PHILIPPINE BIDDING DOCUMENTS

Procurement of INFRASTRUCTURE PROJECTS

Government of the Republic of the Philippines

PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF DAY CARE CENTER AT DISTRICT 4 AREA XX

Project number: 21-00173

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 AND AWARDS COMMITTEE FOR INFRASTRACTU



BIDS AND AWARDS COMMITTEE FOR INFRASTRACTURE & CONSULTANCY

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

November 15, 2021

Invitation to Bid

No	Project No.	Project Name	Location	Amount	Durati on Cal. Days	Office	Source Fund
Bui	ildings – S	Small B					
1	21- 00156	Proposed Construction of Hand Washing Facility and Rehabilitation of Waterline System at Krus Na Ligas Elementary School (Simon Building)	Krus Na Ligas	1,136,052.36	60	Engineering Department	Special Education Fund
2	21- 00157	Proposed Construction of Hand Washing Facility at Payatas C Elementary School	Payatas	1,278,401.32	60	Engineering Department	Special Education Fund
3	21- 00158	Proposed Construction of Hand Washing Facility at Main Building of Balara High School	Pansol	1,282,912.05	60	Engineering Department	Special Education Fund
4	21- 00159	Proposed Rehabilitation of Day Care Center at District 3 / Area XIII and XIV	Claro, Silangan & East Kamias	1,458,079.64	45	Engineering Department	Engineering - SB No. 1
5	21- 00160	Proposed Construction of Hand Washing Facility and Rehabilitation of Waterline System at Ramon Magsaysay High School Belmonte Building)	Pinagkaisahan	1,731,551.85	90	Engineering Department	Special Education Fund
6	21- 00161	Proposed Construction of Hand Washing Facility and Rehabilitation of Waterline at Bagong Pag-Asa Elementary School (SB Building)	Bagong Pag- Asa	1,801,334.79	60	Engineering Department	Special Education Fund
7	21- 00162	Proposed Rehabilitation of Milagrosa Daycare Center and Livelihood Center	Milagrosa	2,198,687.07	75	Engineering Department	Engineering - SB No. 1
8	21- 00163	Proposed Construction of Hand Washing Facility and Rehabilitation of Comfort Rooms and Waterline System at Aguinaldo Elementary School (Estrada Building)	San Roque	2,296,791.86	120	Engineering Department	Special Education Fund
9	21- 00164	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 2 Area VII (Cluster 5)	Payatas	2,871,590.18	60	Engineering Department	Engineering - SB No. 1
10	21- 00165	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 3 / Area XV	Matandang Balara & Pansol	3,027,863.77	60	Engineering Department	Engineering - SB No. 1

11	21- 00166	Proposed Construction of Hand Washing Facility and Rehabilitation of Comfort Rooms and Waterline System at Maligaya Elementary School (Vargas Building)	Pasong Putik	3,565,679.65	90	Engineering Department	Special Education Fund
12	21- 00167	Proposed Construction of Hand Washing Facility and Rehabilitation of Comfort Rooms and Waterline System at San Francisco High School (SB Building)	Ramon Magsaysay	4,900,074.64	60	Engineering Department	Special Educution Fund
13	21- 00168	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 3 / Area XVI and XVIII	Villa Maria Clara, Bagumbuhay, Bayanihan, Escopa 3, Marilag	5,527,209.52	90	Engineering Department	Engineering - SB No. i
14	21- 00169	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 4 / Area XIX	Kamuning. Obrero, Paligsahan, Roxas & South Triangle	7,108,186.57	60	Engineering Department	Engineering - SB No. 1
15	21- 00170	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 4 / Area XXIII	Old Capitol Site, San Vicente & U.P. Campus	8,767,692.58	90	Engineering Department	Engineering - SB No. 1
16	21- 00171	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 4 / Area XXIV	Central, Krus Na Ligas & Pinyahan	8,801,647.54	60	Engineering Department	Engineering - SB No. 1
17	21- 00172	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 2 Area VII (Cluster 1)	Bagong Silangan	8,899,769.12	90	Engineering Department	Engineering - SB No. I
18	21- 00173	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 4 / Area XX	Horseshoe, Immaculate Concepcion, Kaunlaran, Pinagkaisahan & San Martin De Porres	9,342,308.35	60	Engineering Department	Engineering - SB No. 1
19	21- 00174	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 2 Area VII (Cluster 4)	Holy Spirit	9,513,555.66	90	Engineering Department	Engineering - SB No. 1
20	21- 00175	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 4 / Area XXII	Tatalon, Don Manuel, Doña Aurora, Doña Imelda, Doña Josefa, San Isidro Galas, Santol & Sto. Niño	11,988,174.41	90	Engineering Department	Engineering - SB No. 1
21	21- 00176	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 2 Area VII (Cluster 3)	Balonbato & Sangandaan	14,755,919.20	90	Engineering Department	Engineering - SB No. 1

22	21- 00177	Proposed Construction of Hand Washing Facility and Rehabilitation of Day Care Center at District 2 Area VII (Cluster 2)	Batasan Hills	17,576,527.83	90	Engineering Department	Engineering - SB No. 1
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- 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.
- 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).
- Bidding will be conducted through open competitive bidding procedures using nondiscretionary "pass/fail" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
- 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 16 November 2021 (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
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The following are the requirements for purchase of Bidding Documents;

- PhilGEPS Registration Certificate (Platinum 3 Pages)
- 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 November 23, 2021 - 5:00PM.

 The QC-BAC-INFRASTRUCTURE & CONSULTANCY will hold a Pre-Bid Conference¹ on November 24, 2021 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.

Virtual Conference (ZOOM APP)

Meeting ID: 854 9489 0133

Password: 273320

- Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below, on or before December 6, 2021 – 9:00AM. Late bids shall not be accepted.
- All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in ITB Clause 16.
- Bid opening shall be on December 6, 2021 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

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-Lefra and Consultancy

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

Section II. Instructions to Bidders

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 CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF DAY CARE CENTER AT DISTRICT 4 AREA XX, with Project Identification Number 21-00173.

[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 2021 in the amount of Nine Million Three Hundred Forty-Two Thousand Three Hundred Eight Pesos & 35/100 Ctvs. (P 9,342,308.35).
- 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 "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

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

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

- 5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Origin of Associated Goods

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

7. Subcontracts

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

The Procuring Entity has prescribed that:

a. Subcontracting is not allowed.

- 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 November 24, 2021, 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		s purpose, similar cor categories of work.	ntracts shall refer to con	tracts which have the same		
7.1	Subcontracting is not allowed.					
10.3	No additional contractor license or permit is required					
	In addi	tion, eligible bidders	shall qualify or compl	y with the following:		
	1. Bidd	ers with valid Philipp	oine Contractors Accred	litation Board (PCAB)		
	Тур	e				
	F	Building - Small B				
10.4	The m	*	rience requirements for	or key personnel are the		
PROPOSED CONSTRUCTION OF HAND WASHING FAC REHABILITATION OF HILLCREST DAY CARE CE						
	Qnty.	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		
	PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF HORSESHOE DAY CARE CENTER					
	Qnty.	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
			SHING FACILITY AND DAY CARE CENTER
Qnty.	Key Personnel	General Experience	Relevant Experience
1	Project Engineer	3 years	3 years
1	DPWH duly accredit Materials Engineer	ed 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
12	Laborer	1 year	3 months
P	ROPOSED REHAB	ILITATION OF F. MA	ANALO DAY CARE
Qnty.	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
5	Skilled Worker	3 years	3 years
1	Driver	3 years	3 years
5	Laborer	1 year	3 months

PR	OPOSED REHABI	LITATION OF PLAN CENTER	AS SITE DAY CARE
Qnty.	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
5	Skilled Worker	3 years	3 years
1	Driver	3 years	3 years
6	Laborer	1 year	3 months
		CTION OF HAND WA OF SAN MARTIN DE I CENTER	SHING FACILITY AND PORRES DAY CARE
Qnty.	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
			SHING FACILITY AND DRRES DAY ANNEX C
Qnty.	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
5	Skilled Worker	3 years	3 years

	1 Driver	3 years	3 years
	5 Laborer	1 year	3 months
	notarized stating tha for the project until i	dder must execute an affic t the foregoing personnel sha its completion. Please see atta	all perform work exclusively ached bid forms.
10.5	The minimum major	equipment requirements are the	he following:
		STRUCTION OF HAND WA ATION OF HILLCREST DA	
	Equipment	Capacity	Number of Units
	Elf Truck Scaffolding Power Tools Minor Tools		as needed as needed as needed
		STRUCTION OF HAND WA ATION OF HORSESHOE D	
	Equipment	Capacity	Number of Units
	Elf Truck Scaffolding Power Tools Minor Tools		as needed as needed as needed
		STRUCTION OF HAND WA ION OF PINAGKAISAHAN	
	Equipment	Capacity	Number of Units
	Elf Truck Scaffolding Power Tools Minor Tools		as needed as needed as needed
	PROPOSED R	EHABILITATION OF F. M CENTER	IANALO DAY CARE
	Equipment	Capacity	Number of Units
	Elf Truck Scaffolding Power Tools Minor Tools		as needed as needed as needed

	PROPOSED REHA	BILITATION OF PLANAS CENTER	S SITE DAY CARE
	Equipment	Capacity	Number of Units
	Elf Truck Scaffolding		as needed
	Power Tools		as needed
	Minor Tools		as needed
		UCTION OF HAND WASH N OF SAN MARTIN DE PO CENTER	
	Equipment	Capacity	Number of Units
	Elf Truck Scaffolding Power Tools Minor Tools		as needed as needed as needed
		UCTION OF HAND WASH OF SAN MARTIN DE POR CARE CENTER	
	Equipment	Capacity	Number of Units
	Elf Truck		1
	Scaffolding		as needed
	Power Tools		as needed
	Minor Tools		as needed
	notarized stating that th	r must execute an affidavi e foregoing equipment shall pletion. Please see attached by	be used exclusively for
12	[Insert Value Engineerin	g clause if allowed.]	
15.1		in the form of a Bid Securing lowing forms and amounts:	Declaration with project
	(2%) of ABC if b	ot less than Php 186,846.17 or edid security is in cash, cashier'r irrevocable letter of credit; o	s/manager's check, bank
	(5%) of ABC if b	t less than Php 467,115.42 or education id security is in Surety Bond.	
19.2		ed. The infrastructure project is e divided into sub-lots for taward.	

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: [list here the required site investigation reports.]
7.2	[Select one, delete the other.]
	[In case of permanent structures, such as buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems, power plants, transmission and communication towers, railway system, and other similar permanent structures:] Fifteen (15) years.
	[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:] Five (5) years.
	[In case of other structures, such as bailey and wooden bridges, shallow wells, spring developments, and other similar structures:] Two (2) years.
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	The date by which operating and maintenance manuals are required is thirty (30) days The date by which "as built" drawings are required as part of final
	payment
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.



