall be rejected and replaced without extra cost.
- M. All sanitary fittings and pipework shall be cleaned after installation and keep them in a new condition
- N. All installed pipelines shall be flushed through with water, rodded when necessary to ensure clearance of debris.
- O. Cleaning and flushing shall be carried out in sections as the installation becomes completed

- P. The Contractor shall carry out hydraulic test on the complete plumbing systems and the drainage system to show that it is functioning satisfactorily within the requirements of this Specification and local regulations.
- Q. The Contractor shall provide suitable test pumps and arrange for a supply of water required in connection with testing of pipework. The test pump shall be fitted with pressure gauges which shall be of suitable range for the pressure being applied.
- R. Hydraulic tests shall be carried out as the pipework is installed and shall be completed before chases in walls and ducts are closed. Also test shall be carried out prior to false ceilings and other finishes are installed.
- S. Testing apparatus shall be provided by the Contractor. Where any section of pipework or equipment is unable to withstand the maximum pipework test pressure, it shall be isolated during the pipework test then that section of pipework or equipment shall be re-tested at the appropriate test pressure.
- T. The Sanitary Contractor must carry out any additional tests required by the end-user and/or approving agency.
- U. Drainage pipe shall be tested by filling the pipe with 3m. of water higher than the test section and wait for 15 min, then check for leakage at every joints.
- V. Testing of drainage systems shall be carried out in sections by dividing the system horizontally. Each section shall comprise pipework and fitting for three floors/storeys required for testing.
- W. Drainage pressure pipe shall be hydraulic tested at minimum pressure 50 psi.
- X. Hangers and supports for plumbing piping and equipment shall withstand the effects of gravity loads and stresses within limits and under conditions indicated according to ASCE/SEI 7.
- Y. Install hangers and supports to allow controlled thermal and seismic movement of piping systems to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.
- Z. Install lateral bracing with pipe hangers and supports to prevent swaying.
- AA. Install building attachments within concrete slabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges and strainers, NPS 2-1/2 (DN 65) and larger and at changes in direction of piping. Install concrete inserts before concrete is placed; fasten inserts to forms and install reinforcing bars through openings at top of inserts.
- BB. Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment.
- CC. Install hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping.

VI. ELECTRICAL WORKS

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ the more stringent apply.
- C. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes.
- D. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen.

- E. When the tests and inspections have been completed, a label shall be attached to all devices tested. The label shall provide the name of the testing company, the date the tests were completed, and the initials of the person who performed the tests.

F PANELBOARDS

- F.1 Fabricate and test panelboards according to IEEE 344 to withstand seismic forces defined in Division 16 Sections 16073 and 16074 "Hangers and Supports for Electrical Systems and Vibration and Seismic controls for Electrical Systems" respectively
- F.2 Enclosures: Flush, Surface, Flush- and surface-mounted cabinets.
- F.2.1 Rated for environmental conditions at installed location.
- i. Indoor Dry and Clean Locations: NEMA 250, Type 1
 - ii. Outdoor Locations: NEMA 250, Type 3R
 - iii. Kitchen and Wash-Down Areas: NEMA 250, Type 4X, stainless steel.
 - iv. Other Wet or Damp Indoor Locations: NEMA 250, Type 4
 - v. Indoor Locations Subject to Dust, Falling Dirt, and Dripping Noncorrosive Liquids: NEMA 250, Type 5 or Type 12
- F.2.2 Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions; for flush-mounted fronts, overlap box.
- F.2.3 Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover.
- F.2.4 Skirt for Surface-Mounted Panelboards: Same gage and finish as panelboard front with flanges for attachment to panelboard, wall, and ceiling or floor.
- F.2.5 Gutter Extension and Barrier: Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections.
- F.2.6 Finishes:
- i. Panels and Trim: Steel and galvanized steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat.
 - ii. Back Boxes: Galvanized steel. Same finish as panels and trim.
 - iii. Fungus Proofing: Permanent fungicidal treatment for overcurrent protective devices and other components.
- F.2.7 Directory Card: Inside panelboard door, mounted in transparent card holder metal frame with transparent protective cover.
- F.3 Incoming Mains Location: Top or Bottom.
- F.4 Phase, Neutral, and Ground Buses:
- F.4.1 Material: Hard-drawn copper, 98 percent conductivity.
- F.4.2 Equipment Ground Bus: Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.

- F 4.3 Neutral Bus. 100 percent of phase bus 4 Extra-Capacity Neutral Bus
Neutral bus rated 200 percent of phase bus and UL listed as suitable for
nonlinear loads.


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TECHNICAL SPECIFICATIONS QUEZON CITY INFRASTRUCTURE PROJECT

PROJECT TITLE: PROPOSED REHABILITATION OF NAGKAISANG NAYON 1 DAY CARE CENTER

LOCATION: BARANGAY NAGKAISANG NAYON, DISTRICT 5, QUEZON CITY

I. GENERAL REQUIREMENTS

- a. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations and standards. Any works perform contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost arising therefrom.
- b. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- c. Should there be any change(s) in drawings or specifications, it is required to comply with the governing regulations, notify the implementing agency.
- d. Photographs shall be taken as, when and where directed at intervals of not more than one month. The photographs shall be sufficient in number and location to record the exact progress of the works. The photographs shall be retained and will become the property of the Government.
- e. Site verification / inspection shall be conducted to validate the scope of works. No extra compensation and extension of time shall be given due to negligence or inadvertence.
- f. The quality of materials shall be of the best grade of their respective kinds for the purpose. The work shall also be performed in the best and most capable manner in strict accordance with requirements of the plans and details. All materials not conforming to the requirements of these specifications shall be considered as defective.
- g. All equipment and installations shall meet or exceed minimum requirements of the standards and codes.
- h. Mobilization and Demobilization (if applicable)
 - i. Mobilization shall include all activities and related costs for transportation of personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the operations at the site.
 - ii. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not anymore required within the construction site including the disassembly, removal and site clean-up of offices and other facilities assembled on the site specifically for this contract.

- i. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen. Provide a competent, experienced, full-time supervisor who is authorized to make decisions on behalf of the Contractor.
- j. Temporary Facilities and Utilities
 - i. All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.
 - ii. Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations.
 - iii. Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication.
 - iv. Temporary enclosure shall be provided within the construction site with adequate guard lights, railings and proper signages.
 - v. Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period.
 - vi. Upon completion of the work, the temporary facilities shall be demolished, hauled-out and disposed properly.
- k. Adequate construction safety and health protection shall be provided at all times during the execution of work to both workers and property
 - i. A fully trained Medical Aide shall be employed permanently on the site who shall be engaged solely from medical duties.
 - ii. The medical room shall be provided in waterproof; it could be a building or room designated and used exclusively for the purpose and have a floor area of at least 15 square meters and a glazed window area of at least 2 square meters
 - iii. The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations suitable notices in the site
 - iv. Additional safety precautions shall be provided in the observance of pandemic. Protocols set-forth by the government shall be strictly followed.
- l. Necessary protections to the adjacent property shall be provided to avoid untoward incidents / accidents.
- m. Final cleaning of the work shall be employed prior to the final inspection for certification of final acceptance. Final cleaning shall be applied on each surface or unit of work and shall be of condition expected for a building cleaning and maintenance program

II. SITE WORKS

- A. All grades, lines, levels and dimensions shall be verified as indicated on the plans and details. Any discrepancies or inconsistencies shall be reported before commencing to work.
- B. Removal / demolition of existing structures shall be done in accordance to safety procedures
- C. All excavations shall be made to grade as indicated in the plans. Whenever water is encountered in the excavation process, it shall be removed by pumping, care being taken that the surrounding soil particles are not disturbed or removed.
- D. All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted wetting, tamping and rolling.

III. CIVIL / STRUCTURAL WORKS

A. MASONRY

- a. Masonry Units (CHB):
 - i. 100mm thick for all interior walls and exterior walls unless otherwise indicated.
 - ii. Use 400 psi for non-load bearing blocks and 700 psi for load bearing blocks where required.
 - iii. Where full height walls are constructed with concrete hollow blocks, these shall extend up to the bottom of beam or slab unless otherwise indicated on plans. Provide stiffener columns & lintel beams as specified in the structural drawings or as specified or as deemed required to assure a stabilized wall due to height & other considerations.
- b. Sand:

S-1, washed, clean and greenish in color.
- c. Mortar:

One part 'Portland' cement and two parts sand and water but not more than three parts sand and water.
- d. Plaster bond:

Apply plaster bond to all wall area

B. ROOFING WORKS

- a. The roof shall be covered with Ga. 24 pre-painted G.I. rib-type roofing sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 1/2" max. 3" long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the Ga. 24 pre-painted G.I. rib-type roofing sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
- b. The roof shall be covered with 6mm thick Rib-type polycarbonate sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 1/2" max. 3" long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the 6mm thick solid polycarbonate sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
- c. All roofing sheets adjacent to concrete hollow block and other masonry walls such as property line firewalls, shall be provided with Gauge 28 pre-painted plain G.I. Flashing to extend to the top and over to the other side of the wall. All fasteners shall be placed at the top of the corrugations of the roofing sheets to prevent water from standing around the fasteners.

C. WATERPROOFING

- a. Waterproofing:

Furnish all labor, materials, equipment, plant and other facilities required to complete all waterproofing work as shown on the drawings and herein specified. All applications shall be strictly performed by an approved waterproofing Contractor.
- b. Testing:

Test waterproofed area by seventy-two (72) hours and check for any seepages.

Note: Thickness should be as per Manufacturers Specifications and installation depending on the Areas to be applied with.

IV. ARCHITECTURAL WORKS

A. TILE WORKS

- a. Both broken and unbroken old tiles must be chip-off
- b. Surface should be smoothen & clean.
- c. Ceramic tiles shall be soaked in clean water prior to installation
- d. Lay the tiles true to profile as specified in the plan

B. PROVISION OF CABINET

- a. Good Lumber must be 2" x 2" x 10' for support frames and main frames
- b. 1/2" thick Plywood must be used.
- c. Countertop must be finished with 300mm x 300mm Tiles.

C. FABRICATED DOORS & WINDOWS

All doors and windows must be in approved quality as specified in the plan and program of works.

D. PAINTING WORKS

- a. All primers, thinners and putty, also waterproofing for internal and external application shall be the same brand as the specified material.
- b. Application shall be as per paint Manufacturer's specification and recommendation
- c. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass, finishes and other works.
- d. All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications.
- e. All surfaces including masonry wall shall be thoroughly cleaned, puttied, sandpapered, rubbed and polished; masonry wall shall be treated with Neutralizer.
- f. All exposed finish hardware, lighting fixtures and accessories, glass and the like shall be adequately protected so that these are not stained with paint and other painting materials prior to painting works.
- g. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper

V. SANITARY / PLUMBING WORKS

A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable)

B. Supply, installation and testing of the following:

- B.1 Potable water supply system complete in all respects including but not limited to submittals, shop drawings, piping, water meters, valves, bibbs, insulation, all accessories required for complete and operational of the system
- B.2 Water service connections including but not limited to water meters, float valves. Any and all other works involve in providing the complete operation of the water supply system
- B.3 Soil waste and vent system complete in all respect including but not limited to connection to existing sewer, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational

- B.4 Storm drainage system complete in all respect including but not limited to connection to existing storm drainage, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
- C Workmanship and installation methods shall conform to the best modern practice. Employ skilled tradesmen to perform work under the direct supervision of fully qualified personnel.
- D. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes as specified in plans and program of work.
- E. Install equipment in strict accordance with manufacturers written recommendations.
- F. Physical sizes of all plant and equipment are to be suitable for the space allocated for the accommodation of such plant and equipment, taking into account the requirement of access for maintenance purposes.
- G In selecting makes and types of equipment, the Contractor shall ascertain that facilities for proper maintenance, repair and replacement are provided.
- H. Where the Contractor proposes to use an item of equipment other than that specified or detailed in the drawing, which requires any redesign of the system, drawings showing the layout of the equipment and such redesign as required therefore shall be prepared by the Contractor at his own expenses. Where such approved deviation necessitates a different quantity and arrangement of materials and equipment's from that originally specified or indicated in the drawings, the Contractor shall furnish and install any such additional materials and equipment's required by the system at no additional cost.
- I. Equipment catalogue and manufacturer's specifications must be submitted for examination and details shall be submitted for approval before any equipment is to be ordered.
- J This shall include all information necessary to ascertain the equipment comply with this specification and drawings. Data and sales catalogue of a general nature will not be accepted.
- K. All materials, equipment, components and accessories shall be delivered to the Site in a new condition, properly packed and protected against damage or contamination or distortion, breakage or structural weakening due to handling, adverse weather or other circumstances and, as far as practicable, they shall be kept in the packing cases or under approved protective coverings until required for use.
- L. Any items suffering from damage during manufacture, or in transit, or on site whilst in storage or during erection shall be rejected and replaced without extra cost.
- M. All sanitary fittings and pipework shall be cleaned after installation and keep them in a new condition.
- N. All installed pipelines shall be flushed through with water, rodded when necessary to ensure clearance of debris.
- O. Cleaning and flushing shall be carried out in sections as the installation becomes completed.
- P The Contractor shall carry out hydraulic test on the complete plumbing systems and the drainage system to show that it is functioning satisfactorily within the requirements of this Specification and local regulations.
- Q. The Contractor shall provide suitable test pumps and arrange for a supply of water required in connection with testing of pipework. The test pump shall be fitted with pressure gauges which shall be of suitable range for the pressure being applied.
- R. Hydraulic tests shall be carried out as the pipework is installed and shall be completed before chases in walls and ducts are closed. Also test shall be carried out prior to false ceilings and other finishes are installed.
- S Testing apparatus shall be provided by the Contractor. Where any section of pipework or equipment is unable to withstand the maximum pipework test pressure, it shall be

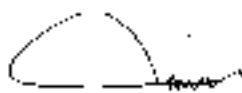
isolated during the pipework test then that section of pipework or equipment shall be re-tested at the appropriate test pressure.

- T. The Sanitary Contractor must carry out any additional tests required by the end-user and/or approving agency
- U. Drainage pipe shall be tested by filling the pipe with 3m. of water higher than the test section and wait for 15 min, then check for leakage at every joints.
- V. Testing of drainage systems shall be carried out in sections by dividing the system horizontally. Each section shall comprise pipework and fitting for three floors/storeys required for testing.
- W. Drainage pressure pipe shall be hydraulic tested at minimum pressure 50 psi.
- X. Hangers and supports for plumbing piping and equipment shall withstand the effects of gravity loads and stresses within limits and under conditions indicated according to ASCE/SEI 7
- Y. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.
- Z. Install lateral bracing with pipe hangers and supports to prevent swaying.
- AA. Install building attachments within concrete slabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges, and strainers, NPS 2-1/2 (DN 65) and larger and at changes in direction of piping. Install concrete inserts before concrete is placed. Fasten inserts to forms and install reinforcing bars through openings at top of inserts
- BB. Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment.
- CC. Install hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping

VI. ELECTRICAL WORKS

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- C. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes.
- D. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen.
- E. When the tests and inspections have been completed, a label shall be attached to all devices tested. The label shall provide the name of the testing company, the date the tests were completed, and the initials of the person who performed the tests.
- F. PANELBOARDS
 - F.1 Fabricate and test panelboards according to IEEE 344 to withstand seismic forces defined in Division 16 Sections 16073 and 16074 "Hangers and Supports for Electrical Systems and Vibration and Seismic controls for Electrical Systems" respectively.
 - F.2 Enclosures. Flush, Surface, Flush- and surface-mounted cabinets.
 - F.2.1 Rated for environmental conditions at installed location
 - Indoor Dry and Clean Locations NEMA 250, Type 1.

- ii. Outdoor Locations: NEMA 250, Type 3R
 - iii. Kitchen and Wash-Down Areas: NEMA 250, Type 4X, stainless steel.
 - iv. Other Wet or Damp Indoor Locations: NEMA 250 Type 4
 - v. Indoor Locations Subject to Dust, Falling Dirt, and Dripping Noncorrosive Liquids: NEMA 250, Type 5 or Type 12.
- F.2.2 Front. Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions, for flush-mounted fronts, overlap box.
- F.2.3 Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover.
- F.2.4 Skirt for Surface-Mounted Panelboards: Same gage and finish as panelboard front with flanges for attachment to panelboard, wall, and ceiling or floor.
- F.2.5 Gutter Extension and Barrier. Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections.
- F.2.6 Finishes.
- i. Panels and Trim: Steel and galvanized steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat.
 - ii. Back Boxes: Galvanized steel Same finish as panels and trim.
 - iii. Fungus Proofing: Permanent fungicidal treatment for overcurrent protective devices and other components.
- F.2.7 Directory Card: Inside panelboard door, mounted in transparent card holder metal frame with transparent protective cover.
- F.3 Incoming Mains Location: Top or Bottom.
- F.4 Phase, Neutral, and Ground Buses:
- F.4.1 Material: Hard-drawn copper, 98 percent conductivity
 - F.4.2 Equipment Ground Bus. Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.
 - F.4.3 Neutral Bus: 100 percent of phase bus 4 Extra-Capacity Neutral Bus Neutral bus rated 200 percent of phase bus and UL listed as suitable for nonlinear loads.



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TECHNICAL SPECIFICATIONS
QUEZON CITY INFRASTRUCTURE PROJECT

PROJECT TITLE: PROPOSED REHABILITATION OF ST. ANDREW DAY CARE CENTER

LOCATION: BARANGAY NAGKAISANG NAYON, DISTRICT 5, QUEZON CITY

I. GENERAL REQUIREMENTS

- a. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations and standards. Any works perform contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost arising therefrom.
- b. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- c. Should there be any change(s) in drawings or specifications, it is required to comply with the governing regulations, notify the implementing agency.
- d. Photographs shall be taken as when and where directed at intervals of not more than one month. The photographs shall be sufficient in number and location to record the exact progress of the works. The photographs shall be retained and will become the property of the Government.
- e. Site verification / inspection shall be conducted to validate the scope of works. No extra compensation and extension of time shall be given due to negligence or inadvertence.
- f. The quality of materials shall be of the best grade of their respective kinds for the purpose. The work shall also be performed in the best and most capable manner in strict accordance with requirements of the plans and details. All materials not conforming to the requirements of these specifications shall be considered as defective
- g. All equipment and installations shall meet or exceed minimum requirements of the standards and codes.
- h. Mobilization and Demobilization (if applicable)
 - i. Mobilization shall include all activities and related costs for transportation of personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the operations at the site
 - ii. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not anymore required within the construction site including the disassembly, removal and site clean-up of offices and other facilities assembled on the site specifically for this contract

- i. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen. Provide a competent, experienced full-time supervisor who is authorized to make decisions on behalf of the Contractor
- j. Temporary Facilities and Utilities
 - i. All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.
 - ii. Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations.
 - iii. Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication.
 - iv. Temporary enclosure shall be provided within the construction site with adequate guard lights, railings and proper signages
 - v. Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period.
 - vi. Upon completion of the work the temporary facilities shall be demolished, hauled-out and disposed properly
- k. Adequate construction safety and health protection shall be provided at all times during the execution of work to both workers and property.
 - i. A fully trained Medical Aide shall be employed permanently on the site who shall be engaged solely from medical duties
 - ii. The medical room shall be provided in waterproof; it could be a building or room designated and used exclusively for the purpose and have a floor area of at least 15 square meters and a glazed window area of at least 2 square meters.
 - iii. The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations suitable notices in the site.
 - iv. Additional safety precautions shall be provided in the observance of pandemic Protocols set-forth by the government shall be strictly followed.
- l. Necessary protections to the adjacent property shall be provided to avoid untoward incidents / accidents.
- m. Final cleaning of the work shall be employed prior to the final inspection for certification of final acceptance. Final cleaning shall be applied on each surface or unit of work and shall be of condition expected for a building cleaning and maintenance program.

ii. **SITE WORKS**

- A. All grades, lines, levels and dimensions shall be verified as indicated on the plans and details. Any discrepancies or inconsistencies shall be reported before commencing to work.
- B. Removal / demolition of existing structures shall be done in accordance to safety procedures
- C. All excavations shall be made to grade as indicated in the plans. Whenever water is encountered in the excavation process, it shall be removed by pumping, care being taken that the surrounding soil particles are not disturbed or removed.
- D. All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted wetting, tamping and rolling.

III. CIVIL / STRUCTURAL WORKS

A. MASONRY

- a. **Masonry Units (CHB).**
 - i. 100mm thick for all interior walls and exterior walls unless otherwise indicated
 - ii. Use 400 psi for non-load bearing blocks and 700 psi for load bearing blocks where required.
 - iii. Where full height walls are constructed with concrete hollow blocks, these shall extend up to the bottom of beam or slab unless otherwise indicated on plans. Provide stiffener columns & lintel beams as specified in the structural drawings or as specified or as deemed required to assure a stabilized wall due to height & other considerations.
- b. **Sand.**
S-1, washed, clean and greenish in color.
- c. **Mortar:**
One part "Portland" cement and two parts sand and water but not more than three parts sand and water
- d. **Plaster bond**
Apply plaster bond to all wall area.

B. WATERPROOFING

- a. **Waterproofing:**
Furnish all labor, materials, equipment, plant and other facilities required to complete all waterproofing work as shown on the drawings and herein specified. All applications shall be strictly performed by an approved waterproofing Contractor
- b. **Testing:**
Test waterproofed area by seventy-two (72) hours and check for any seepages.

Note: Thickness should be as per Manufacturers Specifications and Installation depending on the Areas to be applied with.

IV. ARCHITECTURAL WORKS

A. TILE WORKS

- a. Both broken and unbroken old tiles must be chip-off
- b. Surface should be smoother & clean.
- c. Ceramic tiles shall be soaked in clean water prior to installation
- d. Lay the tiles true to profile as specified in the plan

B. PROVISION OF CABINET

- a. Good Lumber must be 2" x 2" x 10' for support frames and main frames.
- b. 1/2" thick Plywood must be used.
- c. Countertop must be finished with 300mm x 300mm Tiles

C. FABRICATED DOORS & WINDOWS

All doors and windows must be in approved quality as specified in the plan and program of works.

D. PAINTING WORKS

- a. All primers, thinners and putty, also waterproofing for internal and external application shall be the same brand as the specified material
- b. Application shall be as per paint Manufacturer's specification and recommendation.
- c. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminium, glass, finishes and other works
- d. All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications.
- e. All surfaces including masonry wall shall be thoroughly cleaned, puttied, sandpapered, rubbed and polished; masonry wall shall be treated with Neutralizer.
- f. All exposed finish hardware, lighting fixtures and accessories, glass and the like shall be adequately protected so that these are not stained with paint and other painting materials prior to painting works
- g. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper.

V. SANITARY / PLUMBING WORKS

- A. Comply with the current applicable codes, ordinances and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).
- B. Supply, installation and testing of the following:
 - B.1 Potable water supply system complete in all respects including but not limited to submittals, shop drawings, piping, water meters, valves, bibbs, insulation all accessories required for complete and operational of the system
 - B.2 Water service connections including but not limited to water meters, float valves. Any and all other works involve in providing the complete operation of the water supply system.
 - B.3 Soil waste and vent system complete in all respect including but not limited to connection to existing sewer, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational
 - B.4 Storm drainage system complete in all respect including but not limited to connection to existing storm drainage, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational
- C. Workmanship and installation methods shall conform to the best modern practice. Employ skilled tradesmen to perform work under the direct supervision of fully qualified personnel
- D. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes as specified in plans and program of work.
- E. Install equipment in strict accordance with manufacturers written recommendations.
- F. Physical sizes of all plant and equipment are to be suitable for the space allocated for the accommodation of such plant and equipment, taking into account the requirement of access for maintenance purposes.
- G. In selecting makes and types of equipment, the Contractor shall ascertain that facilities for proper maintenance, repair and replacement are provided.
- H. Where the Contractor proposes to use an item of equipment other than that specified or detailed in the drawing, which requires any redesign of the system, drawings showing the layout of the equipment and such redesign as required therefore shall be prepared by the

Contractor at his own expenses. Where such approved deviation necessitates a different quantity and arrangement of materials and equipment's from that originally specified or indicated in the drawings, the Contractor shall furnish and install any such additional materials and equipment's required by the system at no additional cost.

- I. Equipment catalogue and manufacturer's specifications must be submitted for examination and details shall be submitted for approval before any equipment is to be ordered.
- J. This shall include all information necessary to ascertain the equipment comply with this specification and drawings. Data and sales catalogue of a general nature will not be accepted.
- K. All materials, equipment, components and accessories shall be delivered to the Site in a new condition, properly packed and protected against damage or contamination or distortion, breakage or structural weakening due to handling, adverse weather or other circumstances and, as far as practicable, they shall be kept in the packing cases or under approved protective coverings until required for use.
- L. Any items suffering from damage during manufacture, or in transit, or on site whilst in storage or during erection shall be rejected and replaced without extra cost.
- M. All sanitary fittings and pipework shall be cleaned after installation and keep them in a new condition.
- N. All installed pipelines shall be flushed through with water, radded when necessary to ensure clearance of debris.
- O. Cleaning and flushing shall be carried out in sections as the installation becomes completed.
- P. The Contractor shall carry out hydraulic test on the complete plumbing systems and the drainage system to show that it is functioning satisfactorily within the requirements of this Specification and local regulations.
- Q. The Contractor shall provide suitable test pumps and arrange for a supply of water required in connection with testing of pipework. The test pump shall be fitted with pressure gauges which shall be of suitable range for the pressure being applied.
- R. Hydraulic tests shall be carried out as the pipework is installed and shall be completed before chases in walls and ducts are closed. Also test shall be carried out prior to false ceilings and other finishes are installed.
- S. Testing apparatus shall be provided by the Contractor. Where any section of pipework or equipment is unable to withstand the maximum pipework test pressure, it shall be isolated during the pipework test than that section of pipework or equipment shall be re-tested at the appropriate test pressure.
- T. The Sanitary Contractor must carry out any additional tests required by the end-user and/or approving agency.
- U. Drainage pipe shall be tested by filling the pipe with 3m. of water higher than the test section and wait for 15 min, then check for leakage at every joints.
- V. Testing of drainage systems shall be carried out in sections by dividing the system horizontally. Each section shall comprise pipework and fitting for three floors/storeys required for testing.
- W. Drainage pressure pipe shall be hydraulic tested at minimum pressure 50 psi.
- X. Hangers and supports for plumbing piping and equipment shall withstand the effects of gravity loads and stresses within limits and under conditions indicated according to ASCE/SEI 7.
- Y. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.

- Z. Install lateral bracing with pipe hangers and supports to prevent swaying.
- AA. Install building attachments within concrete slabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges, and strainers, NPS 2-1/2 (DN 65) and larger and at changes in direction of piping. Install concrete inserts before concrete is placed, fasten inserts to forms and install reinforcing bars through openings at top of inserts.
- BB. Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment.
- CC. Install hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping

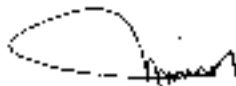
VI. ELECTRICAL WORKS

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction the rules, regulations and requirements of the utility companies (as applicable)
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- C. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes
- D. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen.
- E. When the tests and inspections have been completed, a label shall be attached to all devices tested. The label shall provide the name of the testing company, the date the tests were completed, and the initials of the person who performed the tests.

F. PANELBOARDS

- F.1 Fabricate and test panelboards according to IEEE 344 to withstand seismic forces defined in Division 16 Sections 16073 and 16074 "Hangers and Supports for Electrical Systems and Vibration and Seismic controls for Electrical Systems" respectively.
- F.2 Enclosures: Flush, Surface, Flush- and surface-mounted cabinets.
 - F.2.1 Rated for environmental conditions at installed location.
 - i. Indoor Dry and Clean Locations: NEMA 250, Type 1.
 - ii. Outdoor Locations: NEMA 250, Type 3R.
 - iii. Kitchen and Wash-Down Areas: NEMA 250, Type 4X, stainless steel.
 - iv. Other Wet or Damp Indoor Locations: NEMA 250, Type 4.
 - v. Indoor Locations Subject to Dust, Falling Dirt, and Dripping Noncorrosive Liquids: NEMA 250, Type 5 or Type 12.
 - F.2.2 Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions, for flush-mounted fronts, overlap box
 - F.2.3 Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover
 - F.2.4 Skirt for Surface-Mounted Panelboards: Same gage and finish as panelboard front with flanges for attachment to panelboard, wall, and ceiling or floor.

- F.2.5 Gutter Extension and Barrier: Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections
- F.2.8 Finishes:
- i. Panels and Trim. Steel and galvanized steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat
 - ii. Back Boxes: Galvanized steel Same finish as panels and trim
 - iii. Fungus Proofing. Permanent fungicidal treatment for overcurrent protective devices and other components.
- F.2.7 Directory Card: Inside panelboard door, mounted in transparent card holder metal frame with transparent protective cover
- F.3 Incoming Mains Location: Top or Bottom.
- F.4 Phase, Neutral, and Ground Buses:
- F.4.1 Material Hard-drawn copper, 98 percent conductivity
- F.4.2 Equipment Ground Bus: Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.
- F.4.3 Neutral Bus: 100 percent of phase bus 4. Extra-Capacity Neutral Bus: Neutral bus rated 200 percent of phase bus and UL listed as suitable for nonlinear loads



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TECHNICAL SPECIFICATIONS QUEZON CITY INFRASTRUCTURE PROJECT

PROJECT TITLE: PROPOSED REHABILITATION OF TS CRUZ DAY CARE CENTER
LOCATION: BARANGAY SAN AGUSTIN, DISTRICT 6, QUEZON CITY

I. GENERAL REQUIREMENTS

- a. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations and standards. Any works perform contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost arising therefrom.
- b. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- c. Should there be any change(s) in drawings or specifications, it is required to comply with the governing regulations, notify the implementing agency
- d. Photographs shall be taken as, when and where directed at intervals of not more than one month. The photographs shall be sufficient in number and location to record the exact progress of the works. The photographs shall be retained and will become the property of the Government.
- e. Site verification / inspection shall be conducted to validate the scope of works. No extra compensation and extension of time shall be given due to negligence or inadvertence.
- f. The quality of materials shall be of the best grade of their respective kinds for the purpose. The work shall also be performed in the best and most capable manner in strict accordance with requirements of the plans and details. All materials not conforming to the requirements of these specifications shall be considered as defective.
- g. All equipment and installations shall meet or exceed minimum requirements of the standards and codes.
- h. Mobilization and Demobilization (if applicable)
 - i. Mobilization shall include all activities and related costs for transportation of personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the operations at the site.
 - ii. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not anymore required within the construction site including the disassembly, removal and site clean-up of offices and other facilities assembled on the site specifically for this contract.
- i. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen. Provide a competent experienced, full-time supervisor who is authorized to make decisions on behalf of the Contractor.
- j. Temporary Facilities and Utilities
 - i. All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.

- i. Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations.
 - ii. Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication
 - iv. Temporary enclosure shall be provided within the construction site with adequate guard lights, railings and proper signages.
 - v. Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period.
 - vi. Upon completion of the work, the temporary facilities shall be demolished, hauled-out and disposed properly
- k. Adequate construction safety and health protection shall be provided at all times during the execution of work to both workers and property
- i. A fully trained Medical Aide shall be employed permanently on the site who shall be engaged solely from medical duties.
 - ii. The medical room shall be provided in waterproof; it could be a building or room designated and used exclusively for the purpose and have a floor area of at least 15 square meters and a glazed window area of at least 2 square meters.
 - iii. The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations suitable notices in the site
 - iv. Additional safety precautions shall be provided in the observance of pandemic Protocols set-forth by the government shall be strictly followed.
- l. Necessary protections to the adjacent property shall be provided to avoid untoward incidents / accidents.
- m. Final cleaning of the work shall be employed prior to the final inspection for certification of final acceptance. Final cleaning shall be applied on each surface or unit of work and shall be of condition expected for a building cleaning and maintenance program.

II. SITE WORKS

- A. All grades, lines, levels and dimensions shall be verified as indicated on the plans and details. Any discrepancies or inconsistencies shall be reported before commencing to work.
- B. Removal / demolition of existing structures shall be done in accordance to safety procedures
- C. All excavations shall be made to grade as indicated in the plans. Whenever water is encountered in the excavation process, it shall be removed by pumping, care being taken that the surrounding soil particles are not disturbed or removed.
- D. All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted wetting, tamping and rolling.

III. CIVIL / STRUCTURAL WORKS

A. CONCRETE WORK

- a. Delivery, Storage, and Handling: All materials shall be so delivered, stored, and handled as to prevent the inclusion of foreign materials and the damage of materials by water or breakage. Package materials shall be delivered and stored in original packages until ready to be used. Packages or materials showing evidence of water or other damage shall be rejected.
- b. Unless otherwise specified herein, concrete works shall conform to the requirements of the ACI Building Code. Full cooperation shall be given on trades to install embedded

items. Provisions shall be made for setting items not placed in the forms. Before concrete is placed, embedded items shall have been inspected and tested for concrete aggregates and other materials shall have been done.

c. Materials

- i. Cement for concrete shall conform to the requirements of specifications for Portland Cement (ASTM C - 150)
- ii. Water used in mixing concrete shall be clean and free from other injurious amounts of oils, acids, alkaline, organic materials or other substances that may be deleterious to concrete or steel
- iii. Fine aggregates shall be beach or river sand conforming to ASTM C33, "Specification for Concrete Aggregates". Sand particles shall be coarse, sharp, clean free from salt, dust, loam, dirt and all foreign matters.
- iv. Coarse aggregates shall be either natural gravel or crushed rock conforming to the "Specifications for Concrete Aggregates (ASTM C33). The minimum size of aggregates shall be larger than one fifth (1/5) of the narrowest dimensions between sides of the forms within which the concrete is to be cast nor larger than three fourths (3/4) of the minimum clear spacing between reinforcing bars or between reinforcing bars and forms.

d. Proportioning and Mixing

- i. Proportioning and mixing of concrete shall conform to the requirements for Item 405 of the standard specification with the following proportions.

Cement : Sand : Gravel

- Class 'A' - 1 : 2 : 3
- Class 'B' - 1 : 2 : 4
- Class 'C' - 1 : 2 : ½

- ii. Concrete mixture to be used for concrete shall conform with the structural requirements
- iii. Mixing - concrete shall be machine mixed. Mixing shall begin within 30 minutes after the cement has been added to the aggregates.

e. Forms

- i. General - Forms shall be used whatever necessary to confine the concrete and shape it to the required lines, or to insure the concrete of contamination with materials coming from adjacent excavated surfaces. Forms shall have sufficient strength to withstand the pressure resulting from placement and vibration of the concrete, and shall be maintained rigidly in correct position. Forms shall be sufficiently tight to prevent loss or mortar from the concrete. Forms shall be ½" waterproof plywood and form lumber.
- ii. Cleaning of Forms - before placing the concrete, the contact surfaces of the formed shall be cleaned of encrustations of mortar, the grout or other foreign material
- iii. Removal of Forms - forms shall be removed in a manner which will prevent damage to the concrete. Forms shall not be removed without approval. Any repairs of surface imperfections shall be formed at once and airing shall be started as soon as the surface is sufficiently hard to permit it without further damage

f. Placing Reinforcement:

Steel reinforcement shall be provided as indicated, together with all necessary wire ties, chairs, spacer supported and other devices necessary to install and secure the reinforcement properly. All reinforcement, when placed, shall be free from loose, flaky rust and scale, oil grease, clay and other coating and foreign substances that would reduce or destroy its bond with concrete. Reinforcement shall be placed accurately

and secured in place by use of metal or concrete supports, spacers and ties. Such supports shall be used in such manner that they will not be exposed or contribute in any way, to the discoloration or deterioration of the concrete.

g. Conveying and Placing Concrete:

- i. Conveying – concrete shall be conveyed from mixer to forms as rapidly as applicable, by methods which will prevent segregation, or loss of ingredients. There will be no vertical drop greater than 1.5 meters except where suitable equipment is provided to prevent segregation and where specifically authorized.
- ii. Placing – concrete shall be worked readily into the corners and angles of the forms and around all reinforcement and imbedded items without permitting the material to segregate, concrete shall be deposited as close as possible to its final position in the forms so that flow within the mass does not exceed two (2) meters and consequently segregation is reduced to a minimum near forms or embedded items. or elsewhere as directed, the discharge shall be so controlled that the concrete may be effectively compacted into horizontal layers not exceeding 30 centimeters in depth within the maximum lateral movement specified.
- iii. Time interval between mixing and placing. Concrete shall be placed before initial set has occurred and before it has contained its water content for more than 45 minutes. No concrete mix shall be placed before 60 complete revolution of the machine mixer.
- iv. Consolidation of Concrete – concrete shall be consolidated with the aid of mechanical vibrating equipment and supplemented by the hand spading and tamping. Vibrators shall not be inserted into lower courses that have commenced initial set, and reinforcement embedded in concrete beginning to set or already set shall not be disturbed by vibrators. Consolidation around major embedded parts shall be by hand spading and tamping and vibrators shall not be used.
- v. Placing Concrete through reinforcement – In placing concrete through reinforcement, care shall be taken that no segregation of the coarse aggregate occurs. On the bottom of beams and slabs, where the congestion of steel near the forms makes placing difficult, a layer of mortar of the same cement-sand ratios as used in concrete shall be first deposited to cover the surfaces.

h. Curing

- i. General – All concrete shall be moist cured for a period not less than seven (7) consecutive days by an approved method or combination applicable to local conditions.
- ii. Moist Curing – The surface of the concrete shall be kept continuously wet by covering with burlap plastic or other approved materials thoroughly saturated with water and keeping the covering spraying or intermittent hosing.

i. Finishing

- i. Concrete surfaces shall not be plastered unless otherwise indicated. Exposed concrete surfaces shall be formed with plywood, and after removal of forms, the surfaces shall be smooth, true to line and shall present or finished appearance except for minor defects which can be easily repaired with patching with cement mortar, or can be ground to a smooth surface to remove all joint marks of the form works.
- ii. Concrete Slabs on Fill. The concrete slabs on fill shall be laid on a prepared foundation consisting of sub grade and granular fill with thickness equal to the thickness of the overlaying slab except when indicated.

B. MASONRY WORKS

a. Masonry Units (CMU)

100mm thick for all interior walls and 150mm thick for all exterior walls unless otherwise indicated.

Use 400 psi for non-load bearing blocks and 700 psi for load bearing blocks where required.

Where full height walls are constructed with concrete hollow blocks these shall extend up to the bottom of beam or slab unless otherwise indicated on plans. Provide stiffener columns & lintel beams as specified in the structural drawings or as specified or as deemed required to assure a stabilized wall due to height & other considerations

b. Sand:

S-1, washed, clean and greenish in color.

c. Mortar

One part "Portland" cement and two parts sand and water but not more than three parts sand and water.

d. Plaster bond:

Apply plaster bond to all wall area.

C. METAL WORKS

a. Description

Metal works shall conform to the approved plans and to the Standard Specifications.

b. Reference Standards

Comply with the latest edition of the following as applicable, unless otherwise specified or modified.

1. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), 1978 Specification for the Design, Fabrication and Erection of Structural Steel for Buildings. Code of Standard Practice for Steel Buildings and Bridges; Specification for Architecturally Exposed Structural Steel.
2. AMERICAN WELDING SOCIETY (AWS): Standard Welding Symbols A2 068; Standard Welding Code D1 1-1973 (Rev 1-73 & 2-74) (To govern if in conflict with AISC)
3. RESEARCH COUNCIL ON RIVETED AND BOLTED JOINTS OF THE ENGINEERING FOUNDATION (RCRBJ): Specification for Structural Joists using ASTM A-325-76s Bolts.
4. STRUCTURAL STEEL PAINTING COUNCIL (SSPC): Painting Manual, Vol. 1; Good Painting Practice, Painting Manual Vol 2, Systems and Specifications.

c. Source Quality Control

Errors of Shop Drawings, fabrication, correct fitting and alignment of the various metal items or component members shall be the responsibility of the Contractor. However, the Contractor shall permit the Architect or an independent inspection agency, if engaged by the Owner, to inspect work in progress in his shop. Such inspections shall not relieve the Contractor of his responsibility to furnish materials and workmanship in accordance with the Contract Documents.

d. **Product Delivery, Handling and Storage**

Handle and store in such manner as to prevent damage or disfigurement. Store finished items or components above ground on platforms, pallets or other supports and protect from harmful elements.

e. **Protection**

The Contractor shall protect any existing work subject to damage during the installation of the specified work and shall adequately protect specified work during installation.

f. **Field Quality Control**

Facilities shall be provided by the Contractor as needed for the proper inspection of the specified work, including temporary platforms, hoists, protective devices, electric current, etc. Improper workmanship, as determined by the Architect shall be corrected and replaced, at no additional cost to the Owner.

g. **Materials**

Products shall conform to the respective reference specifications and standards and to the requirements specified herein:

- a) **STEEL AND IRON:** If not specified otherwise, use standard mill-finished structural steel shapes or bar iron. Incompliance with AISC Specifications for Design, Fabrication and Erection of Structural Steel for Buildings.
- b) **BOLTS, NUTS, STUDS AND RIVETS:** ASTM A 307 & A 325
- c) **SCREWS:** Fed. Spec. FF-S-85, Fed. Spec. FF-S-92, and Fed. Spec. FF-S-111

h. **Fabrication**

By mechanics skilled in the trade and in accordance with the manufacturer's directions, Metalwork shall be fabricated to allow for expansion and contraction of materials. Provide welding and bracing of adequate strength and durability, with tight, flush joints, dressed smooth and clean. Complete with bolts and nuts.

i. **Measurements**

Before fabrication, provide necessary field measurements and verify all measurements.

j. **Metal Surfaces**

Shall be clean and free from all scale, flake, rust, and rust pitting; well-formed and finished to shape and size, with sharp lines, angles and smooth surface. Shearing and punching shall leave clean true lines and surfaces. Weld or rivet permanent connections. Weld and flush rivets shall be used and finished flush smooth on surfaces that will be exposed after installation. Do not use screws or bolts where they can be avoided; when used, heads shall be countersunk, screwed up tight and threads nicked to prevent loosening.

k. Construction

Thickness of metals and details of assembly and supports shall give ample strength and stiffness for the minimum loads specified or indicated. Joints exposed to weather shall be formed to exclude water.

l. Shop Fabrication

Fabrication and assembly shall be done in the shop to the greatest extent possible.

m. Submittals

Shop Drawings Submit along with catalogue, cuts, templates and erection and installation details, indicating thickness, type, grade, type of metal and dimensions. Show construction details, reinforcement, anchorage, and installation with relation to the construction.

n. Delivery and Storage

Protect from corrosion, deformation and other types of damage. Store items in an enclosed area free from contact with soil and weather. Contractor shall replace and removed damage items with new items.

o. Welding

Use welding electrode E70xx and perform welding, welding inspection and corrective welding in accordance with AWS D1.1. Weld in a manner to prevent permanent distortion of the connected parts. Weld continuously along the entire area of contact (except where tack welding is permitted. Do not tack weld exposed to connections.) Grind smooth visible weld in finished installation.

p. Metal Purlins

Metal purlins shall be of high grade galvanized steel with minimum tensile strength of 275 MPA, 1.4mm in thickness.

D. ROOFING WORKS

- a. The roof shall be covered with Ga. 24 pre-painted G.I. rib-type roofing sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 1/4" max. 3" long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the Ga. 24 pre-painted G.I. rib-type roofing sheets. They shall lap the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
- b. All roofing sheets adjacent to concrete hollow block and other masonry walls such as property line firewalls, shall be provided with Gauge 26 pre-painted plain G.I. Flashing to extend to the top and over to the other side of the wall. All fasteners shall be placed at the top of the corrugations of the roofing sheets to prevent water from standing around the fasteners.

E. WATERPROOFING

a. Waterproofing

Furnish all labor, materials, equipment, plant and other facilities required to complete all waterproofing work as shown on the drawings and herein specified. All applications shall be strictly performed by an approved waterproofing Contractor.

- b. Test waterproofed area by seventy-two (72) hours and check for any seepages

Note: Thickness should be as per Manufacturers Specifications and Installation depending on the Areas to be applied with.

IV. ARCHITECTURAL WORKS

A. FLOOR AND WALL FINISHES

- a. 600mm x 600mm Non-Skid Homogeneous Tiles
- b. 400mm x 400mm Non-Skid Homogeneous Tiles
- c. 400mm x 400mm Homogeneous Tiles
- d. 6mm thk Double Wall Fiber Cement Board including Metal Framing

B. DOORS

- a. Follow as per approved plan and specifications

C. PAINTING WORKS

- a. All primers, thinners and putty, also waterproofing for internal and external application shall be the same brand as the specified material.
- b. Application shall be as per paint Manufacturer's specification and recommendation.
- c. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass, finishes and other works.
- d. All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications.
- e. All surfaces including masonry wall shall be thoroughly cleaned, putted, sandpapered, rubbed and polished; masonry wall shall be treated with Neutralizer
- f. All exposed finish hardware, lighting fixtures and accessories, glass and the like shall be adequately protected so that these are not stained with paint and other painting materials prior to painting works.
- g. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper.

V. SANITARY / PLUMBING WORKS

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable)
- B. Supply, installation and testing of the following:
 - B.1 Potable water supply system complete in all respects including but not limited to submittals, shop drawings piping, water meters, valves, bibbs, insulation, all accessories required for complete and operational of the system.
 - B.2 Water service connections including but not limited to water meters, float valves. Any and all other works involve in providing the complete operation of the water supply system.
 - B.3 Soil waste and vent system complete in all respect including but not limited to connection to existing sewer submittals, shop drawings, pipes fittings, valves, cleanout, drains, etc. Complete and operational.
 - B.4 Storm drainage system complete in all respect including but not limited to connection to existing storm drainage, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational
- C. Workmanship and installation methods shall conform to the best modern practice. Employ skilled tradesmen to perform work under the direct supervision of fully qualified personnel.
- D. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes as specified in plans and program of work.
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- F. Physical sizes of all plant and equipment are to be suitable for the space allocated for the accommodation of such plant and equipment, taking into account the requirement of access for maintenance purposes
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- J. This shall include all information necessary to ascertain the equipment comply with this specification and drawings. Data and sales catalogue of a general nature will not be accepted
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- L. Any items suffering from damage during manufacture, or in transit, or on site whilst in storage or during erection shall be rejected and replaced without extra cost.
- M. All sanitary fittings and pipework shall be cleaned after installation and keep them in a new condition.
- N. All installed pipelines shall be flushed through with water, rodded when necessary to ensure clearance of debris.
- O. Cleaning and flushing shall be carried out in sections as the installation becomes completed.
- P. The Contractor shall carry out hydraulic test on the complete plumbing systems and the drainage system to show that it is functioning satisfactorily within the requirements of this Specification and local regulations
- Q. The Contractor shall provide suitable test pumps and arrange for a supply of water required in connection with testing of pipework. The test pump shall be fitted with pressure gauges which shall be of suitable range for the pressure being applied.
- R. Hydraulic tests shall be carried out as the pipework is installed and shall be completed before chases in walls and ducts are closed. Also test shall be carried out prior to false ceilings and other finishes are installed.
- S. Testing apparatus shall be provided by the Contractor. Where any section of pipework or equipment is unable to withstand the maximum pipework test pressure, it shall be isolated during the pipework test then that section of pipework or equipment shall be re-tested at the appropriate test pressure.
- T. The Sanitary Contractor must carry out any additional tests required by the end-user and/or approving agency
- U. Drainage pipe shall be tested by filling the pipe with 3m. of water higher than the test section and wait for 15 min, then check for leakage at every joints
- V. Testing of drainage systems shall be carried out in sections by dividing the system horizontally. Each section shall comprise pipework and fitting for three floors/storeys required for testing
- W. Drainage pressure pipe shall be hydraulic tested at minimum pressure 50 psi.

- X. Hangers and supports for plumbing piping and equipment shall withstand the effects of gravity loads and stresses within limits and under conditions indicated according to ASCE/SEI 7
- Y. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units
- Z. Install lateral bracing with pipe hangers and supports to prevent swaying
- AA. Install building attachments within concrete slabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges, and strainers, NPS 2-1/2 (DN 65) and larger and at changes in direction of piping. Install concrete inserts before concrete is placed. Fasten inserts to forms and install reinforcing bars through openings at top of inserts
- BB. Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment
- CC. Install hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping.

VI. ELECTRICAL WORKS

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable)
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply
- C. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes
- D. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen.
- E. When the tests and inspections have been completed, a label shall be attached to all devices tested. The label shall provide the name of the testing company, the date the tests were completed, and the initials of the person who performed the tests.

F. PANELBOARDS

- F.1. Fabricate and test panelboards according to IEEE 344 to withstand seismic forces defined in Division 16 Sections 16073 and 16074 "Hangers and Supports for Electrical Systems and Vibration and Seismic controls for Electrical Systems" respectively
- F.2. Enclosures: Flush, Surface, Flush- and surface-mounted cabinets.
 - F.2.1. Rated for environmental conditions at installed location
 - i. Indoor Dry and Clean Locations: NEMA 250, Type 1.
 - ii. Outdoor Locations: NEMA 250, Type 3R.
 - iii. Kitchen and Wash-Down Areas: NEMA 250, Type 4X, stainless steel
 - iv. Other Wet or Damp Indoor Locations: NEMA 250, Type 4.
 - v. Indoor Locations Subject to Dust, Falling Dirt, and Dripping Noncorrosive Liquids: NEMA 250, Type 5 or Type 12.
 - F.2.2. Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions; for flush-mounted fronts, overlap box.

- F.2.3 Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover
- F.2.4 Skirt for Surface-Mounted Panel boards: Same gage and finish as panel board front with flanges for attachment to panel board, wall, and ceiling or floor.
- F.2.5 Gutter Extension and Barrier: Same gage and finish as panel board enclosure; integral with enclosure body. Arrange to isolate individual panel sections.
- F.2.6 Finishes:
- i. Panels and Trim: Steel and galvanized steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat
 - ii. Back Boxes: Galvanized steel. Same finish as panels and trim
 - iii. Fungus Proofing: Permanent fungicidal treatment for overcurrent protective devices and other components
- F.2.7 Directory Card: Inside panel board door, mounted in transparent card holder metal frame with transparent protective cover.
- F.3 Incoming Mains Location: Top or Bottom.
- F.4 Phase, Neutral, and Ground Buses:
- F.4.1 Material: Hard-drawn copper, 98 percent conductivity.
- F.4.2 Equipment Ground Bus: Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.
- F.4.3 Neutral Bus: 100 percent of phase bus. Extra-Capacity Neutral Bus: Neutral bus rated 200 percent of phase bus and (IL listed as suitable for nonlinear loads)

VII. MECHANICAL WORKS (IF APPLICABLE)

- A. Comply with the current applicable codes, ordinances and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- C. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes
- D. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen.
- E. When the tests and inspections have been completed, a label shall be attached to all devices tested. The label shall provide the name of the testing company, the date the tests were completed, and the initials of the person who performed the tests.


 CARMINA KAY FURAGGANAN
 Planning and Programming Division


 JOCELYN NAONG
 Planning and Programming Division

Section VII. Drawings

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

THE SITE



1 LOCATION MAP

SCALE NTS.

THE SITE



2 VICINITY MAP

SCALE NTS.

3 SITE DEVELOPMENT PLAN

SCALE NTS.

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AR-4	ROOF PLAN SCHEDULE OF DOORS AND WINDOWS
AR-5	UNDER COUNTER CABINET DETAILS LETTERING DETAILS HANGING CABINET DETAILS

PLUMBING

PL-1	GENERAL NOTES LEGEND AND SYMBOLS PLUMBING LAYOUT
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ELECTRICAL

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EL-2	LIGHTING LAYOUT POWER LAYOUT



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:

PROPOSED REHABILITATION OF
JONAVILLE DAY CARE CENTER

LOCATION:

BRGY. NAKAKASARI NAYON, DISTRICT 5, QUEZON CITY

DRAWN BY:

DATE: 06/01/21

CHECKED BY: JM

PERSON NO.

SUBMITTED BY:

ENGR. LEO S. DEL ROSARIO
HEAD, PLANNING & PROJECTS DIVISION

RECOMMENDING APPROVAL:

ENGR. ISAAC R. VERZOSA, JR.
DEPUTY CITY ENGINEERING SUPERVISOR

APPROVED BY:

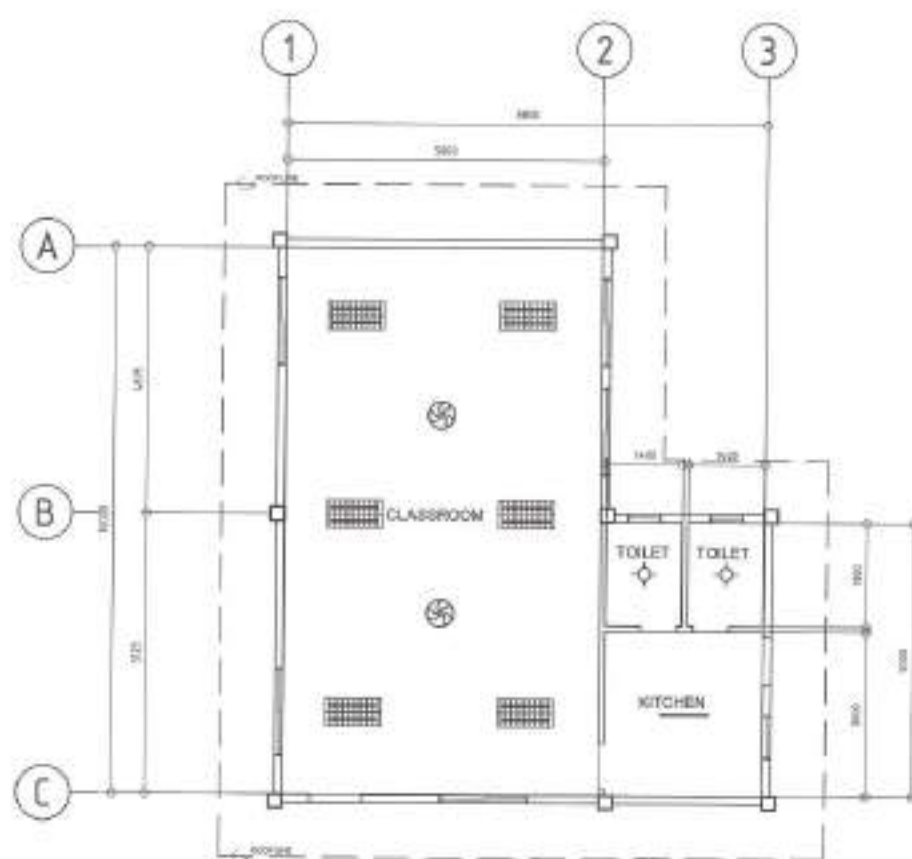
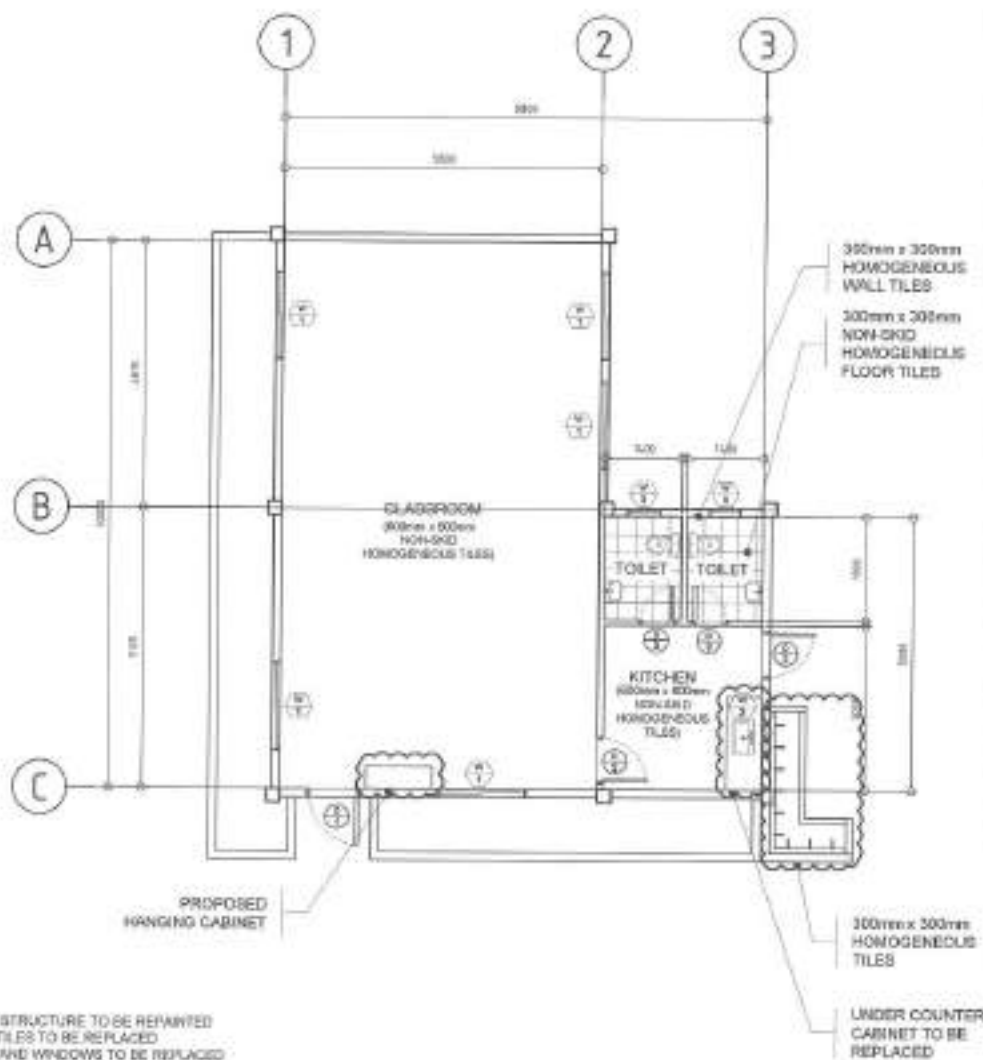
HON. MA. JOSEFINA G. BELMONTE
CITY MARCH

SHEET CONTENT

LOCATION MAP
VICINITY MAP
SITE DEVELOPMENT PLAN

SHEET NO.

AR-01
01/08



1 FLOOR PLAN

SCALE 1:100M

2 REFLECTED CEILING PLAN

SCALE 1:100M



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CITY ENGINEERING DEPARTMENT

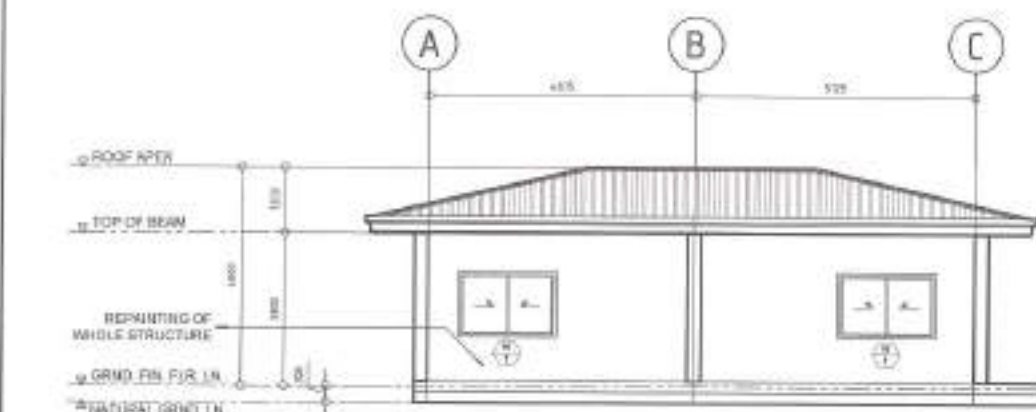
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PROPOSED REHABILITATION OF JONAVILLE DAY CARE CENTER	DATE: 08/15/21 CHECKED BY: [Signature]	[Signature] ENGR. LEO S. DEL ROSARIO HEAD, PLANNING & PROGRAMS DIVISION	[Signature] ENGR. ISAGANI R. VERZOSA, JR. DEPT. CITY ENGINEERING DEPARTMENT	[Signature] HON. MA. JOSEFINA G. BELMONTE CITY MAOR	FLOOR PLAN REFLECTED CEILING PLAN	AR-02 02/08
LOCATION: BRGY. NAGUISARAN BAYAN, DISTRICT 3, QUEZON CITY	REVISIONS:					



NOTE:
1. PROVISION OF DAY CARE STORAGE

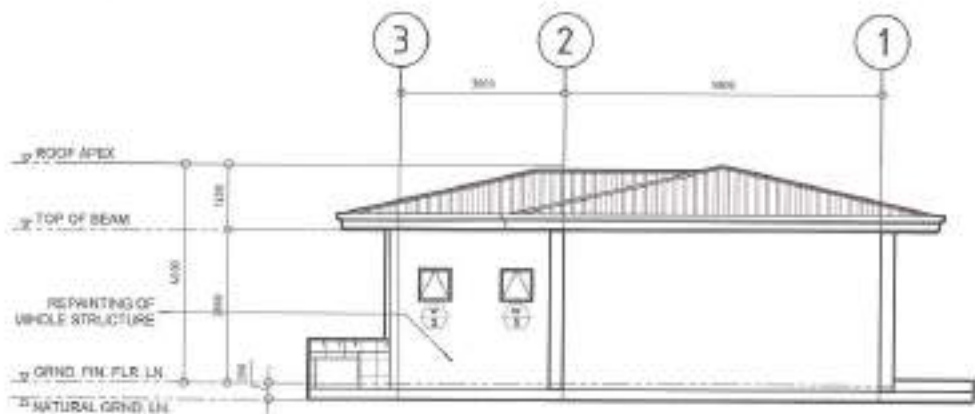
1 FRONT ELEVATION

SCALE 1:100M



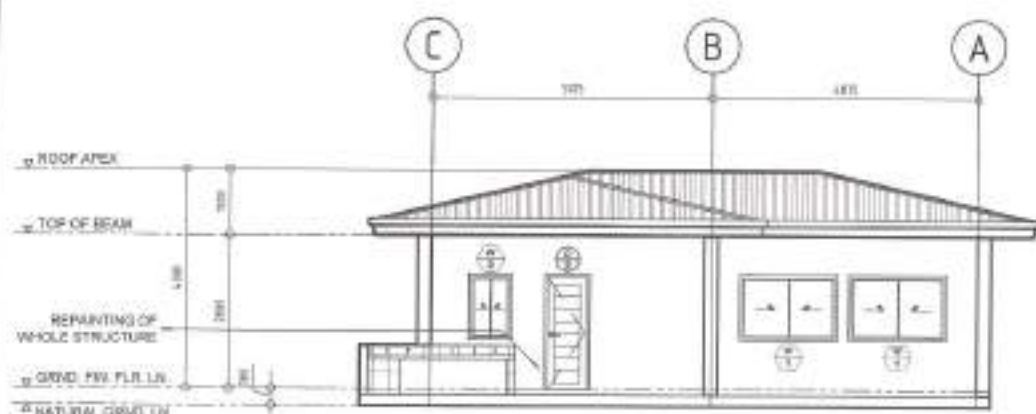
3 LEFT SIDE ELEVATION

SCALE 1:100M



2 REAR ELEVATION

SCALE 1:100M



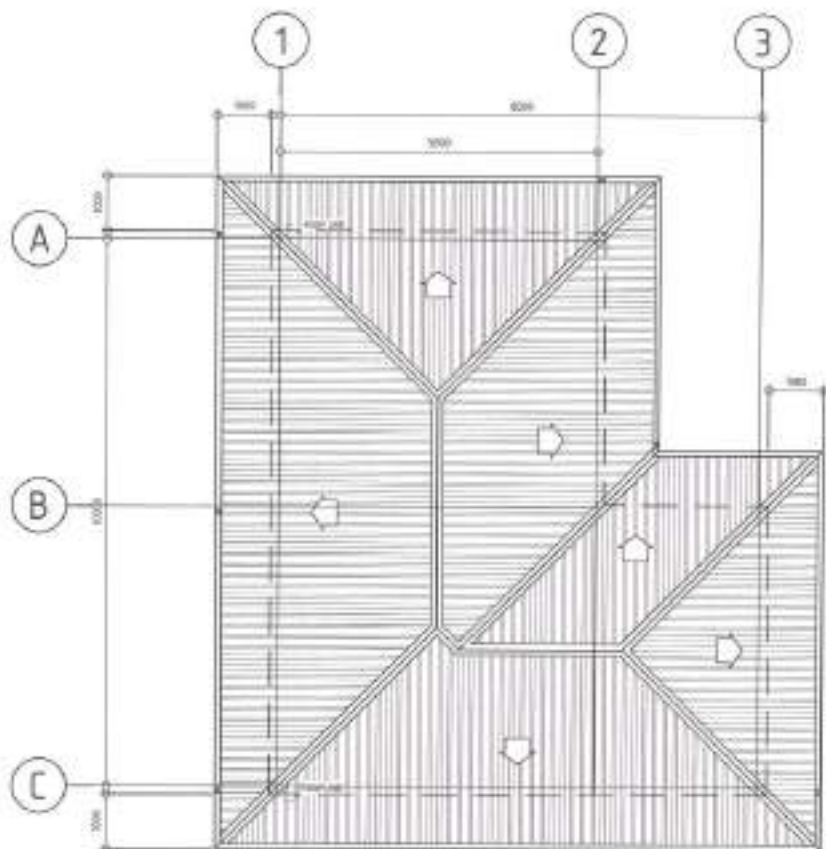
4 RIGHT SIDE ELEVATION

SCALE 1:100M



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CITY ENGINEERING DEPARTMENT

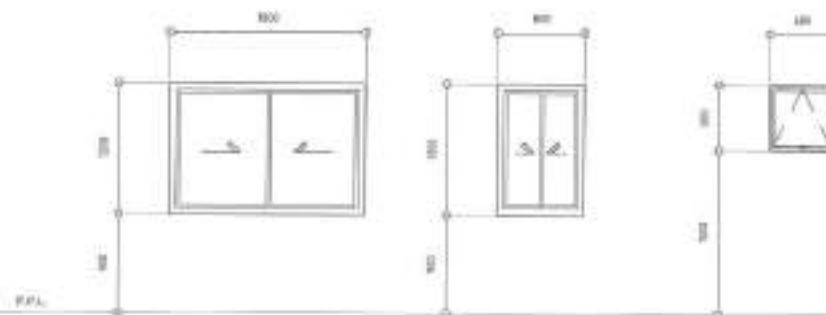
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PROPOSED REHABILITATION OF JONAVILLE DAY CARE CENTER	DATE: 06/06/21 CHECKED BY: J.K.				FRONT ELEVATION REAR ELEVATION LEFT SIDE ELEVATION RIGHT SIDE ELEVATION	AR-03 03/08
LOCATION: BRGY. NAGUNSAW, NAYON, DISTRICT 6, QUEZON CITY	REVISION NO.:	ENGR. LEO S. DEL ROSARIO HEAD, PLANNING & PROGRAMMING DIVISION	ENGR. ISADORA R. VERZOSA, JR. SEC. CITY ENGINEERING DEPARTMENT	HON. MA. JOSEFINA G. BELMONTE CITY MAJOR		



NOTE:
1. DOWNSPOUTS TO BE REPLACED



NAME	⊕	⊕	⊕
NO. OF SETS	1	2	2
DESCRIPTION	PANEL DOOR	PANEL DOOR	PVC DOOR WITH LOUVERS
LOCATION	CLASSROOM	KITCHEN	TOILET
HARDWARE	COMPLETE ACCESSORIES DOOR HANDLE LEVER TYPE, SATIN STAINLESS FINISH	COMPLETE ACCESSORIES DOOR HANDLE LEVER TYPE, SATIN STAINLESS FINISH	COMPLETE ACCESSORIES DOOR HANDLE LEVER TYPE, SATIN STAINLESS FINISH




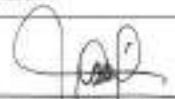


NAME	⊕	⊕	⊕
NO. OF SETS	2	1	2
DESCRIPTION	ALUMINUM FRAME POWDER COATED SLIDING WINDOW WITH 6MM THK CLEAR GLASS	ALUMINUM FRAME POWDER COATED SLIDING WINDOW WITH 6MM THK CLEAR GLASS	ALUMINUM FRAME POWDER COATED JUMBO WINDOW WITH 6MM THK CLEAR GLASS
LOCATION	CLASSROOM	KITCHEN	TOILET

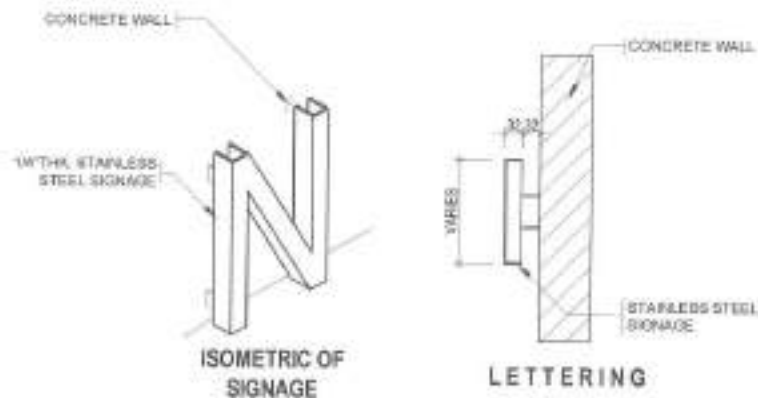
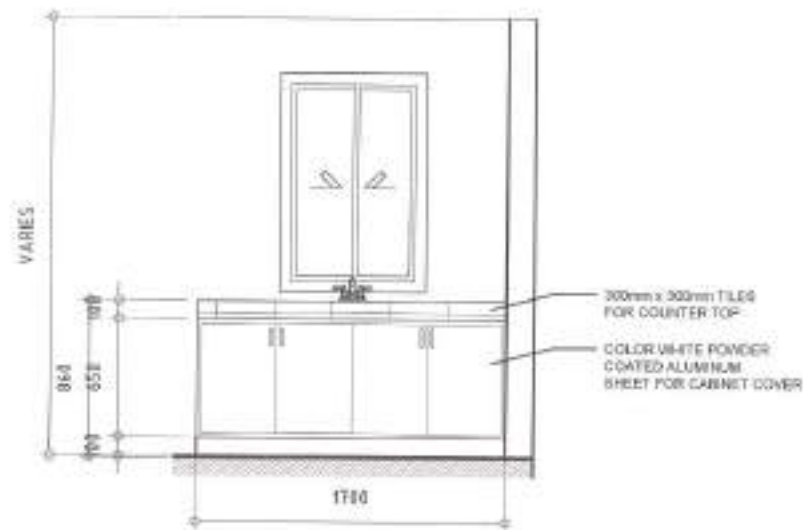
1 ROOF PLAN

SCALE 1:100M

2 SCHEDULE OF DOORS AND WINDOWS

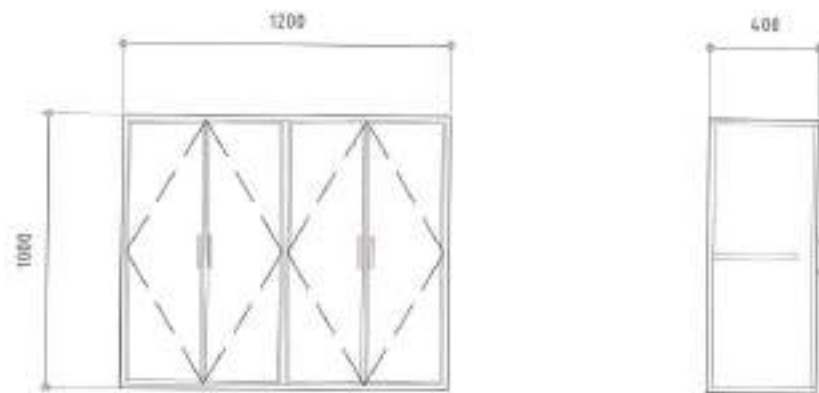
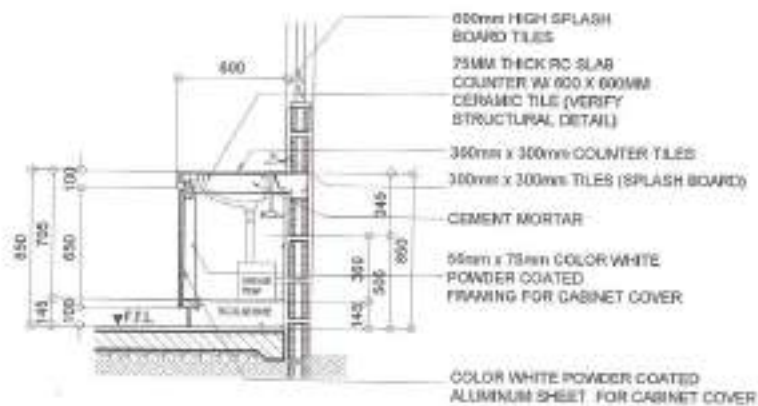
SCALE 1:50M

 <p>Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE:	DESIGN BY:	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET NO.:
	<p>PROPOSED REHABILITATION OF JONAVILLE DAY CARE CENTER</p> <p>LOCATION: Bldg. RABORRANG NAYON, DISTRICT 9, QUEZON CITY</p>	DATE: 08/08/21	CHECKED BY:	 <p>ENGR. LEO S. DEL ROSARIO HEAD, PLANNING & PRODUCTION DIVISION</p>	 <p>ENGR. ISAGANI R. VERZOSA, JR. DC, CITY ENGINEERING DEPARTMENT</p>	 <p>HON. MA. JOSEFINA G. BELMONTE CITY MAJOR</p>	<p>ROOF PLAN SCHEDULE OF DOORS AND WINDOWS</p>



2 LETTERING DETAILS

SCALE 1:100



1 UNDER COUNTER CABINET DETAILS

SCALE 1:300

3 HANGING CABINET DETAILS

SCALE 1:200



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:	DESIGNED BY:	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT	SHEET NO.
PROPOSED REHABILITATION OF JONAVILLE DAY CARE CENTER	DATE: 08/2021 CHECKED BY: [Signature]	[Signature] ENGR. LEO S. DEL ROSARIO RAC, PLUMBING & PROGRAMMING DIVISION	[Signature] ENGR. ISIDORO R. VERZOSA, JR. C.E. CITY ENGINEERING DEPARTMENT	[Signature] HON. MA. JOSEFINA G. BELMONTI CITY MAYOR	UNDER COUNTER CABINET DETAILS LETTERING DETAILS HANGING CABINET DETAILS	AR-05 05/08
LOCATION: BRGY. NARAYANANG HAYON, DISTRICT 3, QUEZON CITY	REVISIONS:					

1. ALL THE PLUMBING/SANITARY WORKS INCLUDED HEREIN SHALL BE EXECUTED ACCORDING TO THE PROVISIONS OF THE PHILIPPINE PLUMBING CODE, THE NATIONAL BUILDING CODE, RULES AND REGULATION OF QUEZON CITY.
2. COORDINATE THE DRAWINGS WITH OTHER RELATED DRAWINGS AND SPECIFICATION REQUIRED. THE ENGR/ARCH SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY FOUND THEREIN.
3. ALL PIPES SHALL BE INSTALLED AS INDICATED ON PLANS. ANY RELOCATION REQUIRED FOR PROPER EXECUTION OF OTHER TRADES SHALL BE WITH PRIOR APPROVAL OF THE ENGINEER OR ARCHITECT.
4. PROPOSED SANITARY UTILITIES SHALL BE CONFORM TO THE ACTUAL LOCATION, DEPTH, AND INVERT ELEVATION OF ALL EXISTING STRUCTURES AND PIPES AS VERIFIED BY THE CONTRACTOR.
5. ALL SLOPES FOR HORIZONTAL DRAINAGE SHALL MAINTAIN 1% MIN. UNLESS OTHERWISE SPECIFIED.
6. SIZES OF WATER SUPPLY PIPES TO FIXTURES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTION.
7. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AT SITE AND COORDINATE THE WORKS WITH THE SEWER LINE EFFLUENT DISPOSAL POINT AND WATER LINE SERVICE CONNECTING POINT.
8. ALL WATER PIPE AND WATER TANKS SHALL BE THOROUGHLY FLUSHED AND DISINFECTED WITH LIQUID CHLORINE OR HYDROCHLORIC SOLUTION.
9. ALL WATER PIPES SHALL BE HYDROSTATICALLY TESTED TO A PRESSURE 1-1/2 THE DESIGNED WORKING PRESSURE OF THE SYSTEM.
10. ALL SANITARY AND STORM DRAINAGE PIPES SHALL BE HYDROSTATICALLY TESTED AT LEAST 3.0 MTS. HEAD TO ENSURE THAT THE SYSTEM ARE WATER TIGHT.
11. ALL DIMENSIONS ARE IN METERS AND ALL PIPES SIZES ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
12. ALL PIPES INDICATED ON PLANS REFER TO PIPES INSIDE DIAMETER.

1 GENERAL NOTES

SCALE: NTS.

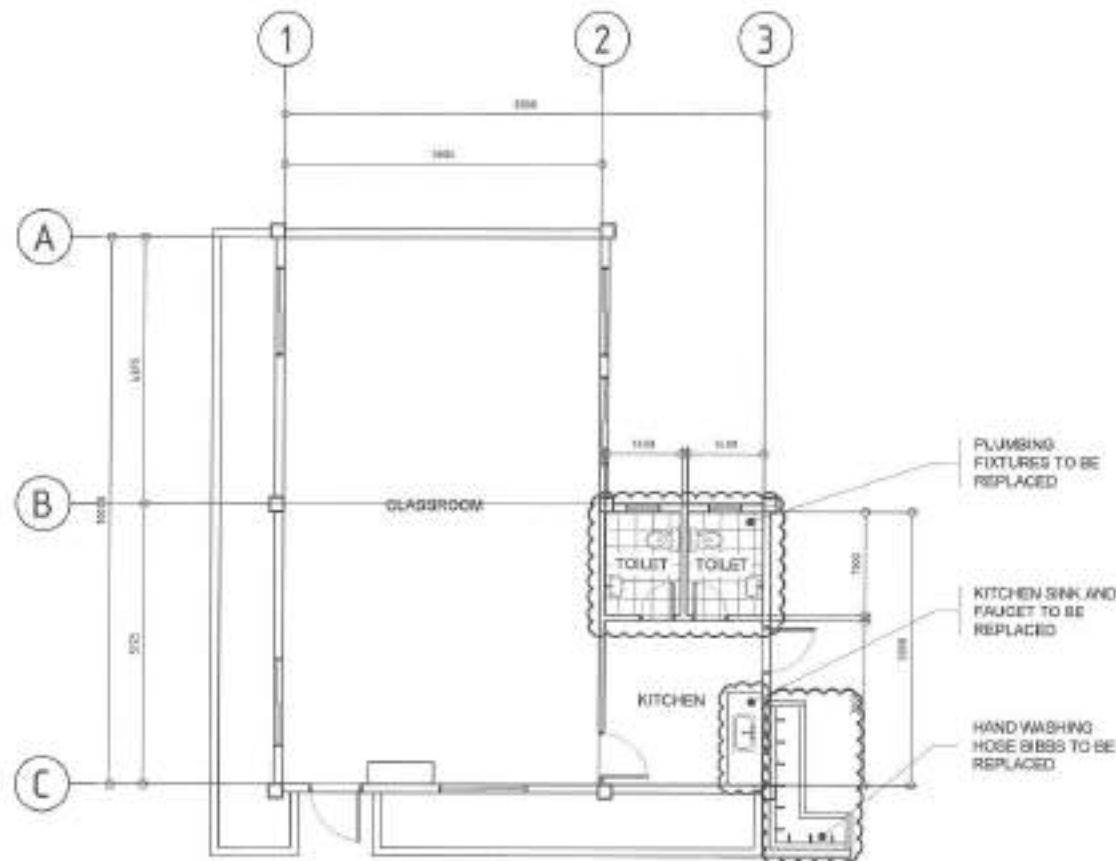
I. SEWER/WASTE AND VENT SYSTEM

- BP / WP — SOIL PIPE / WASTE PIPE
- - - - - MP / VAC — VENT PIPE / VENT AT CEILING
- - - - - SP — STORM DRAIN PIPE
- FCO / GCO — FLOOR CLEANOUT / GROUND CLEANOUT
- CCO — CEILING CLEAN-OUT
- DS — DRAINAGE STACK / DOWNPOUT
- VSTR — VENT STACK EXTENDED THROUGH ROOF
- SS — SOIL STACK
- FD — FLOOR DRAIN
- CB — CATCH BASIN
- AD — AREA DRAIN
- STALL TYPE URINAL
- GT — GREASE TRAP

II. WATER DISTRIBUTION SYSTEM

- CWL — COLD WATER LINE
- CWR — COLD WATER RISER
- GV — GATE VALVE
- CV — CHECK VALVE
- WM — WATER METER
- BD — BALCONY DRAIN

- NOTE:
1. PLUMBING FIXTURES TO BE REPLACED
 2. KITCHEN SINK AND FAUCET TO BE REPLACED
 3. HAND WASHING HOSE BIBBS TO BE REPLACED



2 LEGENDS

SCALE: NTS.

3 PLUMBING LAYOUT

SCALE: 1:100M.



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:
**PROPOSED REHABILITATION OF
JONAVILLE DAY CARE CENTER**

LOCATION:
DRGY, NAGRAHANG MAYON, DISTRICT 3, QUEZON CITY

DESIGN BY: *[Signature]*
DATE: 06/08/21
CHECKED BY: J.M.
REVISION NO:

SUBMITTED BY:
[Signature]
ENGR. LEO S. DEL ROSARIO
HEAD, PLUMBING & PIPING DIVISION

RECOMMENDING APPROVAL:
[Signature]
ENGR. ISAGAN R. VERZOSA, JR.
CH. CITY ENGINEERING DEPARTMENT

APPROVED BY:
[Signature]
HON. MA. JOSEFINA G. BELMONTE
CITY MAYOR

SHEET CONTENT:
GENERAL NOTES
LEGEND AND SYMBOLS
PLUMBING LAYOUT

SHEET NO:
PL-01
06/08

- ALL ELECTRICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL CODE ENFORCING AUTHORITY AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE UTILITY COMPANY.
- THE CONTRACTOR SHALL SECURE ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE WORK AND SHALL FURNISH THE OWNER THROUGH THE ENGINEERS, FINAL CERTIFICATES OF ELECTRICAL INSPECTION AND APPROVAL FROM PROPER GOVERNMENT AUTHORITIES FOR COMPLETION OF WORK.
- ALL EXPOSED BRANCH CIRCUITS SHALL BE PVC CONDUITS AND FOR EXPOSED INSTALLATION SHALL BE USE SUPPORTED BY CONDUIT CLAMPS EVERY 700 MILLIMETERS.
- PULL BOXES SHALL BE PROVIDED BY THE CONTRACTOR WHENEVER NECESSARY TO FACILITATE WIRE PULLING EVEN IF THESE ARE NOT INDICATED ON THE PLANS. SIZES OF ALL PULL BOXES SHALL BE COMPUTED BASED ON THE CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION. LOCATION OF PULLBOXES SHALL BE APPROVED BY THE ARCHITECT/ENGINEER AND MUST BE REFLECTED ON THE 'AS-BUILT' PLAN.
- ALL POWER OUTLETS AND SWITCHES SHALL BE GROUNDING TYPE WITH PARALLEL SLOTS FOR 200V.
- PROVIDE GROUND FAULT CURRENT INTERRUPTION CIRCUIT BREAKER FOR LOADS MARKED 'GFCI' ON THE PLAN.
- ALL METALLIC CONDUITS, CABLES AND EQUIPMENT SHALL BE PROPERLY GROUNDING AND BONDED.
- UNLESS OTHERWISE NOTED, MOUNTING HEIGHT FOR WALL MOUNTED DEVICES SHALL BE AS FOLLOWS:

RECEPTACLE OUTLET - 300 MM AFF, 150MM ABOVE WORKING COUNTER
TELEPHONE OUTLET - 300 MM AFF
DATA OUTLET - 300MM AFF
LIGHTING SWITCH - 1400MM AFF
PANELBOARD - 1800 MM AFF

- REFER TO MECHANICAL PLUMBING AND FIRE PROTECTION DRAWINGS FOR PATTERNS AND LOCATIONS OF EQUIPMENT AS WELL AS THEIR CONTROL AND INTERLOCK AS SPECIFIED AND OR SHOWN UNDER THEIR RESPECTIVE SECTIONS.
- ALL MATERIAL TO BE USED SHALL BE OF THE BEST QUALITY, BRAND NEW AS SPECIFIED.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT GENERAL LAYOUT AND BRING OUT A DESCRIPTION OF THE PROJECT BUT DO NOT NECESSARILY INDICATE DESCRIBED ACTUAL LOCATIONS, LEVELS, AND DISTANCES OF THE EQUIPMENT. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE SUCH ADJUSTMENT AT THE JOBSITE AS LOCATIONAL DISTANCES AND LEVELS ARE GOVERNED BY ACTUAL FIELD CONDITIONS.
- ANY DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION DECISION.
- ALL LIGHTING AND COMMERCIAL OUTLET CIRCUITS SHALL BE #12 AWG THINWALL COPPER WIRE UNLESS OTHERWISE NOTED. MINIMUM SIZE OF WIRE SHALL BE #12 AWG COPPER WIRE. ALL WIRES AND CABLES SHALL BE COLOR CODED AS FOLLOWS:

LINE 1 - RED
LINE 2 - YELLOW
NEUTRAL - WHITE
GROUND - GREEN

- BOXES, WIRE, OUTLETS, ENCLOSURE SHALL BE FABRICATED FROM STEEL WITH THICKNESS AS FOLLOWS:
MAXIMUM WIDTH OF THE WIDEST SURFACE STEEL:
UP TO INCLUDING 152.40 MM GA 18 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT
OVER 152.40 MM BUT NOT OVER 304.80 GA 14 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT
OVER 304.80 MM BUT NOT OVER 381.00 GA 12 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT
OVER 381.00 MM GA 10 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT
- ALL ELECTRICAL WORKS HEREIN SHALL BE EXECUTED BY LICENSED MEN UNDER THE DIRECT SUPERVISION OF A FULL-TIME LICENSED ELECTRICAL ENGINEER, AND A FULLY ACCREDITED ELECTRICAL CONTRACTOR BY PCAB. WORKS SHALL BE NEATLY PLACED, SECURELY FASTENED AND PROPERLY FINISHED.
- TYPE OF SERVICE ENTRANCE SHALL BE SINGLE PHASE, THREEWIRE PLUS GROUND, 60 HERTZ, 230V AC NOMINAL.
- CONDUITS IN NO CASE SHALL THERE BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDED PLANT ONE RUN ALL CONDUIT BENDS SHALL BE FACILITATED BY USING HYDRAULIC BENDERS. MINIMUM BENDING RADIUS MUST BE IN ACCORDANCE TO THE CODE REQUIREMENTS.
- UPON COMPLETION OF ELECTRICAL CONSTRUCTION WORK, INSULATION RESISTANCE TEST AND FUNCTIONALITY TEST SHALL BE PERFORMED BY THE CONTRACTOR. VOLUME OF THE TESTULATION TO BE REPORTED IN DETAILS ON FORMS APPROVED BY THE QUEZON CITY ENGINEERING DEPARTMENT REPRESENTATIVE. THE GROUND RESISTANCE FOR ELECTRICAL SYSTEMS SHALL NOT BE MORE THAN 5 OHMS. COMMUNICATION GROUNDING RESISTANCE SHALL NOT EXCEED 2 OHMS.

	150MM LED SLS 16 WATTS
	2X15W TROUGH LIGHT
	T5 LED 1200MM, 26 WATTS
	DUPLEX COMMERCIAL OUTLET
	ADU OUTLET
	CEILING FAN
	PANEL BOARD
	ONE GANG SWITCH (LIGHTS)
	SELECTOR SWITCH (FAN)
	THREE WAY THREE GANG SWITCH (LIGHTS)
	HOMERUN CIRCUIT BREAKER

LP(NEW)

CIRCUIT NO.	LOAD DESCRIPTION	VOLT	POWER	CURRENT (AMPERE)	CIRCUIT BREAKER			WIRES AND CONDUIT		
					AT	AF	#	INSULATION TYPE	SIZE	TYPE
1	4 - TROUGH 2 - SLS 2 - T5 2 - 1200MM	240	3300	5.57	15	50	2	2 - 2.5mm ²	1 - 1.5mm ²	20 mm Ø PVC
2	7 - COMMERCIAL OUTLET	240	3300	5.44	15	50	2	2 - 2.5mm ²	1 - 1.5mm ²	20 mm Ø PVC
3	ADU	240	2320	10.00	15	50	2	2 - 2.5mm ²	1 - 1.5mm ²	20 mm Ø PVC
4	SWITCH	240	3000	4.17	15	50	2			
TOTAL COMMITTED LOAD			5840	25.38						

CIRCUIT PROTECTION COMPUTATION:
 $I_1 = (5840 / 230 V + 25\% (10)) * 125\%$
 $I_1 = 34.88 \text{ ampere}$

OVER CURRENT PROTECTION:
USE: 60 AT, 2P CB BOLT-ON

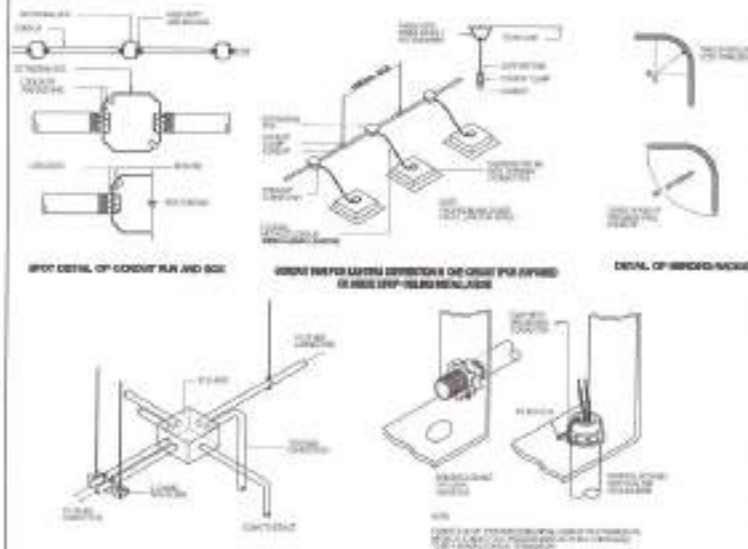
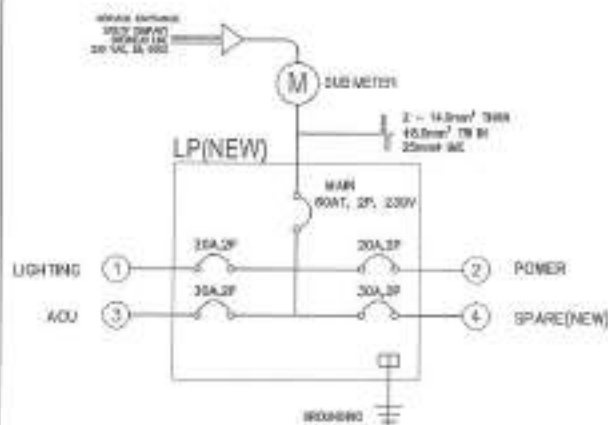
MAIN FEEDS:
USE: 2 - 14mm² THHN WIRE & 1 - 8.0mm² TW GROUND WIRE
IN 25mm Ø PVC TYPE

2 LEGENDS

SCALE: NTS

3 LOAD SCHEDULE

SCALE: NTS



1 GENERAL NOTES

SCALE: NTS

4 RISER DIAGRAM

SCALE: NTS

5 MISCELLANEOUS DETAILS

SCALE: NTS



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Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

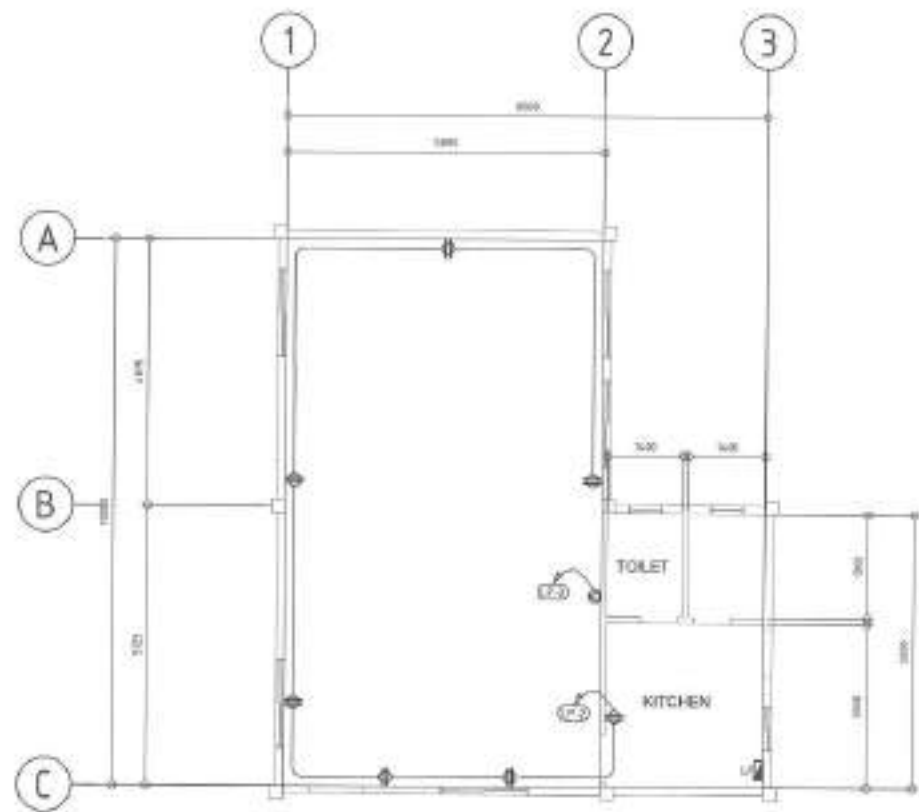
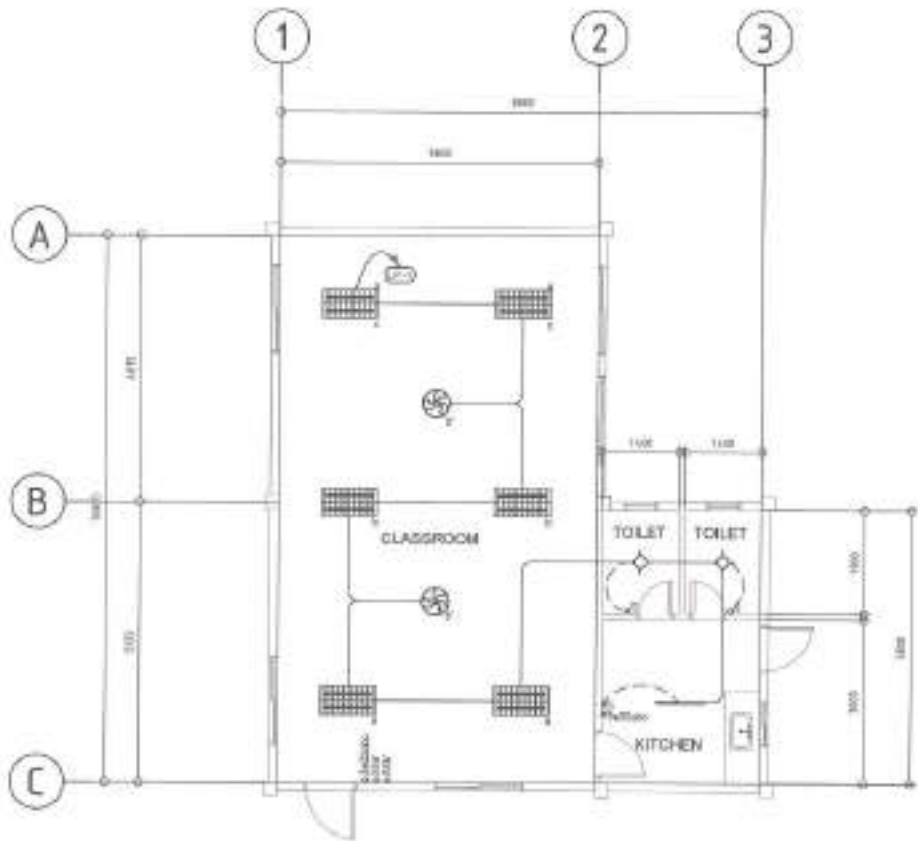
PROJECT TITLE:	DRIVER BY:	SUBMITTED BY:
PROPOSED REHABILITATION OF JONAVILLE DAY CARE CENTER	DATE: 06/08/21	
LOCATION:	CHECKED BY:	REVISION NO.:
3RD FLOOR, MAGKASAMA NA PAYER, DISTRICT 2, QUEZON CITY		ENGR. LEO S. DEL ROSARIO HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:	APPROVED BY:
ENGR. EDMAR R. VERZOSA, JR. CH. CITY ENGINEERING DEPARTMENT	HON. MA. JOSEFINA G. BELMONTE CITY NAVIG

RECOMMENDING APPROVAL:	APPROVED BY:
ENGR. EDMAR R. VERZOSA, JR. CH. CITY ENGINEERING DEPARTMENT	HON. MA. JOSEFINA G. BELMONTE CITY NAVIG

RECOMMENDING APPROVAL:	APPROVED BY:
ENGR. EDMAR R. VERZOSA, JR. CH. CITY ENGINEERING DEPARTMENT	HON. MA. JOSEFINA G. BELMONTE CITY NAVIG

SHEET CONTENT:	SHEET NO.:
GENERAL NOTES LOAD SCHEDULE RISER DIAGRAM MISCELLANEOUS DETAILS	EL-01 07/08



1 LIGHTING LAYOUT

SCALE MTS.

2 POWER LAYOUT

SCALE MTS.

 <p>Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE:	DRAWN BY:	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET NO.:
	<p>PROPOSED REHABILITATION OF JONAVILLE DAY CARE CENTER</p> <p>LOCATION: BAGY. NAGBABANG MAYOR, DISTRICT 3, QUEZON CITY</p>	<p>DATE: 08/08/21</p> <p>CHECKED BY:</p> <p>NUMBERING:</p>	 <p>ENGR. LEO S. DEL ROSARIO HEAD, PLANNING PROGRAMMING DIVISION</p>	 <p>ENGR. ISHAM R. VERZOSA, JR. DEPT. CITY ENGINEERING DEPARTMENT</p>	<p>HON. MA. JOSEFINA G. BELMONTE CITY MAYOR</p>	<p>LIGHTING LAYOUT POWER LAYOUT</p>	<p>EL-02 08/08</p>

THE SITE



1 VICINITY MAP

SCALE NTS.

THE SITE



2 LOCATION MAP

SCALE NTS.

3 SITE DEVELOPMENT PLAN

SCALE 1:150M.

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ARCHITECTURAL

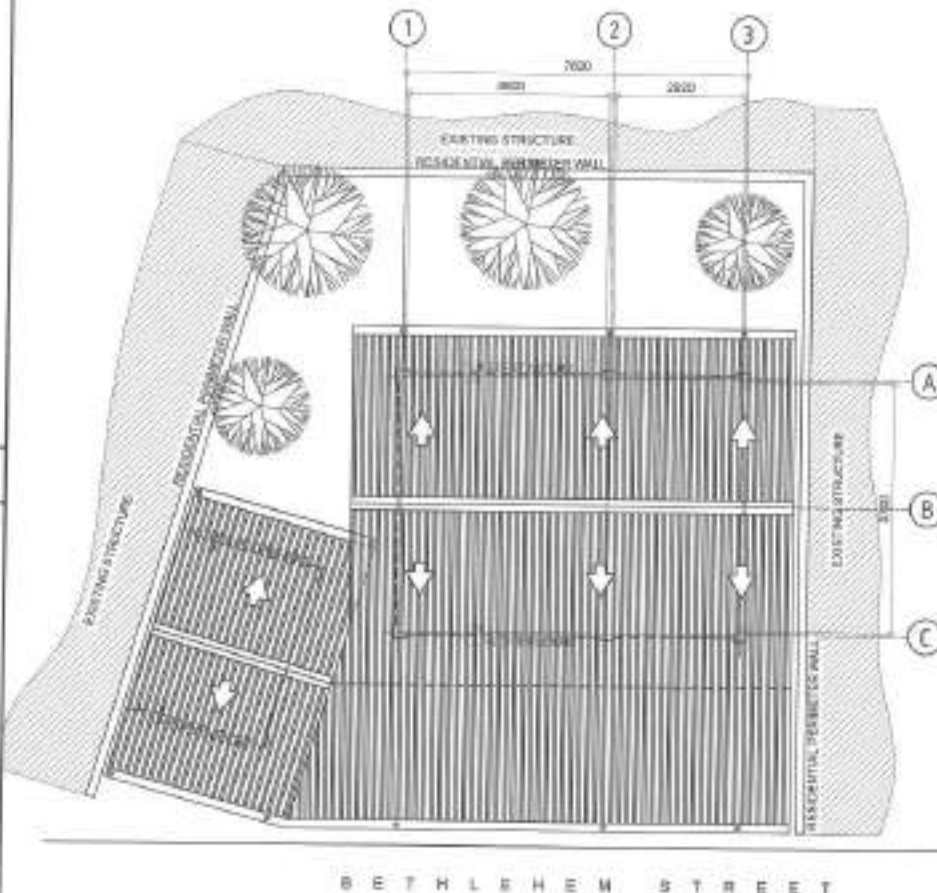
AR-01	VICINITY MAP
	LOCATION PLAN
	SITE DEVELOPMENT PLAN
AR-02	GROUND FLOOR PLAN
	REFLECTED CEILING PLAN
AR-03	ROOF PLAN
	TOILET DETAILS
AR-04	FRONT ELEVATION
	RIGHT SIDE ELEVATION
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	LETTERING DETAILS
AR-05	SCHEDULE OF DOORS
	SCHEDULE OF WINDOWS
	LETTERING DETAILS

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ELECTRICAL

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	LEGEND AND SYMBOLS
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EL-03	LIGHTING LAYOUT
	POWER LAYOUT



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:

PROPOSED REHABILITATION OF
LAZARO DAY CARE CENTER

LOCATION:
BARAY, NAKBIBANG NAYON DISTRICT 3, QUEZON CITY

DRAWN BY:

DATE: 10/1/2021

CHECKED BY:

REVISION NO.:

SUBMITTED BY:

ENGR. LEO S. DEL ROSARIO
HEAD, PLANNING & COMMUNITY DIVISION

RECOMMENDING AGENCY:

ENGR. ISABELA R. VERZOSA, JR.
DC, CITY ENGINEERING DEPARTMENT

APPROVED BY:

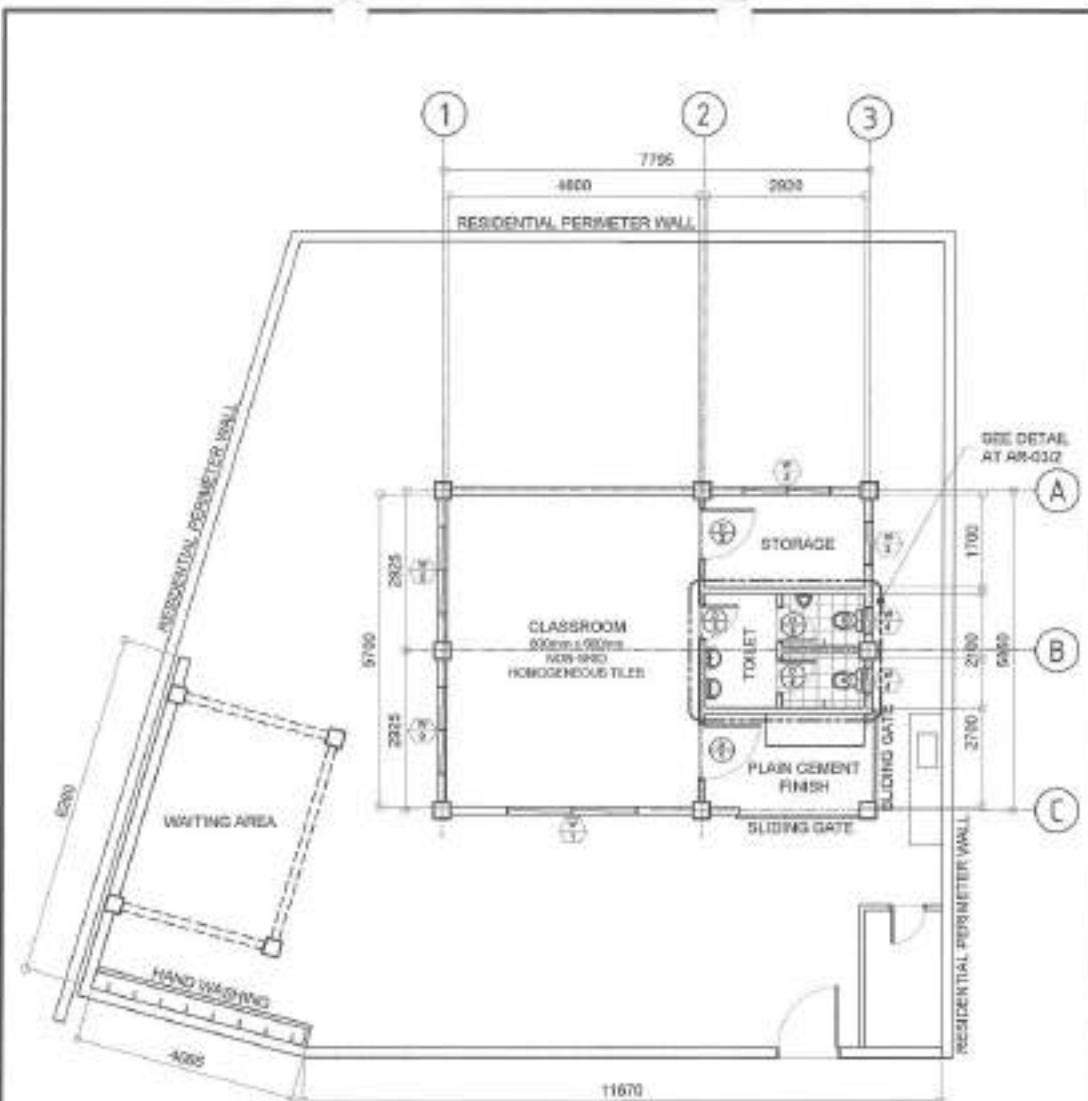
HON. MR. JOSEFINA G. BELMONTE
CITY BANGOR

SHEET COUNT:

VICINITY MAP
LOCATION MAP
SITE DEVELOPMENT PLAN

SHEET NO.