Replublika ng Pilipinas Lungsod ng Quezon

CITY ENGINEERING DEPARTMENT

5TH, 6TH, 7TH Floors, OC Clvic Center Building "B" Telephone Nos. 8988-4242 Local 8538



PROJECT TITLE:

LOCATION:

PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND

REHABILITATION OF HILLCREST DAY CARE CENTER!

BARANGAY MMACULATE CONCEPCION, DISTRICT 4, QUEZON CITY/

TECHNICAL SPECIFICATIONS

I. GENERAL REQUIREMENTS

- A. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations, and standards. Any works performed 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 cetails. 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 end codes
- H. Mobilization and Demobilization (if applicable).
 - 1 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.
 - 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.
- 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
 - All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types
 - 2 Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations.

- Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication.
- Temporary enclosure shall be provided around the construction site with adequate guard lights, railings and proper signage
- Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period
- Upon completion of the work, the temporary facilities shall be demolished, hauled-outand 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.
 - A fully-trained Medical Aide shall be employed permanently on the site who shall be engaged solely to medical duties
 - 2 The medical room shall be provided with waterpropfing; 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.
 - 3 The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations and suitable notices in the site.
 - Additional safety precautions shall be provided in the event of a pandemic. Protocols set forth by the government shall be strictly followed.
 - Personal Protective Equipment (PPE) shall consist of safety helmet/hard hat, safety reflectorized vest, safety insulated gloves, duet mask, safety shoes, safety goggles, and safety harness. Every skilled and unskilled worker, and the project foreman shall be provided PPE by the Contractor Consideration of quantity shall be made for the Project Engineer, Materials Engineer, Safety Officer/Practitioner (as required) and project driver.
 - Construction safety materials shall consist of eafety net, fire extinguisher and sefety signage and posters.
- 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 the 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 work.
- B. This Item shall consist of the removal wholly or in part, and satisfactory disposal of all buildings, fences, structures, old pavements, abandoned pipe lines, and any other obstructions which are not designated or permitted to remain, except for the obstructions to be removed and disposed of under other items in the Contract.
 - Removal and/or 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 teken that the surrounding soil particles are not disturbed or removed.

The Contractor shall notify the Engineer sufficiently in advance of the beginning of any excavation so that cross-sectional elevations and measurements may be taken on the undisturbed ground. The natural ground adjacent to the structure shall not be disturbed without permission of the Engineer.

Trenches or foundation pits for structures or structure footings shall be excevated to the lines and grades or elevations shown on the Plans or as staked by the Engineer. They shall be of sufficient size to permit the placing of structures or structure footings of the full width and length shown. The elevations of the bottoms of footings, as shown on the Plans, shall be considered as approximate only and the Engineer may order, in whing, such changes in dimensions or elevations of footings as may be deemed necessary, to secure a satisfactory foundation.

Boulders, logs, and other objectionable materials encountered in excavation shall be removed.

After each excavation is completed, the Contractor shall notify the Engineer to that effect and no footing, bedding material or pipe culvert shall be placed until the Engineer has approved the depth of excavation and the character of the foundation material

D. All excavated materials, so far as suitable, shall be utilized as backfill. The surplus materials shall be disposed of in such manner as not to obstruct the stream or otherwise impair the efficiency or appearance of the structure. No excavated materials shall be deposited at any time so as to endenger the partly finished structure.

All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted by wetting, tamping and rolling.

- E. Soil Poisoning. There are two methods usually adopted in soil poisoning which are as follows:
 - Cordoning. This method is usually adopted when there is no visible evidence of termite infestation. Trenches in concentro circles, squares or rectangles are dug 150mm to 220mm wide and at least one meter apart and applied with Liquid Termicide Concentrate working solution at the rate of 8 lifers per linear meter.
 - Evenching. When soil show termite infestation, this method shall be applied. The building area shall be thoroughly drenched with Liquid Termicide Concentrate working solution at the rate of 24 litera per square meter.

III. CIVIL / STRUCTURAL WORKS

A. CONCRETE WORKS

- 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.
- 2. 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.

3. Materials

- Cement for concrete shall conform to the requirements of specifications for Portland Cement (ASTM C = 150).
- Water used in mixing concrete shall be clean and free from other injurious amounts of oits, acids, alkatine, organic materials or other substances that may be deterious to concrete or steel
- c Fine aggregates shall be beach or river send conforming to ASTM C33, "Specification for Concrete Aggregates". Sand particle shall be course, sharp, clean free from salt, dust, foem, dirt and all foreign matters.

d. 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

Proportioning and Mixing.

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

Cement: Şand: Gravel Class "A" - 1: 2: 3 Class "B" - 1: 2: 4 Class "C" - 1: 2 1/3

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

5. Forms

- a. General Forms shall be used whatever necessary to confine the concrete and shape it to the required lines, or to insure the concrete of contamnation with materials caving from adjacent, excevated 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 ½7 (6mm) thick ordinary plywood and form lumber.
- b Cleaning of Forms before placing the concrete, the contact surfaces of the formed hall be cleaned of encrustations of morter, the grout or other foreign material.
- c. 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.

Placing Reinforcement.

Steel reinforcement shall be provided as indicated, together with all necessary te wires, chairs, spacers, supports and other devices necessary to install and secure the reinforcement properly. All reinforcement, when placed, shall be free from foose, flaky rust end scale, oil, grease, cley 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

7 Conveying and Placing Concrete:

- a. Conveying concrete shall be conveyed from mixer to forms as repidly 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.
- Placing concrete shall be worked readily into the corners and angles of the forms and ground all reinforcement and imbedded items without permitting the meterial 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 tayers not exceeding 30 centimeters in depth within the maximum lateral movement specified.

- c Time interval between mixing and placing. Concrete shall be placed before mitial 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.
- d. Consolidation of Concrete concrete shall be consolidated with the aid of mechanical vibrating equipment and supplemented by the hand spading and temping. Vibrators shall not be inserted into lower cursed that have commenced mitial set; and reinforcement embedded in concepts beginning to set or already set shall not be disturbed by vibrators. Consolidation around major embedded parts shall by hand spading and temping and vibrators shall not be used.
- e. 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.

8. Curing

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

Finishing

- a. 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 grounded to a smooth surface to remove all joint marks of the form works.
- Concrete Slabs on Fill. The concrete stabs 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. ROOFING WORKS

- 1. 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 ½° 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 be riveted to the roofing sheets at least 250mm. The ridge rolls, hip rolls and valleys shall be riveted to the roofing sheets.
- 2. The roof shall be covered with 6mm thick Rib-type polycarbonate sheets as shown on the plans. The roofing shall be secured to the purtins with min. 2 ½ 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.
- 3 Att roofing sheets adjacent to concrete hollow block and other mesonry walls such as property line firewalls, shall be provided with Gauge 26 pre-peinted plain G.t. 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. Meterials:

- Steet and Iron. If not specified otherwise, use standard mill-finished structural steet shapes or ber iron in compliance with AISC Specifications for Design Fabrication and Erection of Structural Steet for buildings.
- Boits, Nuts, Studs and Rivers. ASTM A 307 and A 325.
- c. \$crews. Fed. \$pec FF-S-85, Fed. Spec FF-S-92, and Fed. Spec FF-S-111
- Metal Purlins. High grade galvanized steel with minimum tensile strength of 275 MPa, 1.4mm in thickness or approved equal.

C. MASONRY WORKS

- Masonry Units (Concrete Hollow Blocks):
 - 100mm thick for all interior walts and 150mm thick for all exterior walts unless
 otherwise indicated.
 - Use 400 psi for non-load bearing blocks and 700 psi for load bearing blocks where required.
 - c. Where full height walls are constructed with concrete hollow blocks, these shall extend up to the bottom of beam or stab unless otherwise indicated on plans. Provide stiffener columns and fintel beams as specified in the structural drawings or as specified or as deemed required to assure a stabilized wall due to height and other considerations.

2 Sand

\$-1, washed, clean and greenish in color.

Mortar:

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

4 Reinforcement

The concrete hollow blocks shall be reinforced with 10mm diameter deformed bar, spaced not more than 0.8m on centers, both ways.

5. Plaster bond:

The mixture of cement plaster for concrete hollow block wall finishes indicated in the drawings shall be one part Portland cement and three parts send

Floor Topping Preparation for Tilework. One part Portland cement and two parts gand and water but not more than three parts sand and water.

D. METAL FABRICATION

1. Materiale:

- 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
- Bolts, Nuts, Stude and Rivets. ASTM A 307 and A 325.
- g. Screws. Fed. Spec FF-S-85, Fed. Spec FF-S-92, and Fed. Spec FF-S-111
- Metal Purtins. High grade galvanized steel with minimum tensile strength of 275 MPs, 1,4mm in thickness or approved equal.

Fabrication:

By mechanics skilled in the trade and in accordance with the manufacturers 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.

Metal Surfaces.

Surfaces shall be closh and free from all scale, flake, rust and rust pitting; well-formed and finished to shape and size, with sharp lines langle 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 botts where they can be avoided, when used, heads shall be countersunk, screwed up tight and threads nicked to prevent loosening.

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.

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 contect (except where tack welding is permitted. Do not tack weld exposed to connections). Grind smooth visible weld in finished installation.

IV. ARCHITECTURAL WORKS

A. FLOOR FINISHES

- 300mm x 300mm Non-Skid Homogeneous Tiles including tile adhesive
- 50mm concrete Topping with Plain Cement Firesh

B. WALL FINISHES

- 300mm x 300mm Homogeneous Tiles including the adhesive
- 50mm concrete Topping with Plain Cement Finish.

C. PAINTING WORKS

- Paint Materials. All types of paint material and other related products shall be subject to test as to material composition by the Bureau of Research and Standard, DPWH or the National Institute of Science and Technology.
- Tinting Colors. Tinting colors shall be first grade quality pigment ground in alkyd resin that disperses and mixes easity with paint to produce the color desired. Use the same brand of paint and tinting color to effect good paint body.
- Skim coet Skim coet shall be fine powder type material like kalsomine that can be mixed into putty consistency, with oil-based primers and paints to fill minor surface dents and experiections.

4. Paint Schedule.

- Exterior Masonry Wall (plain cement pleatered finish to be painted).
 - i 1 coat skim coating, 1 coat primer, 2 coats electomeric paint finish.
- Interior Masonry Wall (plain cament plastered finish to be painted).

Febrication:

By mechanics skilled in the trade and in accordence with the manufacturer's directions. Metalwork shall be febricated 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 ruts.

Metal Surfaces

Surfaces shall be clean and free from all scale, flake, rust and rust pitting; wellformed and finished to shape and size, with sharp lines, angle and smooth surface. Shearing and punching shall teave 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 evoided; when used, heads shall be countersurst, screwed uptight and threads nicked to prevent loosening.

4. Construction:

Thickness of metals and detaits 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.

Weiding:

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.