AR-01
01/09

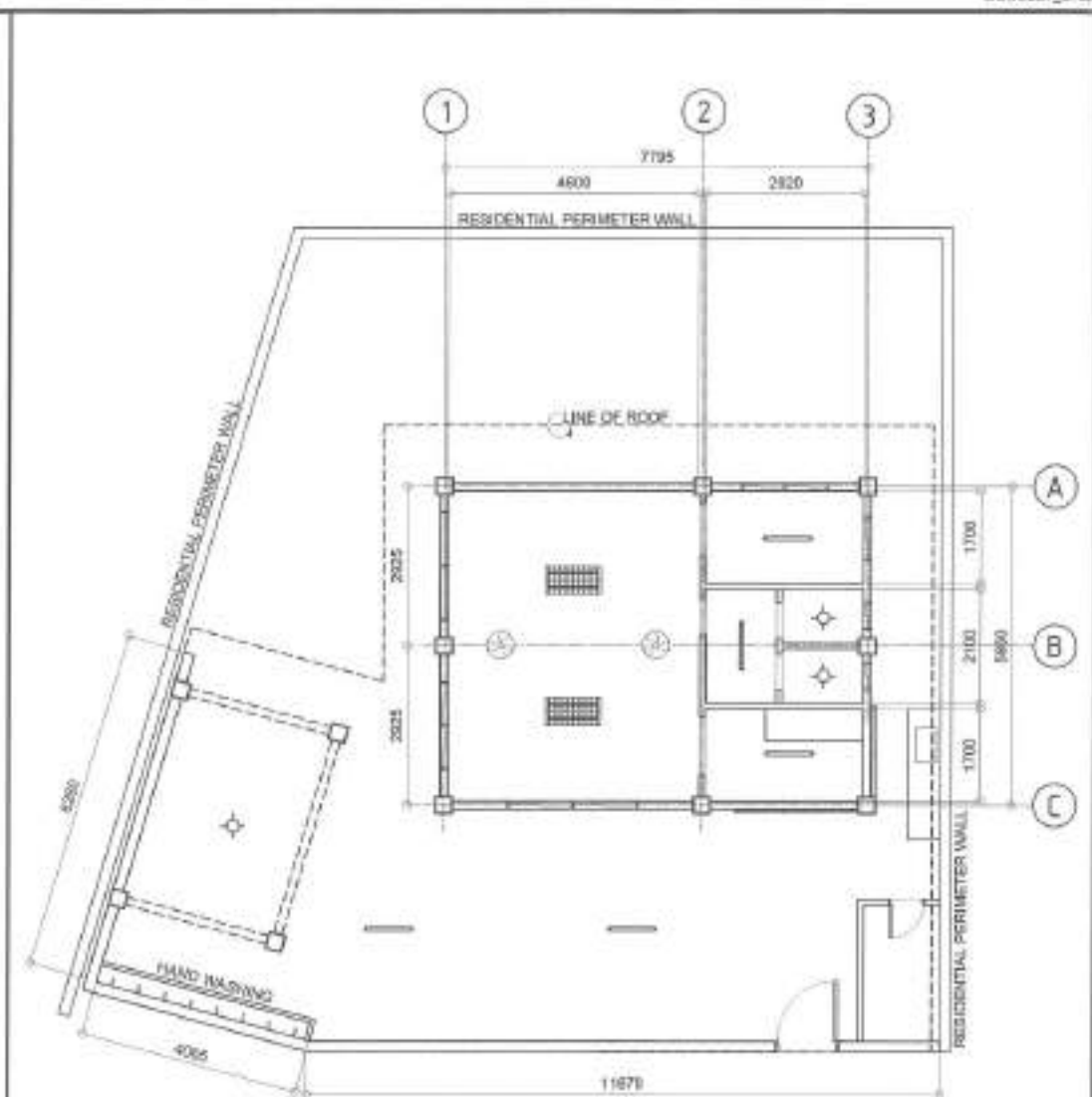


NOTES:

- DOORS AND WINDOWS TO BE REPLACED.
- INTERIOR AND EXTERIOR WALL TO BE REPAINTED.
- REPLACEMENT OF FLOOR AND WALL TILES.
- GATE AND PERIMETER FENCE TO BE REPAINTED.
- PROVISION OF STAINLESS STEEL SIGNAGE.

1 GROUND FLOOR PLAN

SCALE 1:100M


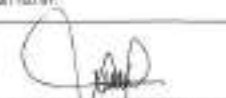
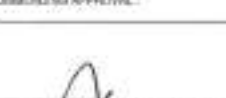



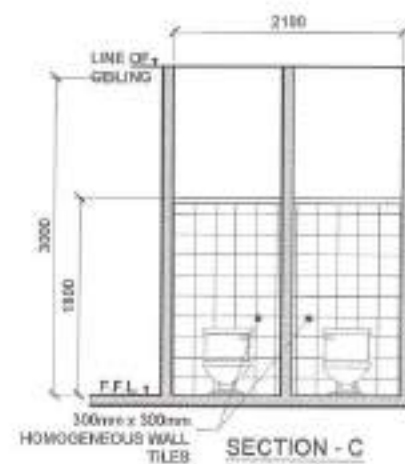
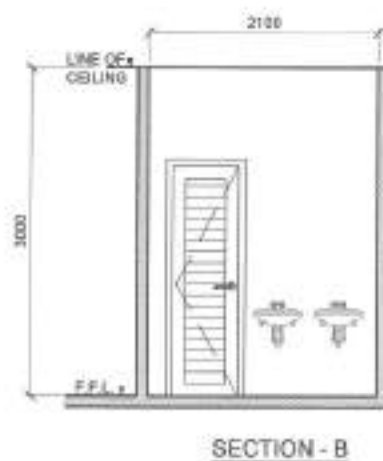
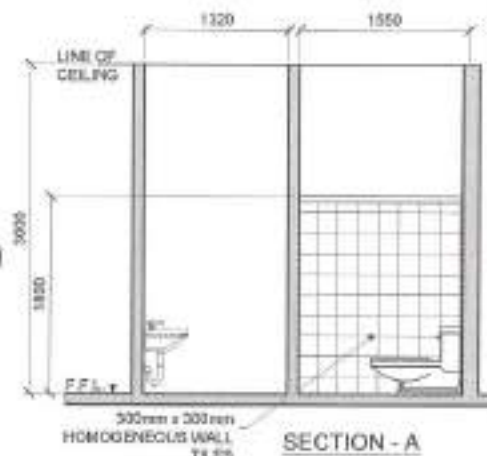
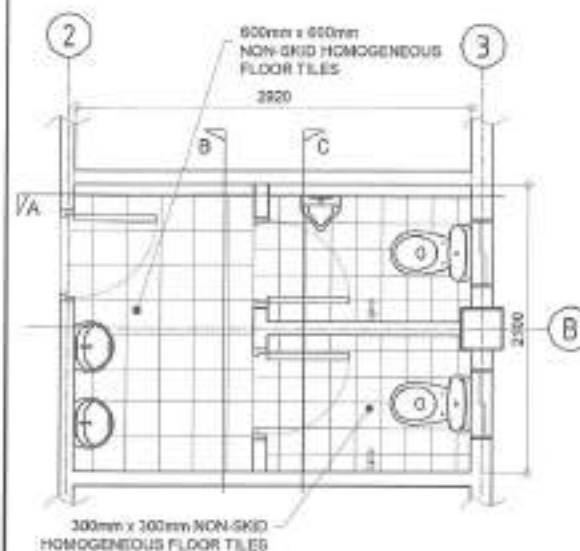
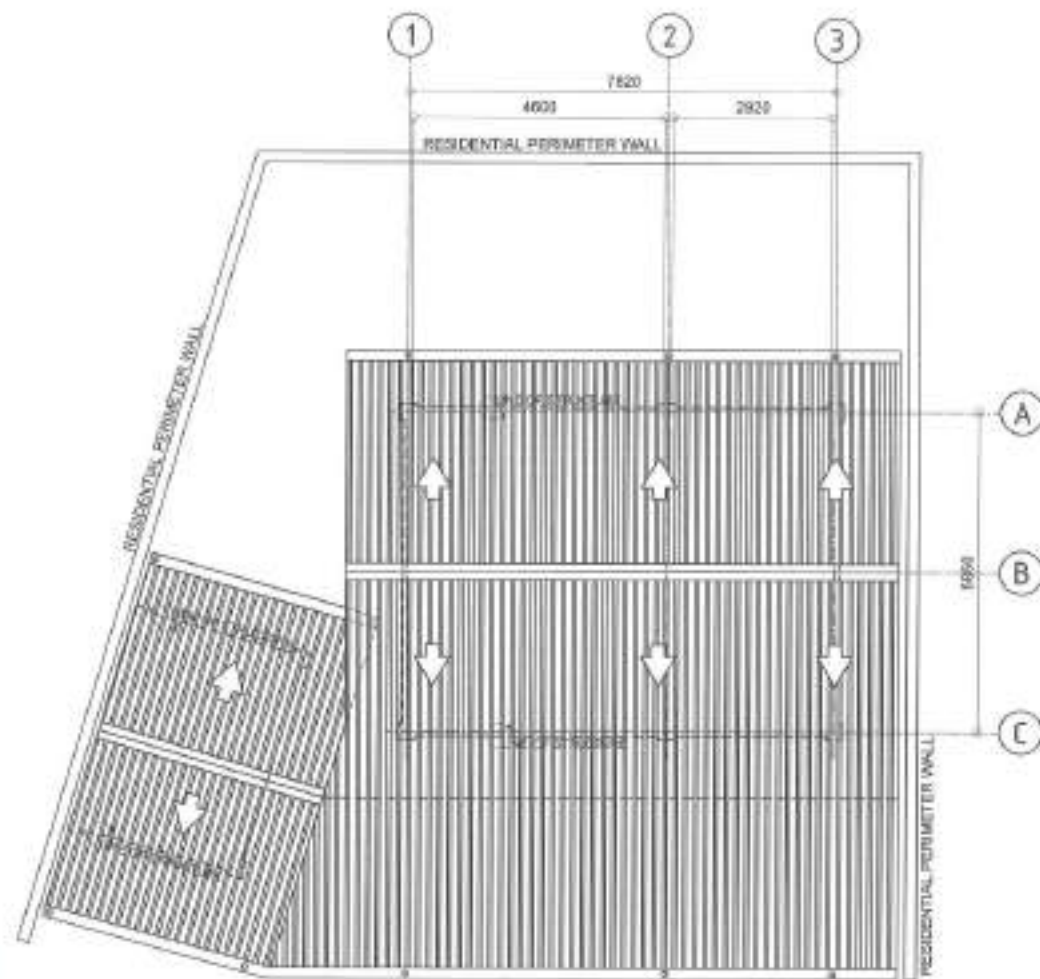
NOTE:

- REPLACEMENT OF 6mm THICK FIBER CEMENT BOARD INCLUDING ROOF EAVES.

2 REFLECTED CEILING PLAN

SCALE 1:100M

 <p>Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE:	DESIGN BY:	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET NO.
	PROPOSED REHABILITATION OF LAZARD DAY CARE CENTER	DATE: 10/1/2021					
LOCATION: BRT, AMRASSANG MAYOR, DISTRICT 1, QUEZON CITY	REVISION NO.:	CHECKED BY:	ENGR. LEO S. DEL ROSARIO HEAD, PLANNING & PROGRAM DIVISION	ENGR. ISAAC R. VERZOSA, JR. DIC OF PLANNING & PROGRAM DIVISION	HON. MA. JOSEFINA O. BELMONTE CITY MAYOR	GROUND FLOOR PLAN REFLECTED CEILING GROUND	AR-02 02/09



NOTE:
1. REPLACEMENT OF ROOFING AND ACCESSORIES.

1 ROOF PLAN

SCALE 1:100M

2 TOILET DETAILS

SCALE 1:100M



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:
PROPOSED REHABILITATION OF LAZARO DAY CARE CENTER

LOCATION:
BPOZ, NABIKINGANG AMYAL, DISTRICT 5, QUEZON CITY

DATE: 10/1/2021
CHECKED BY: [Signature]
REVISION NO:

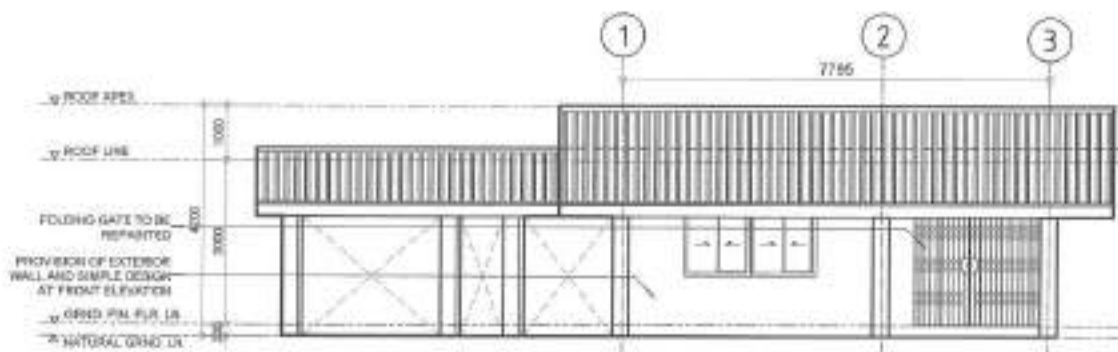
SUBMITTED BY:
[Signature]
ENGR. LEO S. DEL ROSARIO
HEAD, PLANNING & PROGRAMING DIVISION

RECOMMENDED APPROVAL:
[Signature]
ENGR. SAUL M. R. VERZOSA, JR.
CC, CITY ENGINEERING DEPARTMENT

APPROVED BY:
[Signature]
HON. MA. JOSEFINA G. BELMONTTE
CITY MAYOR

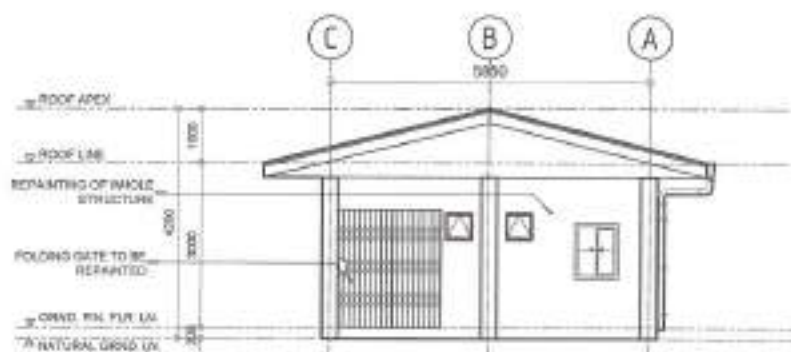
SHEET CONTENT:
ROOF PLAN
TOILET DETAILS

SHEET NO:
AR-03
03/09



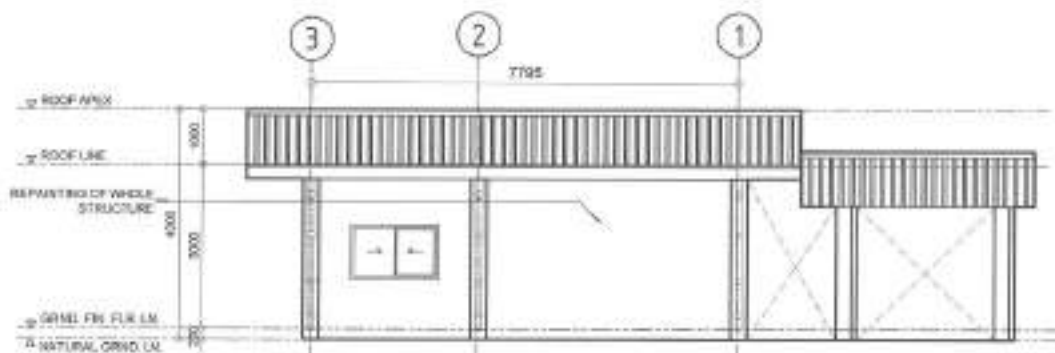
1 FRONT ELEVATION

SCALE 1:100M



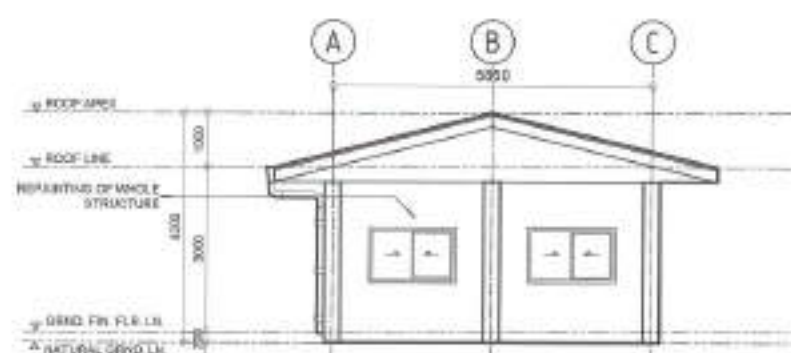
2 RIGHT SIDE ELEVATION

SCALE 1:100M



3 REAR ELEVATION

SCALE 1:100M



4 LEFT SIDE ELEVATION

SCALE 1:100M



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:
PROPOSED REHABILITATION OF LAZARO DAY CARE CENTER

LOCATION:
BPOY, MADRASANG RIVER, DISTRICT 5, QUEZON CITY

DESIGN ENGINEER:
DATE: 04/1/2011
CHECKED BY:
REVISION NO.:

SUBMITTED BY:

ENGR. LEON DEL ROSARIO
HEAD, PLANNING & PROGRAM DIVISION

RECOMMENDING APPROVAL:

ENGR. ISAGANI R. VERZOSA, JR.
CHIEF, CITY ENGINEERING DEPARTMENT

APPROVED BY:

HON. MA. JOSEFINA G. BELMONTE
CITY MAJOR

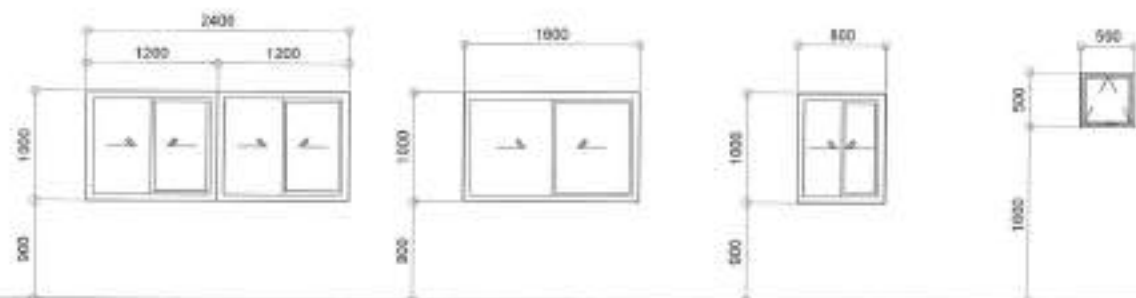
SHEET CONTENT:
FRONT ELEVATION
REAR ELEVATION
RIGHT SIDE ELEVATION
LEFT SIDE ELEVATION

SHEET NO.
AR-04
04/09

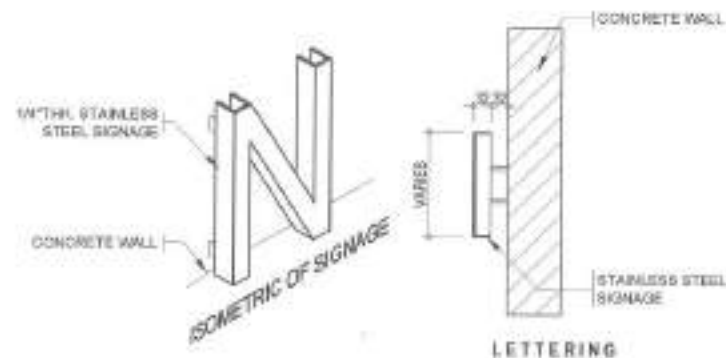
NAME	⊕	⊕	⊕	⊕
NO. OF SETS	1	1	1	1
DESCRIPTION	PANEL DOOR	PANEL DOOR	PANEL DOOR	PVC DOOR WITH LOUVERS
LOCATION	CLASSROOM	STORAGE	STORAGE	TOILET
HARDWARE / GLAZING	COMPLETE ACCESSORIES DOOR KNOB LEVER TYPE, SATIN STAINLESS FINISH	COMPLETE ACCESSORIES DOOR KNOB LEVER TYPE, SATIN STAINLESS FINISH	COMPLETE ACCESSORIES DOOR KNOB LEVER TYPE, SATIN STAINLESS FINISH	COMPLETE ACCESSORIES DOOR KNOB LEVER TYPE, SATIN STAINLESS FINISH

1 SCHEDULE OF DOORS

SCALE: 1:50M



NAME	⊕	⊕	⊕	⊕
NO. OF SETS	1	3	1	1
DESCRIPTION	ALUMINUM FRAME POWDER COATED SLIDING WINDOW WITH 6mm THK CLEAR GLASS	ALUMINUM FRAME POWDER COATED SLIDING WINDOW WITH 6mm THK CLEAR GLASS	ALUMINUM FRAME POWDER COATED SLIDING WINDOW WITH 6mm THK CLEAR GLASS	ALUMINUM FRAME POWDER COATED AWING WINDOW WITH 6mm THK CLEAR GLASS
LOCATION	CLASSROOM AND KITCHEN	CLASSROOM AND KITCHEN	CLASSROOM AND KITCHEN	TOILET



3 SCHEDULE OF WINDOWS

4 LETTERING DETAILS

SCALE: NTS



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE: PROPOSED REHABILITATION OF LAZARO DAY CARE CENTER	DESIGNED BY: <i>[Signature]</i> DATE: 10/02/21	SUBMITTED BY: <i>[Signature]</i> ENGR. LEO S. DEL ROSARIO SENIOR PLANNING & PROGRAM MANAGER	RECOMMENDING APPROVAL: <i>[Signature]</i> ENGR. SARAH R. VERZOSA, JR. DIR. OF ENGINEERING DEPARTMENT	APPROVED BY: <i>[Signature]</i> HON. MA. JOSEFINA G. BELMONTE CITY SAVER	SHEET CONTENT: SCHEDULE OF DOORS SCHEDULE OF WINDOWS LETTERING DETAILS	SHEET NO.: AR-05 05/09
LOCATION: BRGY. BAGUIRANG MAYON, DISTRICT 8, QUEZON CITY	REVISION NO.:					

1. All plumbing works and materials indicated herein shall be compliant to the provisions of the latest edition of National Plumbing Code, the rules and regulations of local authorities concerned, the rules and regulations of local utility companies and the provisions of the land developer when and where applicable.

2. The plumbing layout is only diagrammatic; pipes, cleanouts and check valves shall be concealed as much as possible. It is not intended to show the actual dimension of the pipes and fixtures in the drawing but all the pipes and fixtures shall be installed as and where indicated. Any relocation will require proper execution in relation with other trades.

3. The plumbing contractor shall verify all existing utilities at the site and shall coordinate the work with other trades.

4. Pipes shall not be embedded in structural members unless otherwise specified or allowed.

5. Minimum slope for horizontal sewer lines shall be 1% and for drain lines shall be 5%.

6. Proposed plumbing utilities shall conform with the actual location, depth and invert elevation of all existing pipes/utilities.

7. Connection of fixtures to pipes and fittings shall be according to manufacturer's specifications.

8. All floor drains shall be vented individually.

B. All clean out females shall be flush-mounted to wall and shall be provided with polished cover caps. Do not install floor clean outs except at lines on grade and service areas not subject to traffic.

10. All underground G.I. pipes in direct contact with soil shall be provided with two (2) coats of protective tar covering and wrapped with jute cloth thoroughly soaked in tar or asphalt.

11. Provide vent stack and vent pipe thru roof of cast iron service weight as required.

12. All cast iron pipes shall be of approved quality and G.I. pipes for water distribution lines shall be Schedule 40 U.S. standard weight.

13. Provide gate valves to all water supply lines to fixtures.

14. All hot water lines shall be provided with proper insulation where exposed.

15. All individual branches to fixtures or group of fixtures and/or equipments shall be provided with air chambers or capped vertical pipe extensions of dimensions as shown:

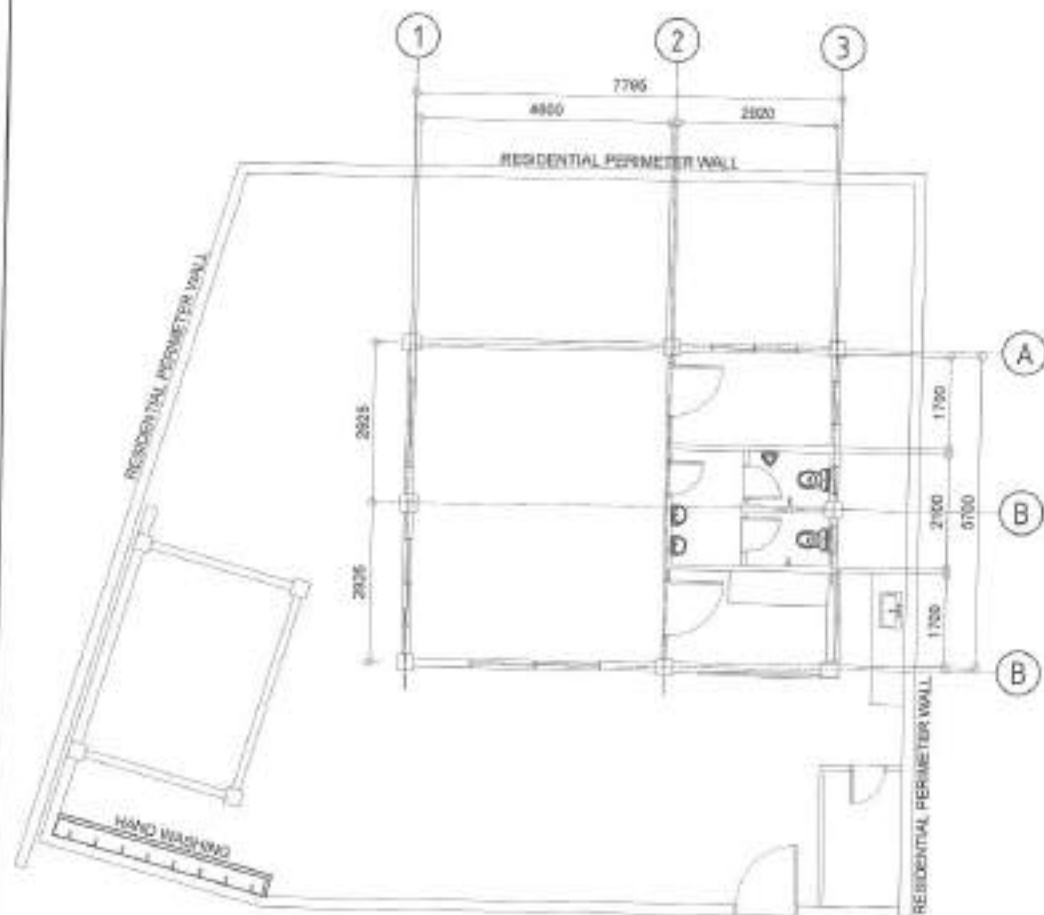
H = 450 mm for 19 mm \varnothing and larger

H = 300 mm for 12 mm \varnothing and smaller

16. All hose bibbs shall be 19 mm \varnothing (3/4" \varnothing) unless otherwise indicated.

17. Inlet pipe of septic tank is 50 mm higher than the siphon pipe which is 30 mm higher than the outlet pipe.

18. All plumbing works and manner of construction shall be under the direct supervision of an able and duly licensed Master Plumber or Registered Sanitary Engineer. Any discrepancies found in plan shall be notified to the same person.



NOTE
1. REPLACEMENT OF PLUMBING FIXTURES.

1 GENERAL NOTES

SCALE: NTS

2 PLUMBING LAYOUT

SCALE: NTS



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:	DESIGNED BY:	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET NO.
PROPOSED REHABILITATION OF LAZARO DAY CARE CENTER	DATE: MARCH 2021 CREATED BY: J.M.	ENGR. LEO S. DEL ROSARIO HEAD, PLUMBING PROGRAMS GROUP	ENGR. ISABEA R. VERZOSA, JR. DC, CITY ENGINEERING DEPARTMENT	HON. RA. JOSEFINA G. BELMONTTE CITY MAYOR	GENERAL NOTES PLUMBING LAYOUT	PL-01 06/09
LOCATION: BRDY, NAGKAWANG NAYON, DISTRICT 3, QUEZON CITY	REVISION NO.:					

GENERAL NOTES:

- ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL CODE ENFORCING AGENCIES AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE UTILITY COMPANY.
- THE CONTRACTOR SHALL SECURE ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE WORK AND SHALL FURNISH THE OWNER THROUGH THE ENGINEER, FINAL CERTIFICATES OF ELECTRICAL INSPECTION AND APPROVAL FROM PROPER GOVERNMENT AUTHORITIES FOR COMPLETION OF WORK.
- ALL EMBEDDED SWITCH CIRCUITS SHALL BE PVC CONDUITS AND FOR EXPOSED INSTALLATION SHALL BE RIGID SUPPORTED BY CONDUIT CLAMPS EVERY 750 MILLIMETERS.
- PULL BOXES SHALL BE PROVIDED BY THE CONTRACTOR WHENEVER NECESSARY TO FACILITATE WIRE PULLING EXCEPT IF THERE ARE NOT INDICATED ON THE PLANS. SIZES OF ALL PULL BOXES SHALL BE COMPUTED BASED ON THE CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. PRIOR TO FABRICATION, LOCATION OF PULL BOXES SHALL BE APPROVED BY THE ARCHITECT/ENGINEER AND MUST BE REFLECTED ON THE "AS BUILT" PLAN.
- ALL POWER OUTLETS AND SWITCHES SHALL BE GROUNDING TYPE WITH PARALLEL SLOTS FOR 200 V.
- PROVIDE GROUND FAULT CURRENT INTERRUPTER CIRCUIT BREAKER FOR LOADS MARKED "GFCI" ON THE PLAN.
- ALL METALLIC CONDUITS, CABLES AND EQUIPMENT SHALL BE PROPERLY GROUNDED AND BONDED.
- UNLESS OTHERWISE NOTED, MOUNTING HEIGHT FOR WALL MOUNTED DEVICES SHALL BE AS FOLLOWS:

RECEPTACLE OUTLET - 300 MM AFF. (150MM ABOVE WORKING COUNTER)
 LIGHTING SWITCH - 1400 MM AFF.
 PANELBOARD - 1400 MM AFF.

- REFER TO MECHANICAL, PLUMBING AND FIRE PROTECTION DRAWINGS FOR RATINGS AND LOCATIONS OF EQUIPMENT AS WELL AS THEIR CONTROL SEQUENCES AS SPECIFIED AND OR SHOWN UNDER THEIR RESPECTIVE SECTIONS.
- ALL MATERIALS TO BE USED SHALL BE OF THE BEST QUALITY, BRAND NAME AS SPECIFIED.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT GENERAL LAYOUT AND BROAD OUTLINE DESCRIPTION OF THE PROJECT BUT DO NOT NECESSARILY INDICATE DESCRIBED ACTUAL LOCATIONS, LEVELS AND DISTANCES OF THE EQUIPMENT. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE SUCH ADJUSTMENT AT THE JOB SITE AS LOCATION DISTANCES AND LEVELS ARE GOVERNED BY ACTUAL FIELD CONDITIONS.
- ANY DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION DECISION.
- ALL LIGHTING AND CONVENIENCE OUTLET CIRCUITS SHALL BE 2.5 SQ. MM THREE CORE COPPER WIRE UNLESS OTHERWISE NOTED. MINIMUM SIZE OF WIRE SHALL BE 3.5 SQ. MM. COPPER WIRE. ALL WIRE AND CABLE SHALL BE COLOR CODED AS FOLLOWS:

LINE 1 - RED
 LINE 2 - YELLOW
 NEUTRAL - WHITE
 GROUND - GREEN

- BOXES, RACE, CADDERS, ENCLOSURE SHALL BE FABRICATED FROM STEEL WITH THICKNESS AS FOLLOWS:
 MINIMUM WIDTH OF THE WIDEST SURFACE STEEL
 UP TO 900 LENGTH 150 MM
 OVER 900 LENGTH BUT NOT OVER 4500 200 MM
 OVER 4500 LENGTH BUT NOT OVER 7500 250 MM
 OVER 7500 300 MM
 OR PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT
 OR PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT
 OR PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT
 OR GALVANIZED WITH METAL PRIMER EPOXY AND TOPCOAT
- ALL ELECTRICAL WORK HEREIN SHALL BE EXECUTED BY EXPERIENCED MEN UNDER THE DIRECT SUPERVISION OF A FULL-TIME LICENSED ELECTRICAL ENGINEER AND A FULLY ACCREDITED ELECTRICAL CONTRACTOR BY NAME. WORKS SHALL BE NEATLY PLACED, SECURELY FASTENED AND PROPERLY FINISHED.
- TYPE OF SERVICE ENTRANCE SHALL BE SINGLE PHASE, TWO WIRE PLUS GROUND, 60 HERTZ, 230V AC NOMINAL.
- CONDUITS INTO CASE SHALL THERE BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS IN ANY ONE RUN. ALL CONDUIT BENDS SHALL BE FIELD MADE BY USING HYDRAULIC BENDERS. MINIMUM BENDING RADIUS MUST BE IN ACCORDANCE TO THE CODE REQUIREMENTS.
- UPON COMPLETION OF ELECTRICAL CONSTRUCTION WORK, INSULATION RESISTANCE TEST AND FUNCTIONALITY TEST SHALL BE PERFORMED BY THE CONTRACTOR INCLUSIVE OF THE INSTALLATION TO BE REPORTED IN DETAILS ON FORMS APPROVED BY THE QUEZON CITY ENGINEERING DEPARTMENT REPRESENTATIVE. THE GROUND RESISTANCE FOR ELECTRICAL SYSTEMS SHALL NOT BE MORE THAN 5 OHMS. COMMUNICATIONS GROUNDING RESISTANCE SHALL NOT EXCEED 3 OHMS.

	150MMØ LED BULB 18 WATTS		PANEL BOARD
	2X 10W TROFFER LIGHT		SELECTOR SWITCH (FAN)
	T5 LED (200MM, 20 WATTS)		ONE GANG SWITCH (LIGHTS)
	DUPLEX CONVENIENCE OUTLET (HEIGHT 1400MM)		TWO GANG SWITCH (LIGHTS)
	ACU OUTLET (HEIGHT 1400MM)		HOME RUN CIRCUIT BREAKER
			ORBIT FAN WITH SELECTOR SWITCH

2 LEGEND & SYMBOLS

SCALE NTS

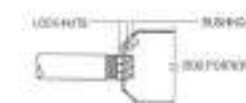
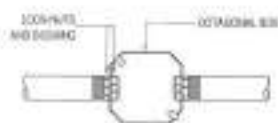


BENDS SHOULD USE 750MM

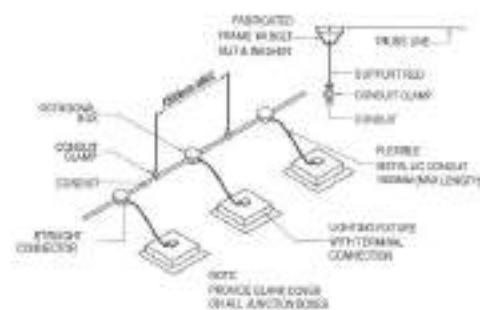


SMALL BENDS OF ANY ANGULAR DEGREE

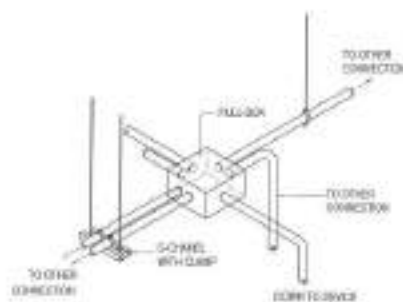
BENDING RADIUS DETAIL



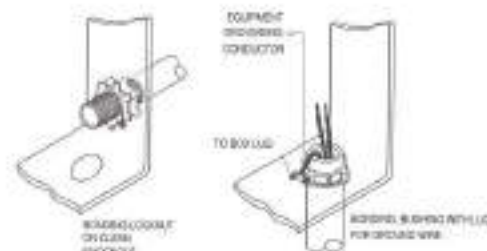
SPOT DETAIL OF CONDUIT RUN AND BOX



CONDUIT RUN FOR LIGHTING DISTRIBUTION IN ONE CIRCUIT (FOR EXPOSED OR INSIDE DROP-CEILING INSTALLATION)



PROPER CONDUIT LAYOUT AT PULL BOX



NOTE:
 CONNECTION OF THROAT TO RACEWAY METAL CONDUIT OR IMPROPER METAL CONDUIT TO A THROATLESS RACEWAY OR HAS A COMBINED TYPE A GOOD CONDUIT TERMINATION.

ROUNDED RACEWAY TERMINATION FOR SHEET METAL

1 GENERAL NOTES

SCALE NTS



Republika ng Pilipinas
 Lungsod ng Quezon
 CITY ENGINEERING DEPARTMENT

PROJECT TITLE:	DRAWING NO.:
PROPOSED REHABILITATION OF LAZARO DAY CARE CENTER	DATE: 15-01-2021
LOCATION:	CHECKED BY:
8507, HAZARANG NATION, DISTRICT 3, QUEZON CITY	REVISION NO.:

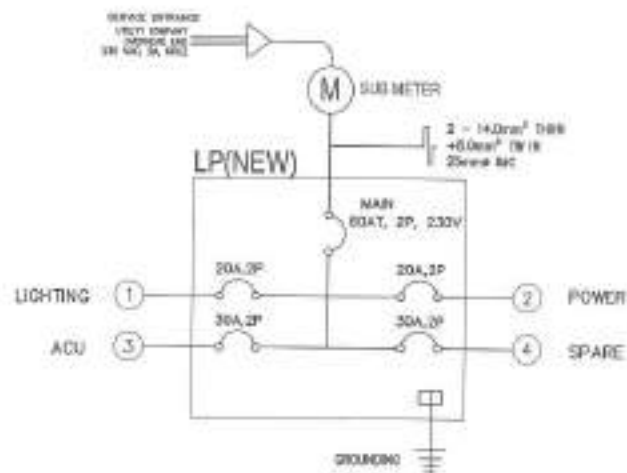
3 MISCELLANEOUS DETAILS

SCALE NTS

SUBMITTED BY:	RECOMMENDING APPROVAL:
ENGR. LEO S. DEL ROSARIO HEAD, PLUMBING & PIPING DIVISION	ENGR. ISAAC R. VERZOSA, JR. DCL, CITY ENGINEERING DEPARTMENT

APPROVED BY:	PROJECT CONTENT:
HON. MA. JOSEFINA G. BELMONTTE CITY ANCHOR	GENERAL NOTES LEGEND AND SYMBOLS MISCELLANEOUS DETAILS

SHEET NO.:	DATE:
EL-01	07/09



1 RISER DIAGRAM

SCALE NTS.

LP(NEW)

CKT. NO.	LOAD DESCRIPTION	VOLT	POWER	CURRENT (AMPERE)	CIRCUIT BREAKER			WIRES AND CONDUIT		
					AT	AF	P	UNGRND	GROUND	MMØ
					THHN	TW	TYPE			
1	2 - TROFFER, 3 - BULB, 5 - TS, 2 - C.FAN	230	1266	5.50	20	50	2	2 - 3.5mm ²	1 - 3.5mm ²	20 mm Ø PVC
2	7 - CONVENIENCE OUTLET	230	1260	5.48	20	50	2	2 - 3.5mm ²	1 - 3.5mm ²	20 mm Ø PVC
3	ACU	230	2300	10.00	30	50	2	2 - 5.5mm ²	1 - 3.5mm ²	20 mm Ø PVC
4	EXISTING	230	5520	24.00	30	50	2	2 - 5.5mm ²	1 - 3.5mm ²	20 mm Ø PVC
TOTAL CONNECTED LOAD			10346	44.98						

CIRCUIT PROTECTION COMPUTATION:
 $I_T = (10346 / 230 V + 25\%(10)) * 125\%$
 $I_T = 59.35$ AMPERE

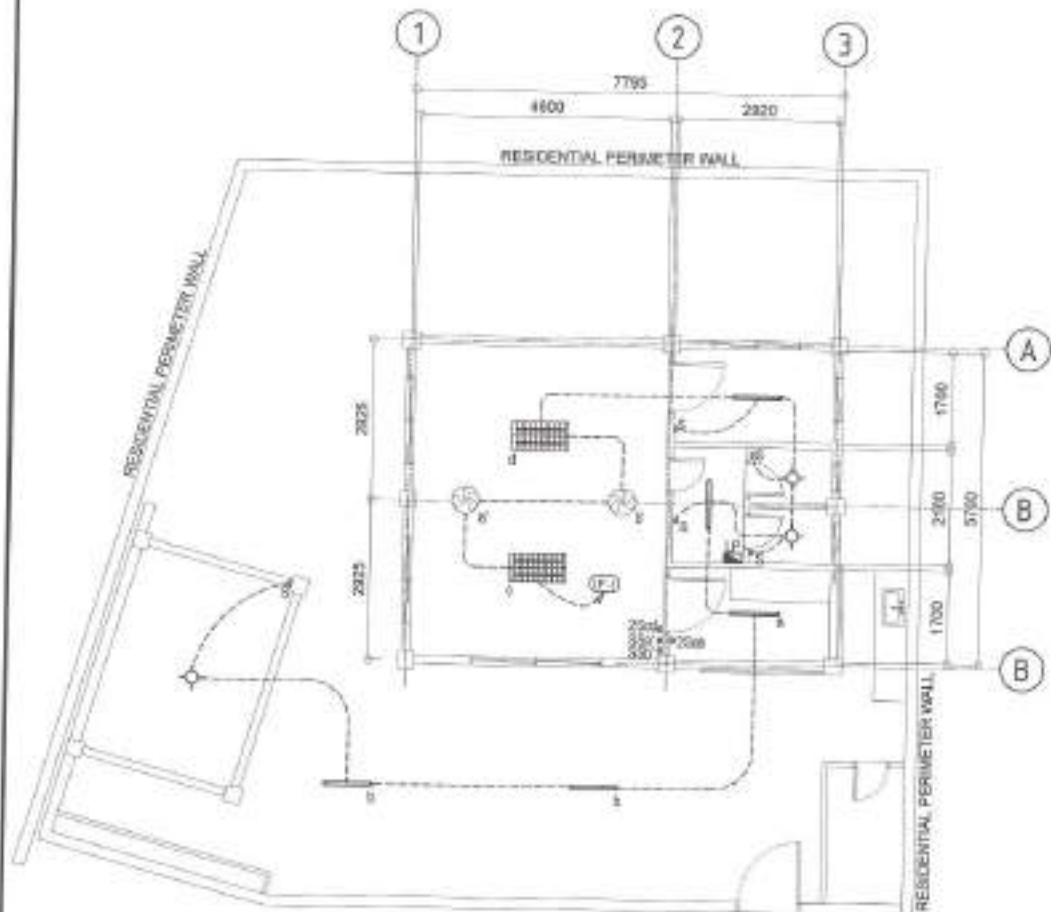
OVER CURRENT PROTECTION:
 USE: 60 AT, 2P CB BOLT-ON

MAIN FEEDER:
 USE: 2- 14mm² THHN WIRE & 1 - 8.0mm² TW GROUND WIRE
 IN 25mm Ø IMC TYPE

1 SCHEDULE OF LOADS

SCALE NTS.

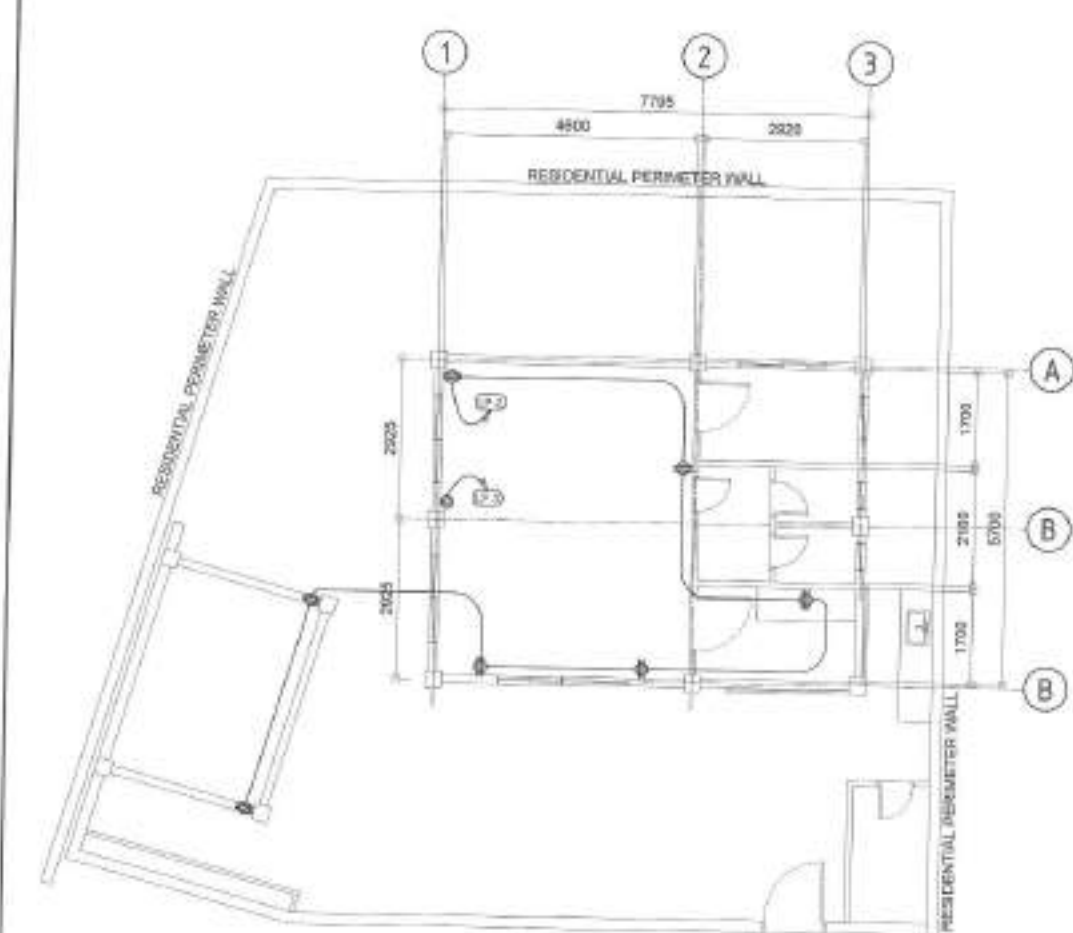
<p>Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE:	DESIGNED BY: <i>[Signature]</i>	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET LOCATION:	SHEET NO.:
	PROPOSED REHABILITATION OF LAZARO DAY CARE CENTER	DATE: 10/21/2021	<i>[Signature]</i>	<i>[Signature]</i>			
	LOCATION: BSP - NAUKARANANG NAYON, DISTRICT 5, QUEZON CITY	REVISION NO.:	ENGR. LEO S. DEL ROSARIO HEAD, PLUMBING & PIPING DIVISION	ENGR. ISAGANI R. VERZOSA, JR. LIC. CITY ENGINEERING DEPARTMENT	HON. WA. JOSEFINA G. BELMONTE CITY MAYOR		REVISION/SCHEDULE OF LOADS



NOTE:
1. REPLACEMENT OF LIGHTING FIXTURES AND SWITCHES

1 LIGHTING LAYOUT (PROPOSED)

SCALE NTS.



NOTE:
1. REPLACEMENT OF CONVENIENCE OUTLETS AND ACU OUTLET

2 POWER LAYOUT (PROPOSED)

SCALE NTS.



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:	DATE:	CHECKED BY:	PROVISION NO.:	DESIGNED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET NO.:
PROPOSED REHABILITATION OF LAZARO DAY CARE CENTER	06.11.2021	[Signature]		ENGR. LEO W. DEL ROSARIO HEAD, PLANNING & PROVISIONS DIVISION	ENGR. ISIDORO R. VERZOSA, JR. CIVIL CITY ENGINEERING DEPARTMENT	HON. MA. JOSEFINA G. BELMONTE CITY MAJOR	LIGHTING LAYOUT (PROPOSED) POWER LAYOUT (PROPOSED)	EL-03 0909



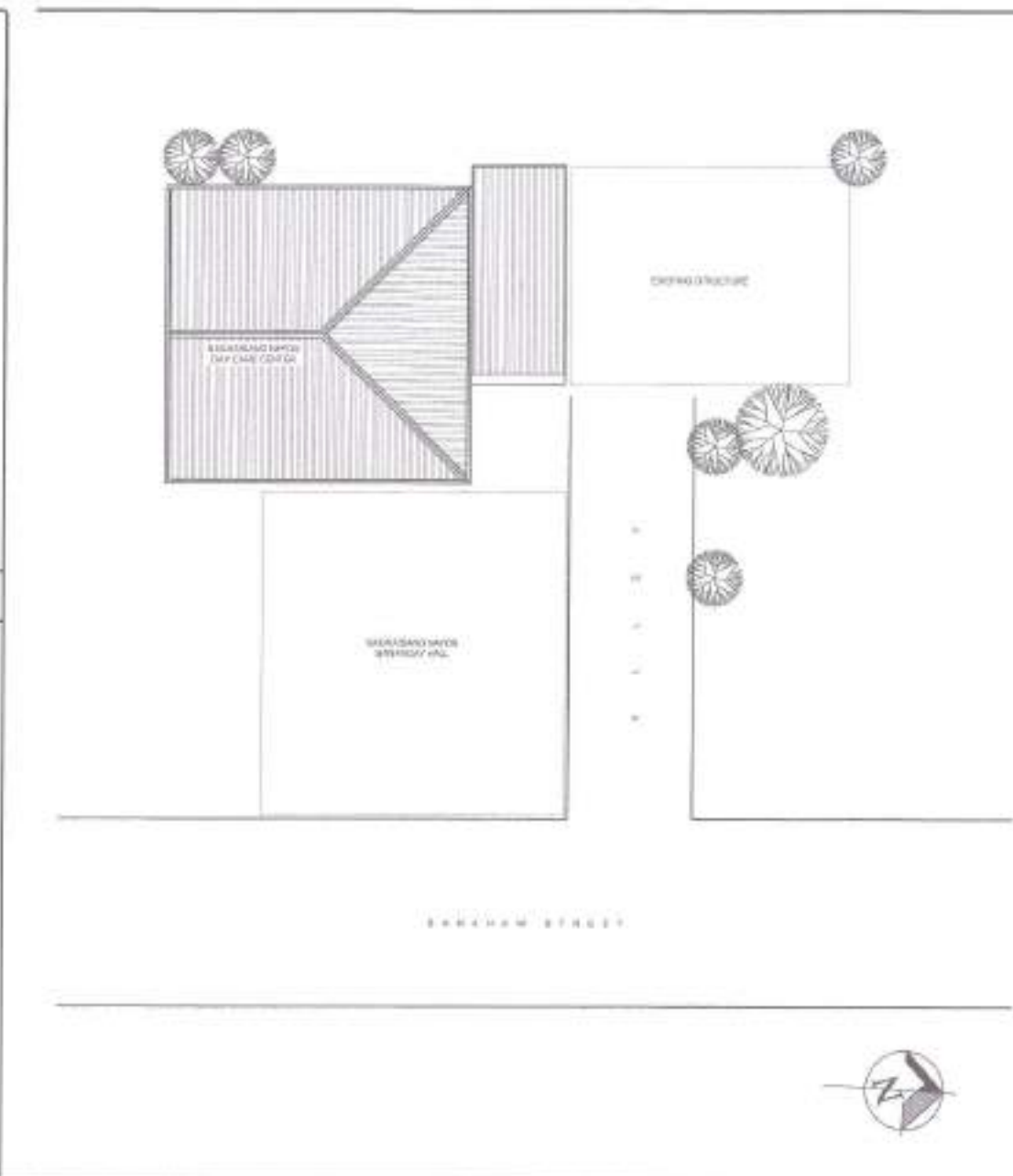
1 LOCATION MAP

SCALE: NTS



2 VICINITY MAP

SCALE: NTS



3 SITE DEVELOPMENT PLAN

SCALE: 1:100M

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Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:	PROPOSED REHABILITATION OF NAGKAISSANG NAYON I DAY CARE CENTER
LOCATION:	SPCY, NAGKAISSANG NAYON, DISTRICT 4, QUEZON CITY

DESIGNED BY:	<i>[Signature]</i>
DATE:	0-24-2021
CHECKED BY:	<i>[Signature]</i>
REVISION NO.:	

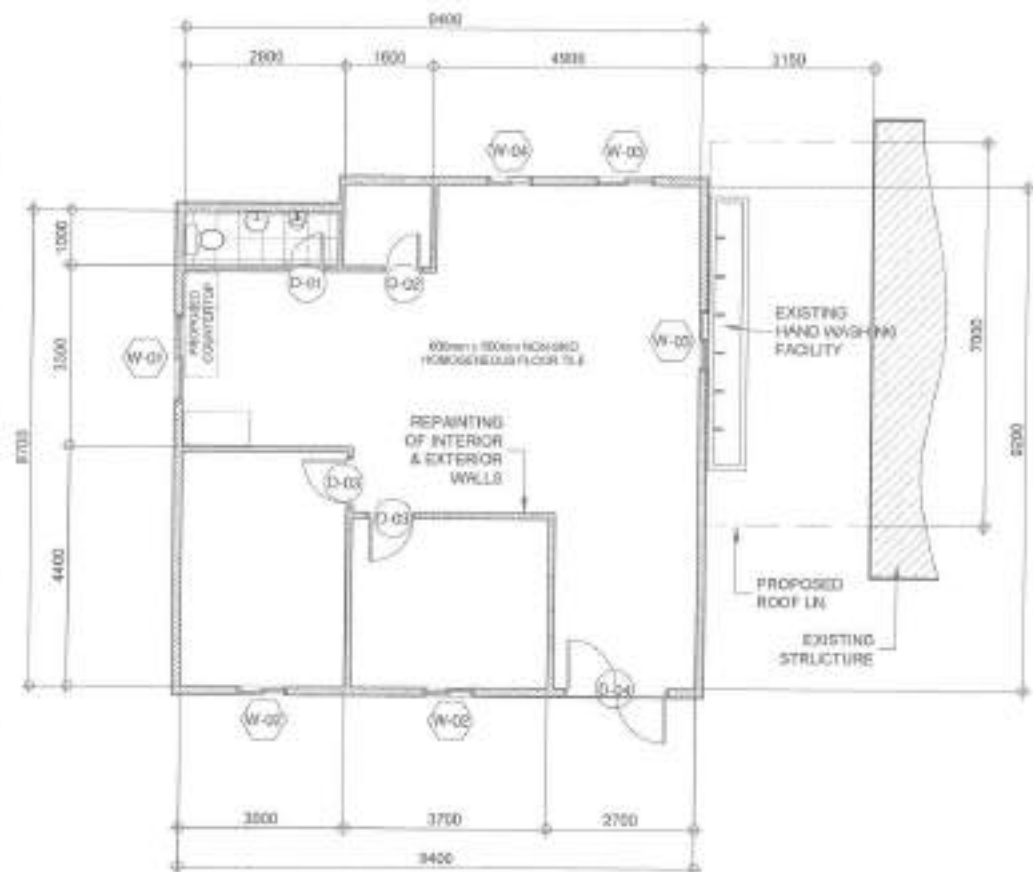
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ENGR. LEO S. DEL ROSARIO	HEAD, PLANNING & PROJECTS DIVISION

RECOMMENDING APPROVAL:	<i>[Signature]</i>
ENGR. ISMAEL R. VERZOSA, JR.	CHIEF, ENGINEERING DEPARTMENT

APPROVED BY:	<i>[Signature]</i>
ENR. MA. JOSEFINA G. BELMORTE	CITY ENGINEER, QUEZON CITY

DATE OF SUBMITTAL:	
SHEET NO. OF SHEETS:	

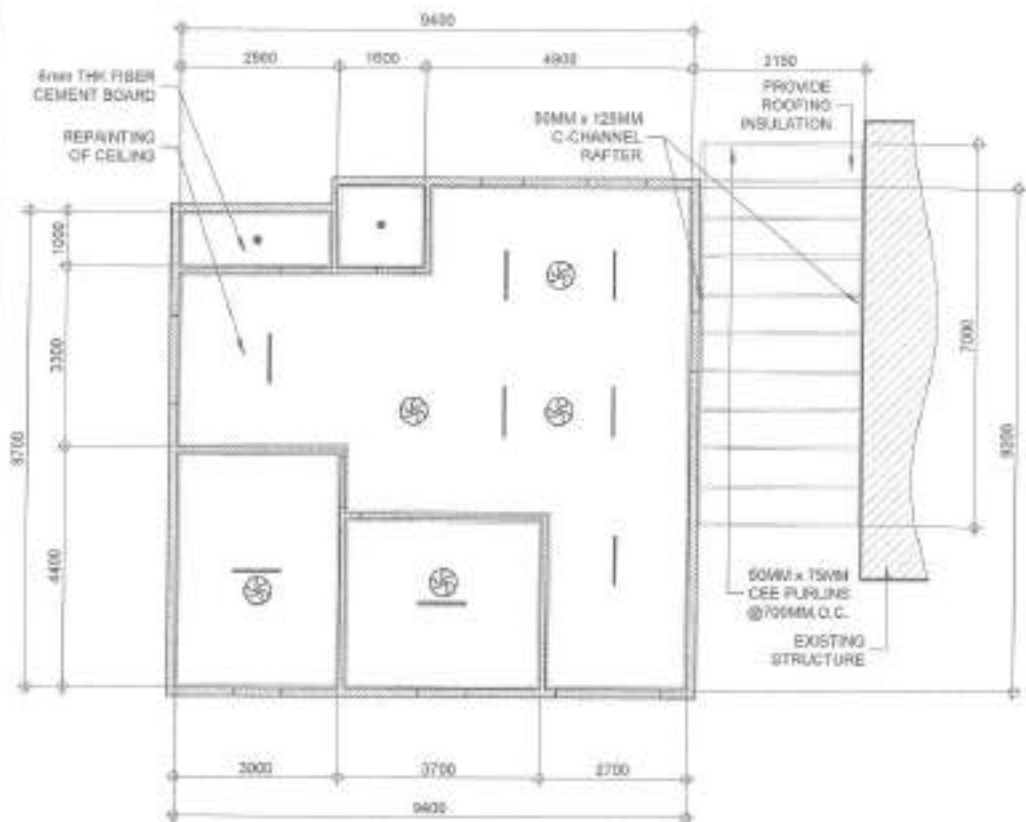
AR-01
01/10



- NOTE
- DOORS AND WINDOWS TO BE REPLACED
 - FLOOR AND WALL TILES TO BE REPLACED
 - HANDING CABINET TO BE REPLACED

2 FLOOR PLAN

SCALE: 1:100M



- NOTE
- COMFORT ROOM CEILING TO BE REPLACED

2 REFLECTED CEILING PLAN

SCALE: 1:100M



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:
PROPOSED REHABILITATION OF
NAGKAISANG NAYON I DAY CARE CENTER

LOCATION:
3RD FLR, NAGKAISANG NAYON, DISTRICT 4, QUEZON CITY

DESIGNED BY:
DATE: 02/20/21
CHECKED BY: [Signature]
REVISION NO.:

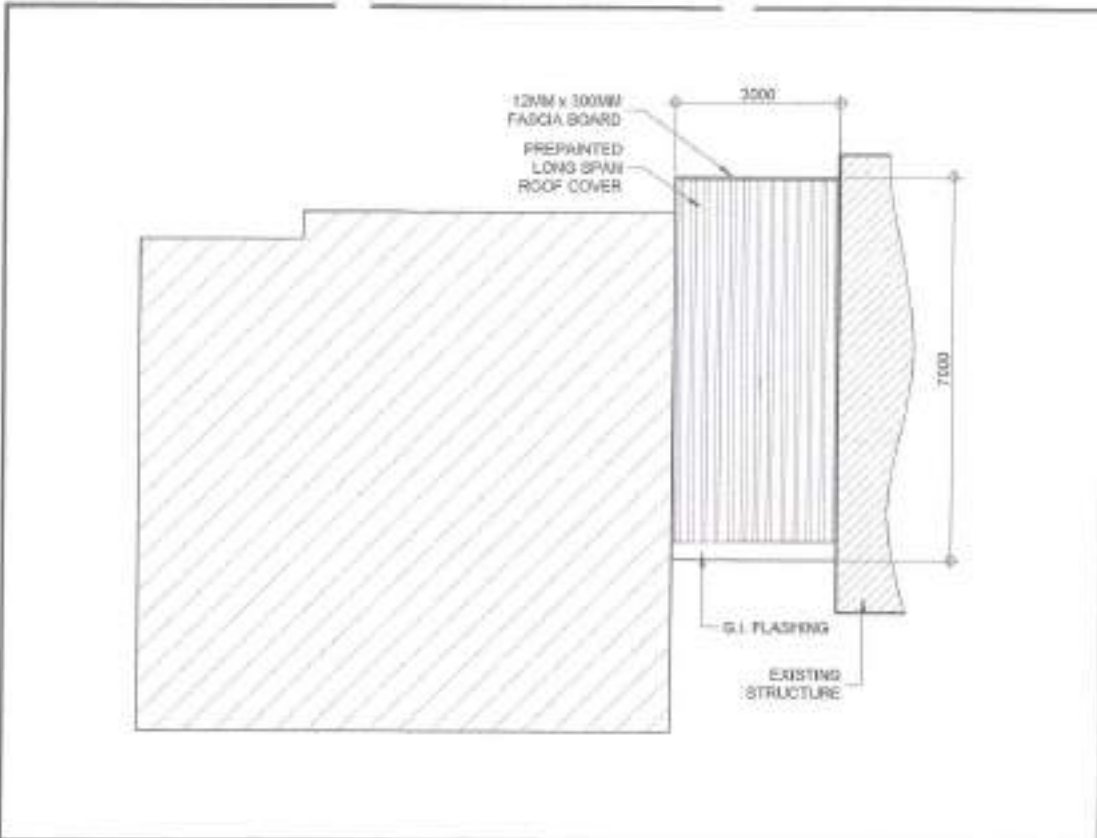
SUBMITTED BY:
[Signature]
ENGR. LEO S. DEL ROSARIO
HEAD, PLANNING AND DESIGN DIVISION

RECOMMENDED APPROVAL:
[Signature]
ENGR. RAG R. VERZOSA, JR.
DIR. OF PLANNING AND DESIGN

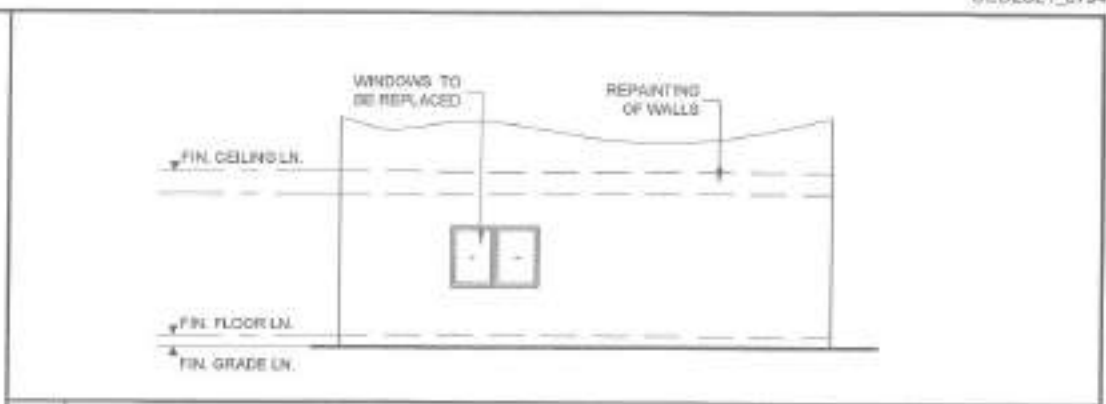
APPROVED BY:
[Signature]
HON. NA. JOSEFINA O. BELMONTE
CITY MGR. - QUEZON CITY

SHEET NO./TOTAL:
FLOOR PLAN
REFLECTED CEILING PLAN

SHEET NO.:
AR-02
02/10



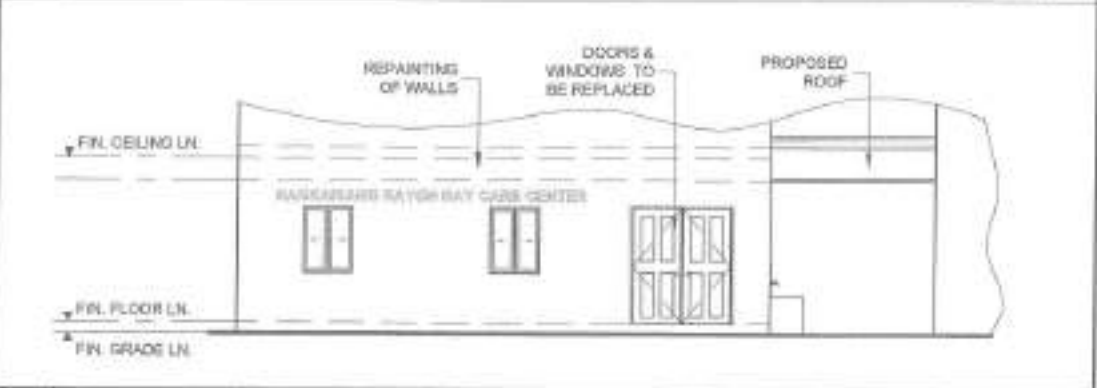
1 ROOF PLAN SCALE: 1:100M



3 LEFT SIDE ELEVATION SCALE: 1:100M




4 RIGHT SIDE ELEVATION SCALE: 1:100M

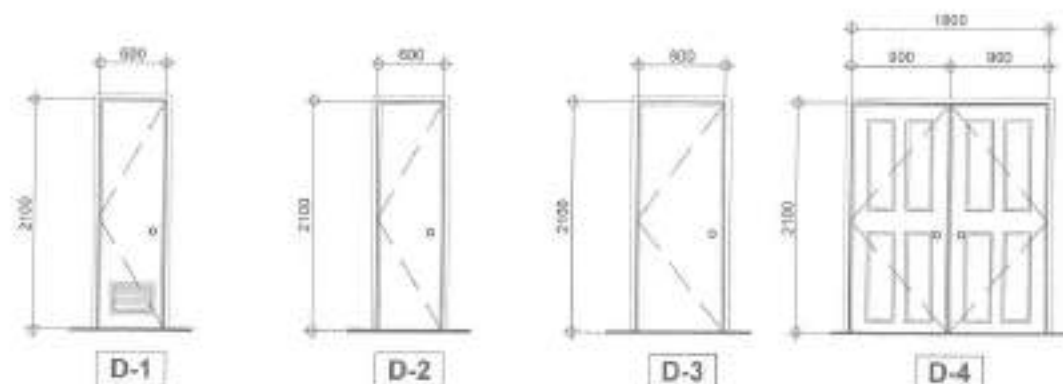


2 FRONT ELEVATION SCALE: 1:100M

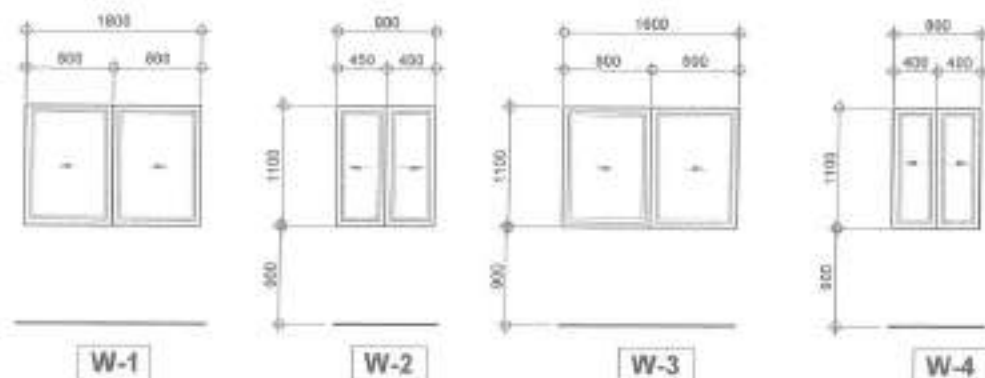


5 REAR ELEVATION SCALE: 1:100M

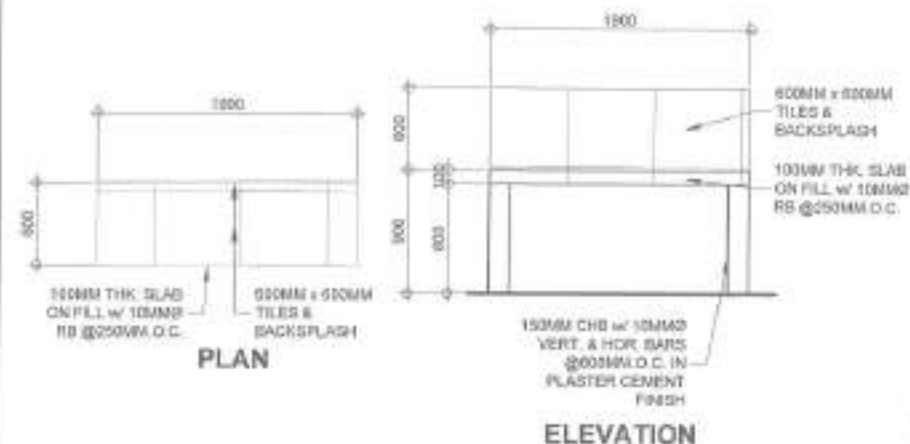
 <p>Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE:	DESIGNED BY:	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	DRAWN BY:	DATE:	
	PROPOSED REHABILITATION OF NAGKAIKISANG NAYON DAY CARE CENTER	FER-07	ENGR. LEO S. DEL ROSARIO HEAD, PLANNING & ENGINEERING DIVISION	ENGR. ISIDORO R. VERZOSA, JR. CEO, CITY ENGINEERING DEPARTMENT	HON. MA. JOSEFINA G. BELMONTE CITY MANOR, QUEZON CITY	ROOF PLAN FRONT ELEVATION LEFT SIDE ELEVATION RIGHT SIDE ELEVATION REAR ELEVATION	03/10	DATE: 4/4/2021
	LOCATION:	REVISION NO.:						
	BRGY. NAGKAIKISANG NAYON, DISTRICT 4, QUEZON CITY							



SETS:	1 SET	SETS:	1 SET	SETS:	2 SETS	SETS:	1 SET
LOCATION:	TOILET	LOCATION:	STORAGE	LOCATION:	OFFICE	LOCATION:	ENTRANCE
TYPE:	PVC FLUSH DOOR WITH LOUVER	TYPE:	FLUSH TYPE DOOR	TYPE:	FLUSH TYPE DOOR	TYPE:	PANEL TYPE DOOR

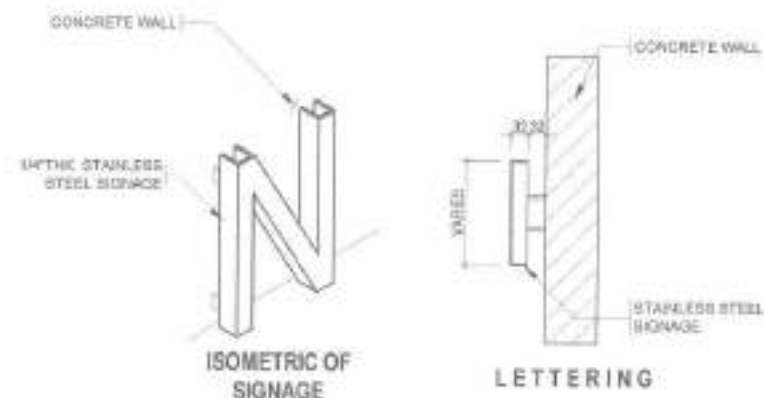


SETS:	1 SET	SETS:	2 SETS	SETS:	2 SETS	SETS:	1 SET
LOCATION:	KITCHEN	LOCATION:	DAY CARE	LOCATION:	DAY CARE	LOCATION:	DAY CARE
TYPE:	ANALOK ALUMINUM FRAME WITH CLEAR GLASS	TYPE:	ANALOK ALUMINUM FRAME WITH CLEAR GLASS	TYPE:	ANALOK ALUMINUM FRAME WITH CLEAR GLASS	TYPE:	ANALOK ALUMINUM FRAME WITH CLEAR GLASS



2 COUNTERTOP DETAILS

SCALE: 1/4"=1'-0"



1 SCHEDULE OF DOORS & WINDOWS

SCALE: 1/8"=1'-0"

3 LETTERING DETAILS

SCALE: 1/4"=1'-0"



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT


PROJECT TITLE:	DRAWN BY: <i>AM</i> DATE: 1/14/21	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SCALE: 1/4"=1'-0"	PROJECT NO.:
PROPOSED REHABILITATION OF NAGKAIKANG MAYON (DAY CARE CENTER)	CREATED BY: <i>AM</i>	<i>[Signature]</i> ENGR. LEO S. DEL ROSARIO HEAD, PLANNING & PROFESSIONAL DIVISION	<i>[Signature]</i> ENGR. ISAAC AR. VERZOSA, JR. CIC, CIVIL ENGINEERING DEPARTMENT	HON. MA. JOSEFINA G. BELMONTE CITY MAYOR - QUEZON CITY		AR-04
LOCATION: BPOV, NAGKAIKANG MAYON, DISTRICT 4, QUEZON CITY	REVISION NO.:					04/10

SCHEDULE OF DOORS &
WINDOWS
COUNTERTOP DETAILS
LETTERING DETAILS

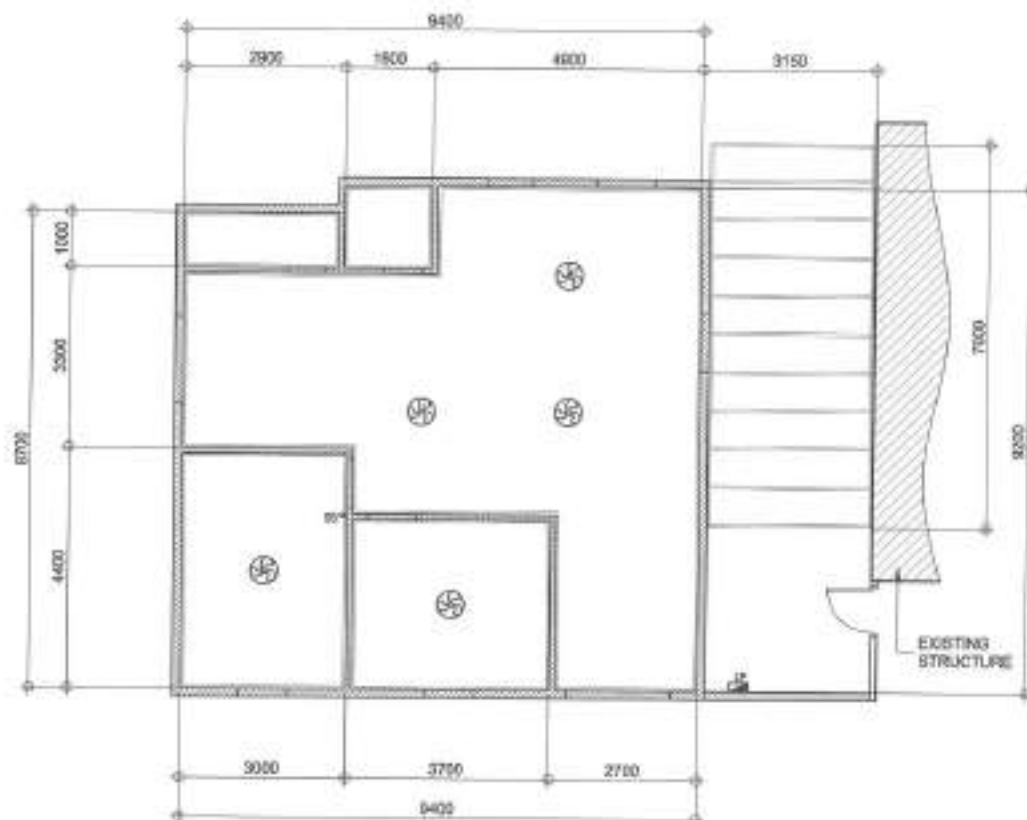
- ALL MECHANICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE NATIONAL BUILDING CODE, PSME CODE AND THE RULES AND REGULATIONS OF QUEZON CITY.
- THE SCOPE OF WORK SHALL INCLUDE ALL WORKS DESCRIBED IN PLANS.
- THE WORKS SHALL BE EXECUTED IN CLOSE COORDINATION WITH ALL OTHER TRADES. ALL AIRCONDITIONED SPACES SHALL BE MAINTAINED AT 24°C DB AND 50% RH.
- ALL AIRCONDITIONED SPACES SHALL BE MAINTAINED AT 24°C DB AND 50% RH.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, MANUFACTURERS CATALOGUE, SPECIFICATIONS, SAMPLES, INCLUDING VIBRATION ISOLATORS BEFORE EXECUTION OF WORK.
- ALL FLOOR SLAB MOUNTED VIBRATING EQUIPMENT SHALL BE PROVIDED WITH VIBRATION ISOLATORS TO PREVENT VIBRATIONS AND NOISE TRANSMISSION.
- EXHAUST FAN SHALL BE PROVIDED WITH SUITABLE FLEXIBLE CONNECTIONS TO DISCHARGE DUCT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING AND COMMISSIONING OF THE WHOLE VENTILATION AND AIRCONDITIONING SYSTEM AND INSTALLATION.
- ALL POWER WIRING SHALL BE ELECTRICAL AND TERMINATION TO EQUIPMENT SHALL BE MECHANICAL.
- PROVIDE CONTROL WIRING FOR AIRCONDITIONING EQUIPMENT.
- PROVIDE THERMOSTAT FOR ALL INDOOR UNITS / FAN COIL UNITS.
- ALL PIPE EQUIPMENT CONDENSATE DRAIN SHALL BE CONNECTED TO THE NEAREST FLOOR DRAIN / AD / CB.
- ALL PIPE EQUIPMENT CONDENSATE DRAIN SHALL BE CONNECTED TO THE NEAREST FLOOR DRAIN / AD / CB.
- PROVIDE GUIDES, HANGERS, AND SUPPLEMENTAL STEEL SUPPORT FOR ALL PIPING, DUCTING AND EQUIPMENTS.
- PROVIDE PIPE SLEEVES FOR ALL PIPING PASSING THRU BUILDING STRUCTURE.
- ALL PIPE DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE NOTED.

1 GENERAL NOTES

SCALE: NTS

°SS	SELECTOR SWITCH (FAN)
	CEILING FAN

NOTE:
1. CEILING FANS AND SWITCHES TO BE REPLACED



2 LEGENDS AND SYMBOLS




SCALE: NTS

3 MECHANICAL LAYOUT

SCALE: 1:100M



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:	DRAWN BY:	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET NO.
PROPOSED REHABILITATION OF NAGKASANG NAYON / DAY CARE CENTER	DATE: 9-24-2021 DRAWN BY: JAR	 ENGR. LEN S. DEL ROSARIO HEAD, PLANNING AND DESIGN DIVISION	 ENGR. ISAGANI R. VERZOSA, JR. CH. CITY ENGINEERING DEPARTMENT	 HON. MA. JOSEFINA O. BELMONTE CITY MAYOR, QUEZON CITY	GENERAL NOTES LEGENDS AND SYMBOLS MECHANICAL LAYOUT	ME-01 10/10
LOCATION: STEDY, NAGKASANG NAYON, DISTRICT A, QUEZON CITY	REVISION NO.:					

1 All plumbing works and materials indicated herein shall be compliant to the provisions of the latest edition of National Plumbing Code, the rules and regulations of local authorities concerned, the rules and regulations of local utility companies and the provisions of the land developer when and where applicable.

2 The plumbing layout is only diagrammatic; pipes, cleanouts and check valves shall be concealed as much as possible. It is not intended to show the actual dimension of the pipes and fixtures in the drawing but all the pipes and fixture shall be installed as and where indicated. Any relocation will require proper execution in relation with other trades.

3 The plumbing contractor shall verify all existing utilities at the site and shall coordinate the work with other trades.

4 Pipes shall not be embedded in structural members unless otherwise specified or allowed.

5 Minimum slope for horizontal sewer lines shall be 1% and for drain lines shall be 5%.

6 Proposed plumbing utilities shall conform with the actual location, depth and invert elevation of all existing pipes/utilities.

7 Connection of fixtures to pipes and fittings shall be according to manufacturer's specifications.

8 All floor drains shall be vented individually.

9 All clean out ferrules shall be flush-mounted to wall and shall be provided with polished cover caps. Do not install floor clean outs except at lines on grade and service areas not subject to traffic.

10 All underground G.I. pipes in direct contact with soil shall be provided with two (2) coats of protective tar covering and wrapped with jute cloth thoroughly soaked in tar or asphalt.

11 Provide vent stack and vent pipe thru roof of cast iron service weight as required.

12 All cast iron pipes shall be of approved quality and G.I. pipes for water distribution lines shall be Schedule 40 U.S. standard weight.

13 Provide gate valves to all water supply lines to fixtures.

14 All hot water lines shall be provided with proper insulation where exposed.

15 All individual branches to fixtures or group of fixtures and/or equipments shall be provided with air chambers or capped vertical pipe extensions of dimensions as shown.

H = 450 mm for 19 mm Ø and larger


H = 300 mm for 12 mm Ø and smaller

16 All hose bibbs shall be 19 mm Ø (3/4" Ø) unless otherwise indicated.

17 Inlet pipe of septic tank is 50 mm higher than the siphon pipe which is 30 mm higher than the outlet pipe.

18 All plumbing works and manner of construction shall be under the direct supervision of an able and duly licensed Master Plumber or Registered Sanitary Engineer. Any discrepancies found in plan shall be notified to the same person.

I. FIXTURES AND OTHER LEGEND

FD	FLOOR DRAIN
RD	ROOF DRAIN
SHO	SHOWER
WC	WATER CLOSET
LAV	LAVATORY
URI	URINAL
KS	KITCHEN SINK
BD	BUILDING DRAIN
DD	DECK DRAIN
CCO	CEILING CLEANOUT
FCO	FLOOR/GROUND CLEANOUT
DS	DOWNSPOUT
mm	millimeter
Ø	mm DIAMETER
SHD	SHOWER DRAIN
CB	CATCH BASIN
MH	MANHOLE
→	DIRECTION OF FLOW
	GREASE TRAP

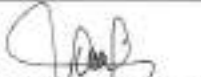
	UNION/FYTER
	CHECK VALVE
BS	BUILDING SEWER
BD	BUILDING DRAIN
WT	WASTE LINE
AD/CB	AREA DRAIN / CATCH BASIN
FD	FLOOR DRAIN
Ø	DIAMETER
—	WASTE LINE
—	WATER LINE
	GATE VALVE
DD	DECK DRAIN
CO	CLEANOUT
	PIPE DOWN
	PIPE UP
mm	MILLIMETER
Ø	DIAMETER
AD/CB	AREA DRAIN / CATCH BASIN
WC	WATER CLOSET
LAV	LAVATORY
MH	MANHOLE
HB	HOSE BIBB
	STORM DRAIN LINE
—	VENT LINE
—	VENT ABOVE CEILING
CP/REP	CONCRETE PIPE / REIN' CONC. PIPE
VR	VENT THRU/ROOF
→	DIRECTION OF FLOW/SLOPE

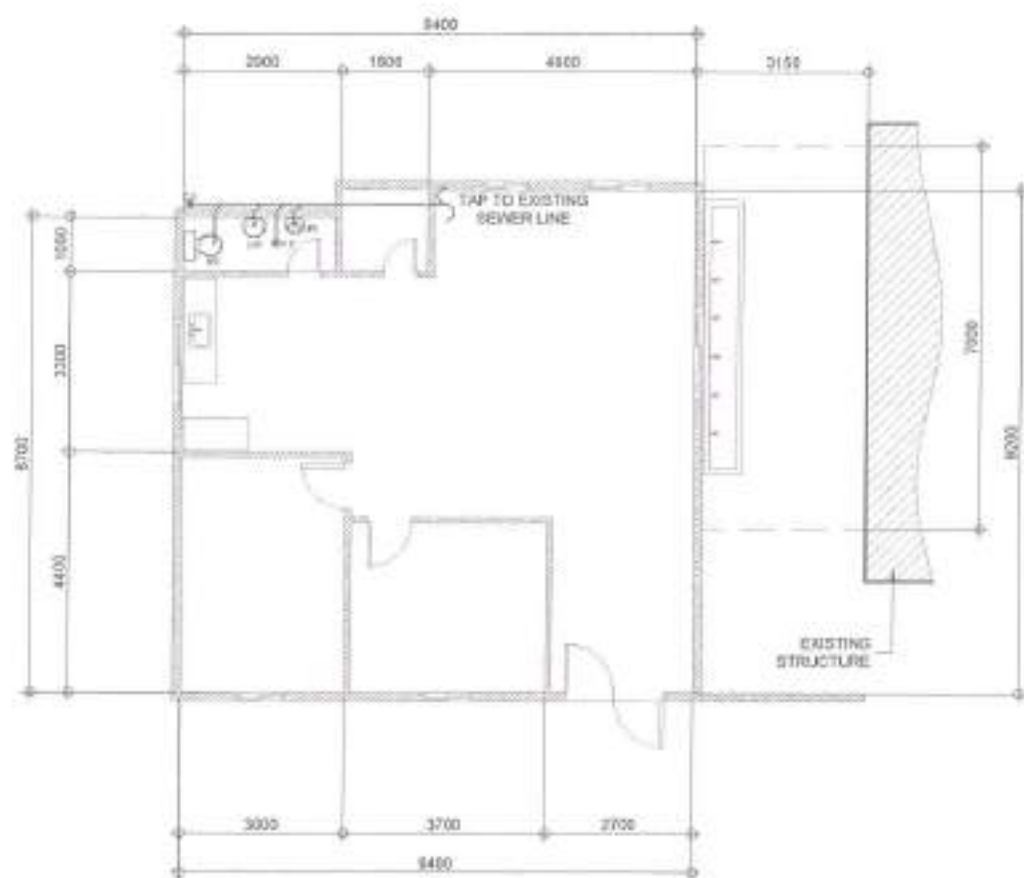
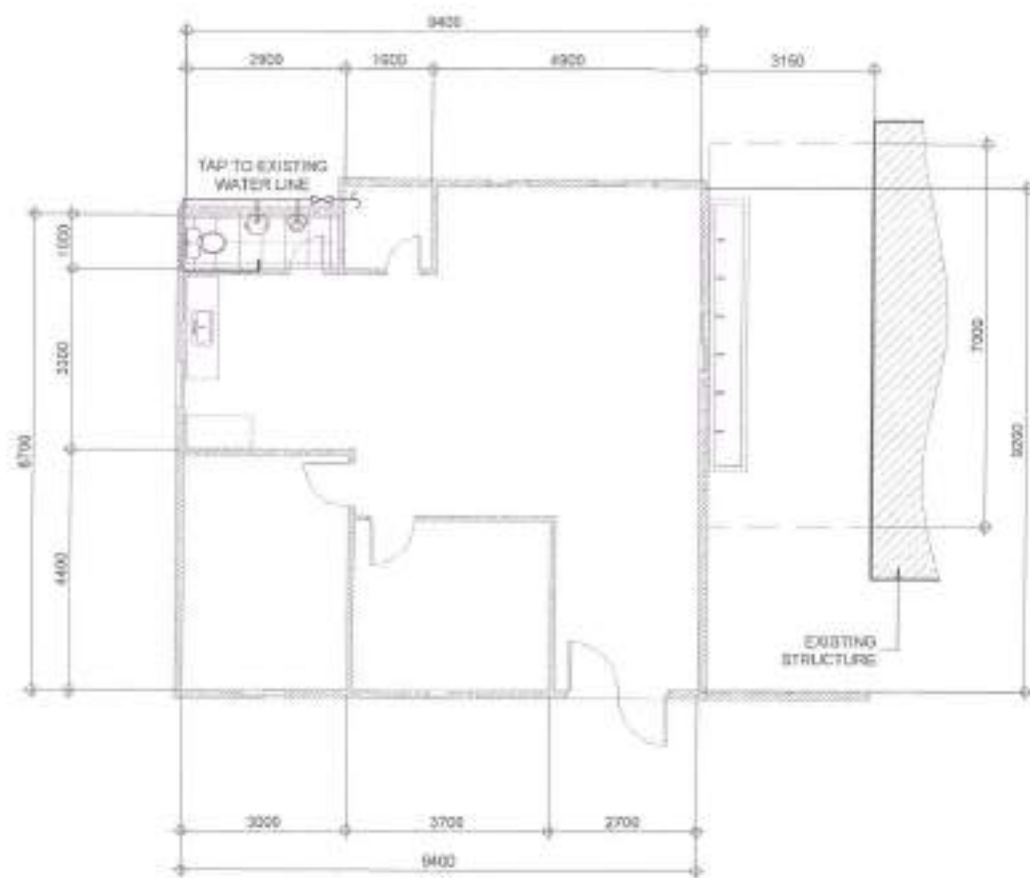
1 GENERAL NOTES

SCALE: NTS

2 LEGEND AND SYMBOLS

SCALE: NTS

 <p>Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE:	DRAWN BY: <i>JAM</i> DATE: 9/2/2021	SUBMITTED BY:	RECOMMENDED APPROVAL:	APPROVED BY:	ISSUE CONTAIN:	ISSUE NO.
	PROPOSED REHABILITATION OF NAGKASANG NAYON / DAY CARE CENTER	CHECKED BY: <i>JAM</i>			HON. MA. JOSEFINA G. BELMONTTE	GENERAL NOTES LEGEND AND SYMBOLS	PL-01 06/10
	LOCATION: STREET, NAGKASANG NAYON, DISTRICT 8, CALUBZON CITY	REVISION NO.:	ENGR. LEO S. DEL ROSARIO HELD. PLUMBING & MECHANICAL DESIGNER	ENGR. ISMAEL R. VERZOSA, JR. DEPT. OF CONSTRUCTION DEPARTMENT	CITY ENGINEER		



NOTE:

1. PLUMBING FIXTURES TO BE REPLACED
2. HAND WASHING HOSE H889 TO BE REPLACED

1 WATER LINE LAYOUT

SCALE: 1:100M

2 SANITARY LINE LAYOUT

SCALE: 1:100M



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:	DRAWN BY:	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT	SHEET NO.
PROPOSED REHABILITATION OF NAGKAISANG NAYON I DAY CARE CENTER,	DATE: 9/14/2021 CHECKED BY: JAA	ENGR. LEN S. DEL ROSARIO HEAD, PLANNING & PROGRAM DIVISION	ENGR. ISABELA R. VERZOSA, JR. DIC, CITY ENGINEERING DEPARTMENT	HON. MA. JOSEFINA G. BELMONTE CITY MANOR, QUEZON CITY	WATER & SEWER LAYOUT SANITARY LINE LAYOUT	PL-02 07/10

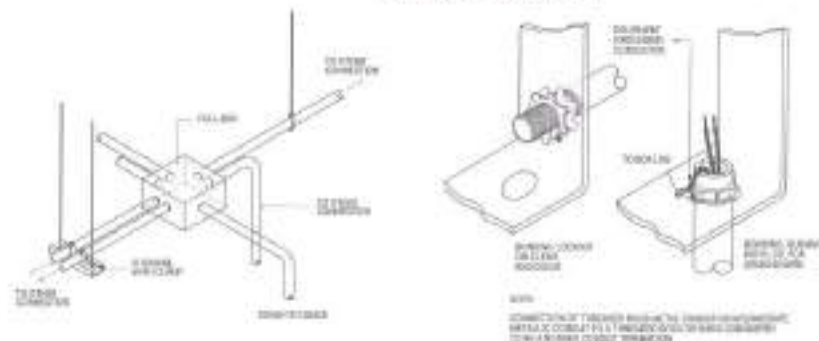
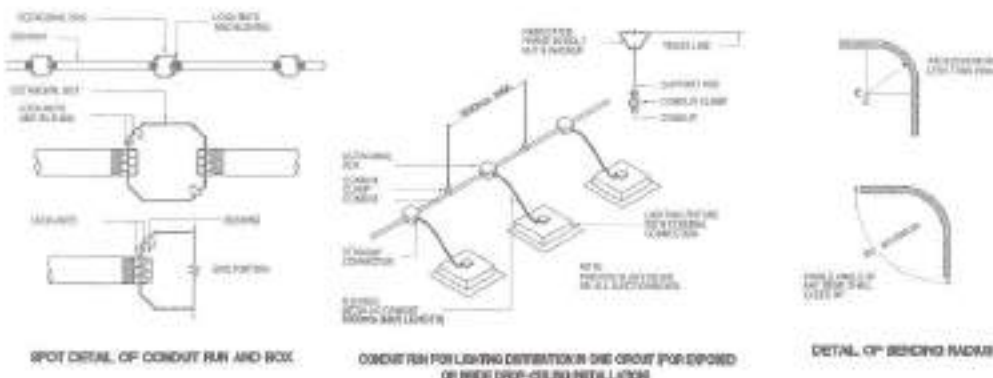
- ALL ELECTRICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL CODE ENFORCING AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE UTILITY COMPANY.
- THE CONTRACTOR SHALL SECURE ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE WORK AND SHALL FURNISH THE OWNER THROUGH THE ENGINEER, FINAL CERTIFICATES OF ELECTRICAL INSPECTION AND APPROVAL FROM PROPER GOVERNMENT AUTHORITIES FOR COMPLETION OF WORK.
- ALL EMBEDDED BRANCH DISCUTS SHALL BE PVC CONDUITS AND FOR EXPOSED INSTALLATION SHALL BE IMC SUPPORTED BY CONDUIT CLAMPS EVERY 100 MILLIMETERS.
- PULL BOXES SHALL BE PROVIDED BY THE CONTRACTOR WHENEVER NECESSARY TO FACILITATE WIRE PULLING EVEN IF THESE ARE NOT INDICATED ON THE PLANS. SIZES OF ALL PULLBOXES SHALL BE COMPUTED BASED ON THE CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. PRIOR TO FABRICATION, LOCATION OF PULLBOXES SHALL BE APPROVED BY THE ARCHITECT/ENGINEER AND MUST BE REFLECTED ON THE "AS-BUILT" PLAN.
- ALL POWER OUTLETS AND SWITCHES SHALL BE GROUNDING TYPE WITH PARALLEL SLOTS FOR 200V.
- PROVIDE GROUND FAULT CURRENT INTERRUPTER CIRCUIT BREAKER FOR LOADS MARKED "GFCI" ON THE PLAN.
- ALL METALLIC CONDUITS, CABLES AND EQUIPMENT SHALL BE PROPERLY GROUNDED AND BONDED.
- UNLESS OTHERWISE NOTED, MOUNTING HEIGHT FOR WALL MOUNTED DEVICES SHALL BE AS FOLLOWS:

RECEPTACLE OUTLET - 300 MM AFF, 150MM ABOVE WORKING COUNTER
 TELEPHONE OUTLET - 300 MM AFF
 DATA OUTLET - 800MM AFF
 LIGHTING SWITCH - 1400MM AFF
 PANELBOARD - 1500MM AFF

- REFER TO MECHANICAL PLUMBERS AND FIRE PROTECTION DRAWINGS FOR RATINGS AND LOCATIONS OF EQUIPMENT AS WELL AS THEIR CONTROL REQUIREMENTS AS SPECIFIED AND OR SHOWN UNDER THEIR RESPECTIVE SECTIONS.
- ALL MATERIALS TO BE USED SHALL BE OF THE BEST QUALITY, BRAND NEW AS SPECIFIED.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT GENERAL LAYOUT AND BROAD OUTLINE DESCRIPTION OF THE PROJECT BUT DO NOT NECESSARILY INDICATE DESCRIBED ACTUAL LOCATIONS, LEVELS AND DISTANCES OF THE EQUIPMENT. THE CONTRACTOR IS HEREBY NOTIFIED TO MAKE SUCH ADJUSTMENT AT THE JOBSITE AS LOCATION, DISTANCES AND LEVELS ARE GOVERNED BY ACTUAL FIELD CONDITIONS.
- ANY DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION DECISION.
- ALL LIGHTING AND CONVENIENCE OUTLET CIRCUITS SHALL BE 3.0 SQ. MM. THINW G COPPER WIRE UNLESS OTHERWISE NOTED. MINIMUM SIZE OF WIRE SHALL BE 3.0 SQ. MM. COPPER WIRE. ALL WIRING AND CABLES SHALL BE COLOR CODED AS FOLLOWS:

LINE 1 - RED
 LINE 2 - YELLOW
 NEUTRAL - WHITE
 GROUND - GREEN

- WORK WIRE, SWITCHES, ENCLOSURE SHALL BE FABRICATED FROM STEEL WITH THICKNESS AS FOLLOWS:
 MAXIMUM WIDTH OF THE WIRE SURFACE STEEL:
 UP TO 160 (LBS) 12.40 MM GA 18 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT
 OVER 152.40 (LBS) BUT NOT OVER 407.30 GA 14 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT
 OVER 407.30 (LBS) BUT NOT OVER 762.1MM GA 13 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT
 OVER 762.1MM GA 12 PAINTED WITH METAL PRIMER EPOXY AND TOPCOAT
- ALL ELECTRICAL WORKS HEREIN SHALL BE EXECUTED BY EXPERIENCED MEN UNDER THE DIRECT SUPERVISION OF A FULL-TIME LICENSED ELECTRICAL ENGINEER AND A DULY ACCREDITED ELECTRICAL CONTRACTOR BY PCAB. WORKS SHALL BE NEATLY PLACED, SECURELY FASTENED AND PROPERLY FINISHED.
- TYPE OF SERVICE ENTRANCE SHALL BE SINGLE-PHASE, TWO-WIRE PLUS GROUND, 60 HERTZ, 200V AC NOMINAL.
- CONDUIT BEND CASE SHALL THERE BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS IN ANY ONE RUN ALL CONDUIT BENDS SHALL BE FIELD MADE BY USING HYDRAULIC BENDERS. MINIMUM BENDING RADIUS MUST BE IN ACCORDANCE TO THE CODE REQUIREMENTS.
- UPON COMPLETION OF ELECTRICAL CONSTRUCTION WORK, INSULATION RESISTANCE TEST AND FUNCTIONALITY TEST SHALL BE PERFORMED BY THE CONTRACTOR INCLUSIVE OF THE INSTALLATION TO BE REPORTED IN DETAILS ON FORMS APPROVED BY THE QUEZON CITY ENGINEERING DEPARTMENT REPRESENTATIVE. THE GROUND RESISTANCE FOR ELECTRICAL SYSTEMS SHALL NOT BE MORE THAN 5 OHMS. COMMUNICATION GROUNDING RESISTANCE SHALL NOT EXCEED 2 OHMS.



2 MISCELLANEOUS DETAILS

SCALE: NTS

	T5 LED 1200MM, 28 WATTS
	DUPLEX CONVENIENCE OUTLET
	ONE GANG CEILING MOUNTED OUTLET
	ACU OUTLET
	PANEL BOARD
	ONE GANG SWITCH (LIGHTS)
	TWO GANG SWITCH (LIGHTS)

1 GENERAL NOTES

SCALE: NTS

3 LEGEND AND SYMBOLS

SCALE: NTS



Republika ng Pilipinas
 Lungsod ng Quezon
 CITY ENGINEERING DEPARTMENT

PROJECT TITLE:

PROPOSED REHABILITATION OF
 NAGKASANG NAYON 1 DAY CARE CENTER

LOCATION:
BAGY, NAGKASANG NAYON, DISTRICT 8, QUEZON CITY

DATE: 01/20/21

DRAWN BY: JAL

REVISION NO.:

SUBMITTED BY:

ENGR. LEO S. DEL ROSARIO
HEAD, PLANNING PROGRAM AND DESIGN

RECOMMENDING APPROVAL:

ENGR. ISAAC P. VERZOSA, JR.
DCL, CITY ENGINEERING DEPARTMENT

APPROVED BY:

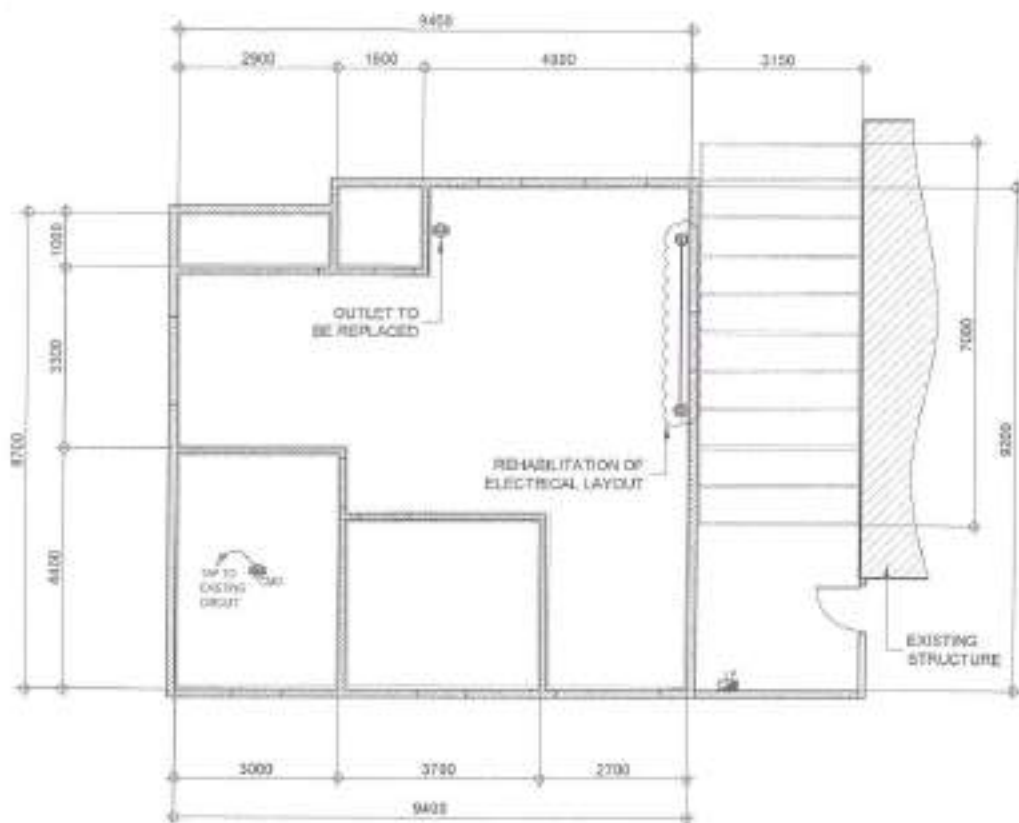
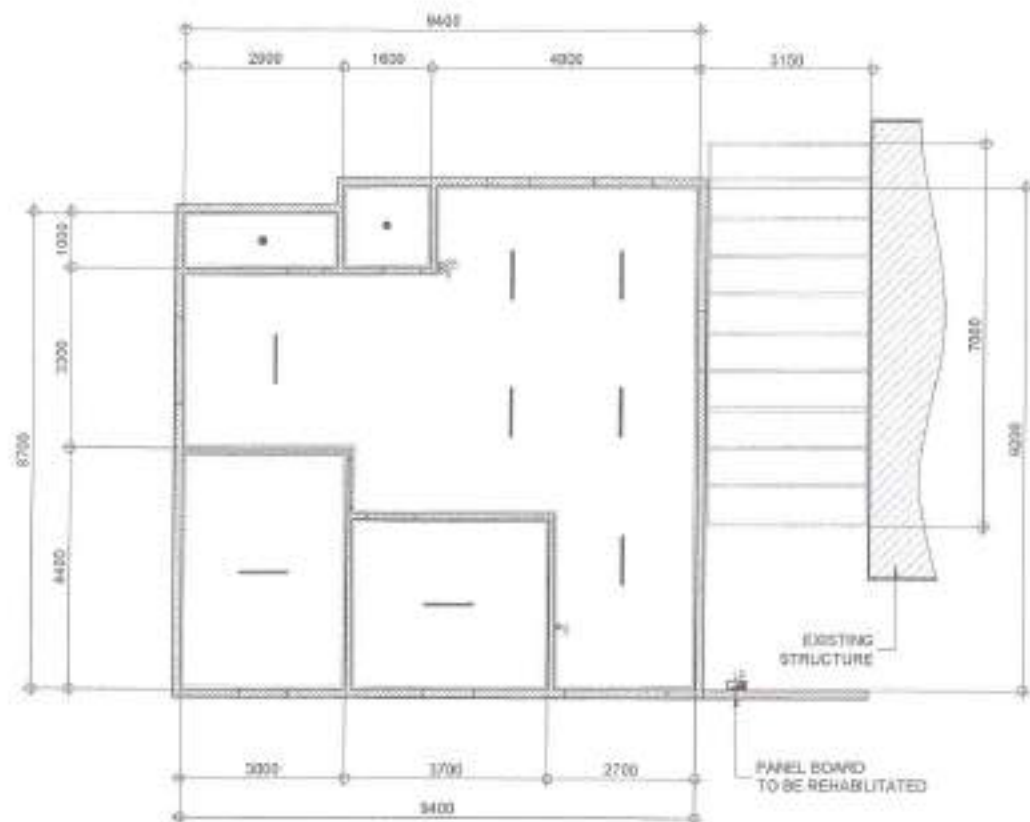
HON. MA. JOSEFINA G. BELMONTE
CITY ENGINEER

SHEET CONTENT:

GENERAL NOTES
MISCELLANEOUS DETAILS
ELECTRICAL SYMBOLS

SHEET NO.:

EL-01
08/10



NOTE:

1. ALL LIGHTING FIXTURES TO BE REPLACED
2. ALL SWITCHES TO BE REPLACED
3. PANEL BOARD TO BE REHABILITATED

1 LIGHTING LAYOUT

SCALE: MTL

2 POWER LAYOUT

SCALE: MTL

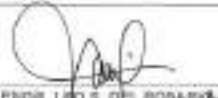


Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:
PROPOSED REHABILITATION OF
NAGKAISSANG NAYON I DAY CARE CENTER

LOCATION:
BAYAN NAGKAISSANG NAYON, DISTRICT 5, QUEZON CITY

DESIGNER:
DATE: 8.29.2021
CHECKED BY:
REVISIONS:

DESIGNED BY:

ENGR. LEO S. DEL ROSARIO
HEAD, PLANNING & PROJECTS DIVISION

RECOMMENDED APPROVAL:

ENGR. ISAGANI R. VERZOSA, JR.
DIO, CITY ENGINEERING DEPARTMENT

APPROVED BY:

HON. MA. JOSEFINA G. BELMONTE
CITY MAYOR, QUEZON CITY

BIGEST CONTACT:
LIGHTING LAYOUT
POWER LAYOUT

PROJECT NO.:

EL-02
09/10

GENERAL

1. CONCRETE REINFORCING BARS SHALL COMPLY TO ALL STANDARDS SPECIFIED THEREIN (SHOWN OR NOTED) UNLESS OTHERWISE SPECIFIED OR REFERRED TO BY OTHER CONDITIONS.
2. SHOP DRAWINGS WITH DIMENSIONS AND PLACING INFORMATION OF ALL STEEL WORK FOR CONCRETE SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL BEFORE PROCEEDING.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ALL WORK IS TO BE DONE, CHECK WITH MECHANICAL AND ELECTRICAL CONTRACTORS FOR COORDINATE PIPE SIZES AND ETC. TO BE COMPLETED IN CONCRETE.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SHORING AND BRACING OF THE STRUCTURE FOR ALL STAGES THAT MAY BE APPLIED SURFACE CONSTRUCTION.
5. RECORDS OF QUALITY ASSURED FROM THE SUPERVISION OF THE CONTRACTOR AND HIS SUBCONTRACTORS, THE ATTENTION OF THE ARCHITECT/ENGINEER SHALL BE CALLED UPON.