IV. ARCHITECTURAL WORKS

A. FLOOR FINISHES

- 300mm x 300mm Non-Skid Homogeneous Tiles including tile adhesive.
- 2 50mm concrete Topping with Plain Cement Finish

B. WALL FINISHES

- 1 300mm x 300mm Homogeneous Tiles including tile achesive.
- 2. 50mm concrete Topping with Plain Cement Finish

C. PAINTING WORKS

- 1 Paint Materials. All types of paint material and other related products shall be subject to test as to material composition by the Bureau of Research and Standard, DPWH or the National Institute of Science and Technology.
- Tinting Colors. Tinting colors shall be first grade quality pigment ground in alkyd resin that disperses and mixes easily with paint to produce the color desired. Use the same brand of paint and tinting color to effect good paint body.
- Skim coat. Skim coat shall be fine powder type material like kalsomine that can be mixed into putty consistency, with oil-based primers and paints to fill minor surface dents and imperfections.

4. Paint Schedule.

- Exterior Masonry Wall (plain cament plastered finish to be painted)
 - 1 coat skim coating, 1 coat primer, 2 coats elastomeric paint finish.
- Interior Masonry Wall (plain cement plastered finish to be painted)

- i. If cost skim coating, it cost primer, 2 costs latex paint finish
- d. Interior Dry Wall
 - i. 1 cost primer, 2 costs latex paint finish.
- Ceiling Boards
 - 1 cost primer, 2 costs letex paint finish.
- Slab Soffit
 - i. 1 cost primer, 2 costs latex paint finish.
- g Metal / Steel Surfaces
 - i. If coat primer, 2 coats epoxy enamel finish.
- 5. Surface Preparation. All surfaces shall be in proper condition to receive the finish. Woodworks shall be hand-sanded emooth and dusted cleen. All knot-holes pitch pockets or sappy portions shall be sealed with natural wood filler. Nail holes, cracks or defects shall be carefully puttied after the first coat, matching the color of paint.

Interior woodworks shall be samplepered between coats. Cracks, holes of imperfections in plaster shall be filled with patching compound and smoothed off to match adjoining surfaces.

Concrete and masonry surfaces shall be coated with concrete neutralizer and allowed to dry before any painting primer coat is applied. When surface is dried apply first coating. Hairline cracks and unevenness shall be patched and sealed with approved putty or patching compound. After all defects are corrected apply the finish coats as specified on the Plans (color scheme approved).

Metal shall be clean, dry and free from mill scale and rust. Remove all greese and oil from surfaces. Wash, unprimed galvenized metal with etching solution and allow it to dry. Where required to prime cost surface with Red Lead Primer same shall be approved by the Engineer.

In addition, the Contractor shall undertake the following:

- Voids, cracks, nick etc. will be repaired with proper patching material and finished flushed with surrounding surfaces.
- b. Marred or damaged shop coals on metal shall be spot primed with appropriate metal primer
- Panting and varnishing works shall not be commenced when it is too but or cold.
- Allow appropriate ventilation during application and drying period
- All hardware will be fitted and removed or protected prior to painting and vamishing works.
- Application. Paints when applied by trush shall become non-fluid. thick enough to lay down as adequate film of wet paint. Brush marks shall have flawed out after application of paint.

Paints made for application by roller must be similar to brushing paint. It must be nonsticky when thinned to appraying viscosity so that it will break up easily into droplets.

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

ii. Application shall be as per paint Manufacturer's specification and recommendation.

- iii Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass, finishes and other works.
- iv All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications
- All surfaces including masonry wall shall be thoroughly cleaned, puttied, sandpapered, rubbed and polished; masonry wall shall be treated with Neutralizer.
- vi All exposed finish hardware, fighting 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.
- Vii. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper

E. DOORS & WINDOWS

Follow as per approved plan and specifications.

F. FABRICATED MATERIALS

Follow as per approved plan and specifications.

G. LETTERINGS

Follow as per approved plan and specifications

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:
 - Potable water supply system complete in all respects including but not limited to submittals, shop drawings, piping, water meters, velves, bibbs, insulation, all accessories required for complete and operational of the system.
 - 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.
 - Soil weste and vent system complete in all respect including but not limited to connection to existing sewer, submittals, shop drawings, pipes, fittings, varves, creanout, drains, etc. Complete and operational.
 - 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 stoct 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 shell 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 shell furnish and install any such additional materials and equipment's required by the system at no additional cost.
- 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 weakaning 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 manufecture, or in transit, or on site whilst in storage or during erection shall be rejected and replaced without extra cost.
- M. All senitary 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.
- Cleaning and flushing shell 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-fested at the appropriate test pressure.
- The Sanitary Contractor must carry out any additional tests required by the end-user and/or
 approving egency.
- U. Orainage 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 honzontally. Each section shall comprise pipework and fitting for three floors/storeys required for testing.

- W. Orainage pressure gipe shall be hydraulic tested at minimum pressure 50 psi
- X. Hangers and supports for plumbing piping and equipment shall withstand the effects of gravity toads and stresses within limits and under conditions indicated according to ASCE/SEL7.
- 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.
- 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 terger and at changes in direction of picing. Install concrete inserts before concrete is placed; fasten inserts to forms and install reinforcing bars through openings at top of inserts.
- 8B. 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 stopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping.

VI. ELECTRICAL WORKS

A CONDUITS, BOXES AND FITTINGS

- This item shall consist of the furnishing end installation of the complete conduit work, consisting of electrical conduits, conduit boxes such as junction boxes, pull boxes, utility boxes, octagonal and square boxes; conduit fittings, such as couplings, locknots and bushings and other electrical materials needed to complete the conduit roughingin work of this project.
- All materials shall be brand new and shall be of the approved type meeting all the
 requirements of the Philippine Electrical Code and bearing the Philippine Standard
 Agency (PSA) mark.
- 3 All works throughout shall be executed in the best practice in a workmanlike manner by qualified and experienced electricians under the immediate supervision of a duly licensed Electrical Engineer.
- 4 The work to be done under this division of specifications consists of the fabrication, furnishing, delivery and installation, complete in all details of the electrical work, at the subject premises and all work materials incidental to the proper completion of the installation, except those portions of the work which are expressly stated to be done by other fields. All works shall be done in accordance with the rules and regulations and with the specifications.
- All lighting fixtures and lamps are as specified and listed on lighting fixture schedule.
- 8. All grounding system installation shall be executed an accordance with the approved plans. Grounding system shall include building perimeter ground wares, ground rods, clamps, connectors, ground walls and ground wire taps as shown in the approved design.
- 7 All auxiliary systems such as telephone and intercom system, time clock system, fire alarm system and public address/nurse's call/paging system installations shall be done in accordance with the approved design.
- 8 Upon completion of the electrical construction work, the contractor shall provide all test equipment and personnel and to submit written copies of all test results.
- The contractor shall guarantee the electrical installation are done and in accordance with the approved plans and specifications. The contractor shall guarantee that the electrical systems are free from all grounds and from all defective workmanship and

meterials and will remain so for a period of one year from date and acceptance of works. Any defect shall be remedied by the Contractor at his own expense.

B. WIRES AND WIRING DEVICES.

- 1 This item shall consist of the furnishing and installation of all wires and wiring devices consisting of electric wires and cables, wall switches, convenience receptacles, heavy duty receptacles and other devices shown on the approved Plans but not mentioned in these specifications.
- Whres and cables shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark. Unless specified or indicated otherwise, all power and lighting conductors shall be insulated for 600 votts. All wires shall be copper, soft drawn and annealed, smooth and of cylindrical form and shall be centrally located inside the insulation.
- 3 Conductors or wires shall not be drawn in conduits until after the cement praster is dry and the conduits are thoroughly cleaned and free from dirt and moisture. In drawing wires into conduits, sufficient stack shall be allowed to permit easy connections for fixtures, switches, receptacles and other wiring devices without the use of additional splices.
- 4. All conductors of convenience outlets and lighting branch circuit homeruns shall be wired with a minimum of 3,5 mm in size. Circuit homeruns to panel boards shall not be smaller than 3.5 mm but all homeruns to panel board more than 30 meters shall not be smaller than 5.5 mm. No conductor shall be less than 2 mm in size.
- 5. All wires of 14mm and larger in size shall be connected to panels and appearatus by means of approved type luge or connectors of the solderless type, sufficiently large enough to enclose all strands of the conductors and securely fastened. They shall not loosen under vibration or normal strain.
- 6. All joints, taps and splices on wires larger than 14 mm shall be made of suitable solderless connectors of the approved type and size. They shall be taped with rubber and PVC tapes providing insulation not less than that of the conductors.
- 7. No aplices or joints shall be permitted in either feeder or branch conductors except within outlet boxes or accessible junction boxes or pull boxes. All joints in branch circuit wiring shall be made machanically and electrically secured by approved splicing devices and taped with rubber and PVC tapes in a manner which will make their insulation as that of the conductor.
- 8. All wall switches and receptacles shall be littled with standard Bakelite face plate covers. Device plates for flush mounting shall be installed with all four edges in continuous contact with finished wall surfaces without the use of coded wire or similar devices. Plaster filling shall not be permitted. Plates installed in well locations shall be gaskeled.
- When more than one switch or device is indicated in a single location, gang plate shall be used.

RALPHOREGOR M. MANALO
Planning Division

Planning and Programming Division



Replublika ng Pitipinas Lungsod ng Quezon

CITY ENGINEERING DEPARTMENT

5^m, 6^m, 7^m Floors, QC Civic Center Building 'B' Telephone Nos. 8988-4242 Local 8538



PROJECT TITLE:

PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND

REHABILITATION OF HORSESHOE DAY CARE CENTER >

LOCATION . BARANGAY HORSESHOE, DISTRICT 4, QUEZON CITY

TECHNICAL SPECIFICATIONS

I. GENERAL REQUIREMENTS

- A. Comply with the current and existing taws, ordinances and applicable codes, rules and regulations, and standards. Any works performed contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost assing therefrom.
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- 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 inadventence.
- 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 ptans and details. All materials not conforming to the requirements of these specifications shall be considered as defective.
- G. Alt equipment and installations shall meet or exceed minimum requirements of the standards and codes.
- H. Mobilization and Demobilization (if applicable)
 - 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.
 - Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not enymore 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.
- 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
 - All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.
 - Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations

- Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication
- Temporary enclosure shall be provided around the construction site with adequate guard lights, railings and proper signage.
- Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period.
- Upon completion of the work, the temporary facilities shall be demokshed, hauled-out and disposed property.
- K. Adequate construction safety and health protection shall be provided at all times during the execution of work to both workers and property.
 - A fully-trained Medical Aide shall be employed permanently on the site who shall be engaged solely to medical duties.
 - The medical room shall be provided with waterproofing; 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
 - 3 The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations and suitable notices in the site.
 - 4 Additional safety precautions shall be provided in the event of a pandemic Protocols set forth by the government shall be strictly followed.
 - Personal Protective Equipment (PPE) shall consist of safety halmet/hard hat, safety reflectorized vest, safety insulated gloves, dust mask, safety shoes, safety goggles, and safety harness. Every skilled and unskilled worker, and the project foreman shall be provided PPE by the Contractor Consideration of quantity shall be made for the Project Engineer Materials Engineer, Safety Officer/Practitioner (as required) and project driver.
 - 6 Construction safety materials shall consist of safety net, fire extinguisher and safety signage and posters.
- 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 the 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.