CONCRETE & REINFORCEMENT

1. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE LATEST BUILDING CODE OF PHILIPPINE CONSTRUCTION INDUSTRY ACT.
 2. ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH AT THE TIME OF FINISH. TEST SPECIMENS WITH CORDED FORMS SHALL BE SUBMITTED TO LABORATORY FOR TESTING.
- | LOCATION | STRENGTH | MAX. SIZE OF AGGREGATION | MAX. SLUMP |
|--|---------------------|--------------------------|--------------|
| a. SLAB ON GRADE
CEILING PARTMENTS
FOOTING
WALL FOOTING | 3000 PSI (20.7 MPa) | 1 1/2" (38mm) | 4 in (100mm) |
| b. BEAMS, COLUMNS
SLAB ON BEAM | 4000 PSI (27.6 MPa) | 3/4" (19mm) | 4 in (100mm) |
| c. LGM CONCRETE | 2500 PSI (17.2 MPa) | 1 in (25mm) | 4 in (100mm) |
3. ALL REINFORCING BARS SHALL COMPLY TO PHILIPPINE STANDARDS FOR 12mm & SMALLER BARS AND GRADE 415 FOR 13mm & LARGER BARS.
 4. IN GENERAL, THE LATEST EDITION OF ACI 318, MINIMUM OF 5 STANDARD PRACTICES, DETAILING REINFORCING CONCRETE STRUCTURES SHALL BE REFERENCED TO UNLESS OTHERWISE NOTED OR NOTED.
 5. MINIMUM MINIMUM CONCRETE COVER FOR REINFORCING BARS AS FOLLOWS:

CONCRETE CASTED TO DIRECTLY AGAINST	COVER
EXPOSED SLAB	20mm
SLAB ON GRADE	40mm
WALLS ABOVE GRADE	50mm
BEAMS & COLUMNS	40mm
 6. SPLICES SHALL BE SECURELY WELDED TOGETHER AND SHALL LAP UP OR DOWN IN ACCORDANCE WITH TABLE 17.4.2.1 OF ACI 318 AND WELDED TOGETHER WITH STEEL WELDED TOGETHER TO FORM ONE SINGLE BAR. SPLICES SHALL BE STaggered ALONG THE LENGTH.
 7. ALL ANCHOR BOLTS, DOWELS AND OTHER BOLTS SHALL BE PROPERLY POSITIONED AND SECURED IN PLACE PRIOR TO POURING OF CONCRETE.
 8. CONTRACTOR SHALL NOTIFY AND PROVIDE ALL NECESSARY CURB, SILL, STEEL, COMPRESSIVE AND WIND WALLS THAT ARE REQUIRED BY THE ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS.
 9. ALL CONCRETE SHALL BE CAST IN PLACE FOR CONSTRUCTION OF BARS (1) CONCRETE TYPE OR OTHERWISE AFTER POURING OF THE 1st CO OF WATERPROOFING OR STRAPPING CURING COMPOUND OR OTHER APPROVED MATERIALS.
 6. STRAFFING NOTED AS FOLLOWS:

	CURBS
SLAB PARTITION	21mm
BEAMS, COLUMNS	25mm
WALLS	21mm

11. DEVELOPMENT LENGTH FOR ALL BARS SHALL BE AS SPECIFIED IN THE DRAWINGS UNLESS OTHERWISE NOTED.

STRUCTURAL STEEL AND PLATES

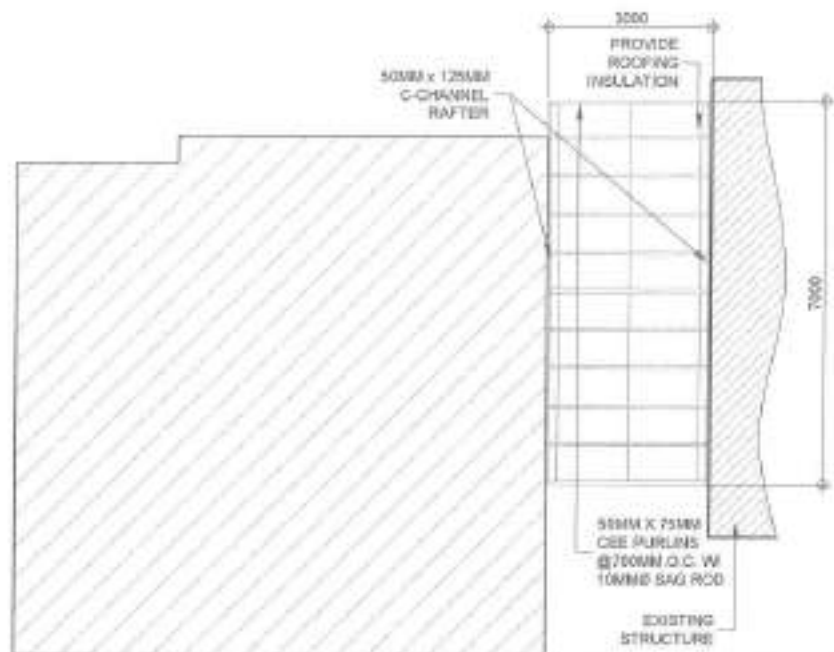
1. ALL STRUCTURAL STEEL SHALL COMPLY TO ASTM A 36 OR EQUIVALENT WITH MINIMUM YIELD STRENGTH (275 MPa).
2. ANCHOR & TIE BARS BOLTS, ALL BOLTS SHALL COMPLY TO A307 (305 MPa) STEEL BOLTS.
3. WELDING SHALL BE AS NOTED AND SHALL BE MADE BY A QUALIFIED WELDER IN ACCORDANCE WITH AWS D1.1 (ELECTRODE - E70XX).

FOUNDATION

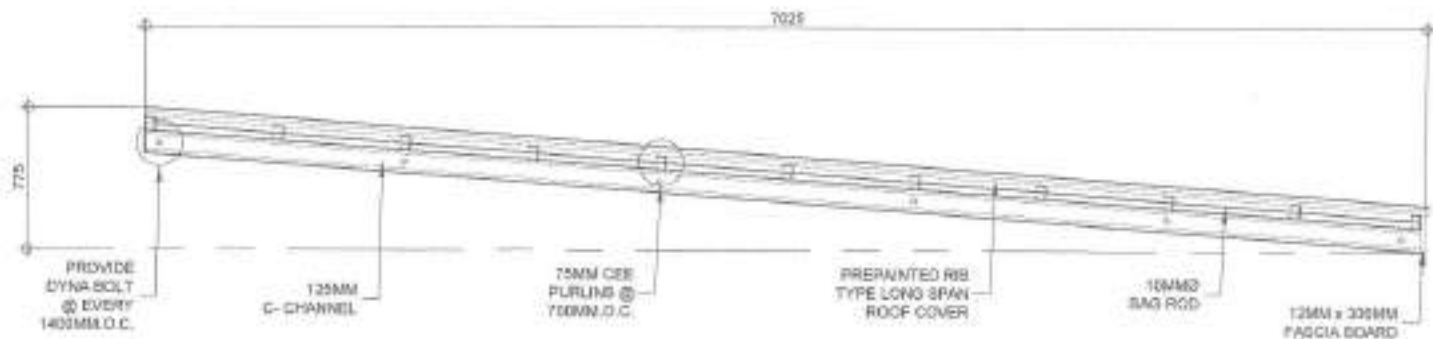
1. COLUMN TIE RODS DESIGN BASED ON MINIMUM BULB CAPACITY OF THE PREPARED FOR AN ALLOWABLE SOIL BEARING CAPACITY OF 200 kPa.
2. FOOTING OF ALL REINFORCED CONCRETE SHALL BE MADE UP OF ONE PIECE BY THE ENTIRE WIDTH OF THE FOUNDATION SHALL REST ON ONE.
3. THE CONTRACTOR SHALL NOTIFY THE DESIGNER UPON COMPLETION OF FOUNDATION FOR ACTUAL SOIL CONDITIONS WHICH DOES NOT CORRESPOND TO THE SOIL BEARING CAPACITY FOR PROPOSED DESIGN.

BASINERY WALLS

1. ALL MATERIALS & WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE APPLICABLE CODES & SPECIFICATIONS OF THE STRUCTURAL CODE OF THE PHILIPPINE BUILDING REGULATORY CODE.
2. NORTH & CREST FOR ALL CONCRETE BASINERY SHALL CONFORM TO NSCBC TYPE VA SHALL HAVE A MINIMUM OF 30 DAYS OF CURED CONCRETE OR 28 DAYS OF 70% MOISTURE CURING.
3. ALL CURBS SHALL BE CAST WITH THE CURBS BY WELDED TOGETHER WITH CONTINUES. ALL CURBS DIFFERENTIALLY FROM WITH REINFORCING SHALL BE FILLED WITH MORTAR.
4. REINFORCING AS NOTED BELOW SHALL BE PROVIDED UNLESS OTHERWISE SPECIFIED IN THE PLAN.
5. ALL BASINERY WALL SHALL BE PROVIDED WITH PROPER DRAINAGE & CURBS AS REQUIRED.
 - a. FOR CURB WALLS & CURBS SHALL BE 100mm (4") AT 300mm ON CENTER.
 - b. FOR DOORS & WINDOWS CURBS PROVIDE LEVEL, 100mm (4") AT 300mm ON CENTER.

**2 ROOF FRAMING PLAN**

SCALE: 1:100M

**1 GENERAL NOTES****3 RAFTER DETAIL**

SCALE: 1:30M



Republic of Philippines
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:	DRAWN BY:	SUBMITTED BY:	RECOMMENDED BY:	APPROVED BY:	SHEET CONTENT:	SHEET NO.
PROPOSED REHABILITATION OF NAGKAIKANG NAYON I DAY CARE CENTER	DATE: 04/20/21 CHECKED BY: [Signature] REVISION NO.:	[Signature] ENGR. LEON S. DEL ROSARIO HEAD, PLANNING & DESIGN DIVISION	[Signature] ENGR. ISAAC R. VERZOSA, JR. DCC, CITY ENGINEERING DEPARTMENT	[Signature] ENR. MA. JOSEFINA G. BELMONTE CITY MARCH, QUEZON CITY	GENERAL NOTES ROOF FRAMING PLAN RAFTER DETAIL	ST-01 05 10

THE SITE



1 VICINITY MAP

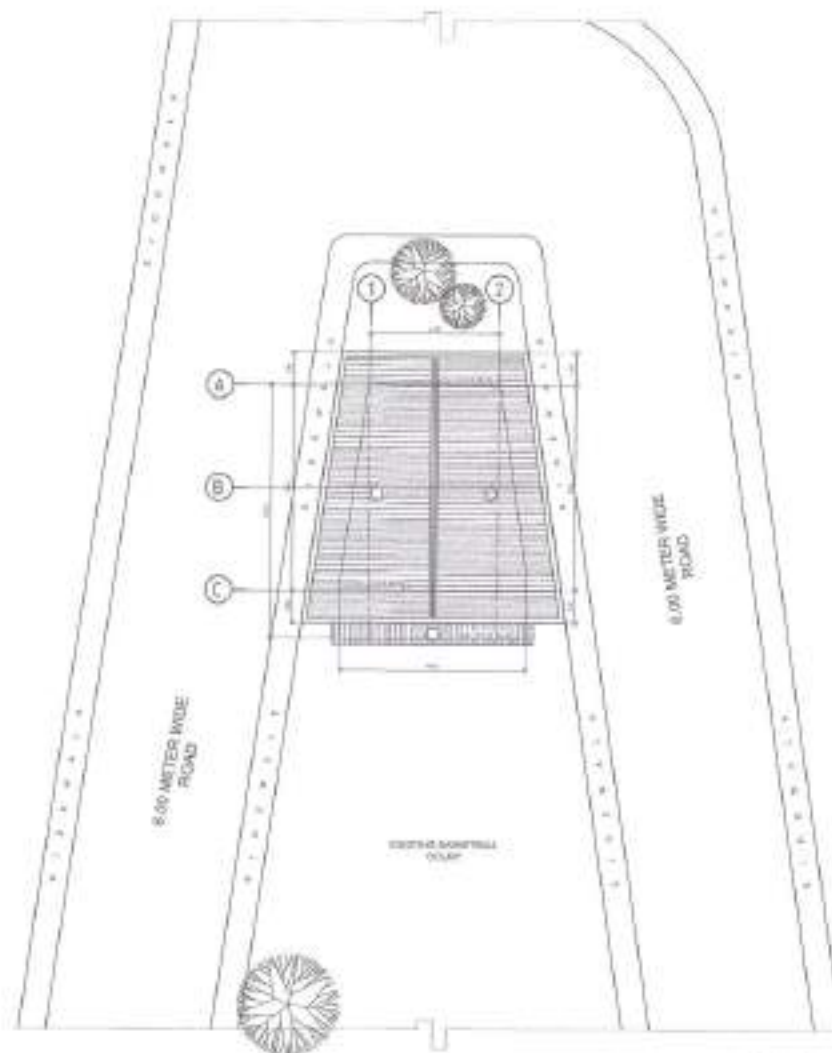
SCALE NTS.

THE SITE



2 LOCATION MAP

SCALE NTS.



3 SITE DEVELOPMENT PLAN

SCALE 1:2000.

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AR-3	FRONT ELEVATION REAR ELEVATION RIGHT SIDE ELEVATION LEFT SIDE ELEVATION
AR-4	CROSS SECTION THRU A LETTERING DETAILS SCHEDULE OF DOORS STEEL GATE DETAILS

PLUMBING

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PL-2	WATER LINE LAYOUT SANITARY LINE LAYOUT

ELECTRICAL

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EL-2	LIGHTING LAYOUT



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:

PROPOSED REHABILITATION OF ST.
ANDREW DAY CARE CENTER

LOCATION:
BDOY BAGUISAWAY RAYON, DISTRICT 5, QUEZON CITY

DRAWN BY: XMG

DATE: 06.08.21

DESIGNED BY: X

REVISION NO.:

SUBMITTED BY:


ENGR. LEO S. DEL ROSARIO
HEAD, PLANNING AND DESIGN DIVISION

RECOMMENDING APPROVAL:


ENGR. ISAAC R. VERZOSA, JR.
DICTATOR, PLANNING DIVISION

APPROVED BY:

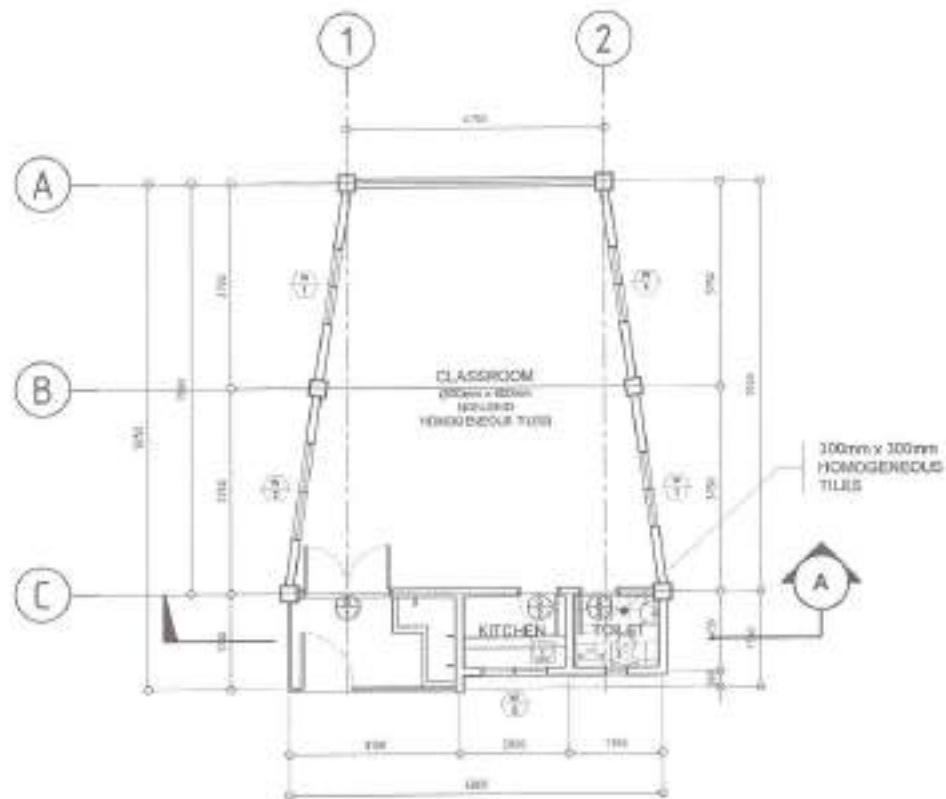
HON. MA. JOSEFINA G. BELMONTÉ
CITY MAYOR

SHEET CONTENT:

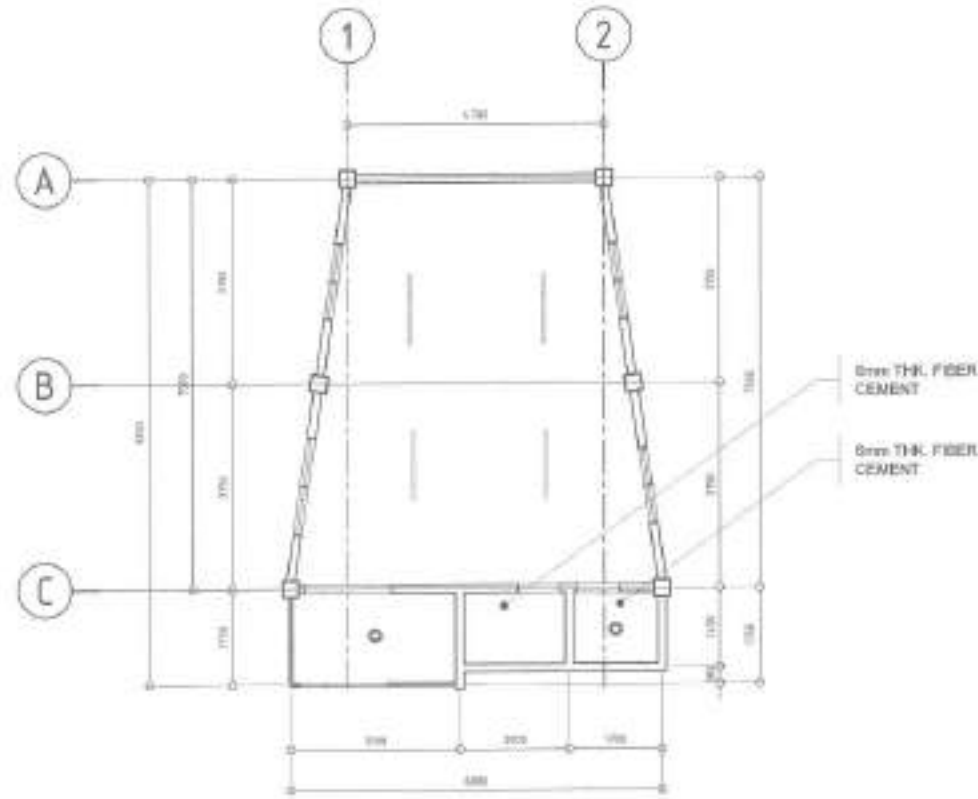
VICINITY MAP
LOCATION MAP
SITE DEVELOPMENT PLAN

SHEET NO.:

AR-01
01/08



- NOTE:
1. EXTERIOR WALLS TO BE REPAINTED
 2. ALL DOORS TO BE REPLACED
 3. ALL WINDOWS TO BE REPLACED
 4. FLOOR TILES AND WALL TILES TO BE REPLACED
 5. KITCHEN CABINET TO BE REPLACED




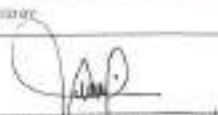

- NOTE:
1. CEILING AT TOILET AND KITCHEN TO BE REPLACED

1 | GROUND FLOOR PLAN

SCALE 1:100M

2 | REFLECTED CEILING PLAN

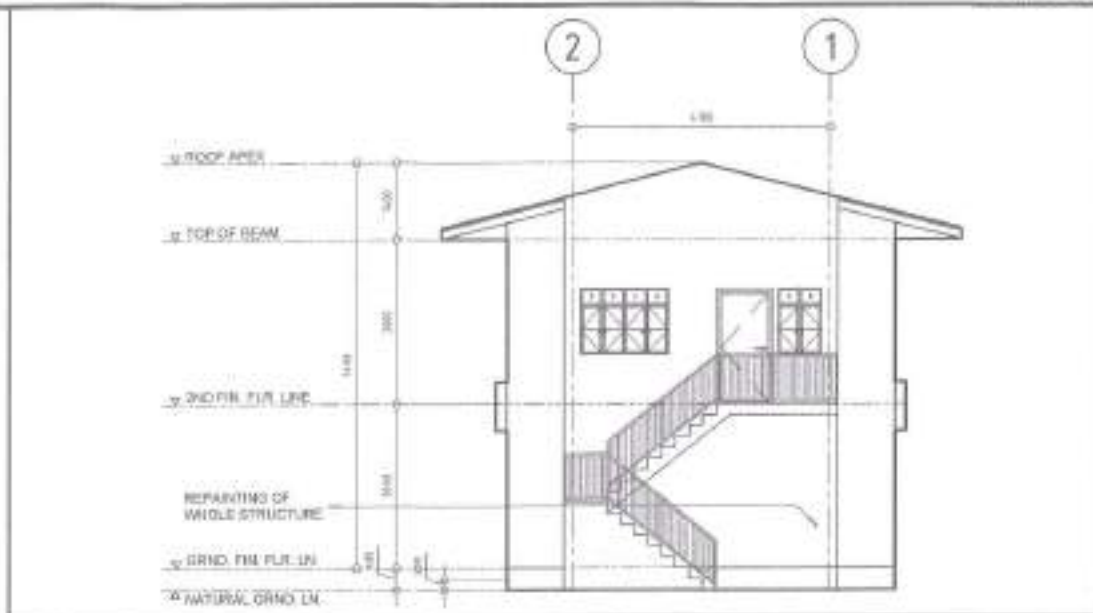
SCALE 1:100M

 <p>Republic of the Philippines Lungsod ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE:	DRAWN BY:	SUBMITTED BY:	RECOMMENDED APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET NO.
	PROPOSED REHABILITATION OF ST. ANDREW DAY CARE CENTER	DATE: 04/20/21			HON. NA. JOSEFINA G. BELMONTE CITY MAJOR	GROUND FLOOR PLAN ROOF PLAN	AR-02 02/08
	APPROVED BY: ENGR. MAURIMAR RAYDA, DISTRICT 5, QUEZON CITY	APPROVED NO.:	ENGR. LEO S. DEL ROSARIO HEAT, PLUMBING & REFRIGERATION ENGINEER	ENGR. RAMON R. VERZOSA, JR. OC, CIVIL & STRUCTURAL ENGINEER			



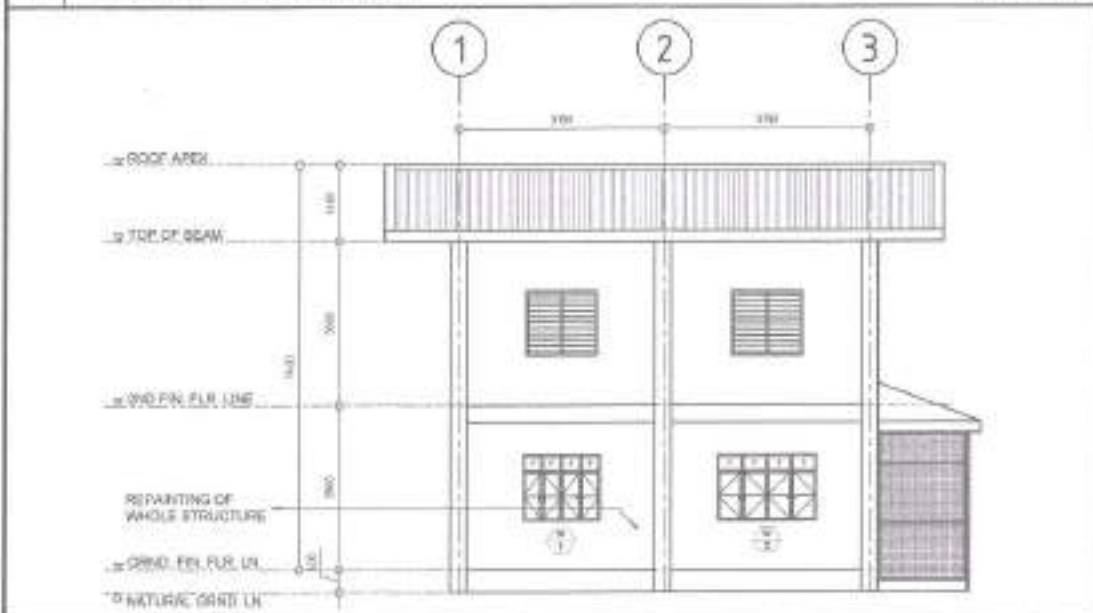
1 FRONT ELEVATION

SCALE 1:100M



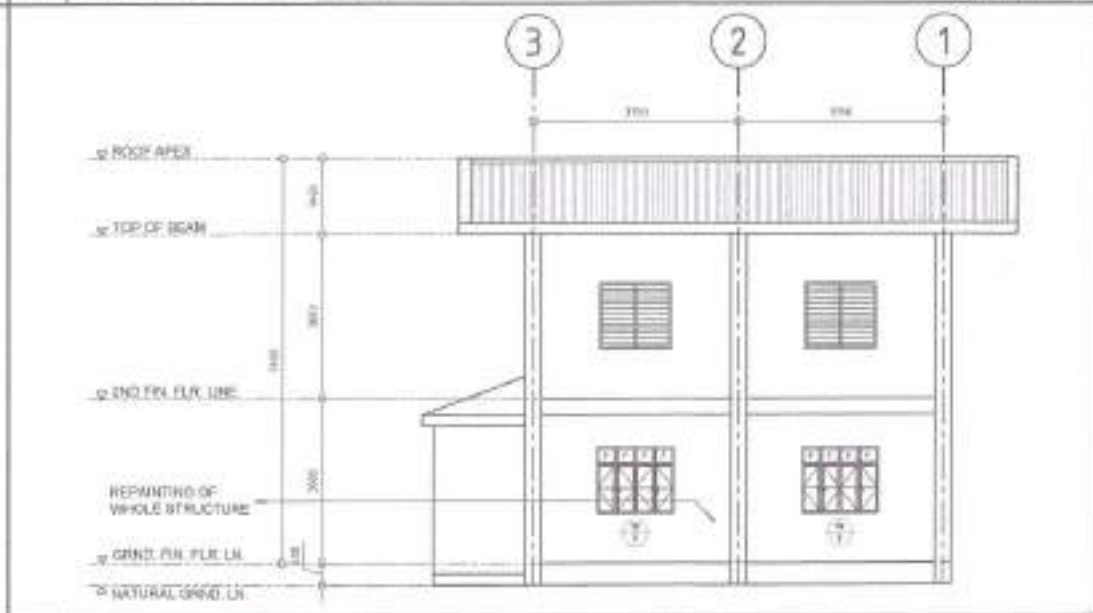
2 REAR ELEVATION

SCALE 1:100M



3 RIGHT SIDE ELEVATION

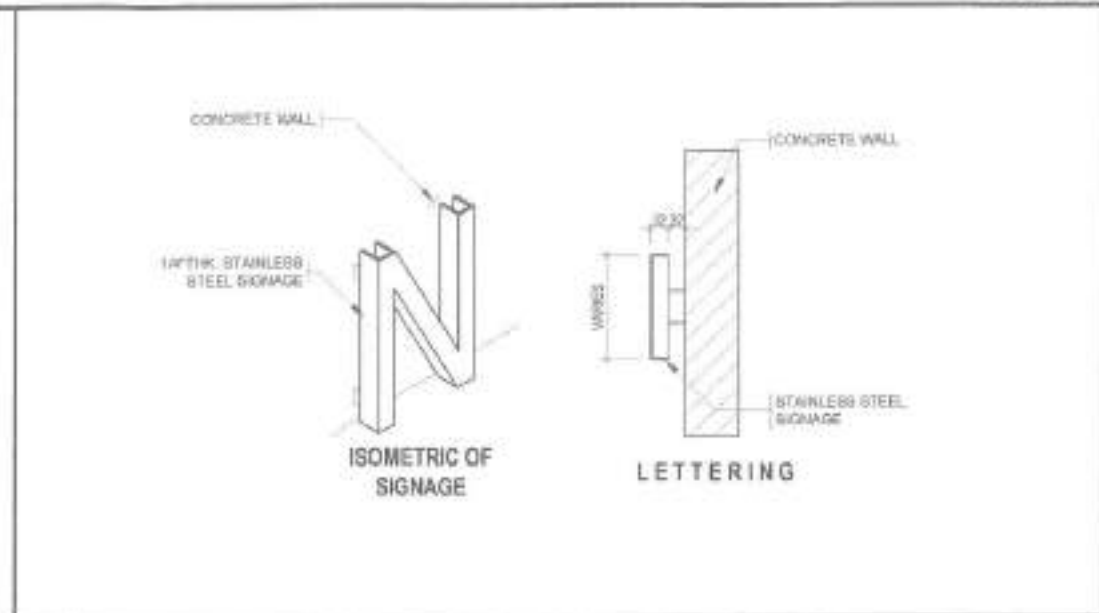
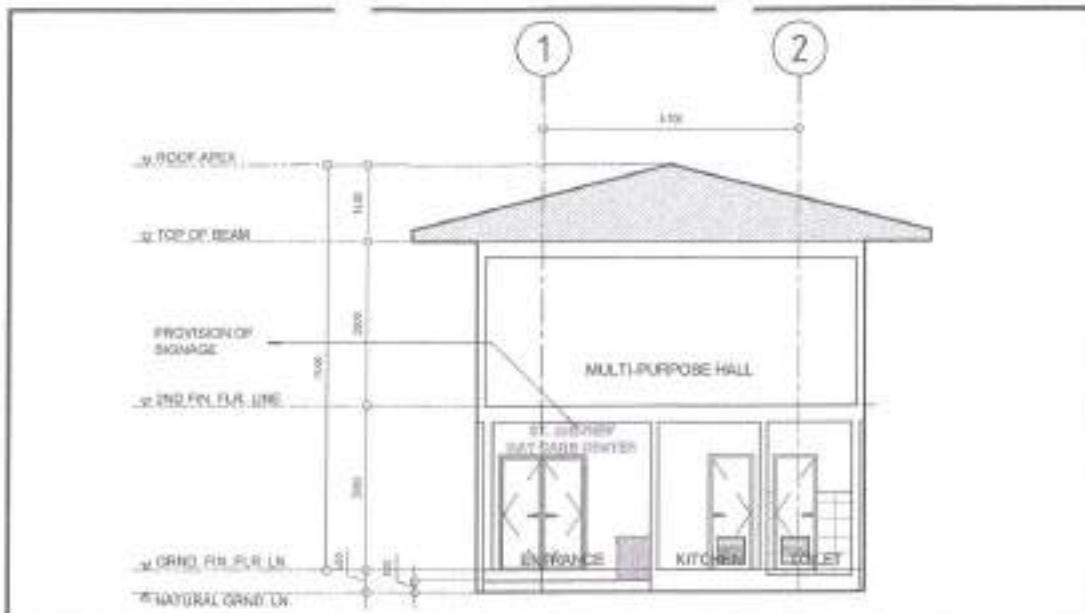
SCALE 1:100M



4 LEFT SIDE ELEVATION

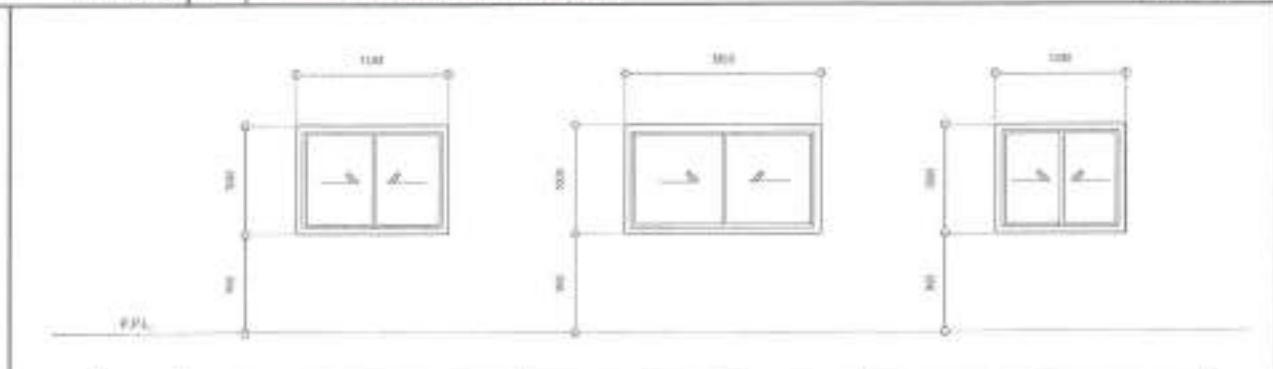
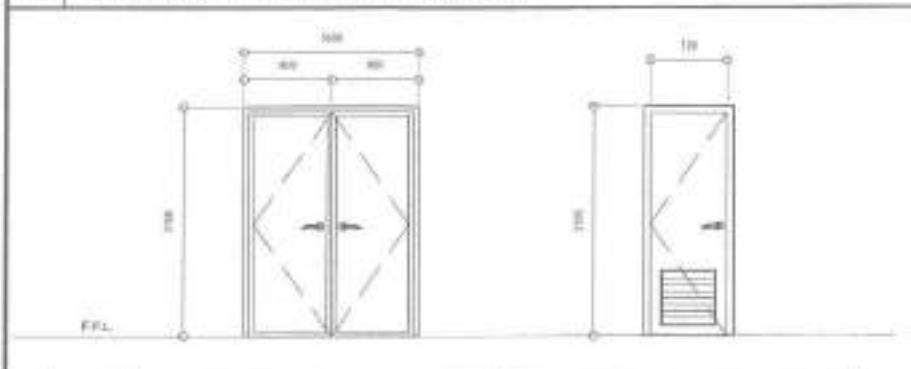
SCALE 1:100M

 <p>Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE:	DESIGN BY:	SUBMITTED BY:	RECOMMENDED APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET NO.	
	PROPOSED REHABILITATION OF ST. ANDREW DAY CARE CENTER	DATE: 26-20-21	CHECKED BY:	ENGR. LEO S. DEL ROSARIO HEAD, PLUMBING & PIPING DIVISION	ENGR. ISIDORO R. VERZOSA, JR. DEPT. CITY ENGINEERING DEPARTMENT	HON. MA. JOSEFINA G. BELMORTE CITY MAYOR	FRONT ELEVATION REAR ELEVATION RIGHT SIDE ELEVATION LEFT SIDE ELEVATION	AR-03 03/08
	LOCATION: 515P, NAGKAWING NAYON, DISTRICT 1, QUEZON CITY	DESIGNER:						



1 CROSS SECTION THRU-A SCALE 1:100M

2 LETTERING DETAILS SCALE NTS



NAME	①	②
NO. OF SETS	1	2
DESCRIPTION	PANEL DOOR	PVC DOOR WITH LOUVER
LOCATION	ENTRANCE / CLASSROOM	KITCHEN AND TOILET
REMARKS	TO BE REPLACED	TO BE REPLACED

NAME	①	②	③
NO. OF SETS	1	1	1
DESCRIPTION	ALUMINUM FRAME, POWDER COATED SLIDING WINDOW WITH 6MM THK CLEAR GLASS	ALUMINUM FRAME, POWDER COATED SLIDING WINDOW WITH 6MM THK CLEAR GLASS	ALUMINUM FRAME, POWDER COATED SLIDING WINDOW WITH 6MM THK CLEAR GLASS
LOCATION	CLASSROOM	CLASSROOM	KITCHEN
REMARKS	TO BE REPLACED	TO BE REPLACED	TO BE REPLACED

3 SCHEDULE OF DOORS SCALE 1:50M

4 SCHEDULE OF WINDOWS SCALE 1:50M

<p>Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE:	DRAWN BY: <i>[Signature]</i>	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET NO.:
	PROPOSED REHABILITATION OF ST. ANDREW DAY CARE CENTER	DATE: 03/21/21	 ENGR. LEO S. DEL ROSARIO HEAD, PLANNING & PROGRAMMING OFFICE	 ENGR. EDA ANNE R. VERZOSA, JR. ILC, CITY ENGINEERING DEPARTMENT	HON. MA. JOSEFINA G. BELMONTE CITY MAYOR	CROSS SECTION THRU-A LETTERING DETAILS SCHEDULE OF DOORS SCHEDULE OF WINDOWS	
	LOCATION: BPOY, BACARRANG MAYON, DISTRICT 2, QUEZON CITY	DESIGN NO.:					

1 All plumbing works and materials indicated herein shall be compliant to the provisions of the latest edition of National Plumbing Code, the rules and regulations of local authorities concerned, the rules and regulations of local utility companies and the provisions of the land developer when and where applicable.

2 The plumbing layout is only diagrammatic; pipes, cleanouts and check valves shall be concealed as much as possible. It is not intended to show the actual dimension of the pipes and fixtures in the drawing but of the pipes and fixtures shall be installed as and where indicated. Any relocation will require proper execution in relation with other trades.

3 The plumbing contractor shall verify all existing utilities at the site and shall coordinate the work with other trades.

4 Pipes shall not be embedded in structural members unless otherwise specified or allowed.

5 Minimum slope for horizontal sewer lines shall be 1% and for drain lines shall be 5%.

6 Proposed plumbing utilities shall conform with the actual location, depth and invert elevation of all existing pipes/utilities.

7 Connection of fixtures to pipes and fittings shall be according to manufacturer's specifications.

8 All floor drains shall be vented individually.

9 All clean-out formulas shall be flush-mounted to wall and shall be provided with polished cover caps. Do not install floor clean outs except at lines on grade and service areas not subject to traffic.

10 All underground G.I. pipes in direct contact with soil shall be provided with two (2) coats of protective tar covering and wrapped with jute cloth thoroughly soaked in tar or asphalt.

11 Provide vent stack and vent pipe thru roof of cast iron service weight as required.

12 All cast iron pipes shall be of approved quality and G.I. pipes for water distribution lines shall be Schedule 40 U.S. standard weight.

13 Provide gate valves to all water supply lines to fixtures.

14 All hot water lines shall be provided with proper insulation where exposed.

15 All individual branches to fixtures or group of fixtures and/or equipments shall be provided with air chambers or capped vertical pipe extensions of dimensions as shown:

H = 450 mm for 19 mm Ø and larger

H = 300 mm for 12 mm Ø and smaller

16 All hose bibbs shall be 19 mm Ø (3/4" Ø) unless otherwise indicated.

17 Inlet pipe of septic tank is 50 mm higher than the siphon pipe which is 30 mm higher than the outlet pipe.

18 All plumbing works and manner of construction shall be under the direct supervision of an able and duly licensed Master Plumber or Registered Sanitary Engineer. Any discrepancies found in plan shall be notified to the same person.

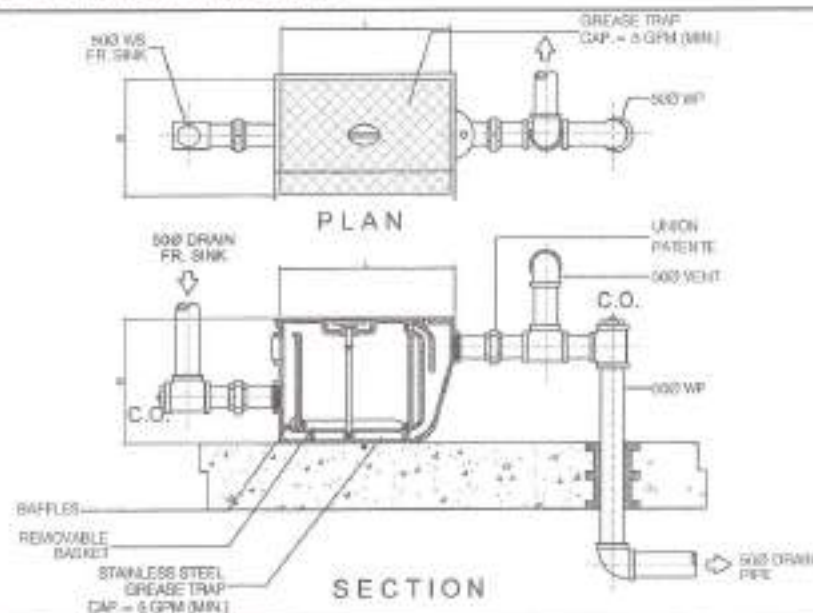
1. FIXTURES AND OTHER LEGEND

FD	FLOOR DRAIN
RD	ROOF DRAIN
SHD	SHOWER
WC	WATER CLOSET
LAV	LAVATORY
URI	URNIAL
K2	KITCHEN SINK
BD	BUILDING DRAIN
DD	DECK DRAIN
CCD	CEILING CLEANOUT
FCO	FLOOR/GRAND CLEANOUT
DS	DOWNSPOUT
mm	millimeter
Ø	mm DIAMETER
S-D	SHOWER DRAIN
CB	CATCH BASIN
MH	MANHOLE
→	DIRECTION OF FLOW
⊠	GREASE TRAP

+	UNION PATENT
+	CHECK VALVE
⊠	BUILDING DRAIN
⊠	BUILDING DRAIN
⊠	WASTE LINE
⊠	AREA DRAIN / DATCH BASIN
⊠	FLOOR DRAIN
⊠	DRAINER
⊠	WASTE LINE
⊠	WASTE LINE
⊠	GATE VALVE
⊠	DECK DRAIN
⊠	CLEANOUT
⊠	PIPE DOWN
⊠	PIPE UP
⊠	MILLI METER
⊠	GATE VALVE
⊠	KITCHEN DRAIN / DATCH BASIN
⊠	WATER CLOSET
⊠	LAVATORY
⊠	MANHOLE
⊠	HOSE BIBB
⊠	STORM DRAIN LINE
⊠	VENT LINE
⊠	VENT ABOVE CEILING
⊠	CONCRETE PIPE / ROOF, CONC. PIPE
⊠	VENT THRU ROOF
⊠	DIRECTION OF FLOW/SLOPE

2 LEGEND AND SYMBOLS

SCALE: 1:40M



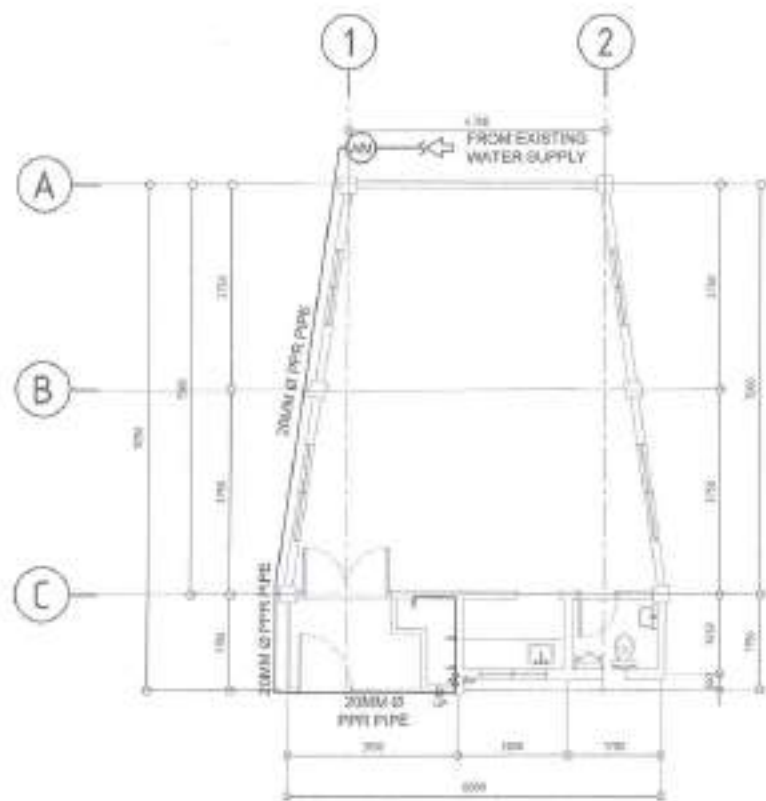
1 GENERAL NOTES

SCALE NTS.

3 GREASE TRAP DETAILS

SCALE NTS.

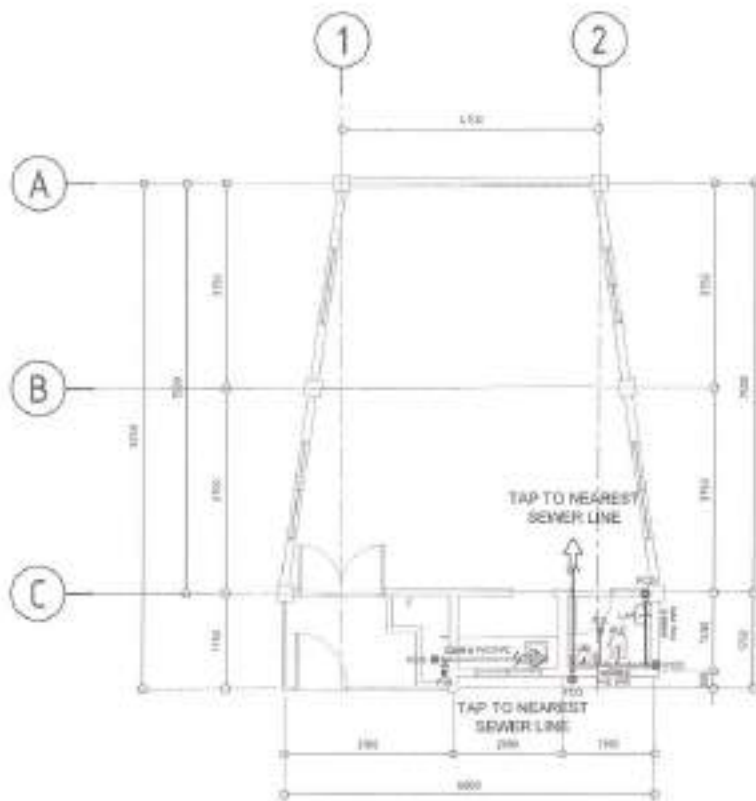
<p>Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE:	DRAWN BY: <i>[Signature]</i>	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET NO.
	PROPOSED REHABILITATION OF ST. ANDREW DAY CARE CENTER	DATE: 06-22-21	<p>ENGR. LEO S. DEL ROSARIO HEAD, PLUMBING & PIPING DIVISION</p>	<p>ENGR. JUAN R. VERZOSA, JR. CH. CITY ENGINEERING DEPARTMENT</p>	<p>HON. RA. JOSEFINA G. BELMONTÉ CITY MAYOR</p>	GENERAL NOTES LEGEND AND SYMBOLS GREASE TRAP DETAILS	<p>PL-01 0508</p>
	LOCATION: BRGY. BAGABAGSANG NAYON, DISTRICT 5, QUEZON CITY	APPROVED BY:					



- NOTE:
1. ALL PLUMBING FIXTURES TO BE REPLACED
 2. WATERLINE AT HAND WASHING TO BE REPLACED

1 WATER LINE LAYOUT

SCALE: NTS.



- NOTE:
1. ALL PLUMBING FIXTURES TO BE REPLACED
 2. SANITARY LINE TO BE REPLACED

2 SANITARY LINE LAYOUT

SCALE: NTS.