N. 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 work.
- B This Item shall consist of the removal wholly or in part, and satisfactory disposal of all buildings, fences, structures, old pavements, abandoned pipe lines, and any other obstructions which are not designated or permitted to remain, except for the obstructions to be removed and disposed of under other items in the Contract.
 - Removal and/or 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.

The Contractor shall notify the Engineer sufficiently in advance of the beginning of any excavation so that cross-sectional elevations and measurements may be taken on the undisturbed ground. The natural ground adjacent to the structure shall not be disturbed without permission of the Engineer.

Frenches or foundation pits for structures or structure footings shall be excavated to the lines and grades or elevations shown on the Plans or as staked by the Engineer. They shall be of sufficient size to permit the placing of structures or structure footings of the full width and length shown. The elevations of the bottoms of footings, as shown on the Plans, shall be considered as approximate only and the Engineer may order, in writing, such changes in denensions or elevations of footings as may be deemed necessary, to secure a satisfactory foundation.

Soulders, logs, and other objectionable materials encountered in excavation shall be removed

After each excavation is completed, the Contractor shall notify the Engineer to that effect and no footing, bedding material or pipe culvert shall be placed until the Engineer has approved the depth of excavation and the character of the foundation material.

O All excavated materials, so far as suitable, shall be utilized as backfill. The surplus materials shall be disposed of in such manner as not to obstruct the stream or otherwise impair the efficiency or appearance of the structure. No excavated materials shall be deposited at any time ab as to endanger the partly finished structure.

All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted by wetting, temping and rolling.

- E. Soit Poisoning. There are two methods usually adopted in soil poisoning which are as follows:
 - 1. Cordoning. This method is usually adopted when there is no visible evidence of termite infestation. Trenches in concentric circles, squares or rectangles are dug 150mm to 220mm wide and at least one meter apart and applied with Liquid Termicide Concentrate working solution at the rate of 8 liters per linear meter.
 - Drenching. When soil show termite infestation, this method shall be applied. The building area shall be thoroughly drenched with Liquid Termicide Concentrate working solution at the rate of 24 liters per aquere meter.

III. ARCHITECTURAL WORKS

A. FLOOR FINISHES

- 300mm x 300mm Non-Skid Homogeneous Tiles including tile achesive.
- 400mm x 400mm Non-Skid Homogeneous Tiles including tile adhesive.
- 3. 50mm concrete Topping with Plain Cement Finish.

B. WALL FINISHES

- 300mm x 300mm Homogeneous Tiles including tile adhesive.
- 2. 50mm concrete Topping with Plain Cement Finish

C. PAINTING WORKS

- Paint Materials. All types of paint material and other related products shall be subject to test as to material composition by the Bursau of Research and Standard, DPWH or the National Institute of Science and Technology.
- 2 Tinting Colors. Tinting colors shall be first grade quality pigment ground in alkyd resin that disperses and mixes easily with paint to produce the color desired. Use the same brand of paint and finting color to effect good paint body.
- Skim coat. Skim coat shall be fine powder type material like katsomine that can be mixed into putty consistency, with olf-based primers and paints to fill minor surface dents and imperfections.
- Paint \$chedule.

- Exterior Mesorry Wall (plain cement plastered finish to be painted)
 - 1 coat skim coating, 1 coat primer 2 coats elastomeric paint finish.
- Interior Meaonry Wall (plain cement plastered finish to be painted).
 - 1 coat skim coating, 1 coat primer, 2 coats latex paint finish.
- Intenor Dry Wall
 - 1 cost primer, 2 costs latex paint finish.
- Ceiling Boards
 - 1 cost primer, 2 costs latex paint finish.
- f. State Soffit
 - 1 cost primer, 2 costs latex paint finish.
- g. Metal / Steel Surfaces
 - 1 coat primer, 2 coats epoxy enamel finish.
- 5 Surface Preparation All surfaces shall be in proper condition to receive the finish. Woodworks shall be hand-sanded smooth and dusted clean. All knot-holes pitch pockets or sappy portions shall be seeled with netural wood filter. Nail holes, cracks or defects shall be carefully putted after the first coat, matching the color of paint.

Interior woodworks shall be sandpapered between coats. Cracks, hotes of imperfections in plaster shall be filled with patching compound and smoothed off to match adjoining surfaces.

Concrete and masonry surfaces shall be coated with concrete neutralizer and allowed to dry before any painting primer coat is applied. When surface is dried apply first coating. Heidline cracks and unevenness shall be patched and seeled with approved putty or patching compound. After all defects are corrected apply the firish coats as apported on the Plans (color scheme approved).

Metal shall be clean, dry and free from mill scale and rust. Remove all grease and oil from surfaces. Wash, unprimed galvenized metal with etching solution and allow it to dry. Where required to prime coat surface with Red Lead Primer same shall be approved by the Engineer

In addition, the Contractor shall undertake the following:

- voids, cracks, nick etc. will be repaired with proper patching material and finished flushed with surrounding surfaces.
- b Marred or damaged shop coats on metal shall be spot primed with appropriate metal primer.
- Panting and varnishing works shall not be commenced when it is too hot or cold.
- Allow appropriate ventilation during application and drying period.
- All handware will be fitted and removed or protected prior to painting end vernishing works.
- Application Paints when applied by brush shall become non-fluid, thick enough to lay down as adequate film of wet paint. Brush marks shall have flawed out after application of paint.

Paints made for application by roller must be similar to brushing paint. It must be nonsticky when thinned to spraying viscosity so that it will break up easily into droplets. Paint is atomized by high pressure pumping rather than broken up by the large volume of air mixed with it. This procedure changes the required properties of the paint.

- Application shall be as per paint Manufacturer's specification and recommendation.
- iii. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass finishes and other works.
- At applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications.
- All surfaces including masonry wall shall be thoroughly deaned, puttied, sandpapered, rubbed and polished, masonry well shall be treated with Neutralizer.
- W. 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.
- All other surfaces endangered by stains and paint marks should be taped and covered with craft paper.

D. DOORS & WINDOWS

Follow as per approved plan and specifications.

E. FABRICATED MATERIALS

Follow as per approved plan and specifications

F. LETTERINGS

Follow as per approved plan and specifications

IV. SANITARY / PLUMBING WORKS

- Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having junisdiction, the rules, regulations and requirements of the utility companies (as applicable)
- Supply, installation and testing of the following:
 - Potable water supply system complete in all respects including but not limited to submittats, shop drawings, piping, water meters, valves, bibbs, insulation, all accessories required for complete and operational of the system.
 - 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.
 - 3 Soit 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
 - 4 Storm dramage system complete in all respect including but not fimited to connection to existing storm drainage, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
- C. Workmanship and inestallation methods shall conform to the best modern practice. Employ skilled tradesmen to perform work under the direct supervision of fully qualified personnel.

- D Atliequipment 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 attocated 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 deteiled 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 onglinally 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.
- 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 ejection 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, redded when necessary to ensure dearance of debrie.
- 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 dramage system to show that it is functioning satisfactority 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 Hydrautic 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.
- 8. 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.
- 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 hydrautic 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/SEL7.
- 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, faster inserts to forms and install reinforcing bars through openings at top of inserts.
- 88. Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment.
- CG. Install hangers and supports to provide indicated pipe stopes and to not exceed maximum pipe deflections allowed by ASME 831.9 for building services piping.

V. ELECTRICAL WORKS

A. CONDUITS, BOXES AND FITTINGS

- 1. This item shall consist of the furnishing and installation of the complete conduit work, consisting of electrical conduits; conduit boxes such as junction boxes, pull boxes utility boxes, octagonal and square boxes; conduit fittings, such as couplings, locknuts and businings and other electrical materials needed to complete the conduit roughing-in work of this project.
- All materials shall be brand new and shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark.
- All works throughout shall be executed in the best practice in a workmankle manner by qualified and experienced electricians under the immediate supervision of a duly licensed Electrical Engineer.
- 4. The work to be done under this division of specifications consists of the febrication, furnishing, delivery and installation, complete in all details of the electrical work, at the subject premises and all work materials incidental to the proper completion of the installation, except those portions of the work which are expressly stated to be done by other fields. All works shall be done in accordance with the rules and regulations and with the specifications.
- All lighting fixtures and lamps are as specified and listed on lighting fixture schedule.
- All grounding system installation shall be executed in accordance with the approved plans. Grounding system shall include building perimeter ground wires ground rods, clamps, connectors, ground wells and ground wire taps as shown in the approved design.
- All auxiliary systems such as telephone and intercom system, time clock system, fire alarm system and public address/hurse's call/paging system installations shall be done in accordance with the approved design.

- Upon completion of the electrical construction work, the contractor shall provide all
 test equipment and personnel and to submit written copies of all test results.
- 9. The contractor shall guarantee the electrical installation are done and in accordance with the approved plans and specifications. The contractor shall guarantee that the electrical systems are free from all grounds and from all defective workmanship and materials and will remain so for a period of one year from date and acceptance of works. Any defect shall be remedied by the Contractor at his own expense.

B. WIRES AND WIRING DEVICES

- 1 This Item shall consist of the furnishing and installation of all wires and wiring devices consisting of electric wires and cables, wall switches, convenience receptacles, heavy duty receptacles and other devices shown on the approved Plans but not mentioned in these specifications.
- 2. Wires and cables shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark. Unless specified or indicated otherwise, all power and lighting conductors shall be insulated for 600 volts. All wires shall be copper, soft drawn and enhealed, smooth and of cylindrical form and shall be centrally located inside the insulation.
- 3 Conductors or wires shall not be drawn in conduits until after the cament plaster is dry and the conduits are thoroughly cleaned and free from dirt and moisture. In drawing wires into conduits, sufficient stack shall be allowed to permit easy connections for fixtures, switches, receptacles and other winnig devices without the use of additional splices.
- 4. All conductors of convenience outlets and lighting branch circuit homerons shall be wired with a minimum of 3.5 mm in size. Circuit homerons to panel boards shall not be smaller than 3.5 mm but all homerons to panel board more than 30 meters shall not be smaller than 5.5 mm. No conductor shall be less than 2 mm in size.
- 5 All wires of 14mm and larger in size shall be connected to panels and apparatus by means of approved type lugs or connectors of the solderless type, sufficiently large enough to enclose all strands of the conductors and securely fastened. They shall not loosen under vibration or normal strain.
- Att joints, taps and splices on wires larger than 14 mm shall be made of suitable solderless connectors of the approved type and size. They shall be taped with rubber and PVC tapes providing insulation not less than that of the conductors.
- 7. No aplices or joints shall be permitted in either feeder or branch conductors except within outlet boxes or eccessible junction boxes or pull boxes. All joints in branch circuit wiring shall be made mechanically and electrically secured by approved splicing devices and taped with hubber and PVC tapes in a manner which will make their insulation as that of the conductor.
- 8. All wall switches and receptedes shall be fitted with standard Bakelite face plate covers. Device plates for flush mounting shall be installed with all four edges in continuous contact with finished wall surfaces without the use of coiled wire or similar devices. Plaster filling shall not be permitted. Plates installed in wet locations shall be gasketed.
- When more than one switch or device is indicated in a single location, gang plate shall be used

RALPHOREGOR M. MANALO Planning and Programming Division JOCELYN ADNAONG
Planning and Programming Division



Republic of the Philippines Ouezoa City

CITY ENGINEERING DEPARTMENT



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TECHNICAL SPECIFICATIONS QUEZON CITY INFRASTRUCTURE PROJECT

PROJECT TITLE: PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND

REHABILITATION OF PINAGKAISAHAN DAY CARE CENTER /

LOCATION: BARANGAY PINAGKAISAHAN, DISTRICT 4, 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 ensing therefrom
- 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, holify 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.
- 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 plane 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.
- Mobilization and Demobilization (if applicable)
 - 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.
 - it 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.