<p>Republic of the Philippines Longos ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE:	DESIGNED BY:	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	PROJECT DEPARTMENT:	SHEET NO.:
	<p>PROPOSED REHABILITATION OF ST. ANDREW DAY CARE CENTER</p> <p>LOCATION: STEDY, MAGKASANG NAYON, DISTRICT 5, QUEZON CITY</p>	<p>DATE: 06.05.21</p> <p>CHECKED BY: [Signature]</p> <p>REVISION NO.:</p>	<p>[Signature]</p> <p>ENGR. LEO S. DEL ROSARIO HEAD, PLUMBING & PROGRAMMING DIVISION</p>	<p>[Signature]</p> <p>ENGR. ISAAC R. VERZOSA, JR. DC, CIVIL ENGINEERING DEPARTMENT</p>	<p>[Signature]</p> <p>HON. MA. JOSEFINA G. BELMONTE CITY MANDR</p>	<p>WATER LINE LAYOUT SANITARY LINE LAYOUT</p>	<p>PL-02 06/08</p>

- ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL CODES ENFORCING AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE UTILITY COMPANY.
- THE CONTRACTOR SHALL SECURE ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE WORK AND SHALL TURN IN THE DENIED THROUGH THE ENGINEER, FINAL CERTIFICATES OF ELECTRICAL INSPECTION AND APPROVAL FROM PROPER GOVERNMENT AUTHORITIES FOR COMPLETION OF WORK.
- ALL EMBEDDED BRANCH CIRCUITS SHALL BE PVC COVERED AND FOR EXPOSED INSTALLATION SHALL BE AID SUPPORTED BY CONDUIT CLAMP EVERY 100 MILLIMETER.
- ALL LUGS SHALL BE PROVIDED BY THE CONTRACTOR WHENEVER NECESSARY TO ENLARGE WIRE PULLING ENDS IF THESE ARE NOT INDICATED ON THE PLANS. BONDING OF ALL PULLBOXES SHALL BE COMPLETED BASED ON THE CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION LOCATION OF PULLBOXES SHALL BE APPROVED BY THE ARCHITECT/ENGINEER AND MUST BE REFLECTED ON THE "AS-BUILT" PLAN.
- ALL POWER TIGHTS AND SWITCHES SHALL BE SECURED TYPE WITH PARALLEL SLOTS FOR 20KV.
- PROVIDE CIRCUIT BREAKER OR FUSE INTERRUPTER CIRCUIT BREAKER FOR LOADS MARKED "BFC" ON THE PLANS.
- ALL METALLIC CONDUITS, CABINETS AND EQUIPMENT SHALL BE PROPERLY GROUNDING AND BONDED.
- UNLESS OTHERWISE NOTED, MOUNTING HEIGHT FOR WALL MOUNTED DEVICES SHALL BE AS FOLLOWS:

- RECEPTACLE OUTLET - 200 MM AFF, 150MM ABOVE WORKING SURFACE
- TELEPHONE OUTLET - 200 MM AFF
- COPY OUTLET - 300 MM AFF
- LIGHTING SWITCH - 1400 MM AFF
- PANELBOARD - 1500 MM AFF

- REFER TO MECHANICAL, PLUMBING AND FIRE PROTECTION DRAWINGS FOR RATINGS AND LOCATION OF EQUIPMENT AS WELL AS THEIR CONTROL SEQUENCES AS SPECIFIED AND OR SHOWN UNDER THEIR RESPECTIVE SECTIONS.
- ALL MATERIALS TO BE USED SHALL BE OF THE BEST QUALITY. BRAND NAME AS SPECIFIED.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT GENERAL LAYOUT AND BROAD OUTLINE DESCRIPTION OF THE PROJECT BUT DO NOT NECESSARILY INDICATE DESCRIBED ACTUAL LOCATIONS, LEVELS AND DIMENSIONS OF THE EQUIPMENT. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE SUCH ADJUSTMENT AT THE JOBSITE AS LOCAL AND SITE-SPECIFIC MATERIALS ARE COVERED BY ACTUAL FIELD CONDITIONS.
- ANY DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION/DECISION.
- ALL LIGHTING AND CONDUIT OUTLET CIRCUITS SHALL BE 20 SQ. MM THINW GALVANIZED COPPER WIRE UNLESS OTHERWISE NOTED. MINIMUM SIZE OF WIRE SHALL BE 3.0 SQ. MM. COPPER WIRE, ALL WIRES AND CABLES SHALL BE COLOR CODED AS FOLLOWS:

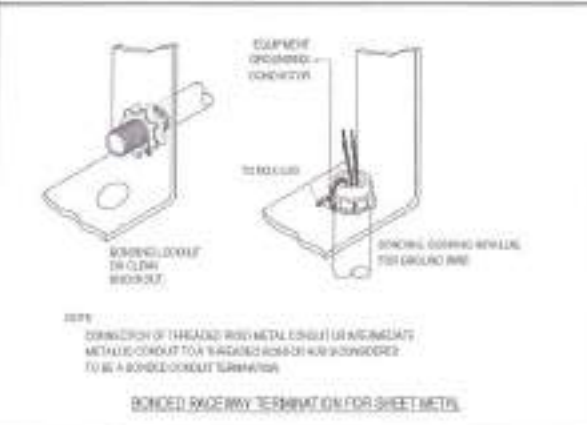
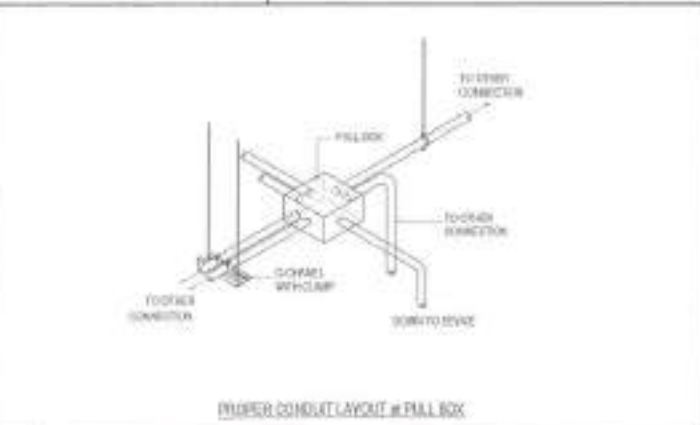
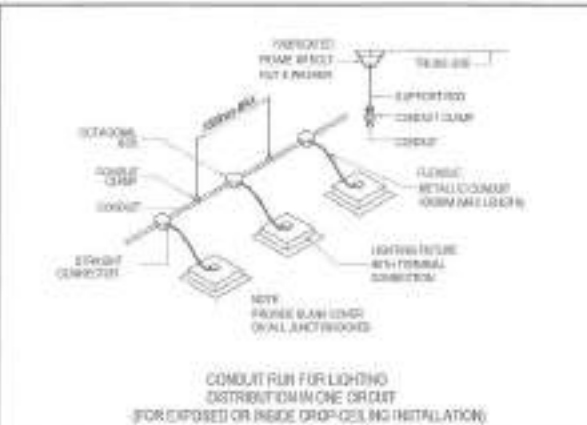
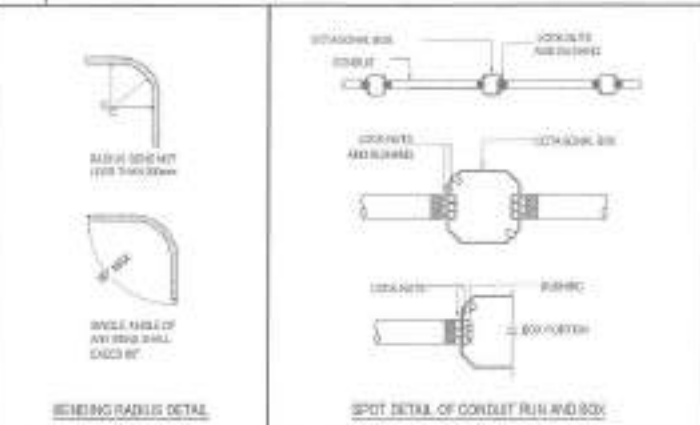
- LINE 1 - RED
- LINE 2 - YELLOW
- NEUTRAL - WHITE
- GROUND - GREEN

- BONES, WIRE GUTTERS, ENCLOSURE SHALL BE FABRICATED FROM STEEL WITH THICKNESS AS FOLLOWS:
MINIMUM WIDTH OF THE WIDEST SURFACE STEEL:
UP TO INCLUDING 150.00 MM
OVER 150.00 MM BUT NOT OVER 300.00
OVER 300.00 MM BUT NOT OVER 600.00
OVER 600.00 MM
O4 IS PAINTED WITH METAL PRIMER GLOSSY AND TOPCOAT
O4 IS PAINTED WITH METAL PRIMER GLOSSY AND TOPCOAT
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- ALL ELECTRICAL WORKS HEREIN SHALL BE EXECUTED BY EXPERIENCED MEN UNDER THE DIRECT SUPERVISION OF A FULL-TIME LICENSED ELECTRICAL ENGINEER AND A DULY ACCREDITED ELECTRICAL CONTRACTOR BY PCSB. WORKS SHALL BE NEATLY PLACED, SECURELY FASTENED AND PROPERLY FINISHED.
- TYPE OF SERVICE ENTRANCE SHALL BE: SINGLE PHASE, TWO WIRE PLUS GROUND, 80 HERTZ, 200V AC NOMINAL.
- CONDUITS AND CABLES SHALL THERE BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS IN ANY ONE RUN. ALL CONDUIT BENDS SHALL BE FOLD BACK BY USING HYDRAULIC BENDERS. MINIMUM BENDING RADIUS MUST BE IN ACCORDANCE TO THE CODE REQUIREMENTS.
- UPON COMPLETION OF ELECTRICAL CONSTRUCTION WORK, INSULATION RESISTANCE TEST AND FUNCTIONALITY TEST SHALL BE PERFORMED BY THE CONTRACTOR PRIOR TO THE INSTALLATION TO BE REPORTED IN DETAILS ON FORMS APPROVED BY THE QUEZON CITY ENGINEERING DEPARTMENT REPRESENTATIVE. THE GROUND RESISTANCE FOR ELECTRICAL SYSTEMS SHALL NOT BE MORE THAN 5 OHMS. COMMUNICATIONS EQUIPMENT RESISTANCE SHALL NOT EXCEED 2 OHMS.

	Degree Connectivity Outlet
	11 Watt LED Bulb
	180mm x 100mm Ceiling Mounted Exhaust Fan
	Speed Paper Outlet ACU/PCU
	Lighting Panel
	Circuit Breaker
	Grounding
	11 Watt LED Tube Light Bulb

2 LEGEND & SYMBOLS

SCALE: NTS.



1 GENERAL NOTES

SCALE: NTS.

3 MISCELLANEOUS DETAILS

SCALE: NTS.

Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE: PROPOSED REHABILITATION OF ST. ANDREW DAY CARE CENTER	DRAWN BY: <i>APC</i> DATE: 08.07.21 CHECKED BY: <i>[Signature]</i>
LOCATION: 8927, INKASANG PAKON, DISTRICT 3, QUEZON CITY	REVISION NO.:

SUBMITTED BY: <i>[Signature]</i> ENGR. LEY S. DEL ROSARIO HEAD, PLUMBING & MECHANICAL DIVISION	RECOMMENDING APPROVAL: <i>[Signature]</i> ENGR. RAFFIN R. VERZOSA, JR. DC, CITY ENGINEERING DEPARTMENT
--	--

APPROVED BY: <i>[Signature]</i> HON. MA. JOSEFINA S. BELMONTTE CITY ENGINEER
--

DESIGN DEPARTMENT: GENERAL NOTES MISCELLANEOUS DETAILS LEGEND AND SYMBOLS

SHEET NO.: EL-01
SHEET NO.: 07/08

THE SITE



1 LOCATION MAP

SCALE NTS.

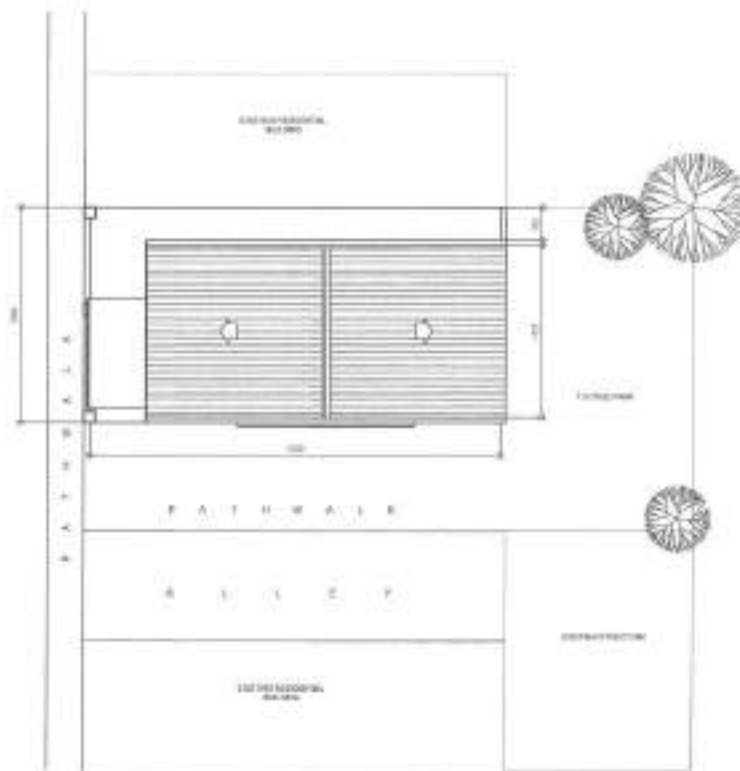
THE SITE



2 VICINITY MAP

SCALE NTS.

S U B S E R I P T



3 SITE DEVELOPMENT PLAN

SCALE NTS.

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ARCHITECTURAL

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Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:
PROPOSED REHABILITATION OF TS. CRUZ DAY CARE CENTER

LOCATION:
SHRY. SAN AGUSTIN, DISTRICT 1, QUEZON CITY

DESIGN BY: *[Signature]*
DATE: 08-08-21
CHECKED BY: *[Signature]*
REVISION(S):

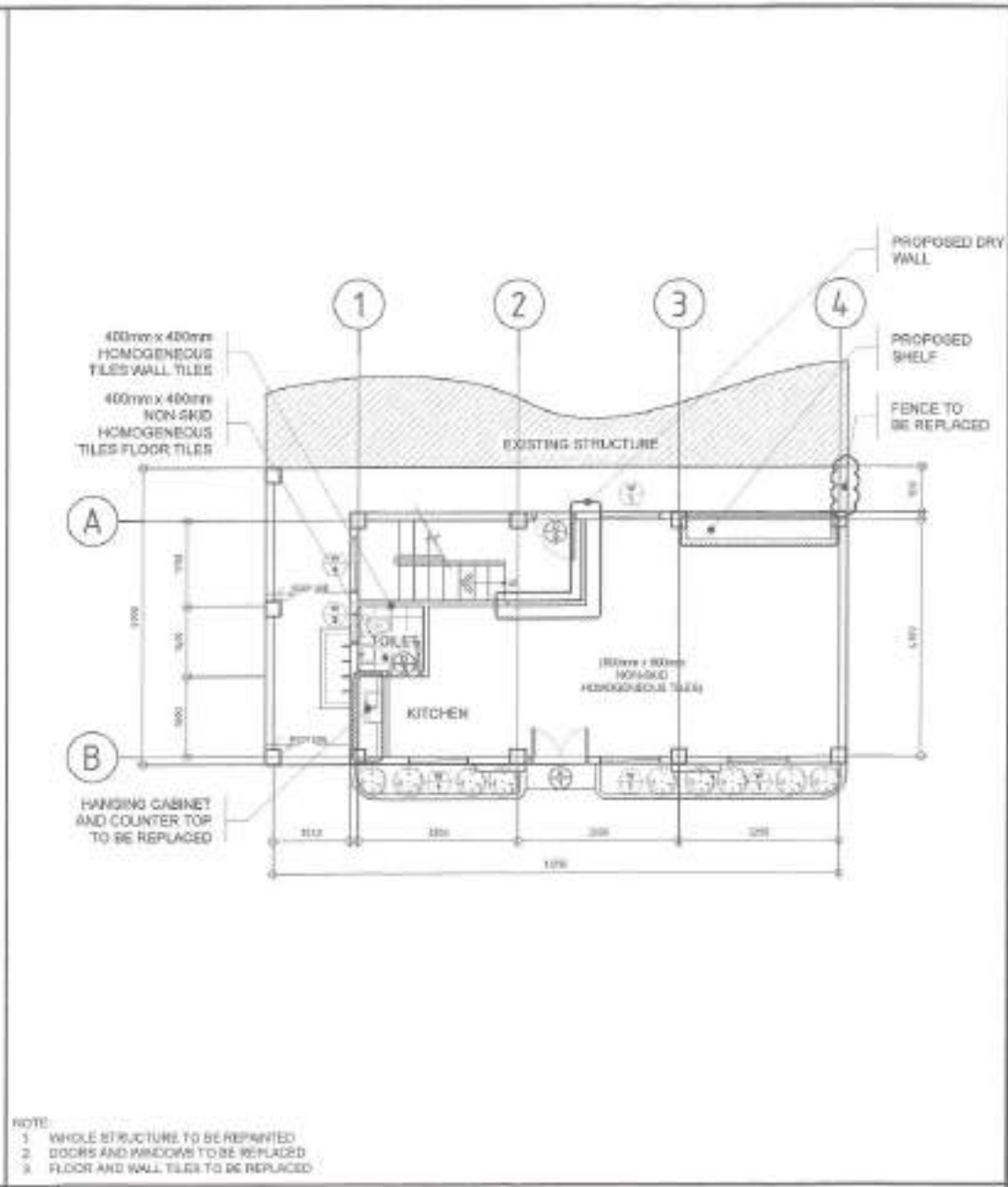
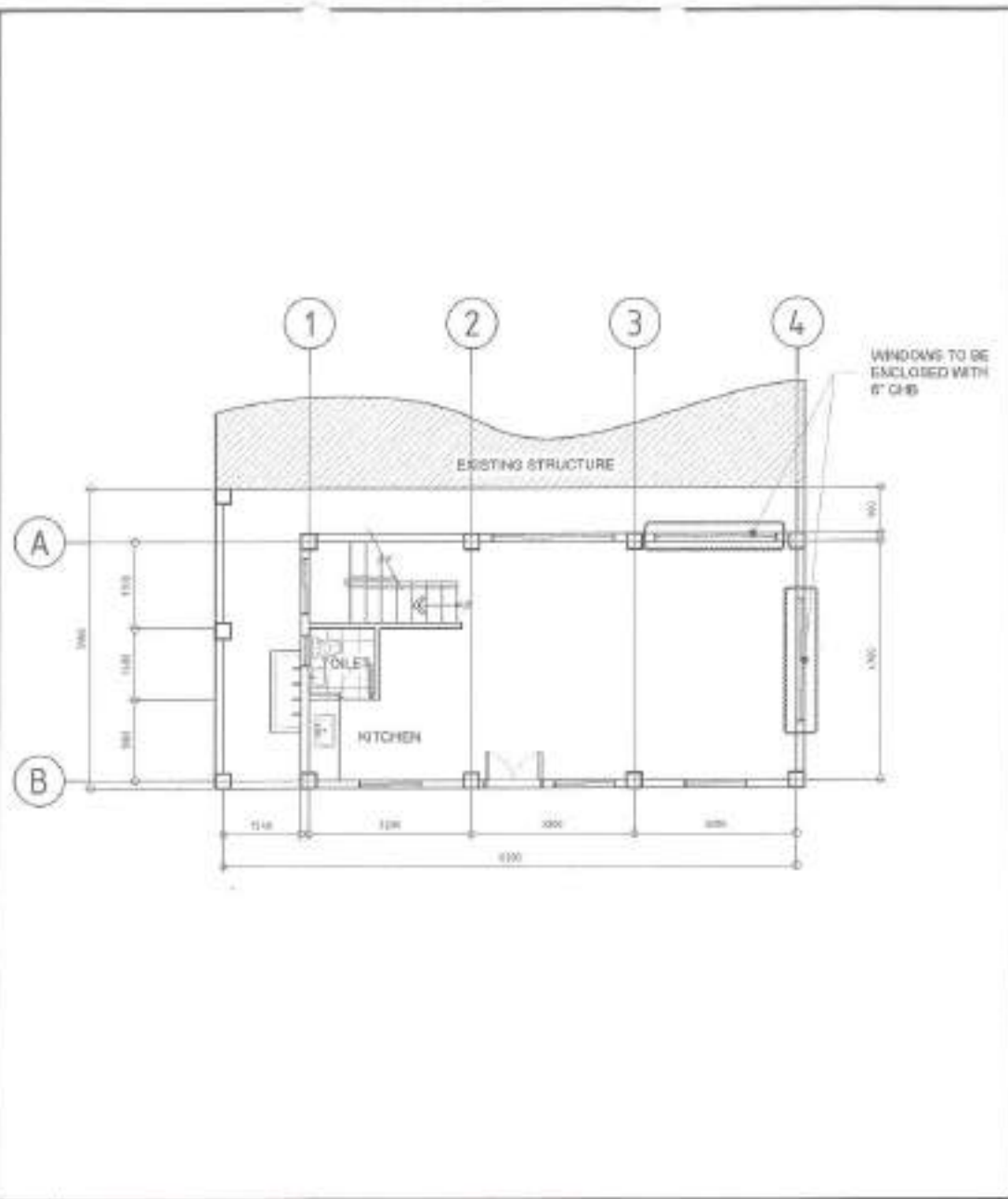
SUBMITTED BY:
[Signature]
ENGR. LEO S. DEL ROSARIO
HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:
[Signature]
ENGR. WILLIAM R. VERZOSA, JR.
CH. CITY ENGINEERING DEPARTMENT

APPROVED BY:
[Signature]
HON. MA. JOSEFINA G. BELAMONTE
CITY MAYOR

SHEET CONTENT:
LOCATION MAP
VICINITY MAP
SITE DEVELOPMENT PLAN

SHEET NO.:
AR-01
01/14

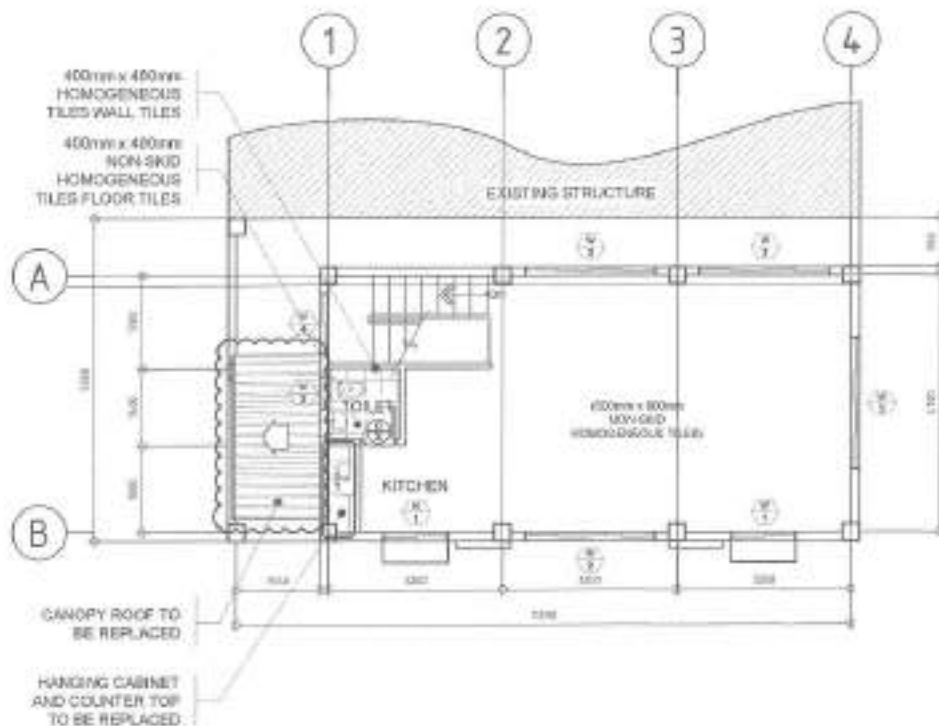
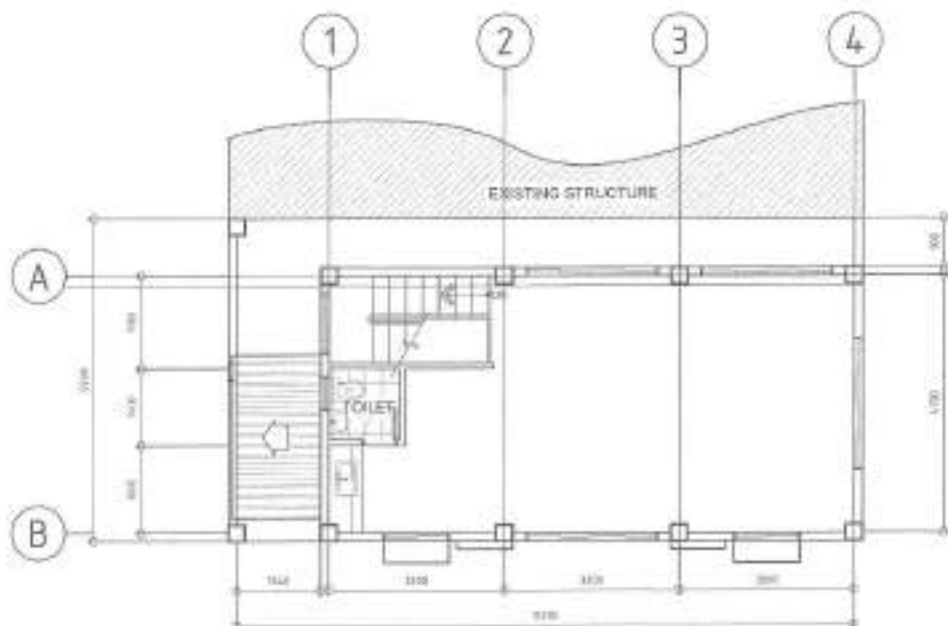


NOTE:
 1. WHOLE STRUCTURE TO BE REPAINTED
 2. DOORS AND WINDOWS TO BE REPLACED
 3. FLOOR AND WALL TILES TO BE REPLACED

1 EXISTING GROUND FLOOR PLAN SCALE 1:100M

2 PROPOSED GROUND FLOOR PLAN SCALE 1:100M

 <p>Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE	DRAWN BY	SUBMITTED BY	RECOMMENDING APPROVAL	APPROVED BY	SHEET CONTENT	SHEET NO.
	PROPOSED REHABILITATION OF T5, CRUZ DAY CARE CENTER	DATE: 08/14/21 CHECKED BY: JR				EXISTING GROUND FLOOR PLAN PROPOSED GROUND FLOOR PLAN	AR-02 02/14
	LOCATION: BRGY. SAN AGUSTIN, DISTRICT 8, QUEZON CITY	REVISIONS:	ENGR. LEN S. DEL ROSARIO HEAD, PLANNING & DESIGN DIVISION	ENGR. ISIDORO R. VERZOSA, JR. CITY ENGINEERING DEPARTMENT	HON. MA. JOSEFINA G. BELMONTE CITY ENGINEER		



- NOTE
1. WHOLE STRUCTURE TO BE REPAINTED
 2. DOORS AND WINDOWS TO BE REPLACED
 3. FLOOR AND WALL TILES TO BE REPLACED

1 EXISTING SECOND FLOOR PLAN

SCALE 1:100M

2 PROPOSED SECOND FLOOR PLAN

SCALE 1:100M



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE
PROPOSED REHABILITATION OF TS. CRUZ DAY CARE CENTER

LOCATION
BULET, SAN AGUSTIN DISTRICT 2, QUEZON CITY

DESIGN BY
DATE: 06/16/21
CHECKED BY: JF
REVISION NO:

SUBMITTED BY

ENGR. LEO S. DEL ROSARIO
HEAD, PLANNING & DESIGN DIVISION

RECOMMENDING APPROVAL

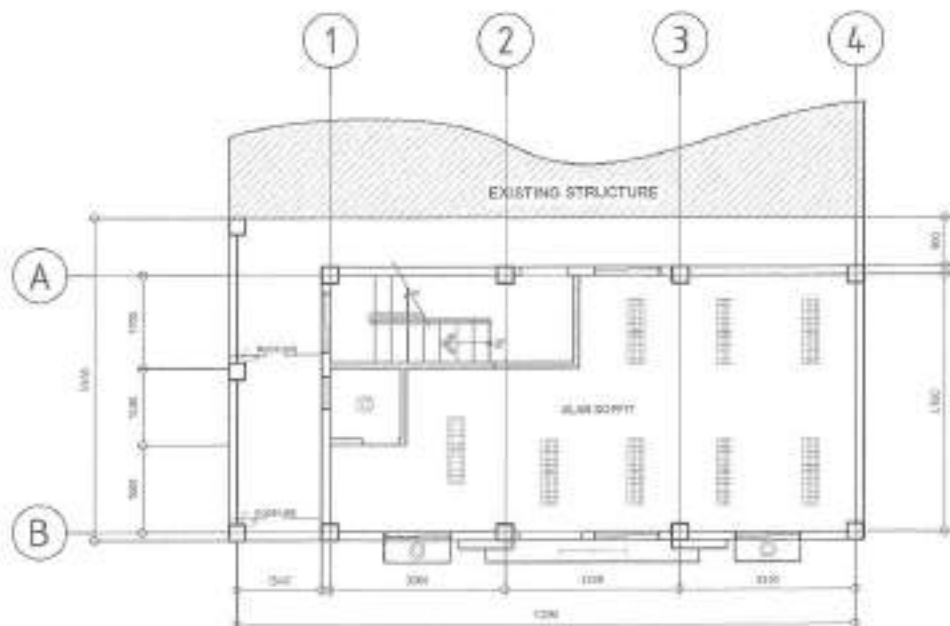
ENGR. MAXIME R. VERZOSA, JR.
H.C. CITY ENGINEERING DEPARTMENT

APPROVED BY

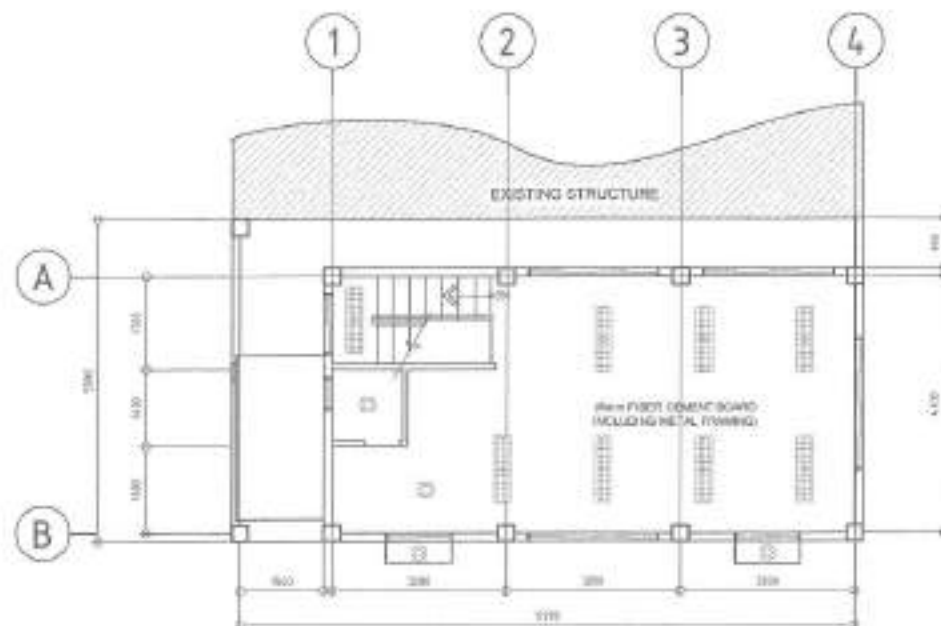
HON. MA. JOSEFINA G. BELMONTE
CITY MAYOR

SHEET CONTENT
EXISTING SECOND FLOOR PLAN
PROPOSED SECOND FLOOR PLAN

SHEET NO.
AR-03
03/14



NOTE:
1. SLAB GOFFIT TO BE REPAIRED



NOTE:
1. REPLACEMENT OF 2nd FLOOR FIBER CEMENT

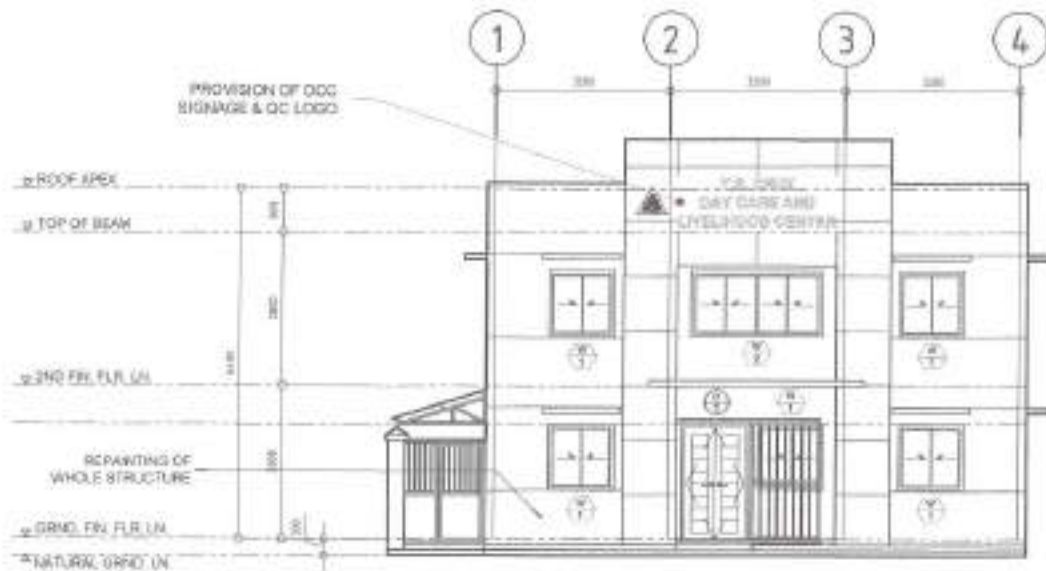
1 GROUND FLOOR REFLECTED CEILING PLAN

SCALE 1:100M

2 SECOND FLOOR REFLECTED CEILING PLAN

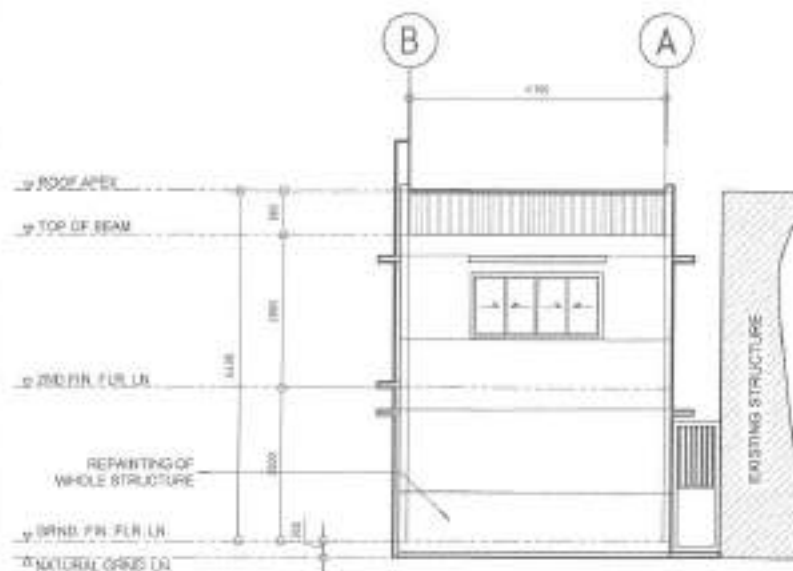
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 <p>Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE	DESIGNED BY	SUBMITTED BY	RECOMMENDING AGENCY	APPROVED BY	SHEET CONTENT	SHEET NO.
	PROPOSED REHABILITATION OF TS, CRUZ DAY CARE CENTER	DATE: 08/01/21 CHECKED BY: JAL	 ENGR. LEO S. DEL ROSARIO HEAD, PLANNING & PROGRAMMING DIVISION	 ENGR. USAP R. VERZOSA, JR. CHIEF, CITY ENGINEERING DEPARTMENT	HON. MA. JOBERNA G. BELMONTTE CITY MAYOR	GROUND FLOOR REFLECTED CEILING PLAN SECOND FLOOR REFLECTED CEILING PLAN	AR-04 04/14
	LOCATION: BRGY. SAN AGUSTIN DISTRICT 2, QUEZON CITY	REVISION NO.:					



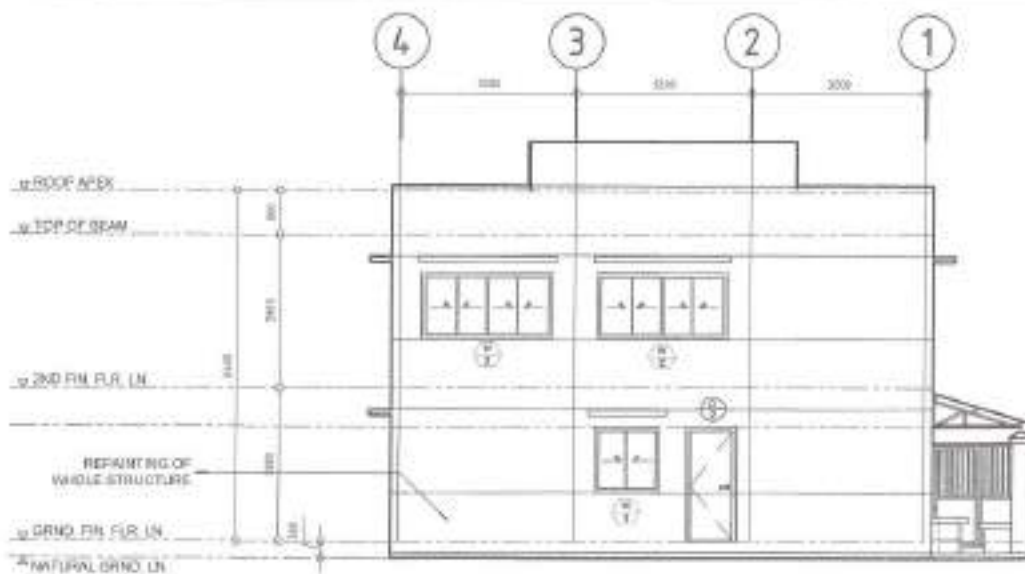
1 FRONT ELEVATION

SCALE 1:100M.



3 RIGHT SIDE ELEVATION

SCALE 1:100M.



2 REAR ELEVATION

SCALE 1:100M.



4 LEFT SIDE ELEVATION

SCALE 1:100M.



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:

PROPOSED REHABILITATION OF TS.
CRUZ DAY CARE CENTER

LOCATION:
BIRDF 348 HUSTIN, DISTRICT 5, QUEZON CITY

DRAWN BY:

DATE: 06/2021

DESIGNED BY:

REVISION NO.

SUBMITTED BY:

ENGR. LEO R. DEL ROSARIO
HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:

ENGR. CLAYTON R. VERZOSA, JR.
CH. CITY ENGINEERING DEPARTMENT

APPROVED BY:

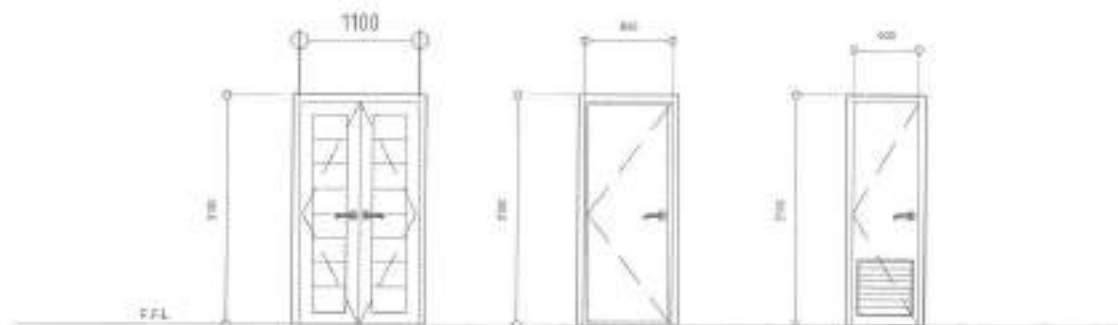
HON. MA. JOSEFINA G. BELMONTE
CITY ENGINEER

SHEET CONTENT:

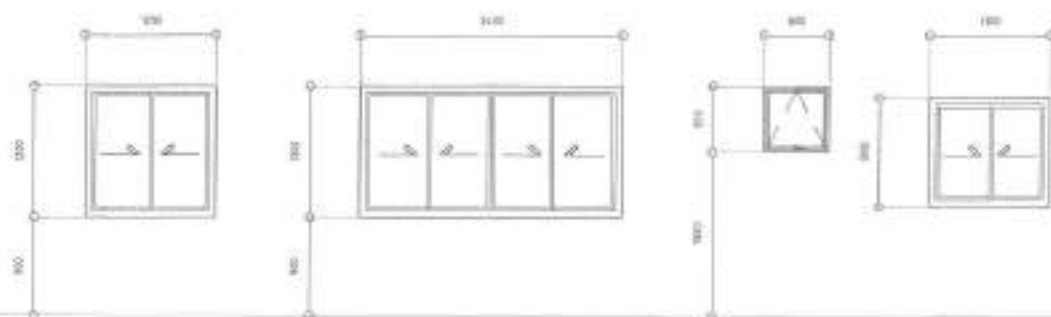
FRONT ELEVATION
REAR ELEVATION
RIGHT SIDE ELEVATION
LEFT SIDE ELEVATION

SHEET NO.:

AR-05
05/14



NAME	⊕	⊕	⊕
NO. OF SETS	1	1	3
DESCRIPTION	PANEL DOOR	FLUSH DOOR	PVC DOOR WITH LOUVERS
LOCATION	CLASSROOM	BACK DOOR	TOILET
HARDWARE	STAINLESS LEVER-TYPE DOOR HANDLE	STAINLESS LEVER-TYPE DOOR HANDLE	STAINLESS LEVER-TYPE DOOR HANDLE



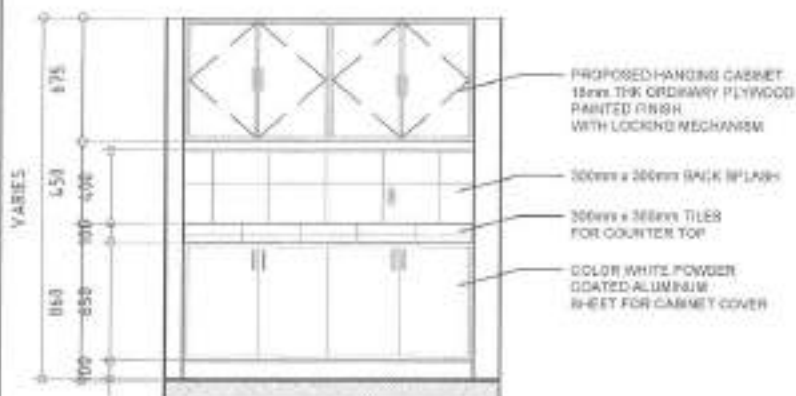
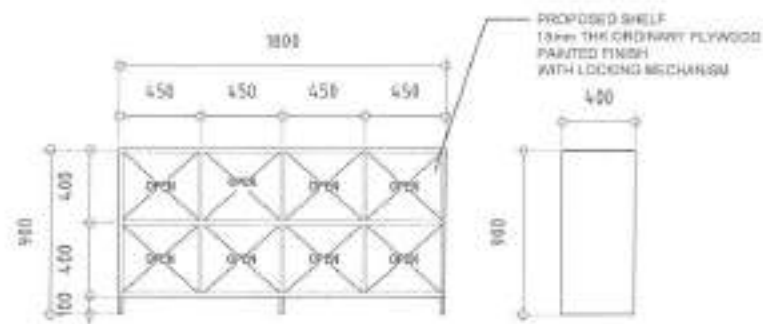
NAME	⊕	⊕	⊕	⊕
NO. OF SETS	0	4	3	3
DESCRIPTION	ALUMINUM FRAME POWDER-COATED SLIDING WINDOW WITH 6mm THK CLEAR GLASS	ALUMINUM FRAME POWDER-COATED SLIDING WINDOW WITH 6mm THK CLEAR GLASS	ALUMINUM FRAME POWDER-COATED SLIDING WINDOW WITH 6mm THK CLEAR GLASS	ALUMINUM FRAME POWDER-COATED SLIDING WINDOW WITH 6mm THK CLEAR GLASS
LOCATION	GROUND FLOOR AND 2ND FLOOR	2ND FLOOR	TOILET	STAIRWAY
HARDWARE	WINDOW GRILLES	WINDOW GRILLES	WINDOW GRILLES	WINDOW GRILLES

1 SCHEDULE OF DOORS AND WINDOWS

SCALE 1:30M.

2 SHELF DETAILS

SCALE 1:30M.



3 KITCHEN DETAILS

SCALE 1:30M.



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:

PROPOSED REHABILITATION OF T.S.
CRUZ DAY CARE CENTER

LOCATION:

8747, SAN AGUSTIN, DISTRICT 3, QUEZON CITY

DRAWN BY:

DATE: 06/20/21

CHECKED BY:

REVISIONS:

SUBMITTED BY:

[Signature]
ENGR. LEO S. DEL ROSARIO
HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:

[Signature]
ENGR. ISMAEL R. VERZOSA, JR.
CC, PLANNING AND PROGRAM DIVISION

APPROVED BY:

HON. MA. JOSEFINA G. BELMONTÉ
CITY MAYOR

SHEET CONTENT:

3D-SKETCH OF DOOR AND WINDOW
DETAILS OF SHELF AND HANGING CABINET
DETAILS

SHEET NO.:

AR-06
06/14

GENERAL

1. CONSTRUCTION SHALL BE ACCORDING TO ALL DRAWINGS ISSUED OR REVISED THEREON TO BE THE MOST RECENT. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS BEFORE COMMENCING WORK.
2. SHOP DRAWINGS SHALL BE SUBMITTED AND PLACING ORDERS FOR ALL STRUCTURAL MATERIALS, APPROVALS, AND FABRICATION SHALL BE OBTAINED BEFORE ALL WORK IS TO BE COMMENCED.
3. CONSTRUCTION SHALL BE BY ALL DIMENSIONS BEFORE ALL WORK IS TO BE COMMENCED. MECHANICAL AND ELECTRICAL CONNECTIONS FOR CONDUITS, PIPES, DUCTS, ETC. TO BE MADE AS NECESSARY.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ACCESS TO EXISTING AND ADJACENT UTILITIES FOR ALL WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

CONCRETE & REINFORCEMENT

LOCATION	STRENGTH	MAX. SIZE OF AGGREGATE	MAX. SLUMP
1. SLAB ON GROUND, WALLS, PARTIAL EXPOSED EXTERIOR WALLS, FOOTINGS	280 PSI (20MPa)	1 1/2" (38mm)	4 1/2" (115mm)
2. FOUNDATION, EXTERIOR WALLS, INTERIOR WALLS	300 PSI (21MPa)	1 1/2" (38mm)	4 1/2" (115mm)
3. FOUNDATION, EXTERIOR WALLS, INTERIOR WALLS	300 PSI (21MPa)	1 1/2" (38mm)	4 1/2" (115mm)

1. ALL REINFORCING BARS SHALL CONFORM TO ASTM SPECIFICATIONS FOR STEEL REINFORCING BARS AND SHALL BE GRADE 60 (420 MPa) WITH LARGER BARS.
2. REINFORCING BARS SHALL BE PROVIDED WITH PROPER BENDING AND LAP SPACING AS SHOWN ON DRAWINGS.

REINFORCING BARS	DEVELOPMENT LENGTH
SLAB ON GROUND	40d
WALLS AND EXTERIOR WALLS	40d
FOUNDATIONS	40d

1. ALL REINFORCING BARS SHALL BE PROVIDED WITH PROPER BENDING AND LAP SPACING AS SHOWN ON DRAWINGS.
2. REINFORCING BARS SHALL BE PROVIDED WITH PROPER BENDING AND LAP SPACING AS SHOWN ON DRAWINGS.

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REINFORCING BARS	DEVELOPMENT LENGTH
SLAB ON GROUND	40d
WALLS AND EXTERIOR WALLS	40d
FOUNDATIONS	40d

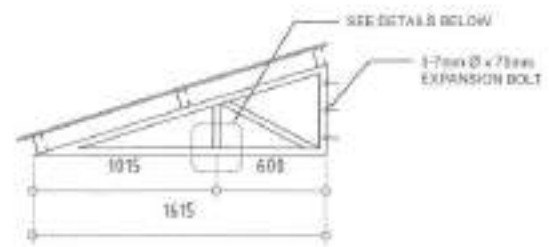
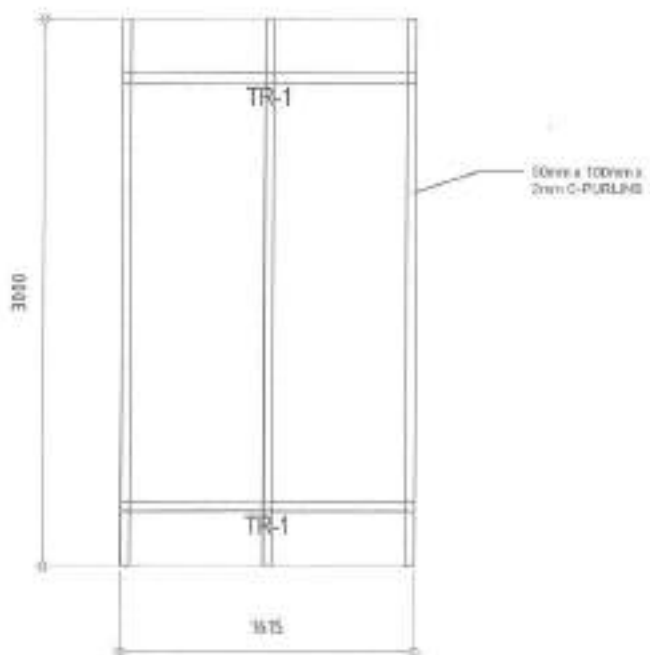
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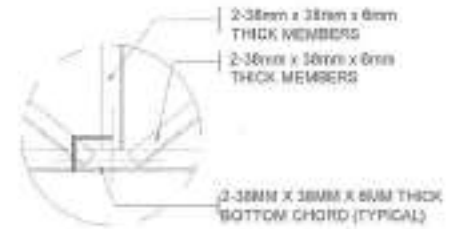
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TRUSS DETAILS (TR-1)

TOP AND BOTTOM CHORD:
2-38mm x 38mm x 6mm ANGLE BAR
MIDDLE CHORD:
2-38mm x 38mm x 6mm ANGLE BAR



NOTE:
1. 38 mm x 38 mm x 6mm THICK ANGLE BAR (TOP & BOTTOM CHORD)
2. 38 mm x 14 mm x 6 mm ANGLE BAR (WEB MEMBERS)
3. 50mm x 100mm x 3mm C-PURLINS SPACING AS SHOWN

1 GENERAL NOTES SCALE: NTS

2 CANOPY ROOF FRAMING PLAN SCALE: 1:30M

3 CANOPY TRUSS DETAILS SCALE: 1:30M

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Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE: PROPOSED REHABILITATION OF T.S. CRUZ DAY CARE CENTER

LOCATION: BRGY. SAN AGUSTIN, DISTRICT 2, QUEZON CITY

DESIGNED BY: J.S.

DATE: 06/16/21

REVISION NO.:

ENGR. LEO S. DEL ROSARIO
HEAD, PLANNING & PROGRAMS DIVISION

RECOMMENDED APPROVAL:

ENGR. ISAAC R. VERZOSA, JR.
CHIEF, CIVIL ENGINEERING DEPARTMENT

APPROVED BY:

RON. RA. JOSEFINA G. BELMONTÉ
CITY MGR.

SHEET CONTENT: GENERAL NOTES CANOPY ROOF FRAMING PLAN CANOPY TRUSS DETAILS

SHEET NO. ST-01 08/14

1 All plumbing works and materials indicated herein shall be compliant to the provisions of the latest edition of National Plumbing Code, the rules and regulations of local authorities concerned, the rules and regulations of local utility companies and the provisions of the land developer when and where applicable.

2 The plumbing layout is only diagrammatic; pipes, cleanouts and check valves shall be concealed as much as possible. It is not intended to show the actual dimension of the pipes and fixtures in the drawing but all the pipes and fixtures shall be installed as and where indicated. Any relocation will require proper execution in relation with other trades.

3 The plumbing contractor shall verify all existing utilities at the site and shall coordinate the work with other trades.

4 Pipes shall not be embedded in structural members unless otherwise specified or allowed.

5 Minimum slope for horizontal sewer lines shall be 1% and for drain lines shall be 5%.

6 Proposed plumbing utilities shall conform with the actual location, depth and invert elevation of all existing pipes/utilities.

7 Connection of fixtures to pipes and fittings shall be according to manufacturer's specifications.

8 All floor drains shall be vented individually.

9 All clean out females shall be flush-mounted to wall and shall be provided with polished cover caps. Do not install floor clean outs except at lines on grade and service areas not subject to traffic.

10 All underground G.I. pipes in direct contact with soil shall be provided with two (2) coats of protective tar covering and wrapped with jute cloth thoroughly soaked in tar or asphalt.

11 Provide vent stacks and vent pipe thru roof of cast iron service weight as required.

12 All cast iron pipes shall be of approved quality and G.I. pipes for water distribution lines shall be Schedule 40 U.S. standard weight.

13 Provide gate valves to all water supply lines to fixtures.

14 All hot water lines shall be provided with proper insulation where exposed.

15 All individual branches to fixtures or group of fixtures and/or equipments shall be provided with air chambers or capped vertical pipe extensions of dimensions as shown.

H = 450 mm for 19 mm \varnothing and larger



H = 300 mm for 12 mm \varnothing and smaller

16 All hose bibbs shall be 19 mm \varnothing (3/4" \varnothing) unless otherwise indicated.

17 Inlet pipe of septic tank is 50 mm higher than the siphon pipe which is 30 mm higher than the outlet pipe.

18 All plumbing works and manner of construction shall be under the direct supervision of an able and duly licensed Master Plumber or Registered Sanitary Engineer. Any discrepancies found in plan shall be notified to the same person.