- 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 Fecilities and Utilities
 - All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.
 - Temporary facilities shall be provided and maintained including sanitary facilities and first end stations.
 - iii Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication
 - 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.
 - V_i. Upon completion of the work, the temporary facilities shall be demolished, heuled-out and disposed properly.
- 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.
 - 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.
 - Additional safety preceutions shall be provided in the observance of pandemic Protocols set-forth by the government shall be strictly followed.
- 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 linel 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.

IL SITE WORKS

- A. All grades, lines, levels and dimensions shall be varified 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.
- O All backfills shall be placed in layers not exceeding to \$50mm 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, atored, and transled 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 apprepates and other materials shall have been done.

c. Materials

- Cement for concrete shall conform to the requirements of specifications for Pontand Cement (ASTM C - 150).
- ii. Water used in mixing concrete shall be clean and free from other injunous amounts of oils, acids, alkaline, organic materials or other substances that may be deleterious to concrete or steel.
- jii Fine aggregates shall be beach or river send conforming to ASTM C33, "Specification for Concrete Aggregates". Sand particle shall be course, sharp, clean free from salt, dust, loam, durt 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 eggregates 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.

Proportioning and Mixing

 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
- Concrete mixture to be used for concrete shall conform with the structural requirements.
- 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 whetever necessary to confine the concrete and shape it to the required lines, or to insure the concrete of contemination with materials caying from adjacent, excavated surfaces. Forms shall have sufficient strength to withstend 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 morter from the concrete. Forms shall be '%' waterproof plywood and form lumber.
- Cleaning of Forms before placing the concrete, the contact surfaces of the formed half be cleaned of encrustations of morter, 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 sixing 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 tires, 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.

- 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 materiel 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 alsowhere as directed, the discharge shall be so controlled that the concrete may be effectively compacted into horizontal layers not exceeding 30 centimaters in depth within the maximum lateral movement specified.
- III. Time interval between mixing and placing. Concrete shall be placed before mitial 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 cursed that have commenced initial set, and reinforcement embedded in concepts beginning to set of already set shall not be disturbed by vibrators. Consolidation around major embedded parts shall 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

- General All concrete shall be moist cured for a period not less than seven (7)
 consocutive 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.

Finishing

4. 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 dement mortar, or can be grounded to a smooth surface to remove all joint marks of the form works.

ii. Concrete Slabs on Fill. The concrete stabs 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 stab except when indicated

B. MASONRY

- a. Masoncy 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
 - Where full height walls are constructed with concrete hollow blocks, these shall extend up to the bottom of beam or alab unless otherwise indicated on plans Provide attifiener 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 Morter:

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

Plaster bond.

Apply plaster bond to all wall area.

IV. ARCHITECTURAL WORKS

A. TILE WORKS

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

B. FABRICATED DOORS

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

C. PAINTING WORKS

- All primers, thinners and putty, also waterproofing for internal and external application shall be the same brand as the specified material.
- 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.
- All surfaces including masonry wall shall be thoroughly cleaned, puttied, sandpapered, rubbed and polished; mesonry wall shall be treated with Neutralizer.

- f. All exposed finish hardware, lighting fixtures and accessories, glass and the tike shall be adequately protected so that these are not steined 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 creft paper.

V. SANITARY / PLUMBING WORKS

- A Compty 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 anduding but not limited to submittals, shop drawings, piping, water maters, 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 direwings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
 - 8.4 Storm drainage system complete in all respect including but not limited to connection to existing storm drainage, submittals, shop drawings, pipes, filtings, 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.
- 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.
- 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.
- 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 compty 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 stems suffering from demage 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.
- O. 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 Hydrautic 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 callings and other finishes are installed.
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- 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 psl.
- X. Hangers and supports for plumbing piping and equipment shall withstend the effects of gravity loads and stresses within limits and under conditions indicated according to ASCE/SEL7.
- 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.
- 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 targer and at changes in direction of piping. Install concrete insents before concrete is placed; faster insents to forms and install reinforcing bars through openings at top of insents.
- B6 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 631.9 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 compenies (as applicable).
- 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
 - Indeor Dry and Clean Locations: NEMA 250, Type 1.
 - Outdoor Locations: NEMA 250, Type 3R.
 - iji Kitchen and Wash-Down Areas NEMA 250, Type 4X, stainless steel.
 - Other Wet or Damp Indoor Locations NEMA 250, Type 4
 - v. Indeor 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 frim hinged to box and with standard door within hinged from 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 Berrier. Same gage and firmsh as panelboard enclosure; integral with enclosure body. Arrange to sollate individual panel sections.
 - F.2.6 Finishes:
 - Panels and Trim. Steel and galvanized steel, factory finished immediately after cleaning and prefreating with manufacturer's standard two-coat, baked-on finish consisting of prime coal and thermosetting topotat.
 - it. Back Boxes: Galvenized steet Same finish as panels and from

- 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 Bolton.
- 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 toeds.

VII. MECHANICAL WORKS

A. Air Conditioning and Refrigeration System

- This item shall consist of furnishing and installation of air conditioning, reingeration and ventilation systems, inclusive of necessary electrical connections, ductworks, grilles, pipes, and condensate drains and all other necessary accessories ready for service in accordance with the Plans and Specifications.
- The types sizes, capacities, quantities and power characteristics of the compressor, evaporator, condenser, chilled water pump and condenser water pump shall be specified or as shown on the Ptans.
- 3. The air conditioning system shall be entirely automatic in operation and shall not require the presence of an attendant except for periodic inspection for lubrication. All equipment and materials shall be inspected upon delivery and shall be tested after installation. Piping shall not be buried, concealed or insulated until it has been inspected tested and approved. Walls, floors and other parts of the structure and equipment damaged by the Contractor in the prosecution of the work shall be replaced as shown on the Plans.

B. WATER-PUMPING SYSTEM

- This Item shall consist of furnishing and installation of water pumping system, inclusive of all piping and pipe fitting connections, valves, controls, electrical wirings, tanks and all accessories ready for service in accordance with the approved Plans and Specifications.
- Exposed piping shall be provided with concrete saddle or steel clamps or hangers to secure them firmly to the structures.

Pipe threads shall be lubricated by white lead, red lead. Teffon or other approved tubrication before tightening.

Piping supports shall be placed at 3m intervals or less.

C. AUTOMATIC WATER SPRINKLER SYSTEM

- This item shall consist of furnishing and installation of automatic water sprinkler system, inclusive of all piping and pipe fitting connections, valves, controls, electrical wiring connection, and all accessories ready for service in accordance with the approved Plans and Specifications
- 2.System operation and maintenance chart shall be submitted to the End User upon completion of the Contract. This shall include the locations of control valves and care of the new equipment.
- Marked instructions and identification sign boards: These sign boards shall be made of #14 gauge B I, sheet with baked ename! finish paint and letter instruction.

are shown on the Plans. Additional sign boards as may be required and not specified herewith shall be furnished at no extra cost. Sign boards shall be mounted on the equipment or wall nearest the equipment for obsy identification and reading. Paints shall be basically gloss fire red and white.

- D. ELECTRIC ELEVATOR.
- E. ELECTRIC DUMBWAITER
- F. OXYGEN, NITROUS OXIDE, VACUUM AND FUEL GAS SYSTEM.
- G. HEATING SYSTEM
- H BOILER
- Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the atility companies (as applicable).
- J Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringert apply.
- K All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes
- L. Execute work in strict accordance with the best practices of the trades in a thorough, substantial workmanlike manner by competent workman.
- M. When the tests and inspections have been completed, a label shall be attached to all devices tested. The tabel shall provide the name of the testing company, the date the tests were completed, and the initials of the person who performed the tests.

MIKKI J. DE GRACIA

Planning and Programming Division

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Replublika og Pilipinas Lungsod og Quezon

CITY ENGINEERING DEPARTMENT

5TH, 6TH, 7TH Floors, QC Clvic Center Building 'B' Telephone Nos. 8988-4242 Local 8538



PROJECT TITLE :

PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND

REHABILITATION OF SAN MARTIN DE PORRES ANNEX C'DAY CARE

CENTER 1

LOCATION:

BARANGAY SAN MARTIN DE PORRES, DISTRICT 4, QUEZON CITY

TECHNICAL SPECIFICATIONS

I. GENERAL REQUIREMENTS

- A. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations, and standards. Any works performed 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)
 - 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.
 - 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.
- Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workman Provide a competent, experienced, full-time supervisor who is authorized to make decisions on behalf of the Contractor.
- J. Temporary Facilities and Utilities
 - All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.

- Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations.
- Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication.
- Temporary enclosure shall be provided around the construction site with adequate guard lights, railings and proper signage.
- Temporary roadways shall be constructed and maintained to sustain loads to be carned on them during the entire construction period.
- Upon completion of the work, the temporary facilities shall be demolished, hauled-out and disposed property.
- K. Adequate construction safety and health protection shall be provided at all times during the execution of work to both workers and property.
 - A fully-trained Medical Aide shall be employed permanently on the site who shall be engaged solely to medical duties.
 - The medical room shall be provided with weterproofing; 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.
 - 3 The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations and suitable notices in the site.
 - Additional safety precautions shall be provided in the event of a pandemic. Protocols
 set forth by the government shall be strictly followed.
 - 5 Personal Protective Equipment (PPE) shall consist of safety helmet/hard hat, safety reflectorized vest, safety insulated gloves, dust mask, safety shoes, safety goggles, and safety harness. Every skilled and unskilled worker, and the project foreman shall be provided PPE by the Contractor, Consideration of quantity shall be made for the Project Engineer, Materials Engineer, Safety Officer/Practitioner (as required) and project driver.
 - 6 Construction safety materials shall consist of safety net, fire extinguisher and safety signage and posters.
- L. Necessary protections to the adjacent properly shall be provided to avoid unlowerd incidents / accidents.
- M. Final cleaning of the work shall be employed prior to the final inspection for the 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.

IL 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 work.
- B. This Item shall consist of the removal wholly or in part, and satisfactory disposal of all buildings, fences, structures, old pavements, abandoned pipe lines, and any other obstructions which are not designated or permitted to remain, except for the obstructions to be removed and disposed of under other Items in the Contract.

Removal and/or 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.

The Contractor shall notify the Engineer sufficiently in advance of the beginning of any excavation so that cross-sectional alevations and measurements may be taken on the

undisturbed ground. The natural ground adjacent to the structure shall not be disturbed without permission of the Engineer.

Trenches or foundation pits for structures or structure footings shall be excavated to the lines and grades or elevations shown on the Plans or as staked by the Engineer. They shall be of sufficient size to permit the placing of structures or structure footings of the full width and length shown. The elevations of the bottoms of footings, as shown on the Plans, shall be considered as approximate only and the Engineer may order, in writing, such changes in dimensions or elevations of footings as may be deemed necessary, to secure a satisfactory foundation.

Soulders, logs, and other objectionable materials encountered in excavation shall be removed.

After each excavation is completed, the Contractor shall notify the Engineer to that effect and no looting, bedding material or pipe culvert shall be placed until the Engineer has approved the depth of excavation and the character of the foundation material.

D. All excevated materials, so far as suitable, shall be utilized as backfill. The surplus materials shall be disposed of in such manner as not to obstruct the stream or otherwise impair the efficiency or appearance of the structure. No excevated materials shall be deposited at any time so as to endanger the partly finished structure.

All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted by wetting, temping and rolling.

- E. Soil Poisoning. There are two methods usually adopted in soil poisoning which are as follows:
 - Cordoning This method is usually adopted when there is no visible evidence of termite infestation. Tranches in concentric circles, squares or rectangles are dug 150mm to 220mm wide and at least one meter apart and applied with Liquid Termicide Concentrate working solution at the rate of 8 liters per linear meter.
 - 2 Drenching. When soil show termile infestation, this method shall be applied. The building area shall be thoroughly drenched with Liquid Termicide Concentrate working solution at the rate of 24 liters per square mater.

III. CIVIL / STRUCTURAL WORKS

A. MASONRY WORKS

- Masonry Units (Concrete Hollow Blocks):
 - a. 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.
 - c. 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 and lintel beams as specified in the structural drawings or as specified or as deemed required to assure a stabilized wall due to height and other considerations.

2 Sand

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

3 Morter:

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

4. Reinforcement

The concrete hotlow blocks shall be reinforced with 10mm diameter deformed bar, spaced not more than 0.8m on centers, both ways.

Plaster bond:

The mixture of cement plaster for concrete hollow block wall finishes indicated in the drawings shall be one part Portland cament and three parts sand.

Floor Topping Preparation for Tilework. One part Portland cament and two parts and and water but not more than three parts sand and water.

B. METAL FABRICATION

Meterials:

- Steel and Iron. If not specified otherwise, use standard mill-finished structural steel shapes or bar iron in compliance with AtSC Specifications for Design, Fabrication and Erection of Structural Steel for buildings.
- b Boils, Nuts, Studs and Rivets, ASTM A 307 and A 325.
- Screws Fed Spec FF-S-85, Fed Spec FF-S-92, and Fed. Spec. FF-S-111.
- d. Metal Purtins. High grade galvanized steel with minimum tensile strength of 275 MPa, 1,4mm in (hickness or approved equal.

2 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, thish joints, dressed smooth and clean. Complete with bolts and nuts.

Metal Surfaces.

Surfaces shell be clean and free from all scale, flake, rust and rust pitting; wellformed and finished to shape and size, with sharp lines, angle and smooth surface.
Shearing and punching shall leave clean true lines and surfaces. Welld or rivel
permanent connections. Welld and flush rivels 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 necked to prevent loosening.

4 Construction:

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

Weiding:

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 cominuously along the entire area of correct (except where tack welding is permitted. Do not tack weld exposed to connections). Grind smooth visible weld in finished installation.

IV. ARCHITECTURAL WORKS

A. FLOOR FINISHES

- 300mm x 300mm Non-Skid Homogeneous Tiles including tile adhesive.
- 2. 50mm concrete Topping with Plain Cement Finish

B. WALL FINISHES

- 1 300mm x 300mm Homogeneous Tiles Including tile adhesive
- 2 50mm concrete Topping with Plain Cement Finish.

C. PAINTING WORKS

- Paint Meterials. All types of paint material and other related products shall be subject to test as to material composition by the Bureau of Research and Standard, DPWH or the National Institute of Science and Technology.
- Tinting Colors. Tinting colors shall be first grade quality pigment ground in alkyd resinthat disperses and mixes easily with paint to produce the color desired. Use the same brand of paint and tinting color to effect good paint body.
- Skim coat. Skim coat shall be fine powder type material like kalsomine that can be mixed into putty consistency, with oil-based primers and paints to fill minor surface dents and imperfections.
- Paint Schedule.
 - Exterior Masonry Wall (plain cement plastered finish to be painted)
 - 1 coat skim coating, 1 coat primer, 2 coats elastomeric paint finish.
 - Interior Masonry Wall (plain cement plastered finish to be painted).
 - 1 coat skim coating, 1 coat primer, 2 coats latex paint finish
 - d. Interior Dry Wall
 - i 1 cost primer, 2 costs latex paint finish
 - e. Ceiling Boards
 - i 1 cost primer, 2 costs latex paint finish.
 - f. Slab Soffit
 - i 1 cost primer, 2 costs latex paint finish
 - Metal / Steel Surfaces
 - 1 cost primer, 2 costs spoxy enamel finish.
- 5. Surface Preparation. All surfaces shall be in proper condition to receive the finish. Woodworks shall be hand-sanded smooth and dusted clean. All knot-holes pitch pockets or sappy portions shall be sealed with natural wood filler. Neil holes, cracks or detects shall be carefully putted after the first coat, matching the color of paint.

Interior woodworks shall be sandpapered between coats. Cracks, holes of imperfections in plaster shall be filled with patching compound and smoothed off to match adjoining surfeces.

Concrete and masonry surfaces shall be coated with concrete neutralizer and allowed to dry before any painting primer coat is applied. When surface is dred apply first coating. Hairline cracks and unevenness shall be patched and sealed with approved putty or patching compound. After all defects are corrected apply the finish coats as specified on the Plans (color scheme approved).

Metal shall be clean, dry and free from mill scale and rust. Remove all grease and oil from surfaces. Wash, unprimed galvenized metal with etching solution and allow it to dry. Where required to prime coat surface with Red Lead Primer same shall be approved by the Engineer.

In addition, the Contractor shall undertake the following.

- Voids, cracks, nick etc. will be repaired with proper patching material and finished flushed with surrounding surfaces
- b Marred or damaged shop coats on metal shall be spot primed with appropriate metal primer
- Panting and varnishing works shall not be commenced when d is too hot or cold.
- d. Allow appropriate ventilation during application and drying period
- All hardware will be fitted and removed or protected prior to painting and varnishing works
- Application Paints when applied by brush shall become non-fluid, thick enough to lay down as adequate film of wet paint. Brush marks shall have flawed out after application of paint

Paints made for application by rober must be similar to brushing paint. It must be nonsticky when thinned to spraying viscosity so that it will break up easity into droplets.

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

- ii. Application shall be as per paint Manufacturer's specification and recommendation.
- iii Provide all drop cloth and other covering requisite for protection of floors, walls, attaninum glass, finishes and other works
- All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications
- All surfaces including masonry wall shall be thoroughly cleaned, puttled, sandpapered, rubbed and polished; masonry wall shall be treated with Neutralizer.
- vi. 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.
- All other surfaces endangered by stains and paint marks should be taped and covered with creft paper.

C. DOORS & WINDOWS

Follow as per approved plan and specifications.

D. FABRICATED MATERIALS

Follow as per approved plan and specifications

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)
- 8. Supply, installation and testing of the following:
 - 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
 - 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.
 - 3 Soil waste and vent system complete in all respect including but not limited to connection to existing sewer, submittels, shop drawings, pipes, fittings, valves, cleanout drains, etc. Complete and operational
 - Storm drainage system complete in all respect including but not limited to connection
 to existing atoms drainage, submittels, 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.
- 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.
- 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, property 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.
- 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 senitary 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.
- Cleaning and flushing shall be carried out in sections as the installation becomes completed.
- P. The Contractor shall carry out hydrautic 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 tast 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 linishes 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.
- The Sandary 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 mm, 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 litting 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/SEL7.
- Y. Install trangers 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 bands, and smiler units.
- Z. Install tateral 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; faster inserts to forms and install reinforcing bare 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 CONDUITS, BOXES AND FITTINGS

 This item shall consist of the furnishing and installation of the complete conduit work, consisting of electrical conduits; conduit boxes such as juriction boxes, pull boxes, utility boxes, edagonal and square boxes, conduit fittings, such as couplings, locknuts and bushings and other electrical materials needed to complete the conduit roughingin work of this project.

- 2 Alt materials shall be brand new and shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark.
- All works (broughout shall be executed in the best practice in a workmanlike manner by qualified and expenenced electricians under the immediate supervision of a duly ficensed Electrical Engineer.
- 4. The work to be done under this division of specifications consists of the fabrication, furnishing, delivery and installation, complete in all details of the electrical work, at the subject premises and all work materials incidental to the proper completion of the installation, except those portions of the work which are expressly stated to be done by other fields. All works shall be done in accordance with the rules and regulations and with the specifications.
- All lighting fixtures and lamps are as specified and listed on lighting fixture schedule.
- 6. All grounding system installation shall be executed in accordance with the approved plans. Grounding system shall include building perimeter ground wires, ground rods, clamps, connectors, ground wells and ground wire taps as shown in the approved design.
- All auxiliary systems such as telephone and intercom system, time clock system, fire alarm system and public address/nurse's call/paging system installations shall be done in accordance with the approved design.
- Upon completion of the electrical construction work, the contractor is shall provide all test equipment and personnel and to submit written copies of all test results.
- 9. The contractor shall guarantee the electrical installation are done and in accordance with the approved plans and specifications. The contractor shall guarantee that the electrical systems are free from all grounds and from all defective workmanship and materials and will remain so for a period of one year from date and acceptance of works. Any defect shall be remedied by the Contractor at his own expense.