I. FIXTURES AND OTHER LEGEND

FD	FLOOR DRAIN
RD	ROOF DRAIN
SHD	SHOWER
WC	WATER CLOSET
LAV	LAVATORY
URI	URINAL
KS	KITCHEN SINK
BD	BUILDING DRAIN
DD	DECK DRAIN
CCD	CEILING CLEANOUT
FCO	FLOOR/GROUND CLEANOUT
DS	DOWNSPOUT
mm	millimeter
\varnothing	mm DIAMETER
SHD	SHOWER DRAIN
CB	CATCH BASIN
MH	MANHOLE
	DIRECTION OF FLOW
	GREASE TRAP




	URINAL FATELY
	CHECK VALVE
	BUILDING SEWER
	BUILDING DRAIN
	WASTE LINE
	AREA DRAIN / CATCH BASIN
	FLOOR DRAIN
	DIAMETER
	WASTE LINE
	WATER LINE
	GATE VALVE
	DECK DRAIN
	CLEANOUT
	PIPE DOWN
	PIPE UP
	MILLIMETER
	GATE VALVE
	AREA DRAIN / CATCH BASIN
	WATER CLOSET
	LAVATORY
	MANHOLE
	HOSE BIBB
	STORM DRAIN LINE
	VENT LINE
	VENT ABOVE CEILING
	CONCRETE PIPE / REINF. CONC. PIPE
	VENT THRU ROOF
	DIRECTION OF FLOW / SLOPE

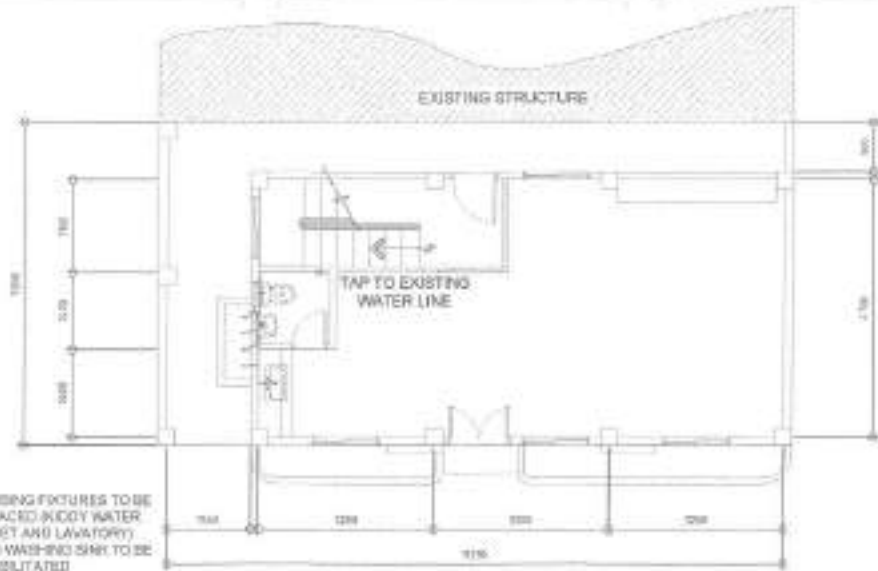
1 GENERAL NOTES

SCALE NTS.

2 LEGEND AND SYMBOLS

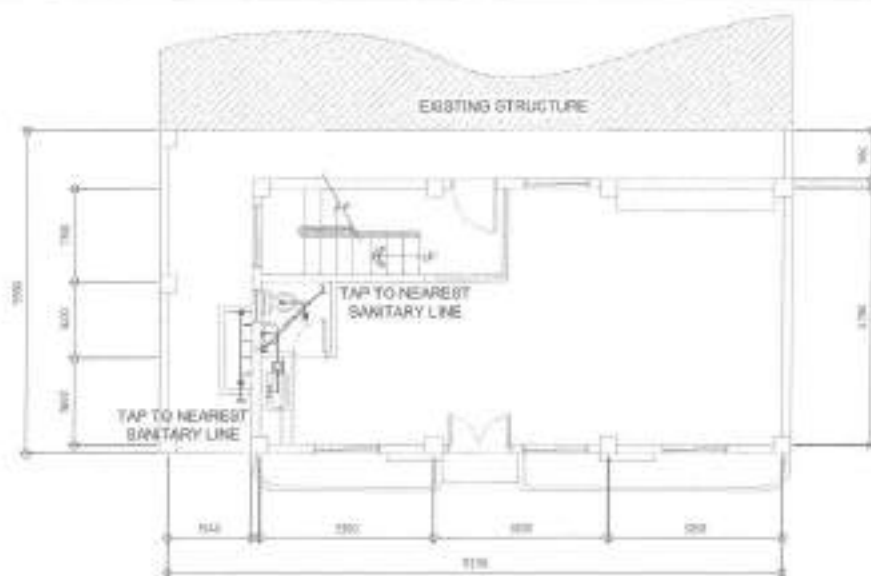
SCALE NTS.

 <p>Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT</p>	PROJECT TITLE:	DRAWN BY:	SUBMITTED BY:	RECOMMENDED APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET NO.
	PROPOSED REHABILITATION OF TS. CRUZ DAY CARE CENTER	DATE: 09.09.21					GENERAL NOTES LEGEND AND SYMBOLS
LOCATION: BRGY. SAN AGUSTIN, DISTRICT 8, QUEZON CITY	CHECKED BY:	REVISION NO.:	ENGR. EDO S. DEL ROSARIO HEAD, PLANNING & PROGRAMMING DIVISION	ENGR. ISADOR M. R. VERZOSA, JR. OC, CIVIL ENGINEERING DEPARTMENT	HON. MA. JOSEFINA G. BELMONTÉ CITY MAJOR		



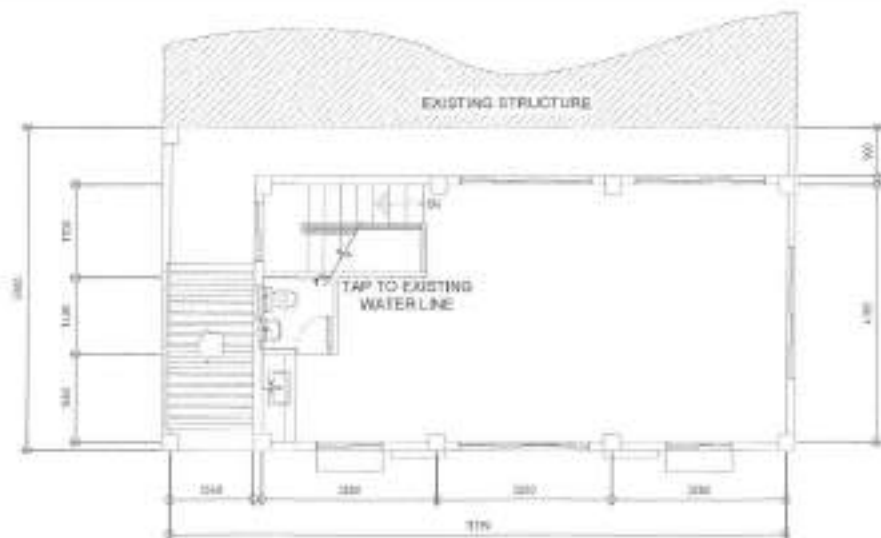
1 GROUND FLOOR WATER LINE LAYOUT

SCALE 1:100M



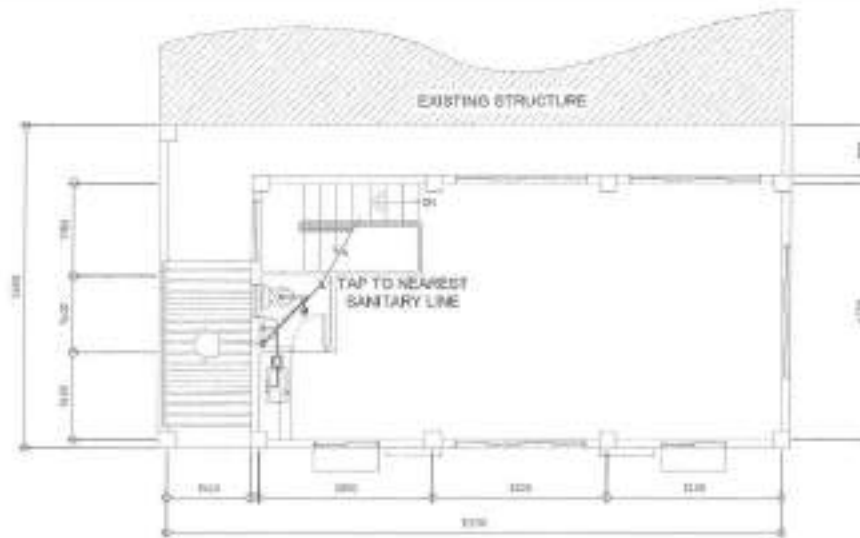
3 GROUND FLOOR SANITARY LAYOUT

SCALE 1:100M



2 SECOND FLOOR WATER LINE LAYOUT

SCALE 1:100M



4 SECOND FLOOR SANITARY LAYOUT

SCALE 1:20M



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:
PROPOSED REHABILITATION OF TS. CRUZ DAY CARE CENTER

LOCATION:
GRD. SAN ANASTASIN, BISTROT 2, QUEZON CITY

DESIGNED BY: *[Signature]*
CHECKED BY: *[Signature]*
DATE: 08/02/21

APPROVED BY: *[Signature]*
ENGR. LEO S. DEL ROSARIO
HEAD, PLUMBING DIVISION

RECOMMENDING APPROVAL: *[Signature]*
ENGR. SARANI R. VERZOSA, JR.
DCC CITY ENGINEERING DEPARTMENT

APPROVED BY: *[Signature]*
HON. MA. JOSEFINA G. BELMONTTE
CITY MAJOR

SHEET CONTENT:
GROUND FLOOR WATER LINE LAYOUT
SECOND FLOOR WATER LINE LAYOUT
GROUND FLOOR SANITARY LAYOUT
SECOND FLOOR SANITARY LAYOUT

SHEET NO.: **PL-02**
10/14

- ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL CODE ENFORCING AUTHORITY AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE UTILITY COMPANY.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND PAY ALL FEES REQUIRED FOR THE WORK AND SHALL FURNISH THE OWNER THROUGH THE ENGINEER, FINAL CERTIFICATES OF ELECTRICAL INSPECTION AND APPROVAL FROM PROPER GOVERNMENT AUTHORITIES FOR COMPLETION OF WORK.
- ALL BRANCHED BRANCH CIRCUITS SHALL BE PVC CONDUITS AND FOR EXPOSED INSTALLATION SHALL BE SECURELY SUPPORTED BY CONDUIT CLAMPS EVERY 100 MILLIMETERS.
- PULL BOXES SHALL BE PROVIDED BY THE CONTRACTOR WHEREVER NECESSARY TO FACILITATE WIRE PULLING EVEN IF THESE ARE NOT INDICATED ON THE PLANS. SIZES OF ALL PULLBOXES SHALL BE COMPUTED BASED ON THE CODE REQUIREMENTS. SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL, PRIOR TO FABRICATION. LOCATION OF PULLBOXES SHALL BE APPROVED BY THE ARCHITECT/ENGINEER AND MUST BE REFLECTED ON THE 'AS-BUILT' PLAN.
- ALL POWER OUTLETS AND SWITCHES SHALL BE GROUNDING TYPE WITH PARALLEL SLOTS FOR 200V.
- PROVIDE GROUND FAULT CURRENT INTERRUPTER CIRCUIT BREAKER FOR LOADS MARKED 'GFCI' ON THE PLAN.
- ALL METALLIC CONDUITS, CABINETS AND EQUIPMENT SHALL BE PROPERLY GROUNDED AND BONDED.
- UNLESS OTHERWISE NOTED, MOUNTING HEIGHT FOR WALL MOUNTED DEVICES SHALL BE AS FOLLOWS:

RECEPTACLE OUTLET - 300 MM AFF. 150MM ABOVE WORKING COUNTERTOP.
 TELEPHONE OUTLET - 200 MM AFF.
 CATV OUTLET - 300 MM AFF.
 LIGHTING SWITCH - 1400 MM AFF.
 PANELEBOARD - 700 MM AFF.

- REFER TO MECHANICAL, PLUMBING AND FIRE PROTECTION DRAWINGS FOR RATINGS AND LOCATIONS OF EQUIPMENT AS WELL AS THEIR CONTROL SEQUENCES AS SPECIFIED AND OR SHOWN UNDER THEIR RESPECTIVE SECTIONS.
- ALL MATERIALS TO BE USED SHALL BE OF THE BEST QUALITY, BRAND NAME AS SPECIFIED.
- THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT GENERAL LAYOUT AND BROAD OUTLINE DESCRIPTION OF THE PROJECT BUT DO NOT NECESSARILY INDICATE/DESCRIBE ACTUAL LOCATIONS, LEVELS AND DISTANCES OF THE EQUIPMENT. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE SUCH ADJUSTMENT AT THE JOBSITE AS LOCATION, DISTANCES AND LEVELS ARE GOVERNED BY ACTUAL FIELD CONDITIONS.
- ANY DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION DECISION.
- ALL LIGHTING AND CONVENIENCE OUTLET CIRCUITS SHALL BE 3.5 SQ. MM. THINWALL COPPER WIRE UNLESS OTHERWISE NOTED. MINIMUM SIZE OF WIRE SHALL BE 3.5 SQ. MM. COPPER WIRE. ALL WIRES AND CABLES SHALL BE COLOR CODED AS FOLLOWS:

LINE 1 - RED
 LINE 2 - YELLOW
 NEUTRAL - WHITE
 GROUND - GREEN

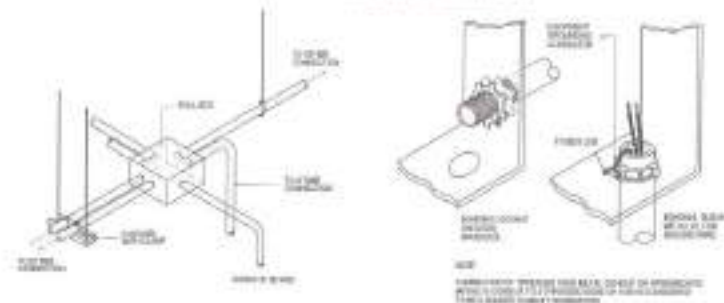
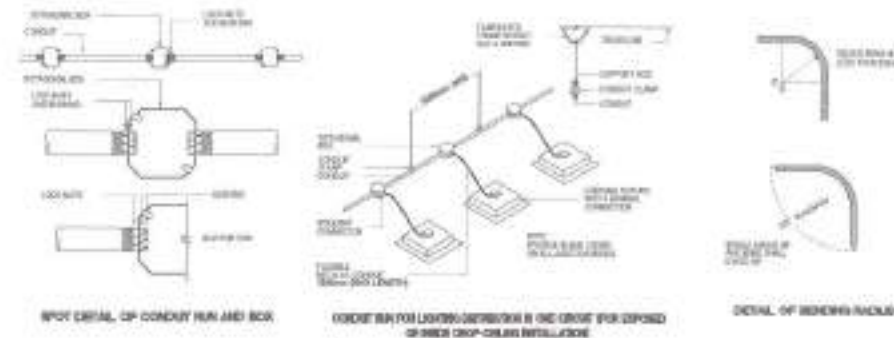
- BOXES, WIRE, OUTER ENCLOSURE SHALL BE FABRICATED FROM STEEL WITH THICKNESS AS FOLLOWS:
 MINIMUM WIDTH OF THE WIDEST SURFACE STEEL:
 UP TO 100 MM AND 102.40 MM GA 16 PAINTED WITH METAL PRIMER EPOXY AND TOPOCOAT
 OVER 100.40 MM BUT NOT OVER 150 MM GA 16 PAINTED WITH METAL PRIMER EPOXY AND TOPOCOAT
 OVER 150.40 MM BUT NOT OVER 190 MM GA 12 PAINTED WITH METAL PRIMER EPOXY AND TOPOCOAT
 OVER 190 MM GA 10 PAINTED WITH METAL PRIMER EPOXY AND TOPOCOAT

- ALL ELECTRICAL WORK HEREIN SHALL BE CONDUCTED BY EXPERIENCED MEN UNDER THE DIRECT SUPERVISION OF A FULL-TIME LICENSED ELECTRICAL ENGINEER, AND A DULY ACCREDITED ELECTRICAL CONTRACTOR BY PCAR. WORK SHALL BE NEATLY PLACED, SECURELY FASTENED AND PROPERLY FINISHED.

- TYPE OF SERVICE ENTRANCE SHALL BE SINGLE-PHASE, TWO-WIRE PLUS GROUND, 60 HERTZ, 220V AC NOMINAL.

- CONDUITS IN NO CASE SHALL THERE BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS IN ANY ONE RUN. ALL CONDUIT BENDS SHALL BE FIELD MADE BY USING HYDRAULIC BENDERS. MINIMUM BENDING RADII MUST BE IN ACCORDANCE TO THE CODE REQUIREMENTS.

- UPON COMPLETION OF ELECTRICAL CONSTRUCTION WORK, INSULATION RESISTANCE TEST AND FUNCTIONALITY TEST SHALL BE PERFORMED BY THE CONTRACTOR INCLUDING OF THE INSTALLATION TO BE REPORTED IN DETAILS ON FORMS APPROVED BY THE QUEZON CITY ENGINEERING DEPARTMENT REPRESENTATIVE. THE INSULATION RESISTANCE FOR ELECTRICAL SYSTEMS SHALL NOT BE MORE THAN 0.05M, COMMUNICATION GROUNDING RESISTANCE SHALL NOT EXCEED 0 OHMS.



2 MISCELLANEOUS DETAILS

SCALE: NTS

	ACU Outlet		Orbit Fan with Selector Switch
	Duplex Convenience Outlet		One Gang Switch
	120mm x 600mm LED tube in Troffer Fixture		Two Gang Switch
	1x18w T8 LED Tube Box Type Lighting Fixture		Three Gang Switch
	14w LED Light Bulb in Plastic Receptacle		Three way Switch

1 GENERAL NOTES

SCALE: NTS

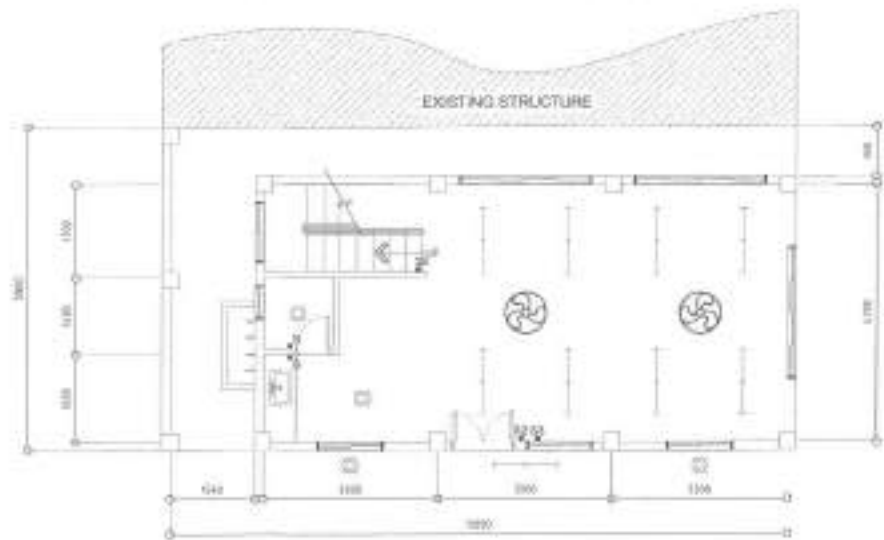
3 LEGEND AND SYMBOLS

SCALE: NTS



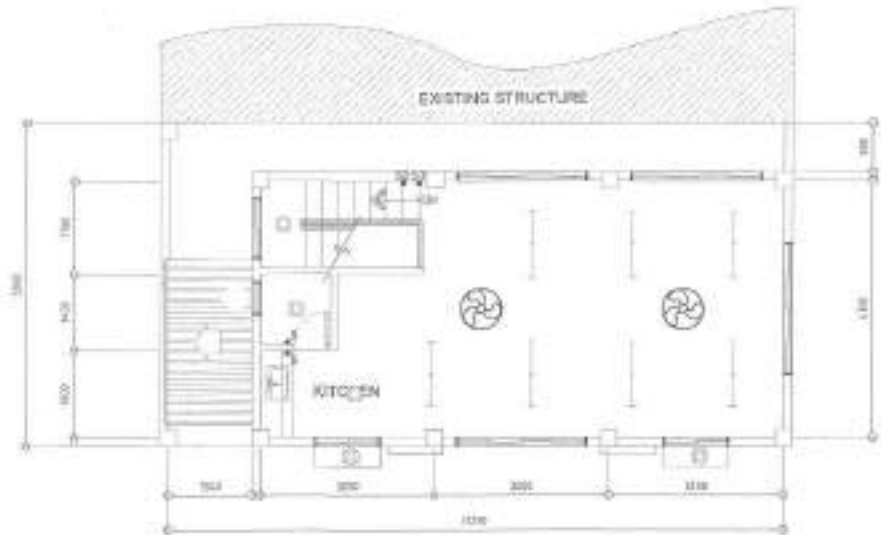
Republika ng Pilipinas
 Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:	DRAWN BY:	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	DISTRICT OFFICE:	DISTRICT NO.
PROPOSED REHABILITATION OF TS. CRUZ DAY CARE CENTER	DATE: 08/16/21 CHECKED BY: JN	 ENGR. LEO S. DEL ROSARIO HEAD, PLANNING & PROJECT MANAGEMENT DIVISION	 ENGR. R. VERZOSA, JR. SEC. CITY ENGINEERING DEPARTMENT	 HON. MA. JOSEFINA G. BELMONTE CITY MAYOR	GENERAL NOTES MISCELLANEOUS DETAILS LEGEND AND SYMBOLS	 EL-01 11/14
LOCATION: SPICY, SAN AUGUSTIN DISTRICTS, QUEZON CITY	PROJECT NO.:					



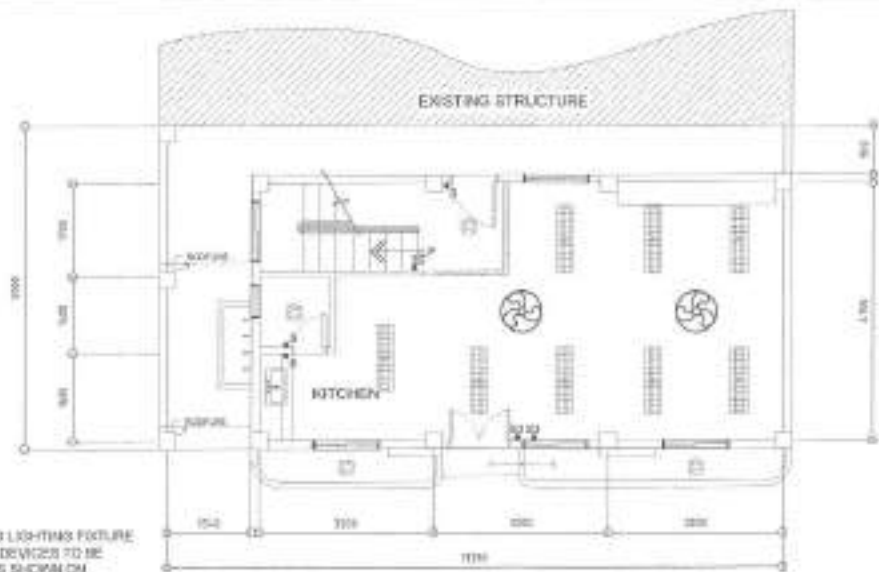
1 GROUND FLOOR EXISTING LIGHTING LAYOUT

SCALE 1:100M



3 SECOND FLOOR EXISTING LIGHTING LAYOUT

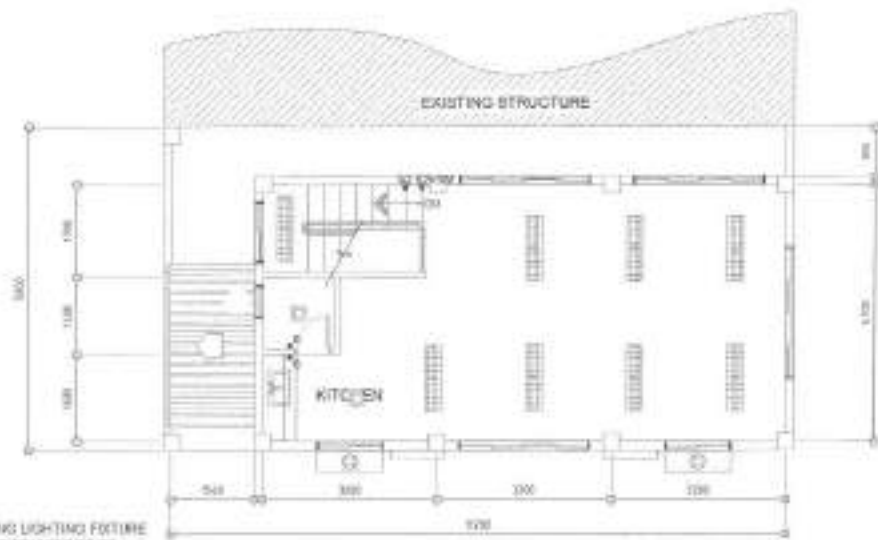
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NOTE
1. ALL EXISTING LIGHTING FIXTURE AND WIRING DEVICES TO BE REPLACED AS SHOWN ON PROPOSED LAYOUT

2 GROUND FLOOR PROPOSED LIGHTING LAYOUT

SCALE 1:100M



NOTE
1. ALL EXISTING LIGHTING FIXTURE AND WIRING DEVICES TO BE REPLACED AS SHOWN ON PROPOSED LAYOUT

4 SECOND FLOOR PROPOSED LIGHTING LAYOUT

SCALE 1:100M



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:
PROPOSED REHABILITATION OF TS. CRUZ DAY CARE CENTER

LOCATION:
BPO7, SAN AGUSTIN, DISTRICT 3, QUEZON CITY

DRAWN BY: *[Signature]*
DATE: 08.14.21
CHECKED BY: *[Signature]*
REVISION NO:

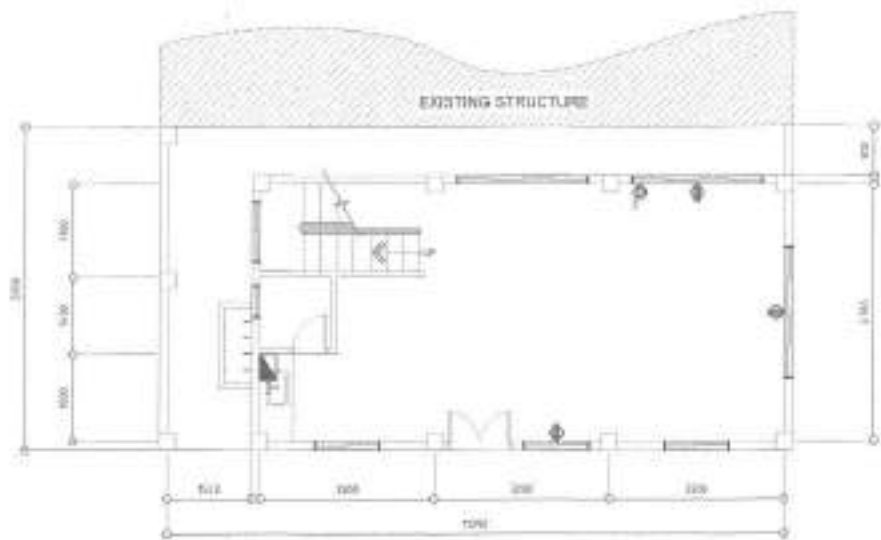
SUBMITTED BY:
[Signature]
ENGR. LEO S. DEL ROSARIO
HEAD, PLANNING & PROGRAMS DIVISION

RECOMMENDING APPROVAL:
[Signature]
ENGR. ISABELE R. VERZOSA, JR.
DCL, CITY ENGINEERING DEPARTMENT

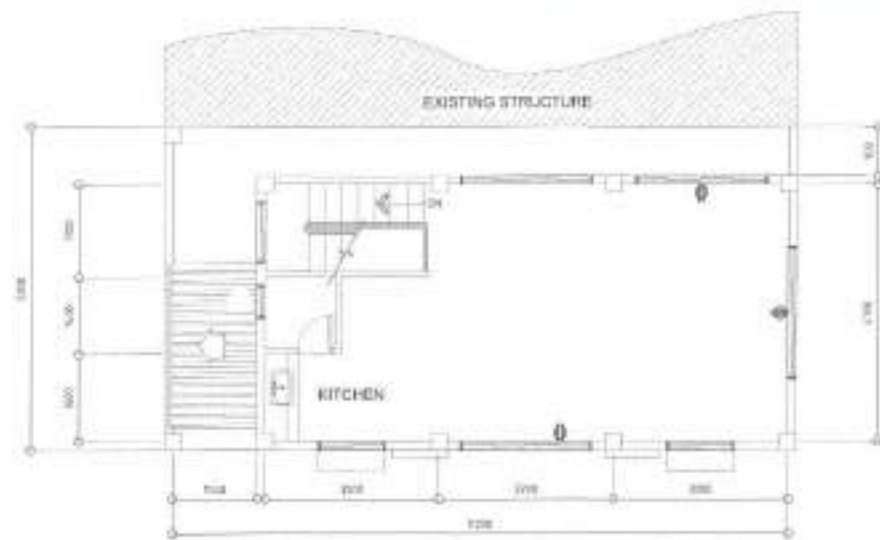
APPROVED BY:
[Signature]
HON. MA. JOSEFINA G. BELMONTE
CITY MAYOR

SHEET CONTENT:
GROUND FLOOR EXISTING LIGHTING LAYOUT
GROUND FLOOR PROPOSED LIGHTING LAYOUT
SECOND FLOOR EXISTING LIGHTING LAYOUT
SECOND FLOOR PROPOSED LIGHTING LAYOUT

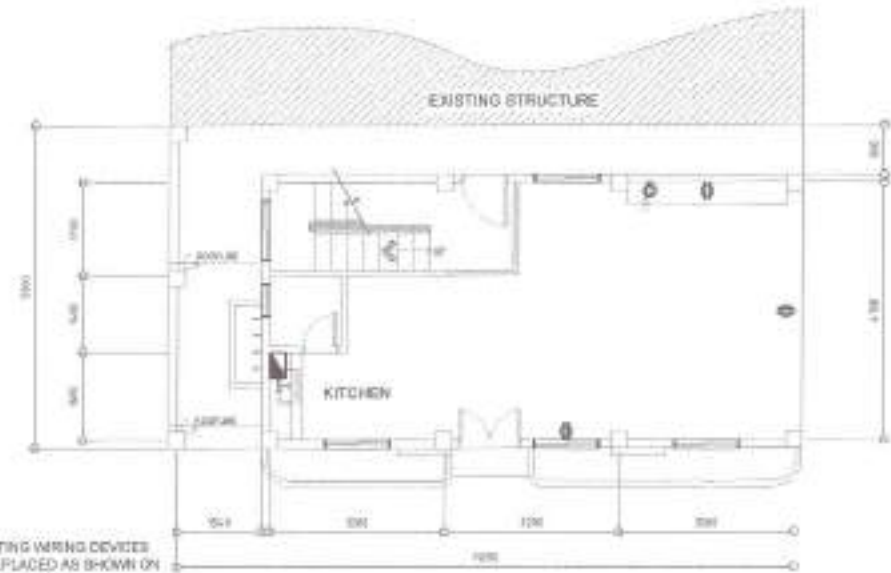
SHEET NO:
EL-02
12/14



1 GROUND FLOOR EXISTING POWER LAYOUT SCALE 1:100M

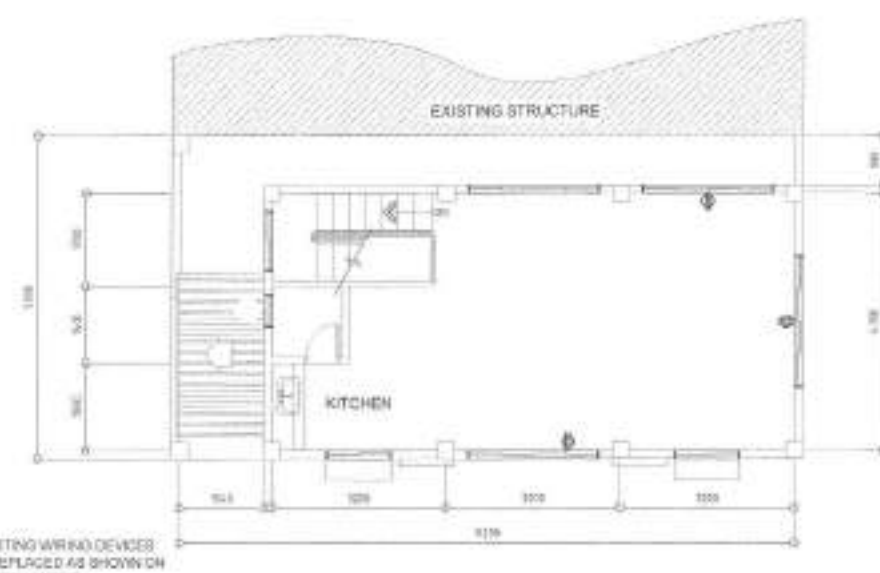


3 SECOND FLOOR EXISTING POWER LAYOUT SCALE 1:100M



NOTE:
1. ALL EXISTING WIRING DEVICES TO BE REPLACED AS SHOWN ON PROPOSED LAYOUT

2 GROUND FLOOR PROPOSED POWER LAYOUT SCALE 1:100M



NOTE:
1. ALL EXISTING WIRING DEVICES TO BE REPLACED AS SHOWN ON PROPOSED LAYOUT

4 SECOND FLOOR PROPOSED POWER LAYOUT SCALE 1:100M



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:
**PROPOSED REHABILITATION OF TS,
CRUZ DAY CARE CENTER**

LOCATION:
BNDY SAN ROBERTO DISTRICT 6, QUEZON CITY

DRAWN BY: [Signature]
DATE: 08/20/21
CHECKED BY: [Signature]
PERSONNEL:

SUBMITTED BY:
[Signature]
ENGR. LEO S. DEL ROSARIO,
HEAD, PLANNING & PROJECT MANAGEMENT

RECOMMENDING APPROVAL:
[Signature]
ENGR. ISAAC R. VERZOSA, JR.
D.C. ENGINEERING DEPARTMENT

APPROVED BY:
[Signature]
MOR. SA. JOSEFINA G. BELMONTÉ
CITY MGR.









SHEET CONTENT:
GROUND FLOOR EXISTING
POWER LAYOUT
SECOND FLOOR
EXISTING
POWER LAYOUT
GROUND FLOOR PROPOSED
POWER LAYOUT
SECOND FLOOR PROPOSED
POWER LAYOUT

SHEET NO:
EL-02
13 | 14

- ALL MECHANICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE NATIONAL BUILDING CODE, PSME CODE AND THE RULES AND REGULATIONS OF QUEZON CITY.
- THE SCOPE OF WORK SHALL INCLUDE ALL WORKS DESCRIBED IN PLANS.
- THE WORKS SHALL BE EXECUTED IN CLOSE COORDINATION WITH ALL OTHER TRADES. ALL AIR-CONDITIONED SPACES SHALL BE MAINTAINED AT 24°C DB AND 50% RH.
- ALL AIR-CONDITIONED SPACES SHALL BE MAINTAINED AT 24°C DB AND 50% RH.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, MANUFACTURERS CATALOGUE, SPECIFICATIONS, SAMPLES, INCLUDING VIBRATION ISOLATORS BEFORE EXECUTION OF WORK.
- ALL FLOOR SLAB MOUNTED VIBRATING EQUIPMENT SHALL BE PROVIDED WITH VIBRATION ISOLATORS TO PREVENT VIBRATIONS AND NOISE TRANSMISSION.
- EXHAUST FAN SHALL BE PROVIDED WITH SUITABLE FLEXIBLE CONNECTIONS TO DISCHARGE DUCT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING AND COMMISSIONING OF THE WHOLE VENTILATION AND AIR-CONDITIONING SYSTEM AND INSTALLATION.
- ALL POWER WIRING SHALL BE ELECTRICAL AND TERMINATION TO EQUIPMENT SHALL BE MECHANICAL.
- PROVIDE CONTROL WIRING FOR AIR-CONDITIONING EQUIPMENT.
- PROVIDE THERMOSTAT FOR ALL INDOOR UNITS / FAN COIL UNITS.
- ALL PIPE EQUIPMENT CONDENSATE DRAIN SHALL BE CONNECTED TO THE NEAREST FLOOR DRAIN / AD/CS.
- ALL PIPE EQUIPMENT CONDENSATE DRAIN SHALL BE CONNECTED TO THE NEAREST FLOOR DRAIN / AD/CS.
- PROVIDE GUIDES, HANGERS, AND SUPPLEMENTAL STEEL SUPPORT FOR ALL PIPING, DUCTING AND EQUIPMENTS.
- PROVIDE PIPE SLEEVES FOR ALL PIPING PASSING THRU BUILDING STRUCTURE.
- ALL PIPE DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE NOTED.

1 GENERAL NOTES

SCALE: NTS

	EQUIPMENT DESIGNATION		AIR-COOLED CONDENSING UNIT
	REFRIGERANT PIPE		ELBOW UP
	WALL MOUNTED INDOOR UNIT		ELBOW DOWN
	WINDOW TYPE AIR-CONDITIONER		FAN COIL UNIT

2 LEGENDS AND SYMBOLS

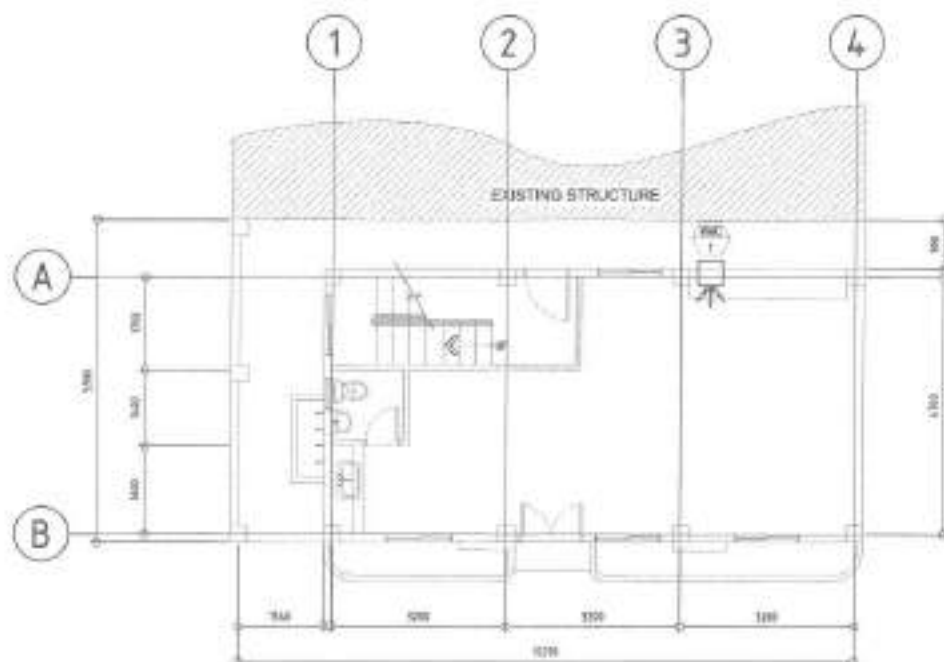
SCALE: NTS

**WINDOW TYPE AIR-CONDITIONER
AIR-COOLED CONDENSING UNITS**

DESIGNATION	LOCATION	QUANTITY	COOLING CAPACITY		AIR CIRCULATION	POWER INPUT WATTS	ELECTRICAL SUPPLY			REMARKS
			HP	KJHR			VOLTS	PHASE	HERTZ	
WAC 1	AS SHOWN ON PLANS	1 SET	25HP	25,900	600 CFM	2800	2000	1Ø	600	REMOVABLE INTAKE GRILLE, EASY TO CLEAN ANTI-SAC FILTER, W/ MECHANICAL ON/OFF TIMER

3 EQUIPMENT SCHEDULE



SCALE: NTS

**4 GROUND FLOOR AIR CONDITIONING LAYOUT**

SCALE: 1:100MM



Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE: PROPOSED REHABILITATION OF TS. CRUZ DAY CARE CENTER	DESIGNED BY: DATE: 08/14/21 CHECKED BY:	SUBMITTED BY:  ENGR. LEO S. DEL ROSARIO HEAT, FLUIDS & REFRIGERATION DIVISION	RECOMMENDING OFFICIAL:  ENGR. ISMAEL R. VERZOSA, JR. SEC. CH. - REFRIGERATION DIVISION	APPROVED BY: HON. MA. JOSEFINA G. BELMONTE CITY ENGINEER	DRAWING DATE: GENERAL NOTES, LEGENDS AND SYMBOLS, EQUIPMENT SCHEDULE, GROUND FLOOR AIR-CONDITIONING LAYOUT	SHEET NO.: ME-01 14/14
LOCATION: Bldg. SAN AGUSTIN DISTRICT 3, QUEZON CITY	REVISION NO.:					

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.

PROJECT TITLE : PROPOSED REHABILITATION OF DAY CARE CENTER AT DISTRICT 5 / AREA IX
LOCATION : BARANGAY NAGKAISANG NAYON AND SAN AGUSTIN, DISTRICT 5, QUEZON CITY
PROJECT NO. : 22 - 00007
DURATION : Sixty (60) Calendar Days

BREAKDOWN OF COST

ITEM NO.	ITEM OF WORK (DESCRIPTION)	MATERIALS COST	LABOR COST	INDIRECT COST	AGGREGATE COST
ST. ANDREW DAY CARE CENTER, BARANGAY NAGKAISANG NAYON					
I	GENERAL REQUIREMENTS				
II	SITE WORKS				
III	CIVIL / STRUCTURAL WORKS				
IV	ARCHITECTURAL WORKS				
V	SANITARY / PLUMBING WORKS				
VI	ELECTRICAL WORKS				
LAZARO DAY CARE CENTER, BARANGAY NAGKAISANG NAYON					
I	GENERAL REQUIREMENTS				
II	SITE WORKS				
III	CIVIL / STRUCTURAL WORKS				
IV	ARCHITECTURAL WORKS				
V	SANITARY / PLUMBING WORKS				
VI	ELECTRICAL WORKS				
JONAVILLE DAY CARE CENTER, BARANGAY NAGKAISANG NAYON					
I	GENERAL REQUIREMENTS				
II	SITE WORKS				
III	CIVIL / STRUCTURAL WORKS				
IV	ARCHITECTURAL WORKS				
V	SANITARY / PLUMBING WORKS				
VI	ELECTRICAL WORKS				
NAGKAISANG NAYON 1 DAY CARE CENTER, BARANGAY NAGKAISANG NAYON					
I	GENERAL REQUIREMENTS				
II	SITE WORKS				
III	CIVIL / STRUCTURAL WORKS				
IV	ARCHITECTURAL WORKS				
V	SANITARY / PLUMBING WORKS				
VI	ELECTRICAL WORKS				
T. S. CRUZ DAY CARE CENTER, BARANGAY SAN AGUSTIN					
I	GENERAL REQUIREMENTS				
II	SITE WORKS				
III	CIVIL / STRUCTURAL WORKS				
IV	ARCHITECTURAL WORKS				
V	SANITARY / PLUMBING WORKS				
VI	ELECTRICAL WORKS				

BILL OF QUANTITIES
(Building Construction/Rehabilitation Project)

PROJECT TITLE : PROPOSED REHABILITATION OF ST. ANDREW DAY CARE CENTER

LOCATION : BARANGAY NAGKAISANG NAYON, DISTRICT 5, QUEZON CITY

PROJECT NO. : 22 - 00007

SCOPE OF WORK :

1. General Requirements include temporary enclosure, billboard, construction safety and health, and clearing, hauling and disposal of construction materials and debris.
2. Site Works include removal works, and clearing and cleaning for painting preparation.
3. Civil Works include masonry works and moisture protection
4. Architectural Works include installation of floor finishes, wall finishes, ceiling finishes, installation of doors and windows, fabricated materials, painting works and letterings.
5. Plumbing / Sanitary Works include installation of roughing-ins, fixtures and accessories.
6. Electrical Works include installation of roughing-ins, wirings, devices, fixtures and accessories.
7. All necessary testing and commissioning shall be performed in accordance to standards.

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY.	UNIT	UNIT COST	TOTAL COST
I	GENERAL REQUIREMENTS				
	Billboard	1	unit	₱	₱
	Clearing, Hauling and Disposal of Construction Materials and Debris	2	t.l.		
	Construction Safety and Health	1	unit		
	Temporary Enclosure Around the Construction Area (h=2.4)	31	l.m.		
				Direct Cost I	₱
II	SITE WORKS				
	Removal Works				
	Removal of Dilapidated Tiles	71	sq.m	₱	₱
	Removal of Ceiling	3	sq.m		
	Removal of Doors	3	set		
	Removal of Windows	9	sq.m		
	Removal of Water Closet	1	pece		
	Removal of Lavatory	1	pece		
	Removal of Urinal	1	pece		
	Removal of Floor Drain	1	piece		
	Removal of Kitchen Sink	1	piece		
	Chipping of Floor (Plumbing Works)	2	sq.m.		
	Clearing and Cleaning for Paint Preparation	160	sq.m.		
				Direct Cost II	₱
III	CIVIL/STRUCTURAL WORKS				
	Masonry Works				
	Restoration of Concrete (Plumbing Works)	2	sq.m.	₱	₱
	Moisture Protection				
	Waterproofing Works				

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY.	UNIT	UNIT COST	TOTAL COST
	Cementitious Capillary Type Waterproofing	4	sq.m.		
				Materials Cost III	₱
				Labor Cost III	
				Direct Cost III	₱
IV	ARCHITECTURAL WORKS				
	Floor Finishes				
	300mm x 300mm Non-Skid Homogeneous Floor Tiles	4	sq.m.	₱	₱
	600mm x 600mm Non-Skid Homogeneous Floor Tiles	45	sq.m.		
	Floor Topping Preparation for Tile Works	49	sq.m.		
	Wall Finishes				
	300mm x 300mm Homogeneous Wall Tiles	11	sq.m.		
	Ceiling Finishes				
	6mm Thk Fiber Cement Board Including Metal Framing	7	sq.m.		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Installation of Doors and Windows				
	D1 - (1.60m x 2.10m) Panel Door	1	set	₱	₱
	D2 - (0.70m x 2.10m) PVC Door with Louver	2	set		
	Door Jambs				
	Wooden Jambs				
	D1 - Panel Door Wooden Jamb	1	set		
	Hardwares and Accessories				
	Door Hinges, Heavy Duty, Stainless	12	set		
	Door Knob, Lever Type, Stainless	4	set		
	Installation of Windows				
	W1-(1.4m x 1.0m) Sliding Window on Powder Coated Aluminum Frame	3	set		
	W2-(1.8m x 1.0m) Sliding Window on Powder Coated Aluminum Frame	1	set		
	W3-(1.2m x 1.0m) Sliding Window on Powder Coated Aluminum Frame	1	set		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Painting Works				
	Elastomeric Paint Finish (Exterior Walls)	86	sq.m.	₱	₱
	Latex Paint Finish				
	Interior Walls	83	sq.m.		
	Ceiling	7	sq.m.		
	Fabricated Materials				
	Hanging Cabinet	2	sq.m.		
	Under Counter Cabinet	2	l.m.		
	Letterings				
	200mm Stainless Steel Lettering				
	"ST. ANDREW DAY CARE CENTER"	22	set		

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY.	UNIT	UNIT COST	TOTAL COST
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
				Materials Cost IV	₱
				Labor Cost IV	
				Direct Cost IV	₱
V	PLUMBING/SANITARY WORKS				
	Sanitary Line/Storm Drainage System				
	50mm Ø PVC Pipe with Hub	5	piece	₱	₱
	100mmØ PVC Pipe with Hub	7	piece		
	50mm Ø x 50mm Ø Wye	5	piece		
	100mm Ø x 50mm Ø Wye	5	piece		
	50mm Ø x 50mm Ø PVC 1/4 Bend	10	piece		
	50mm Ø x 50mm Ø PVC 1/8 Bend	10	piece		
	50mm Ø x 32mm Ø PVC Tap Tee	5	piece		
	50mm Ø PVC Cleanout	4	piece		
	50mm Ø PVC P-Trap	4	piece		
	Waterline System				
	20mm Ø G.I. Pipe	7	piece		
	20mm Ø G.I. Coupling	2	piece		
	20mm Ø G.I. 90° Elbow	2	piece		
	20mm Ø PPR Pipe	6	piece		
	20mm Ø x 20mm Ø Tee Equal	6	piece		
	25mm Ø x 20mm Ø Unequal Tee	3	piece		
	25mm Ø x 20mm Ø Reducer	3	piece		
	20mm Ø 90° Elbow	7	piece		
	25mm Ø 90° Elbow	3	piece		
	20mm Ø Union Patent	2	piece		
	20mm Ø Coupling	3	piece		
	20mm Ø Male Adaptor	6	piece		
	Valve and Appurtenances				
	20mmØ Gate Valve PPR	2	piece		
	50mmØ Check Valve	1	piece		
	20mmØ Water Meter	1	piece		
	Fixtures				
	Bidet, Heavy-Duty, Stainless Steel (Water Efficient)	1	unit		
	Grease Trap, 5GPM, Heavy Duty, with Accessories	1	set		
	Hose Bibb, Heavy Duty (Water Efficient)	3	piece		

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY.	UNIT	UNIT COST	TOTAL COST
	Kitchen Sink, Single	1	piece		
	Kitchen Sink Faucet, Lever Type (Water Efficient)	1	piece		
	Lavatory, Wall Hung, Kiddy	1	unit		
	Lavatory Faucet, Lever-type, Stainless Steel (Water Efficient)	1	piece		
	Water Closet, Tank Type, Kiddy (Water Efficient)	1	unit		
	Accessories & Hardwares				
	Angle Valve, Single-Way, Stainless	4	piece		
	Angle Valve, Two-Way, Stainless	1	piece		
	Flexible Hose, Stainless	5	piece		
	Miscellaneous & Consumables				
	400cc Solvent Cement	2	can		
	All Purpose Sealant	2	can		
	Hacksaw Blade	3	piece		
	Teflon Tape	4	roll		
	Waste Cloth	2	kg		
				Materials Cost V	₱
				Labor Cost V	
				Direct Cost V	₱
VI	ELECTRICAL WORKS				
	Lighting and Power System				
	Devices and Fixtures				
	T8, 11w LED Tube light	4	piece	₱	₱
	11 Watts LED Bulb	2	piece		
	Wiring Devices				
	Switch with plate and cover, One-gang	1	piece		
	Miscellaneous & Consumables				
	All around Sealant	1	tube		
	Electrical Tape	1	roll		
	Hacksaw Blade	2	piece		
	Masking Tape	1	roll		
	Rubber Tape	1	roll		
				Materials Cost VI	₱
				Labor Cost VI	
				Direct Cost VI	₱

SUMMARY

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	TOTAL COST
I	GENERAL REQUIREMENTS	₱
II	SITE WORKS	
III	CIVIL/STRUCTURAL WORKS	
IV	ARCHITECTURAL WORKS	
V	PLUMBING/SANITARY WORKS	
VI	ELECTRICAL WORKS	

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY.	UNIT	UNIT COST	TOTAL COST
	<p>NOTE:</p> <ul style="list-style-type: none"> Strictly enforce health protocols relative to the latest applicable DPWH memorandum 			<p>TOTAL DIRECT COST Overhead, Contingencies and Miscellaneous and Consumables Expenses (OCM) Profit VAT</p> <p>TOTAL ESTIMATED COST</p>	<p>₱</p> <p>₱</p>

BILL OF QUANTITIES
(Building Construction/Rehabilitation Project)

PROJECT TITLE : PROPOSED REHABILITATION OF LAZARO DAY CARE CENTER

LOCATION : BARANGAY NAGKAISANG NAYON, DISTRICT 5, QUEZON CITY

PROJECT NO. : 22 - 00007

SCOPE OF WORKS:

- 1 General Requirements include temporary enclosure, billboard, scaffolding, construction safety and health, and cleaning, hauling and disposal of construction materials and debris.
- 2 Site Works include demolition/removal works and cleaning and clearing for painting preparation.
- 3 Civil/Structural Works include moisture protection and roofing works.
- 4 Architectural Works include floor finishes, wall finishes, ceiling works, installation of doors and windows, painting works and letterings.
- 5 Sanitary/Plumbing Works include installation of roughing-ins, fixtures and accessories.
- 6 Electrical Works include installation of roughing-ins, wirings, devices, fixtures and accessories.
- 7 All necessary testing and commissioning shall be performed in accordance to standards.