B. WIRES AND WIRING DEVICES.

- This item shall consist of the furnishing and installation of all wires and wiring devices
 consisting of electric wires and cables, wall switches, convenience receptacles, heavy
 duty receptacles and other devices shown on the approved Plans but not mentioned
 in these specifications
- 2. Wires and cables shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark. Unless specified or indicated otherwise, all power and lighting conductors shall be insulated for 600 volts. All wires shall be copper, soft drawn and annealed, smooth and of cylindrical form and shall be centrally located inside the Insulation.
- 3 Conductors or wires shall not be drawn in conduits until after the cement plaster is dry and the conduits are thoroughly deaned and free from dirt and moisture. In drawing wires into conduits, sufficient stack shall be allowed to permit easy connections for fixtures, switches, receptacles and other wiring devices without the use of additional solices.
- 4. All conductors of convenience outlets and lighting branch circuit homeruns shell be wired with a minimum of 3.5 mm in size. Circuit homeruns to panel boards shall not be smaller than 3.5 mm but all homeruns to panel board more than 30 meters shall not be smaller than \$.5 mm. No conductor shall be less than 2 mm in size.
- 5. All wires of 14mm and larger in size shall be connected to panels and apparatus by means of approved type lugs or connectors of the solderless type, sufficiently targe enough to enclose all strands of the conductors and securely fastened. They shall not loosen under vibration or normal strain.
- 6. All joints, taps and spices on wires larger than 14 mm shall be made of suitable solderless connectors of the approved type and size. They shall be taped with rubber and PVC tapes providing insulation not less than that of the conductors

- 7. No splices or joints shall be permitted in either feeder or branch conductors except within outlet boxes or accessible junction boxes or pull boxes. All joints in branch circuit wiring shall be made mechanically and electrically accured by approved splicing devices and taped with rubber and PVC tapes in a manner which will make their insulation as that of the conductor.
- 8. All well switches and receptacles shall be fitted with standard Bakelite face plate covers. Device plates for flush mounting shall be installed with all four edges in continuous contact with finished wall surfaces without the use of coiled wire or similar devices. Plaster filling shall not be permitted. Plates installed in well locations shall be gesketed.
- When more than one switch or device is indicated in a single location, gang plate shall be used

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Planning and Programming Division



Replublika ng Pilipinas Lungsod ng Quezon

CITY ENGINEERING DEPARTMENT

5TH, 6TH, 7TH Floors, OC Clivic Center Building "B" Telephone Nos. 8988-4242 Local 8536



PROJECT TITLE :

PROPOSED CONSTRUCTION OF HANDWASHING FACILITY AND REHABILITATION OF SAN MARTIN DE PORRES DAY GARE CENTER 🗡

LOCATION:

BARANGAY SAN MARTIN DE PORRES, DISTRICT 4, QUEZON CITY,

TECHNICAL SPECIFICATIONS

I. GENERAL REQUIREMENTS

- A Comply with the current and existing taws, ordinances and applicable codes, rules and regulations, and standards. Any works performed contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost arising therefrom.
- 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 inedvertence.
- 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 meterials not conforming to the requirements of these specifications shall be considered as defective.
- G. Al: equipment and installations shall meet or exceed minimum requirements of the standards and codes.
- H. Mobilization and Demobilization (if applicable)
 - 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.
 - 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.
- 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.
- Temporary Facilities and Utilities
 - 1 All fecilities shall be near the job site, where necessary and shall conform to the best standard for the required types.
 - Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations.

- 3 Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication.
- Temporary enclosure shell be provided around the construction sits with adequate guard lights, railings and proper signage.
- 5 Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period.
- 6 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
 - 1 A fully-trained Medical Aide shall be employed permanently on the site who shall be engaged solely to medical duties
 - The medical room shall be provided with waterprooting; it could be a building or room
 designated and used exclusively for the purpose and flave a floor area of at least 15
 square meters and a glazed window area of at least 2 square meters.
 - 3 The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations and suitable notices in the site
 - Additional safety precautions shall be provided in the event of a pandemic. Protocols set forth by the government shall be strictly followed.
 - 5. Personal Protective Equipment (PPE) shall consist of safety helmet/hard hal, safety reflectorized vest, safety insulated gloves, dust mask, safety shoes, safety goggles, and safety harness. Every skilled and unskilled worker, and the project foreman shall be provided PPE by the Contractor, Consideration of quantity shall be made for the Project Engineer, Materials Engineer, Safety Officer/Practitioner (as required) and project driver.
 - 6 Construction safety materials shall consist of safety net, fire extinguisher and safety signage and posters.
- Necessary protections to the adjacent property shall be provided to avoid untoward incidents / accidents.
- M. Final cleening of the work shall be employed prior to the final inspection for the certification of final acceptance. Final clearing shall be applied on each surface or unit of work and shall be of condition expected for a building cleaning and maintenance program.

IL SITE WORKS

- 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 work.
- B. This Item shall consist of the removal wholly or in part, and satisfactory disposal of all buildings, fences, structures, old pavements, abandoned pipe lines, and any other obstructions which are not designated or permitted to remain, except for the obstructions to be removed and disposed of under other items in the Confrect.
 - Removal and/or demolition of existing structures shall be done in accordance to safety procedures.
- C. All excavations shall be made to grade as indicated in the ptans. 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.

The Contractor shall notify the Engineer sufficiently in advance of the beginning of any excavation so that cross-sectional elevations and measurements may be taken on the undisturbed ground. The natural ground adjacent to the structure shall not be disturbed without permission of the Engineer.

Trenches or foundation pits for structures or structure footings shall be excavated to the lines and grades or elevations shown on the Plans or as staked by the Engineer. They shall be of sufficient size to permit the placing of structures or structure footings of the full width and length shown. The elevations of the bottoms of footings, as shown on the Plans, shall be considered as approximate only and the Engineer may order, in writing such changes in dimensions or elevations of footings as may be deemed necessary, to secure a satisfactory foundation.

Boulders, logs, and other objectionable materials encountered in excavation shall be removed.

After each excavation is completed, the Contractor shall notify the Engineer to that effect and no footing, bedding material or pipe culvert shall be placed until the Engineer has approved the depth of excavation and the character of the foundation material

D. All excaveted materials, so fer as suitable, shall be utilized as backfill. The surplus materials shall be disposed of in such manner as not to obstruct the stream or otherwise impair the efficiency or appearance of the structure. No excavated materials shall be deposited at any time so as to endanger the partly finished structure.

All backfills shall be placed in layers not exceeding to 150mm in thickness and each leyer shall be thoroughly compacted by welting, tamping and rolling.

- E. Soil Poisoning, There are two methods usually adopted in soil poisoning which are as follows:
 - Cordoning. This method is usually adopted when there is no visible evidence of termite infestation. Trenches in concentric circles, squares or rectangles are dug 150mm to 220mm wide and at least one meter apart and applied with Liquid Termicide Concentrate working solution at the rate of 8 liters per linear meter.
 - Drenching When soit show termite infestation, this method shall be applied. The building area shall be thoroughly drenched with Liquid Termicide Concentrate working solution at the rate of 24 titers per square meter.

III. CIVIL / STRUCTURAL WORKS

A. MASONRY WORKS

- Masonry Dnits (Concrete Hollow Blocks).
 - a. 100mm thick for all intenor 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 (ult 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 and lintel beams as specified in the structural drawings or as specified or as deemed required to assure a stabilized wall due to height and other considerations.

2 Sand

\$-1, washed, clean and greenish in color

3 Morter:

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

4. Reinfarcement

The concrete hollow blocks shall be reinforced with 10mm diameter deformed bar, spaced not more than 0.8m on centers, both ways.

Plaster bond;

The mixture of cement plaster for concrete hollow block wall finishes indicated in the drawings shall be one part Portland cement and three parts sand

Floor Topping Preparation for Tilework. One part Portland cement and two parts sand and water but not more than three parts sand and water.

B. METAL FABRICATION

Materials:

- a. Steel and fron. If not specified otherwise, use standard mill-finished structural steel shapes or bar iron in compliance with AISC Specifications for Design, Februation and Erection of Structural Steel for buildings.
- b Bolts, Nuts, Stude and Rivets, ASTM A 307 and A 325.
- c. Screws, Fed. Spec FF-S-85, Fed. Spec FF-S-92, and Fed. Spec. FF-S-111
- Metal Purlins. High grade gelvarized steel with minimum tensils strength of 275 MPa, 1 4mm in thickness or approved equal.

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 walding and breding of adequate strength and durability, with tight, flush joints, dressed smooth and clean. Complete with bolts and nuis.

3 Metal Surfaces:

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

4 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.

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.

IV. ARCHITECTURAL WORKS

A. FLOOR FINISHES

- 300mm x 300mm Non-Skid Homogeneous Tiles including tile adhesive
- 2 50mm concrete Topping with Plain Cement Finish

B. WALL FINISHES

- 300mm x 300mm Homogeneous Tiles including tile adhesive
- 2. 50mm concrete Topping with Plain Cement Finish

C. PAINTING WORKS

- Paint Materials All types of paint material and other related products shall be subject to test as to material composition by the Bureau of Research and Standard, DPWH or the National Institute of Science and Technology.
- Tinting Colors. Tinting cotors shall be first grade quality pigment ground in alkyd resin that disperses and mores easily with paint to produce the color desired. Use the same brand of paint and linking color to effect good paint body.
- 3 Skim coat. Skim coat shall be fine powder type material like kellsomine that can be mixed into putty consistency, with oit-based primers and paints to fill minor surface dents and imperfections.

Paint Schedule.

- Exterior Masonry Wall (plain cament plastered finish to be painted)
 - 1 cost skim costing, 1 cost primer, 2 costs elestomeric pent finish
- Interior Masonry Wall (plain cament plastered finish to be painted)
 - 1 cost skim coating, 1 cost primer, 2 costs latex paint finish
- d Interior Dry Wall
 - i 1 coat primer, 2 coats latex paint firesh.
- e. Ceiling Boards
 - i. 1 coat primer, 2 coats latex paint finish
- f Slab Soffit
 - 1 coat primer, 2 coats latex paint linish
- g. Metal / Steel Surfaces
 - t coat primer, 2 coats epoxy enamel firesh.
- Surface Preparation. All surfaces shall be in proper condition to receive the finish Woodworks shall be hand-sanded smooth and dusted clean. All knot-holes pitch pockets or sappy portions shall be sealed with natural wood filler. Neil holes, cracks or defects shall be carefully puttied effer the first coat, matching the color of paint.

Interior woodworks shall be sandpapered between coats. Cracks, holes of imperfections in plaster shall be filled with patching compound and smoothed off to match adjoining surfaces.

Concrete and masonry surfaces shall be coated with concrete neutralizer and allowed to dry before any painting primer coat is applied. When surface is dried apply first coating. Hairking cracks and unevenness shall be parched and sealed with approved putty or patching compound. After all defects are corrected apply the finish coats as specified on the Plans (color scheme approved).

Metal shall be clean, dry and free from mill scale and rust. Remove all grease and oil from surfaces. Wash, unprimed galvanized metal with etching equation and allow it to dry. Where required to prime coat surface with Red Lead Primer same shall be approved by the Engineer.

In addition, the Contractor shall undertake the following:

- a Voids, cracks, nick etc. will be repaired with proper patching material and finished flushed with surrounding surfaces.
- Marred or damaged shop coats on metal shall be spot primed with appropriate metal primer.
- e. Panting and varnishing works shall not be commenced when it is too hot or cold.
- Allow appropriate ventilation during application and drying period
- All hardware will be fitted and removed or protected prior to painting and vamishing works.
- Application. Paints when applied by brush shall become non-fluid, thick enough to lay down as adequate film of wet paint. Brush marks shall have flewed out after application of paint.