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
I	GENERAL REQUIREMENTS				
	Billboard	1	unit	₱	₱
	Cleaning, Hauling and Disposal of Construction Materials and Debris	2	t.l.		
	Construction Safety and Health	1	unit		
	Scaffolding (Rental)	153	sq.m.		
	Temporary Enclosure Around the Construction Area (h=2.4m)	51	l.m.		
				Direct Cost I	₱
II	SITE WORKS				
	Demolition/Removal Works				
	Removal of Existing Ceiling	152	sq.m.	₱	₱
	Removal of Existing Tiles	63	sq.m.		
	Removal of Existing Door and Door Jambs	5	set		
	Removal of Existing Windows	9	sq.m		
	Removal of Existing Roofing and Accessories	162	sq.m.		
	Removal of Plumbing Fixtures	5	set		
	Chipping of Wall for Electrical and Plumbing Works	9	sq.m		
	Cleaning and Clearing for Painting Preparation	295	sq.m.		
				Direct Cost II	₱
III	CIVIL/STRUCTURAL WORKS				
	Moisture Protection				
	Cementitious Capillary Type Waterproofing (Comfort Room)	5	sq.m.	₱	₱
	Roofing Works				
	Pre-painted Rib Type G.I Roofing	170	sq.m		
	Pre-painted Ridge Roll	19	l.m.		
	Pre-painted Gutter	31	l.m.		
	Pre-painted G.I Flashing	19	l.m.		
	6mm thick One-Sided Aluminum Foil Thermal Insulation	170	sq.m		
	12mm x 300mm Fiber Cement Fascia Board	59	l.m.		
	Silicon Sealant	4	tube		
	Tekscrew	1,700	piece		

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
				Materials Cost III	₱
				Labor Cost III	
				Direct Cost III	₱
IV	ARCHITECTURAL WORKS				
	Floor Finishes				
	300mm x 300mm Non-Skid Homogeneous Floor Tiles	4	sq.m.	₱	₱
	600mm x 600mm Homogeneous Floor Tile	39	sq.m.		
	Floor Topping for Preparation of Tile Works	43	sq.m.		
	Wall Finishes				
	300mm x 300mm Homogeneous Wall Tiles	24	sq.m.		
	Ceiling Works				
	6mm thick Fiber Cement Board including Metal Framing	160	sq.m.		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Installation of Doors				
	Doors				
	D1 - 1.0m x 2.1m Solid Wood Panel Door	1	set	₱	₱
	D2 - 0.9m x 2.1m Solid Wood Panel Door	1	set		
	D3 - 0.6m x 2.1m Solid Wood Panel Door	1	set		
	D4 - 0.6m x 2.1m PVC Door with Louver	2	set		
	Door Jamb				
	D1 - 1.0m x 2.1m Solid Wood Panel Door	1	set		
	D2 - 0.9m x 2.1m Solid Wood Panel Door	1	set		
	D3 - 0.6m x 2.1m Solid Wood Panel Door	1	set		
	Hardwares and Accessories				
	Door Hinge, Heavy Duty, Stainless	15	piece		
	Door Knob, Lever Type, Stainless	5	piece		
	Installation of Windows				
	W1 - 2.4m x 1.0m Aluminum Framed Casement Window (Powder Coated)	1	set		
	W2 - 1.6m x 1.0m Aluminum Framed Casement Window (Powder Coated)	3	set		
	W3 - 0.8m x 1.0m Aluminum Framed Casement Window (Powder Coated)	1	set		
	W4 - 0.5m x 0.5m Aluminum Framed Casement Window (Powder Coated)	2	set		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Painting Works				
	Elastomeric Paint Finish (Exterior Walls)	160	sq.m.	₱	₱
	Epoxy Enamel Paint Finish (Steel Fence)	16	sq.m.		
	Flat Latex Paint Finish				
	Interior Walls	119	sq.m.		
	Ceiling	160	sq.m.		
	Letterings				
	200mm Stainless Steel Lettering "LAZARO DAYCARE CENTER"	19	set		
				Materials Cost	₱

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
				Labor Cost	
				Subtotal	₱
				Materials Cost IV	₱
				Labor Cost IV	
				Direct Cost IV	₱
V	SANITARY/PLUMBING WORKS				
	Sewer Line / Storm Drainage System				
	50mm Ø PVC Pipe with Hub	2	piece	₱	₱
	75mm Ø PVC Pipe with Hub	15	piece		
	75mm Ø x 75mm Ø PVC Wye	1	piece		
	50mm Ø x 50mm Ø PVC 1/4 Bend	1	piece		
	75mm Ø x 75mm Ø PVC 1/4 Bend	21	piece		
	75mm Ø x 75mm Ø PVC 1/8 Bend	1	piece		
	50mm Ø PVC P-Trap	3	piece		
	50mm Ø PVC Coupling	2	piece		
	75mm Ø PVC Coupling	1	piece		
	Water Line System				
	20mm Ø PPR Pipe, PN 16	1	piece		
	20mm Ø PPR 90° Elbow	2	piece		
	20mm Ø PPR Female Threaded Adaptor	2	piece		
	20mm Ø PPR Coupling	1	piece		
	20mm Ø PPR End Cap	2	piece		
	Fixtures				
	Bidet with Complete Accessories, Stainless (Water Efficient)	2	set		
	Floor Drain, 100mm x 100mm, Stainless	3	piece		
	Hose Bibb, Lever Type, Stainless (Water Efficient)	10	piece		
	Lavatory, Wall-Hung	2	set		
	Lavatory Faucet, Lever Type (Water Efficient)	2	piece		
	Urinal, Bucket-Type (Water Efficient)	1	set		
	Water Closet, Tank Type (Water Efficient)	2	set		
	Accessories				
	Angle Valve, One-way, Stainless Steel	2	piece		
	Angle Valve, Two-way, Stainless Steel	2	piece		
	Flexible Hose, Stainless Steel	4	piece		
	Miscellaneous and Consumables				
	400cc Solvent Cement	10	can		
	All Around Sealant	5	can		
	Hacksaw Blade	5	piece		
	Teflon Tape	8	roll		
	Waste Cloth	1	kg		
				Materials Cost V	₱
				Labor Cost V	
				Direct Cost V	₱
VI	ELECTRICAL WORKS				
	Roughing-ins, Pipes and Fittings				
	20mmØ PVC Pipe	40	piece	₱	₱
	25mmØ IMC Pipe	7	piece		
	Fittings and Accessories				

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	20mmØ PVC Adaptor	70	piece		
	20mmØ PVC Locknut and Bushing	70	pair		
	20mmØ PVC Elbow	10	piece		
	25mmØ IMC Coupling	6	piece		
	25mmØ IMC Locknut and Bushing	2	pair		
	25mmØ IMC Elbow	2	piece		
	50mm x 100mm PVC Utility Box	20	piece		
	100mm x 100mm PVC Junction Box with cover	15	piece		
	Wires and Cables				
	3.5mm² THHN Wire	2	roll		
	5.5mm² THHN Wire	40	lm		
	14.0mm² THHN Wire	40	lm		
	3.5mm² TW Wire	1	roll		
	8.0mm² TW Wire	20	lm		
	Lighting Fixtures (Energy Efficient)				
	600mm x 1200mm, 2 x 18w LED, Troffer Type, With Complete Accessories, Recessed Type	2	piece		
	18W LED Bulb With Receptacle	3	piece		
	T5, 28W LED Tube Light	5	piece		
	Wiring Devices & Appliances				
	Orbit Fan, Heavy Duty With Selector Switch	2	piece		
	Weatherproof Outlet With Ground And Cover, Two-Gang	7	piece		
	Switch with Plate & Cover, One Gang	5	piece		
	Switch with Plate & Cover, Two Gang Switch	2	piece		
	Aircon Outlet, Multipurpose outlet 250V/20A	1	piece		
	Panelboard				
	LP	1	assy		
	Pipe Hangers & Supports				
	Horizontal Layout of Pipe	20	l.m.		
	Miscellaneous & Consumables				
	400cc Solvent Cement	2	can		
	All Around Sealant	2	can		
	Electrical Tape	10	roll		
	G.I Tie Wire	3	kg		
	Hacksaw Blade	3	piece		
	Masking Tape	3	roll		
	Rubber Tape	3	roll		
				Materials Cost VI	₱
				Labor Cost VI	
				Direct Cost VI	₱

SUMMARY

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	AMOUNT
I	GENERAL REQUIREMENTS	₱
II	SITE WORKS	
III	CIVIL/STRUCTURAL WORKS	
IV	ARCHITECTURAL WORKS	
V	SANITARY/PLUMBING WORKS	

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
VI	ELECTRICAL WORKS				
NOTE: <ul style="list-style-type: none"> • Strictly enforce Health Protocols relative to the latest applicable DPWH Memorandum 		TOTAL DIRECT COST			₱
		Overhead, Contingencies and Miscellaneous Expenses (OCM) Profit VAT TOTAL ESTIMATED COST			₱

BILL OF QUANTITIES
(Building Construction/Rehabilitation Project)

PROJECT TITLE : PROPOSED REHABILITATION OF JONAVILLE DAY CARE CENTER

LOCATION : BARANGAY NAGKAISANG NAYON, DISTRICT 5, QUEZON CITY

PROJECT NO. : 22 - 00007

SCOPE OF WORKS:

- I General Requirements include billboard, clearing, hauling and disposal of construction materials and debris, construction safety and health equipment, scaffolding, and temporary enclosure.
- II Site Works include demolition / removal works and cleaning and clearing for painting preparation.
- III Civil/Structural Works include moisture protection works.
- IV Architectural Works include floor finishes, wall finishes, ceiling finishes, installation of doors & windows, painting works, fabricated materials and stainless letterings.
- V Sanitary and Plumbing Works include installation of roughing-ins, fixtures and accessories.
- VI Electrical Works include installation of roughing-ins, wirings, lighting fixtures, and wiring devices.
- VII All necessary testing and commissioning shall be performed in accordance to standards.

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
I	GENERAL REQUIREMENTS				
	Billboard	1	unit	P	P
	Clearing, Hauling and Disposal of Construction Materials and Debris	3	t.l.		
	Construction Safety and Health Equipment	1	unit		
	Scaffolding (Rental)	61	sq.m.		
	Temporary Enclosure around the Construction Area (H=2.4m)	41	l.m.		
				Direct Cost I	P
II	SITE WORKS				
	Demolition / Removal Works				
	Removal of Floor and Wall Tiles	104	sq.m.	P	P
	Removal of Ceiling	116	sq.m.		
	Removal of Doors	5	set		
	Removal of Windows	13	sq.m.		
	Removal of Under Counter Cabinet Door	2	l.m.		
	Removal of Water Closet	2	set		
	Removal of Lavatory	2	set		
	Removal of Kitchen Sink	1	set		
	Chipping of Wall (Electrical & Plumbing Works)	5	sq.m.		
	Cleaning and Clearing for Painting Preparation	423	sq.m.		
				Direct Cost II	P
III	CIVIL/STRUCTURAL WORKS				
	Moisture Protection Works				
	Cementitious Capillary-type Waterproofing (Toilet)	6	sq.m.	P	P
	Restoration of Concrete (Electrical & Plumbing Works)	5	sq.m.		
				Materials Cost III	P
				Labor Cost III	
				Direct Cost III	P

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
IV	ARCHITECTURAL WORKS				
	Floor Finishes				
	Floor Topping for Preparation of Tiles	78	sq.m.	P	P
	300mm x 300mm Non-Skid Homogeneous Floor Tiles	6	sq.m.		
	600mm x 600mm Non-Skid Homogeneous Floor Tiles	72	sq.m.		
	Wall Finishes				
	300mm x 300mm Homogeneous Wall Tiles	22	sq.m.		
	Counter Top Finishes				
	300mm x 300mm Homogeneous Tiles	8	sq.m.		
	Ceiling Finishes				
	6mm thick Fiber Cement Board including Metal Framing	121	sq.m.		
				Materials Cost	P
				Labor Cost	
				Subtotal	P
	Installation of Doors				
	Doors				
	D1 - 0.9m x 2.1m Wooden Panel Door	1	unit	P	P
	D2 - 0.7m x 2.1m Wooden Panel Door	2	unit		
	D3 - 0.6m x 2.1m PVC Door with Louver	2	unit		
	Door Jambs				
	D1 - 0.9m x 2.1m Wooden Door Jamb	1	unit		
	D2 - 0.7m x 2.1m Wooden Door Jamb	2	unit		
	Hardwares and Accessories				
	Door Knob, Lever-type, Heavy Duty, Stainless	5	unit		
	Door Hinge, Heavy Duty, Stainless	15	unit		
	Installation of Windows				
	W1 - 1.8m x 1.2m Sliding Glass Window on Powder Coated Aluminum Frame	5	unit		
	W2 - 0.8m x 1.2m Sliding Glass Window on Powder Coated Aluminum Frame	1	unit		
	W3 - 0.6m x 0.6m Awning Glass Window on Powder Coated Aluminum Frame	2	unit		
				Materials Cost	P
				Labor Cost	
				Subtotal	P
	Painting Works				
	Elastomeric Paint Finish (Exterior Wall)	119	sq.m.	P	P
	Flat Latex Paint Finish				
	Interior Wall	181	sq.m.		
	Ceiling	121	sq.m.		
	Epoxy Enamel Paint Finish				
	Door Grilles	2	sq.m.		
	Window Grilles	13	sq.m.		
	Fabricated Materials				
	Aluminum Cabinet Door	2	l.m.		

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Hanging Cabinet	2	sq.m.		
	Letterings				
	200mm Stainless Steel Lettering "JONAVILLE DAYCARE CENTER"	22	set		
				Materials Cost	P
				Labor Cost	
				Subtotal	P
				Materials Cost IV	P
				Labor Cost IV	
				Direct Cost IV	P
V	SANITARY & PLUMBING WORKS				
	Sewer Line and Storm Drainage System				
	50mm Ø PVC Pipe with Hub	1	piece	P	P
	75mm Ø PVC Pipe with Hub	9	piece		
	75mm Ø x 75mm Ø PVC Wye	1	piece		
	50mm Ø x 50mm Ø PVC 1/4 Bend	1	piece		
	75mm Ø x 75mm Ø PVC 1/4 Bend	13	piece		
	75mm Ø x 75mm Ø PVC 1/8 Bend	1	piece		
	50mm Ø PVC P-Trap	5	piece		
	50mm Ø PVC Coupling	1	piece		
	75mm Ø PVC Coupling	1	piece		
	Water Line System				
	20mm Ø PPR Pipe, PN 16	1	piece		
	20mm Ø PPR 90° Elbow	2	piece		
	20mm Ø PPR Female Threaded Adaptor	3	piece		
	20mm Ø PPR Coupling	1	piece		
	Fixtures				
	Bidet with Complete Accessories, Stainless, Heavy Duty (Water Efficient)	2	piece		
	Floor Drain, 100mm x 100mm, Stainless	4	piece		
	Grease Trap, 5gpm, Stainless	1	set		
	Hose Bibb, Lever-type, Stainless, Heavy-Duty (Water Efficient)	11	set		
	Lavatory, Wall-Hung	2	set		
	Lavatory Faucet, Lever-type, Stainless, Heavy-Duty (Water Efficient)	2	set		
	Kitchen Sink, Single Tub, Stainless	1	set		
	Kitchen Sink Faucet, Stainless, Heavy-Duty (Water Efficient)	1	set		
	Water Closet, Tank Type (Water Efficient)	2	set		
	Accessories				
	Angle Valve, One-way, Stainless Steel	3	piece		
	Angle Valve, Two-way, Stainless Steel	2	piece		
	Flexible Hose, Stainless Steel	5	piece		
	Miscellaneous and Consumables				
	400cc Solvent Cement	3	can		
	All Around Sealant	2	can		
	Hacksaw Blade	5	piece		

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Teflon Tape	10	roll		
	Waste Cloth	2	kg		
				Materials Cost V	P
				Labor Cost V	
				Direct Cost V	P
VI	ELECTRICAL WORKS				
	Pipes and Fittings				
	20mm Ø PVC Pipe	60	piece	P	P
	25mm Ø IMC Pipe	5	piece		
	20mm Ø PVC Adaptor	60	piece		
	20mm Ø PVC Locknut & Bushing	60	pair		
	20mm Ø PVC Elbow	7	piece		
	25mm Ø IMC Coupling	4	piece		
	25mm Ø IMC Locknut & Bushing	2	pair		
	25mm Ø IMC Elbow	2	piece		
	50mm x 100mm PVC Utility Box	15	piece		
	100mm x 100mm PVC Junction Box with Cover	15	piece		
	Wires and Cables				
	3.5mm ² THHN Wire	3	roll		
	5.5mm ² THHN Wire	30	l.m.		
	14.0mm ² THHN Wire	20	l.m.		
	3.5mm ² TW Wire	2	roll		
	8.0mm ² TW Wire	10	l.m.		
	Lighting Fixtures (Energy Efficient)				
	600mm x 1200mm, 2 x 18w LED, Troffer Type, with Complete Accessories, Recessed Type	6	set		
	18W LED Bulb with Receptacle	2	piece		
	T5, 28W LED Tube Light	1	piece		
	Wiring Devices				
	Orbit Fan, Heavy Duty With Selector Switch	2	piece		
	Weatherproof Outlet with Ground and Cover, Two-Gang	7	piece		
	Switch with Plate & Cover, One-Gang	3	piece		
	Switch with Plate & Cover, Three-way, Three-Gang	2	piece		
	Aircon Outlet, Multi-purpose Outlet 250V/20A	1	piece		
	Panel Board				
	LP Main: 60AT, 2P, 230V, Bolt-on Branches: 2 - 20AT, 2P, 230V, Bolt-on 2 - 30AT, 2P, 230V, Bolt-on Enclosure: NEMA 1 with Ground Terminals	1	assy		
	Pipe Hangers & Supports				
	Horizontal Layout of Pipe	30	l.m.		
	Miscellaneous & Consumables				
	400cc Solvent Cement	2	can		
	All Around Sealant	2	can		
	Electrical Tape	10	roll		

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	GI Tie Wire, Ga. 16 (for Wire/Cable Pulling)	3	kg		
	Hacksaw Blade	3	piece		
	Masking Tape	3	piece		
	Rubber Tape	3	roll		
				Material Cost VI	P
				Labor Cost VI	
				Direct Cost VI	P

SUMMARY

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	AMOUNT
I	GENERAL REQUIREMENTS	P
II	SITE WORKS	
III	CIVIL/STRUCTURAL WORKS	
IV	ARCHITECTURAL WORKS	
V	SANITARY & PLUMBING WORKS	
VI	ELECTRICAL WORKS	
		TOTAL DIRECT COST
		Overhead, Contingencies and Miscellaneous Expenses (OCM)
		Profit
		VAT
		TOTAL ESTIMATED COST

Note:
Stricly enforce health protocols relative to the latest applicable DPWH Memorandum

BILL OF QUANTITIES
(Building Construction/Rehabilitation Project)

PROJECT TITLE : PROPOSED REHABILITATION OF NAGKAISANG NAYON 1 DAY CARE CENTER

LOCATION : BARANGAY NAGKAISANG NAYON, DISTRICT 5, QUEZON CITY

PROJECT NO. : 22 - 00007

SCOPE OF WORK :

- I. General Requirements include temporary enclosure, billboard, construction safety and health, and clearing, hauling and disposal of construction materials and debris.
- II. Site Works include removal works, and clearing and cleaning for painting preparation.
- III. Civil Works include masonry works, moisture protection, metal works and roofing works.
- IV. Architectural Works include installation of floor finishes, wall finishes, doors and windows, fabricated materials, painting works and letterings.
- V. Plumbing / Sanitary Works include installation of roughing-ins, fixtures and accessories.
- VI. Electrical Works include installation of roughing-Ins, wirings, devices, fixtures and accessories.
- VII. All necessary testing and commissioning shall be performed in accordance to standards.

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY.	UNIT	UNIT COST	TOTAL COST
I	GENERAL REQUIREMENTS				
	Billboard	1	unit	₱	₱
	Clearing, Hauling and Disposal of Construction Materials and Debris	2	t.l.		
	Construction Safety and Health	1	unit		
	Temporary Enclosure Around the Construction Area (h=2.4)	48	l.m.		
				Direct Cost I	₱
II	SITE WORKS				
	Removal Works				
	Removal of Dilapidated Tiles	71	sq.m	₱	₱
	Removal of Ceiling	3	sq.m		
	Removal of Doors	5	set		
	Removal of Windows	9	sq.m		
	Removal of Water Closet	1	pece		
	Removal of Lavatory	1	pece		
	Removal of Urinal	1	pece		
	Removal of Floor Drain	1	piece		
	Removal of Kitchen Sink	1	piece		
	Chipping of Concrete	2	sq.m.		
	Clearing and Cleaning for Paint Preparation	160	sq.m.		
				Direct Cost II	₱
III	CIVIL/STRUCTURAL WORKS				
	Masonry Works				
	Restoration of Concrete (Plumbing Works)	2	sq.m.	₱	₱
	Moisture Protection				
	Waterproofing Works				
	Cementitious Capillary Type Waterproofing	4	sq.m.		
	Metal Works				

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY.	UNIT	UNIT COST	TOTAL COST
	50mm x 125mm Rafter	50	kg		
	50mm x 75mm Purlins	17	kg		
	10mm Ø Sagrod	5	kg		
	16mm Ø Dyna Bolt	12	piece		
	Miscellaneous & Consumables				
	Acetylene Tank (Refill)	1	tank		
	Cut Off Blade	5	piece		
	Grinding Disc for Metal	5	piece		
	Oxygen Tank (Refill)	2	tank		
	Welding Rod	1	box		
	Roofing Works				
	Pre-painted G.I. Rib-Type Roofing	26	sq.m.		
	Pre-painted G.I. End Flashing	23	l.m.		
	12mm x 300mm Fiber Cement Fascia Board	23	l.m.		
	6mm Thk One-sided Aluminum Foil Thermal Insulation	26	sq.m.		
	Tekscrew	88	piece		
	Blind Rivets	65	piece		
	Silicon Sealant	2	tube		
				Materials Cost III	₱
				Labor Cost III	
				Direct Cost III	₱
IV	ARCHITECTURAL WORKS				
	Floor Finishes				
	300mm x 300mm Non-Skid Homogeneous Floor Tiles	4	sq.m.	₱	₱
	600mm x 600mm Non-Skid Homogeneous Floor Tiles	45	sq.m.		
	Floor Topping Preparation for Tile Works	49	sq.m.		
	Wall Finishes				
	300mm x 300mm Homogeneous Wall Tiles	11	sq.m.		
	Ceiling Finishes				
	6mm Thk Fiber Cement Board Including Metal Framing	7	sq.m.		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Installation of Doors and Windows				
	D1 - (0.60m x 2.10m) PVC Door with Louver	1	set	₱	₱
	D2 - (0.60m x 2.10m) Flush Door	1	set		
	D3 - (0.80m x 2.10m) Flush Door	2	set		
	D4 - (1.80m x 2.10m) Panel Door	1	set		
	Door Jambs				
	D2 - (0.60m x 2.10m) Flush Door	1	set		
	D3 - (0.80m x 2.10m) Flush Door	2	set		
	D4 - (1.80m x 2.10m) Panel Door	1	set		
	Hardwares and Accessories				
	Door Hinges, Heavy Duty, Stainless	18	set		
	Door Knob, Lever Type, Stainless	6	set		
	Installation of Windows				
	W1-(1.60m x 1.10m) Sliding Window on Powder Coated Aluminum Frame	1	set		

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY.	UNIT	UNIT COST	TOTAL COST
	W2-(0.90m x 1.10m) Sliding Window on Powder Coated Aluminum Frame	2	set		
	W3-(1.60m x 1.10m) Sliding Window on Powder Coated Aluminum Frame	2	set		
	W4-(0.80m x 1.10m) Sliding Window on Powder Coated Aluminum Frame	1	set		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Painting Works				
	Elastomeric Paint Finish (Exterior Walls)	86	sq.m.	₱	₱
	Epoxy Enamel Paint Finish (Metal Surfaces)	7	sq.m.		
	Latex Paint Finish				
	Interior Walls	83	sq.m.		
	Ceiling	7	sq.m.		
	Fabricated Materials				
	Hanging Cabinet	2	sq.m.		
	Under Counter Cabinet	2	l.m.		
	Letterings				
	200mm Stainless Steel Lettering				
	"NAGKAISANG NAYON 1 DAY CARE CENTER"	29	piece		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
				Materials Cost IV	₱
				Labor Cost IV	
				Direct Cost IV	₱
V	PLUMBING/SANITARY WORKS				
	Sewer Line / Storm Drainage System				
	100mm Ø, PVC Pipe with Hub	4	piece	₱	₱
	75mm Ø, PVC Pipe with Hub	4	piece		
	50mm Ø, PVC Pipe with Hub	9	piece		
	100mm Ø x 100mm Ø, Wye	2	piece		
	100mm Ø x 75mm Ø, Wye	1	piece		
	100mm Ø x 50mm Ø, Wye	4	piece		
	75mm Ø x 75mm Ø, Wye	1	piece		
	75mm Ø x 50mm Ø, Tee	5	piece		
	50mm Ø, 1/4 Bend	10	piece		
	100mm Ø, 1/8 Bend	4	piece		
	75mm Ø, 1/8 Bend	4	piece		
	50mm Ø, 1/8 Bend	8	piece		
	Cleanout 100mm Ø	1	piece		
	100mm Ø, P-Trap	1	piece		
	50mm Ø, P-Trap	1	piece		
	40mm Ø, P-Trap	1	piece		
	32mm Ø, P-Trap	1	piece		
	Coupling 100mm Ø	6	piece		
	Coupling 75mm Ø	4	piece		

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY.	UNIT	UNIT COST	TOTAL COST
	100mm Ø x 75mm Ø, Reducer	2	piece		
	Waterline System				
	25mm Ø, PPR Pipe	4	piece		
	20mm Ø, PPR Pipe	7	piece		
	20mm Ø, Tee Equal	6	piece		
	20mm Ø, End Cap	4	piece		
	25mm Ø, 90 Deg Elbow	2	piece		
	20mm Ø, 90 Deg Elbow	12	piece		
	25mm Ø x 15mm Ø, Female Thread Tee	4	piece		
	25mm Ø, Coupling	4	piece		
	20mm Ø, Coupling	4	piece		
	25mm Ø x 20mm Ø, Reducer	2	piece		
	Fixtures				
	Bidet, Heavy-Duty, Stainless Steel (Water Efficient)	1	set		
	Floor Drain, 100mm x 100mm Stainless Steel	1	piece		
	Grease Trap, 5GPM, Heavy Duty with Accessories	1	set		
	Hose Bibb, Heavy Duty (Water Efficient)	7	piece		
	Kitchen Sink, Single Tub, Stainless	1	set		
	Kitchen Sink Faucet, Lever Type (Water Efficient)	1	set		
	Lavatory Wall Hung Kiddy	1	set		
	Lavatory Faucet, Lever-type, Stainless Steel (Water	1	piece		
	Urinal, Flash Valve, Kiddy (Water Efficient)	1	set		
	Water Closet, Tank Type, Kiddy (Water Efficient)	1	set		
	Accessories				
	Angle Valve, Single-Way, Stainless	2	piece		
	Angle Valve, Two-Way, Stainless	1	piece		
	Flexible Hose, Stainless	2	piece		
	Miscellaneous & Consumables				
	400cc Solvent Cement	1	can		
	All-Around Sealant	1	can		
	Hacksaw Blade	3	piece		
	Teflon Tape	2	roll		
	Waste Cloth	1	kg		
				Materials Cost V	₱
				Labor Cost V	
				Direct Cost V	₱
VI	ELECTRICAL WORKS				
	Lighting and Power System				
	Roughing-ins				
	3/8" Rectangular PVC Moulding	30	piece	₱	₱
	Fittings & Accessories				
	4" x 2" metal utility box	5	piece		
	PVC Amco Box	5	piece		

ITEM NO.	WORK DESCRIPTION AND SCOPE OF WORKS	QTY.	UNIT	UNIT COST	TOTAL COST
	Wires and Cables				
	3.5mm ² THHN Wire	1	roll		
	Devices and Fixtures				
	T8, 18w LED Tube light	8	piece		
	18W LED bulb	2	piece		
	Wiring Devices				
	Outlet with Grounding , One-gang for Proposed Ceiling Fan	1	piece		
	Outlet with Grounding , Two-gang	1	piece		
	Switch w/ plate & cover, Two pole	1	piece		
	Switch w/ plate & cover, Single pole	2	piece		
	Ceiling Orbit Fan with Selector Switch	5	set		
	Panel Board				
	Enclosure				
	ST4-620, 400x600x200, NEMA 1	1	assy		
	Miscellaneous & Consumables				
	400cc Solvent Cement	1	can		
	General Purpose Construction Adhesive	2	tube		
	All around Sealant	2	tube		
	Electrical Tape	2	roll		
	GI Tie Wire, Ga. 16 (for wire/cable pulling)	1	kg		
	Hacksaw Blade	3	piece		
	Masking Tape	2	roll		
	Rubber Tape	2	roll		
				Materials Cost VI	₱
				Labor Cost VI	
				Direct Cost VI	₱

SUMMARY

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	TOTAL COST
I	GENERAL REQUIREMENTS	₱
II	SITE WORKS	
III	CIVIL/STRUCTURAL WORKS	
IV	ARCHITECTURAL WORKS	
V	PLUMBING/SANITARY WORKS	
VI	ELECTRICAL WORKS	
NOTE:		
	<ul style="list-style-type: none"> Strictly enforce health protocols relative to the latest applicable DPWH memorandum 	
	<p style="text-align: right;">TOTAL DIRECT COST</p> <p>Overhead, Contingencies and Miscellaneous and Consumables Expenses (OCM)</p> <p style="text-align: right;">Profit</p> <p style="text-align: right;">VAT</p>	₱
	TOTAL ESTIMATED COST	₱

BILL OF QUANTITIES
(Building Construction/Rehabilitation Project)

PROJECT : PROPOSED REHABILITATION OF T. S. CRUZ DAY CARE CENTER

LOCATION : BARANGAY SAN AGUSTIN, DISTRICT 5, QUEZON CITY

PROJECT NO. : 22 - 00007

SCOPE OF WORK :

- I General Requirements include billboard, clearing, hauling and disposal of construction materials and debris, temporary enclosure, construction safety & health and scaffolding.
- II Site Works include removal works and cleaning/clearing for painting preparation.
- III Civil Works include masonry works, metal works and roofing works.
- IV Architectural Works include floor finishes, wall finishes, ceiling works, painting works, installation of doors, windows, fabricated materials and logos and letterings.
- V Sanitary / Plumbing Works include installation of roughing-ins, equipment, fixtures and accessories.
- VI Electrical Works include installation of roughing-ins, wirings, devices and fixtures.
- VII Mechanical Works include installation of roughing-ins, equipment and accessories.
- VIII All necessary testing and commissioning shall be performed in accordance to standards.

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
I	GENERAL REQUIREMENTS				
	Billboard	1	unit	₱	₱
	Clearing, Hauling and Disposal of Construction Materials and Debris	1	t.l.		
	Construction Safety and Health	1	unit		
	Scaffolding (Rental)	58	sq.m.		
	Temporary Enclosure Around the Construction Area (H=2.4m)	10	l.m.		
				DIRECT COST I	₱
II	SITE WORKS				
	Removal Works				
	Removal of Dilapidated Ceiling	46	sq.m.	₱	₱
	Removal of Dilapidated Door	3	set		
	Removal of Dilapidated Window	31	sq.m.		
	Removal of Fence	3	sq.m.		
	Removal of Lavatory	2	unit		
	Removal of Roof	5	sq.m.		
	Removal of Stainless Steel Signage	44	set		
	Removal of Tiles	96	sq.m.		
	Removal of Water Closet	2	unit		
	Chipping for Electrical Works	3	sq.m.		
	Chipping of Wall for Proposed Door	2	sq.m.		
	Clearing and Cleaning for Painting Preparation	547	sq.m.		
				DIRECT COST II	₱
III	CIVIL / STRUCTURAL WORKS				
	Masonry Works				
	150mm CHB Wall Laying, including Mortar, Reinforcing and Two-Face Plastering	7	sq.m.	₱	₱

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Metal Works				
	Roof Framing				
	38mm x 38mm x 6mm Angle Bar	73	kg		
	50mm x 100mm x 2mm C-Purlin	30	kg		
	Fence				
	50mm x 75mm x 4mm Tubular Bar	31	kg		
	25mm x 25mm x 2mm Tubular Bar	14	kg		
	G.I. Sheet Ga. 18	18	kg		
	Window Grilles				
	25mm x 25mm x 2mm Tubular Bar	804	kg		
	Miscellaneous & Consumables				
	7mmØ x 75mm Expansion Bolt	12	piece		
	Acetylene Tank (Refill)	1	tank		
	Cut Off Blade	5	piece		
	Grinding Disc for Metal	5	piece		
	Oxygen Tank (Refill)	2	tank		
	Welding Rod	1	box		
	Roofing Works				
	Pre-Painted Rib-type G.I. Roofing	6	sq.m.		
	Pre-Painted G.I. Flashing	10	l.m.		
	12mm x 300mm Fiber Cement Fascia Board	7	l.m.		
	Silicon Sealant	5	tube		
	Tekscrew	27	piece		
	Blind Rivets	46	piece		
				MATERIAL COST III	₱
				LABOR COST III	
				DIRECT COST III	₱
IV	ARCHITECTURAL WORKS				
	Floor Finishes				
	Floor Topping for Preparation of Tile Works	85	sq.m.	₱	₱
	600mm x 600mm Non-Skid Homogeneous Tiles	82	sq.m.		
	400mm x 400mm Non-Skid Homogeneous Tiles	4	sq.m.		
	Wall Finishes and Partition				
	400mm x 400mm Homogeneous Tiles	8	sq.m.		
	Framing	11	sq.m.		
	Ceiling Works				
	6mm thk Fiber Cement Board including Metal Framing	48	sq.m.		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Installation of Doors				
	D1 - (1.10m x 2.10m) Two-Leaf Panel Door	1	set	₱	₱
	D2 - (0.80m x 2.10m) Flush Door	1	set		
	D3 - (0.60m x 2.10m) PVC Door with Louver	2	set		
	Door jamb				
	D1 - (1.10m x 2.10m) Two-Leaf Panel Door	1	set		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	D2 - (0.80m x 2.10m) Swing Type Flush Door	1	set		
	Hardware accessories				
	Door Hinges, Heavy Duty Stainless	15	set		
	Door Knob, Lever Type, Stainless	5	set		
	Installation of Windows				
	W1 - (1.20m x 1.20m) 6mm Thk Clear Tempered Glass on White Color Powder Coated Aluminum Frames, Sliding Window	6	set		
	W2 - (2.40m x 1.20m) 6mm Thk Clear Tempered Glass on White Color Powder Coated Aluminum Frames, Sliding Window	4	set		
	W3 - (0.60m x 0.60m) 6mm Thk Clear Tempered Glass on White Color Powder Coated Aluminum Frames, Awning Window	2	set		
	W4 - (1.10m x 1.00m) 6mm Thk Clear Tempered Glass on White Color Powder Coated Aluminum Frames, Sliding Window	2	set		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Painting Works				
	Elastomeric Paint (Exterior Wall)	95	sq.m.	₱	₱
	Epoxy Enamel Paint Finish (Steel Members)	155	sq.m.		
	Flat Latex Paint Finish				
	Interior Wall	297	sq.m.		
	Ceiling	48	sq.m.		
	Fabricated Materials				
	Book Shelf	3	sq.m.		
	Hanging Cabinet	3	sq.m.		
	Kiddy Countertop	2	l.m.		
	Standard Countertop	4	l.m.		
	Logos and Letterings				
	Stainless Steel Signage (200mm x 200mm) "T.S. CRUZ DAY CARE AND LIVELIHOOD CENTER"	34	set		
	Quezon City Logo	1	set		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
				MATERIAL COST IV	₱
				LABOR COST IV	
				DIRECT COST IV	₱
V	SANITARY / PLUMBING WORKS				
	Sewer Line / Storm Drainage System				
	Roughing-Ins				
	50 mm Ø, PVC Pipe with Hub	2	piece	₱	₱
	75 mm Ø, PVC Pipe with Hub	6	piece		
	100 mm Ø, PVC Pipe with Hub	4	piece		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	50mm Ø, P-Trap	5	piece		
	75mm Ø, P-Trap	1	piece		
	50mm Ø, 1/8 Bend	22	piece		
	75mm Ø, 1/8 Bend	7	piece		
	100mm Ø, 1/8 Bend	3	piece		
	75mm Ø, 1/4 Bend	6	piece		
	75mm Ø x 75mm Ø, Tee	6	piece		
	100mm Ø x 75mm Ø, Tee	6	piece		
	100mm Ø x 50mm Ø, Wye	7	piece		
	100mm Ø x 75mm Ø, Wye	3	piece		
	100mm Ø x 100mm Ø, Wye	3	piece		
	100mm Ø, Cleanout with Adapter	4	piece		
	Waterline System				
	Roughing-Ins				
	20mm Ø, PPR Pipe	4	piece		
	20mm Ø, Elbow	19	piece		
	20mm Ø, Coupling	4	piece		
	20mm Ø, Tee Equal	1	piece		
	20mm Ø, Female Threaded, Tee	11	piece		
	20mm Ø, Female Adapter	2	piece		
	Valves and Appurtenances				
	20mm Ø Gate Valve, PPR	2	piece		
	Fixtures				
	Bidet with Complete Accessories, Stainless (Water Efficient)	2	set		
	Floor Drain, 100mm x 100mm, Stainless	4	set		
	Grease Trap, 5GPM, Stainless	2	set		
	Hose Bibb, Lever-Type, Stainless, Heavy Duty (Water Efficient)	6	set		
	Kitchen Faucet Lever Type, Stainless (Water Efficient)	2	set		
	Kitchen Sink, Single Tub, Stainless	2	set		
	Lavatory, Wall Hung	1	set		
	Lavatory, Wall Hung, Kiddy	1	set		
	Lavatory Faucet Lever Type, Stainless (Water Efficient)	2	set		
	Water Closet, Tank Type w/ Accessories (Water Efficient)	1	set		
	Water Closet, Tank Type w/ Accessories, Kiddy (Water Efficient)	1	set		
	Accessories				
	Angle Valve, Single Way, Stainless	4	piece		
	Angle Valve, Two Way, Stainless	2	piece		
	Flexible Hose, Stainless	6	piece		
	Miscellaneous & Consumables				
	400cc Solvent Cement	4	can		
	All-Around Sealant	2	can		
	Hacksaw Blade	2	piece		
	Teflon Tape	3	roll		
	Waste Cloth	1	kg		
				MATERIAL COST V	₱
				LABOR COST V	
				DIRECT COST V	₱

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
VI	ELECTRICAL WORKS				
	Lighting and Power System				
	Roughing-ins				
	20mmØ PVC Pipe	5	piece	₱	₱
	50mm x 100mm Metal Utility Box	1	piece		
	100mm x 100mm Metal Junction Box with Cover	2	piece		
	20mmØ PVC Adaptor	10	piece		
	20mmØ PVC Locknut and Bushing	10	pair		
	Wires and Cables				
	3.5mm² THHN Wire	16	l.m.		
	2.0mm² TW Wire (Green)	8	l.m.		
	Lighting Fixture (Energy Efficient)				
	14w LED Light Bulb	8	piece		
	100mmØ Plastic Receptacle	8	piece		
	1x18w LED T8 Tube Light, Box Type	1	unit		
	1 x 18w LED,600mmx1200mm Troffer Fixture, Surface Mounted	16	unit		
	Wiring Devices				
	Orbit Fan with Selector Switch	4	unit		
	Outlet with Grounding , One-Gang, for ACU, Heavy Duty	1	piece		
	Outlet with Grounding , Two-Gang	6	piece		
	Switch with Plate and Cover, One-Gang	5	piece		
	Switch with Plate and Cover, Two-Gang	2	piece		
	Switch with Plate and Cover, Three-Gang	2	piece		
	Switch with Plate and Cover, Three-Way	1	piece		
	Switch, Three-way	1	piece		
	Pipe Hangers & Supports				
	Horizontal Layout of Pipe	10	l.m.		
	Miscellaneous & Consumables				
	400cc Solvent Cement	3	can		
	Electrical Tape	10	piece		
	GI Tie Wire, Ga. 16 (for Wire/Cable Pulling)	2	kg		
	Hacksaw Blade	5	piece		
	Masking Tape	10	piece		
				MATERIAL COST VI	₱
				LABOR COST VI	
				DIRECT COST VI	₱
VII	MECHANICAL WORKS				
	Airconditioning System				
	Condensate Water Drainage System				
	Roughing-Ins				
	20mm Ø X 3m uPVC Pipe	1	piece	₱	₱
	20mm Ø uPVC Elbow	3	piece		
	Insulation				
	20mmØ x 12mm thick Rubber Foam Insulation	3	l.m.		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Equipment and Accessories				
	Window-type Air Conditioning Unit				
	WAC 1 - Window-type Airconditioner 2.5 hp, 2.0 TR, 600cfm,2660W, 230/1/60	1	unit	₱	₱
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Pipe Hangers and Supports				
	Condensate Water Drainage System Support	3	l.m.	₱	₱
	Miscellaneous & Consumables				
	400cc Solvent Cement	1	can		
	Teflon Tape	1	roll		
	Waste Cloth	3	kg		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
				MATERIAL COST VII	₱
				LABOR COST VII	
				DIRECT COST VII	₱

SUMMARY

ITEM NO.	WORK DESCRIPTION & SCOPE OF WORKS	TOTAL COST
I	GENERAL REQUIREMENTS	₱ 74,704.00
II	SITE WORKS	62,240.00
III	CIVIL / STRUCTURAL WORKS	111,811.05
IV	ARCHITECTURAL WORKS	967,721.84
V	SANITARY / PLUMBING WORKS	93,552.30
VI	ELECTRICAL WORKS	66,170.25
VII	MECHANICAL WORKS	44,802.50
	TOTAL DIRECT COST	₱ 1,421,001.94
	Overhead, Contingencies and Miscellaneous Expenses (OCM)	213,150.29
	Profit	142,100.19
	VAT	88,812.62
	TOTAL ESTIMATED COST	₱ 1,865,065.04

NOTE:
Strictly enforce Health Protocols relative to the latest applicable DPWH Memorandum

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

Technical Documents

- (f) 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 (*please see attached prescribed forms required by the QC – BAC for Infrastructure and Consultancy*); **and**
- (g) Statement of the bidder’s Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules with an attached Notice of Award, Notice to Proceed, Contract and Certificate of Acceptance (*please see attached prescribed form required by the QC – BAC for Infrastructure and Consultancy*); **and**
- (h) 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**
- (i) 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**
- (j) 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 (*please see attached prescribed form required by the QC – BAC for Infrastructure and Consultancy*);
 - 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 (*please see attached prescribed form required by the QC – BAC for Infrastructure and Consultancy*); **and**

- (k) 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.

Additional Technical Requirements:

- Certificate of Site Inspection or Affidavit of Site Inspection as part of Omnibus Sworn Statement
- Affidavit of Undertaking for Key Personnel and Equipment (*please see attached prescribed form required by the QC – BAC for Infrastructure and Consultancy*)
- Equipment Utilization Schedule
- Manpower Schedule
- Construction Schedule and S-Curve
- PERT-CMP
- Construction Methods

Financial Documents

- (l) 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**
- (m) The prospective bidder’s computation of Net Financial Contracting Capacity (NFCC) (*please see attached prescribed form required by the QC – BAC for Infrastructure and Consultancy*).

Class “B” Documents

- (n) 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

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

Other documentary requirements under RA No. 9184

- (p) Original of duly signed Bid Prices in the Bill of Quantities; **and**
- (q) 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**
- (r) Cash Flow by Quarter.

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

BID FORM

Date : _____
Project Identification No. : _____

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

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

- a. We have no reservation to the PBDs, including the Supplemental or Bid Bulletins, for the Procurement Project: *[insert name of contract]*;
- b. We offer to execute the Works for this Contract in accordance with the PBDs;
- c. The total price of our Bid in words and figures, excluding any discounts offered below is: *[insert information]*;
- d. The discounts offered and the methodology for their application are: *[insert information]*;
- e. The total bid price includes the cost of all taxes, such as, but not limited to: *[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties]*, which are itemized herein and reflected in the detailed estimates,
- f. Our Bid shall be valid within the a period stated in the PBDs, and it shall remain binding upon us at any time before the expiration of that period;
- g. If our Bid is accepted, we commit to obtain a Performance Security in the amount of *[insert percentage amount]* percent of the Contract Price for the due performance of the Contract, or a Performance Securing Declaration in lieu of the the allowable forms of Performance Security, subject to the terms and conditions of issued GPPB guidelines¹ for this purpose;
- h. We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;
- i. We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed; and
- j. We understand that you are not bound to accept the Lowest Calculated Bid or any other Bid that you may receive.

¹ currently based on GPPB Resolution No. 09-2020

- k. We likewise certify/confirm that the undersigned, is the duly authorized representative of the bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for the [Name of Project] of the [Name of the Procuring Entity].
- l. We acknowledge that failure to sign each and every page of this Bid Form, including the Bill of Quantities, shall be a ground for the rejection of our bid.

Name: _____

Legal Capacity: _____

Signature: _____

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

Date: _____

Bid Securing Declaration Form

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

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

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

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

I/We, the undersigned, declare that:

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

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

*[Insert NAME OF BIDDER OR ITS AUTHORIZED
REPRESENTATIVE]
[Insert signatory's legal capacity]
Affiant*

[Jurat]

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

Omnibus Sworn Statement (Revised)

[shall be submitted with the Bid]

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

AFFIDAVIT

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

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

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

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

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

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

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

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

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

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

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

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

[If a partnership or cooperative:] None of the officers and members of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project

Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

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

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

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

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]

Affiant

[Jurat]

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

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

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

CONTRACT AGREEMENT

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

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

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

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

Bid form, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents submitted (e.g., Bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;
 - c. Performance Security;
 - d. Notice of Award of Contract and the Bidder's conforme thereto; and
 - e. Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBDs. **Winning bidder agrees that additional contract documents or information prescribed by the GPPB that are subsequently required for submission after the contract execution, such as the Notice to Proceed, Variation Orders, and Warranty Security, shall likewise form part of the Contract.**
3. In consideration for the sum of *[total contract price in words and figures]* or such other sums as may be ascertained, *[Named of the bidder]* agrees to *[state the object of the contract]* in accordance with his/her/its Bid.

4. The *[Name of the procuring entity]* agrees to pay the above-mentioned sum in accordance with the terms of the Bidding.

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

[Insert Name and Signature] [Insert Name and Signature]

[Insert Signatory's Legal Capacity] [Insert Signatory's Legal Capacity]

for: for:

[Insert Procuring Entity] [Insert Name of Supplier]

Acknowledgment

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

Performance Securing Declaration (Revised)

[if used as an alternative performance security but it is not required to be submitted with the Bid, as it shall be submitted within ten (10) days after receiving the Notice of Award]

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

PERFORMANCE SECURING DECLARATION

Invitation to Bid: [Insert Reference Number indicated in the Bidding Documents] To:
[Insert name and address of the Procuring Entity]

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, to guarantee the faithful performance by the supplier/distributor/manufacturee/contractor/consultant of its obligations under the Contract, I/we shall submit a Performance Securing Declaration within a maximum period of ten (10) calendar days from the receipt of the Notice of Award prior to the signing of the Contract.
2. I/We accept that: I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of one (1) year for the first offense, or two (2) years **for the second offense**, upon receipt of your Blacklisting Order if I/We have violated my/our obligations under the Contract;
3. I/We understand that this Performance Securing Declaration shall cease to be valid upon:
 - a. issuance by the Procuring Entity of the Certificate of Final Acceptance, subject to the following conditions:
 - i. Procuring Entity has no claims filed against the contract awardee;
 - ii. It has no claims for labor and materials filed against the contractor; and
 - iii. Other terms of the contract; or
 - b. replacement by the winning bidder of the submitted PSD with a performance security in any of the prescribed forms under Section 39.2 of the 2016 revised IRR of RA No. 9184 as required by the end-user.

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

*[Insert NAME OF BIDDER OR ITS
AUTHORIZED REPRESENTATIVE]
[Insert signatory's legal capacity]
Affiant*

[Jurat]

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

LIST OF ALL AWARDED BUT NOT YET STARTED GOVERNMENT AND PRIVATE CONTRACTS OF THE BIDDER

NAME OF CONTRACTOR: _____

PROJECT TITLE: _____

PROJECT TITLE & EXACT LOCATION	MAJOR SCOPE OF WORKS & DATE STARTED	NAME AND ADDRESS OF PROJECT OWNER	CONTRACT PRICE (PHP) AS AWARDED	DATE OF SCHEDULED COMPLETION	ROLE OF BIDDER IN THE <u>CONTRACT</u> <u>SOLE CONTRACTOR / SUB-CONTRACTOR/PARTNER IN A</u>
	TOTAL AMOUNT OF CONTRACT (Php)				

SINGLE LARGEST COMPLETED CONTRACT SIMILAR TO THE CONTRACT TO BE BID

NAME OF CONTRACTOR: _____

PROJECT TITLE: _____

PROJECT TITLE (Name of the Contract) & EXACT PROJECT LOCATION	DATE OF CONTRACT	CONTRACT DURATION	PROJECT OWNER & POSTAL ADDRESS	NATURE OF WORK	CONTRACTOR'S ROLE (SOLE CONTRACTOR, SUBCONTRACTOR, PARTNER IN A JV) and PERCENTAGE OF PARTICIPATION	TOTAL CONTRACT VALUE AT AWARD	DATE OF COMPLETION or ESTIMATED COMPLETION TIME	TOTAL CONTRACT VALUE AT COMPLETION IF APPLICABLE

PHOTOCOPY ADDITIONAL FORMS, IF NECESSARY

Page _____ of _____

LIST OF MAJOR EQUIPMENT TO BE USED FOR THE PROJECT

NAME OF CONTRACTOR: _____

PROJECT TITLE: _____

TYPE	DESCRIPTION / CAPACITY	SERIAL NO.	YEAR ACQUIRED	PRESENT LOCATION (SPECIFIC ADDRESS)	STATUS OF AVAILABILITY (OWNED/LEASED)

A. LIST OF KEY CONSTRUCTION PERSONNEL TO BE ASSIGNED TO THE PROJECT

NAME OF CONTRACTOR: _____

PROJECT TITLE: _____

NAME	POSITION	AGE	EDUCATIONAL ATTAINMENT	TYPE OF CONSTRUCTION EXPERIENCE	NO.OF YEARS WITH THE CONTRACTOR	PROFESSION	PRC NO.

COMPUTATION OF NET FINANCIAL CONTRACTING CAPACITY (NFCC)

NAME OF BIDDER: _____

CURRENT ASSETS*		PHP	_____
(LESS) CURRENT LIABILITIES*	(LESS)	PHP	_____
NETWORTH		PHP	_____
NETWORTH x 15	x 15	PHP	_____
(LESS) VALUE OF ALL OUTSTANDING ON-GOING CONTRACTS**	(LESS)	PHP	_____
(LESS) VALUE OF ALL AWARDED BUT NOT YET STARTED CONTRACTS AS OF DATE**	(LESS)	PHP	_____
NET FINANCIAL CONTRACTING CAPACITY		PHP	_____

NOTES: * CURRENT ASSETS AND LIABILITIES BASED ON AUDITED FINANCIAL STATEMENT FOR THE PRECEDING CALENDAR YEAR SUBMITTED TO B.I.R.

** BASED ON LIST OF ON-GOING AND AWRDED BUT NOT VEY STARTED CONTRACTS SUBMITTED

REPUBLIC OF THE PHILIPPINES)

_____) S.S.

AFFIDAVIT OF UNDERTAKING

I, _____ of legal age, Filipino, _____ [OFFICER OR REPRESENTATIVE]

with office address at _____ after having been duly sworn to in accordance with law, hereby voluntary depose and state:

That I am duly authorized representative of the [Name of Bidder] to execute this undertaking as evidenced by Secretary's Certificate and Board Resolution.

That [Name of Bidder] bidding for the (Name of Project)

That relative to the aforementioned Project, the [Name of Bidder] hereby undertake that the equipment to be use and the key personnel to be assign shall exclusively be used and will only perform to the said project until its completion.

That I am executing this affidavit to attest to the truth of the foregoing and in compliance with the submission of the technical requirements for the public bidding of the said project.

IN WITNESS HEREOF, I have hereunto signed my name below this _____ day of _____ at _____.

AFFIANT FURTHER SAYETH NAUGHT.

Affiant

SUBSCRIBED AND SWORN TO BEFORE ME this _____ day of _____
in _____

affiant exhibiting to me his/her _____ issued at _____
on _____

Doc. No. ;
Page No. ;
Book No. ;
Series of 2020

Notary Public