Paints made for application by rotler must be similar to brushing paint. It must be nonsticky when thinned to spraying viscosity so that it will break up easily into droplets.

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

- ii Application shall be as per point Manufacturer's specification and recommendation.
- Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass, finishes and other works.
- iv. All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications
- All surfaces including masonry wall shall be thoroughly cleaned, puttied, sandpapered rubbed and polished mesonry wall shall be treated with Neutralizer
- vi. All exposed finish hardware, lighting fixtures and accessories, glass and the like shall be adequately protected so that these are not stamed with paint and other painting materials prior to painting works.
- vii. All other surfaces endergered by stains and paint marks should be taped and covered with craft paper.

C. DOORS & WINDOWS

Follow as per approved plan and specifications.

D. FABRICATED MATERIALS

Follow as per approved plan and specifications

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
 - 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.
 - 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.
 - Soil waste and vent system complete in all respect including but not limited to connection to existing sewer, submittals, shop drawings, pipes, fittings, valves, cleenout, drains, etc. Complete and operational.
 - Storm drainage system complete in all respect including but not timited to connection
 to existing atom drainage, submittals, shop drawings pipes, fittings, valves,
 cleanout, dreins, 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.
- Install equipment in strict accordance with manufacturers written recommendations.
- F. Physical sizes of all plent 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 maintanance 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.
- 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, property packed and protected against damage or contemination 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 of under approved protective coverings until required for use.
- 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 senitery 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 ceitings 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.
- The Sanitary Contractor must carry out any additional tests required by the end-user end/or approving agency.
- 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 ciremage 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/SEL7.
- Y. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit treedom of movement between pipe enchors, 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.
- 8B. Install hangers and supports so that piping five and dead loads and stresses from movement will not be transmitted to connected equipment.
- CC. Install hangers and supports to provide indicated pipe stopes and to not exceed maximum pipe deflections allowed by ASME 831.9 for building services piping.

VI. ELECTRICAL WORKS

A. CONDUITS, BOXES AND FITTINGS

1. This item shall consist of the furnishing and installation of the complete conduit work, consisting of electrical conduits; conduit boxes such as junction boxes, pull boxes, utility boxes, octagonal and square boxes; conduit fittings, such as couplings, locknuts and bushings and other electrical materials needed to complete the conduit roughing-in work of this project.

- All materials shall be brand new and shall be of the approved type meeting all the
 requirements of the Philippine Electrical Code and bearing the Philippine Standard
 Agency (PSA) mark.
- 3 All works throughout shall be executed in the best practice in a workmanike manner by qualified and experienced electricians under the immediate supervision of a duly licensed Electrical Engineer.
- 4. The work to be done under this division of specifications consists of the fabrication, furnishing, delivery and installation, complete in all details of the electrical work, at the subject premises and all work materials incidental to the proper completion of the installation, except those portions of the work which are expressly stated to be done by other fields. All works shell be done in accordance with the rules and regulations and with the specifications.
- All lighting fixtures and lamps are as specified and listed on lighting fixture schedule.
- All grounding system installation shall be executed in accordance with the approved plans. Grounding system shall include building perimeter ground wires, ground rods, clamps, connectors, ground wells and ground wire taps as shown in the approved design.
- 7. All auxiliary systems such as telephone and intercom system, time clock system, fire alerm system and public address/nurse's call/paging system installations shall be done in accordance with the approved design.
- Upon completion of the electrical construction work, the contractor shall provide all test equipment and personnel and to submit written copies of all test results.
- 9. The contractor shall guarantee the electrical installation are done and in accordance with the approved plans and specifications. The contractor shall guarantee that the electrical systems are free from all grounds and from all defective workmanship and materials and will remain so for a period of one year from date and acceptance of works. Any defect shall be remedied by the Contractor at his own expense.

B WIRES AND WIRING DEVICES

- This Item shall consist of the furnishing and installation of all wires and wiring devices
 consisting of electric wires and cables, wall switches, convenience receptacles, heavy
 duty receptacles and other devices shown on the approved Plans but not mentioned
 in these specifications.
- Wires and cables shalf be of the approved type masting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark Unless specified or indicated otherwise all power and lighting conductors shall be insulated for 600 volts. All wires shall be copper, soft drawn and annealed, smooth and of cytindrical form and shall be centrally located inside the insulation.
- 3. Conductors or wires shall not be drawn in conduits until after the cament plaster is dry and the conduits are thoroughly cleaned and free from dirt and moisture. In drawing wires into conduits, sufficient stack shall be allowed to permit easy connections for fixtures, switches, receptacles and other wiring devices without the use of additional spices.
- 4 All conductors of convenience outlets and lighting branch circuit homerwise shall be wired with a minimum of 3.5 mm in size. Circuit homeruns to panel boards shall not be smaller than 3.5 mm but all homeruns to panel board more than 30 maters shall not be smaller than 5.5 mm. No conductor shall be less than 2 mm in size.
- 5 All wires of 14mm and larger in size shall be connected to panels and apparatus by means of approved type lugs or connectors of the solderless type, sufficiently large enough to enclose all strands of the conductors and securely fastened. They shall not loosen under vibration or normal strain.
- 6 Att joints, taps and splices on wires larger than 14 mm shall be made of sultable solderless connectors of the approved type and size. They shall be taped with rubber and PVC tapes providing insulation not less than that of the conductors.

- 7. No splices or joints shall be permitted in either feeder or branch conductors except within outlet boxes or accessible junction boxes or pull boxes. All joints in branch circuit wiring shall be made mechanically and electrically secured by approved splicing devices and taped with rubber and PVC tapes in a manner which will make their insulation as that of the conductor.
- 8. All wall switches and receptacles shall be fitted with standard Bakelite face plate covers. Device plates for flush mounting shall be installed with all four edges in continuous contact with finished wall surfaces without the use of coiled wire or similar devices. Plaster filling shall not be permitted. Plates installed in wet locations shall be gasketed.
- 9 When more than one switch or device is indicated in a single location, gang plate shall be used.

RALPHOREGOR M. MANALO
Planning end Programming Division

JOCELYN AZ NAONG

Planning and Programming Division



Replublika ng Pilipinas Langsod ng Quezon

CITY ENGINEERING DEPARTMENT

5th, 6th, 7th Floors, QC Clyic Center Building 'B' Telephone Nos, 8988-4242 Local 8538



PROJECT TITLE:

PROPOSED REHABILITATION OF F. MANALO DAY CARE CENTER / BARANGAY IMMACULATE CONCEPCION, DISTRICT 4, QUEZON CITY

TECHNICAL SPECIFICATIONS

I. GENERAL REQUIREMENTS

- A Comply with the current and existing laws, ordinances and applicable codes, rules and regulations, and standards. Any works performed contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost arising therefrom.
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- C. Should there be any change(s) in drawings or specifications, it is required to comply with the governing regulations, notify the implementing agency.
- O. 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 anadvertence.
- 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 end codes.
- H. Mobilization and Demobilization (if applicable)
 - 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.
 - 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
- Execute work in sinct 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
 - All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types
 - Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations

- Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication
- Temporary enclosure shall be provided around the construction site with adequate guard lights, railings and proper signage.
- Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period
- 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.
 - A fully-trained Medical Aide shall be employed permanently on the site who shall be engaged solely to medical duties.
 - The medical room shall be provided with waterproofing; 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.
 - The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations and suitable notices in the site.
 - Additional safety precautions shall be provided in the event of a pendemic. Protocols set both by the government shall be strictly followed.
 - 5. Personal Protective Equipment (PPE) shall consist of safety helmet/hard hat, safety reflectorized vest, safety insulated gloves, dust mask, safety shoes, safety goggles, and safety herness. Every skilled and unskilled worker, and the project foreman shall be provided PPE by the Contractor, Consideration of quantity shall be made for the Project Engineer, Materials Engineer, Safety Officer/Practitioner (as required) and project driver.
 - Construction safety materials shall consist of safety net, fire extinguisher and safety signage and posters.
- 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 the 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 maintenence 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 work.
- B. This Item shall consist of the removal wholly or in part, and satisfactory disposal of all buildings, fances, structures, old pavements, abandoned pipe lines, and any other obstructions which are not designated or permitted to remain, except for the obstructions to be removed and disposed of under other items in the Contract.

Removal and/or 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.

The Contractor shall notify the Engineer sufficiently in advance of the beginning of any excavation so that cross-sectional elevations and measurements may be taken on the undisturbed ground. The natural ground adjacent to the structure shall not be disturbed without permission of the Engineer.

Trenches or foundation pits for structures or structure footings shall be excavated to the lines and grades or elevations shown on the Plans or as staked by the Engineer. They shall be of sufficient size to permit the placing of structures or structure footings of the full width and length shown. The elevations of the bottoms of footings, as shown on the Plans, shall be considered as approximate only and the Engineer may order, in writing, such changes in dimensions or elevations of footings as may be deemed necessary, to secure a satisfactory foundation.

Boulders, logs, and other objectionable materials encountered in excavation shelf be removed

After each excavation is completed, the Contractor shall notify the Engineer to that effect and no footing, bedding material or pipe culvert shall be placed until the Engineer has approved the depth of excavation and the character of the foundation material.

D. All excavated materials, so far as suitable, shall be utilized as backfill. The surplus materials shall be disposed of in such manner as not to obstruct the stream or otherwise impair the efficiency or appearance of the structure. No excavated materials shall be deposited at any time so as to endanger the parily finished structure.

All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted by wetting, tamping and rolling.

- E. Soil Poisoning. There are two methods usually adopted in soil poisoning which are as follows:
 - 1. Cordoning. This method is usually adopted when there is no visible evidence of termite infestation. Tranches in concentric circles, squares or rectangles are dug 150mm to 220mm wide and at least one meter apart and applied with Liquid Termicide Concentrate working solution at the rate of 8 liters per linear meter.
 - Dranching. When soil show termite infestation, this method shall be applied. The building area shall be thoroughly drenched with Liquid Termicide Concentrate working solution at the rate of 24 liters per square meter.

III. CIVIL / STRUCTURAL WORKS

A. ROOFING WORKS

- 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 purios with min. 2 ½" max.
 long Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those compatible with the Ga. 24 pre-painted G.I. nb-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.
- 2. 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 ½" max. 3" long. Tek screws. Ridge rolls, hip rolls and valleys to be used shall be those competible 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.
- 3 Alt 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. Materials:
 - a Steel and Iron. If not specified otherwise, use standard mill-finished structural steel shapes or bar iron in comptiance with AISC Specifications for Design, Fabrication and Erection of Structural Steel for buildings.
 - Bolts, Nuts, Studs and Rivers, ASTM A 307 and A 325.
 - Screws, Fed. Spec FF-S-85, Fed. Spec FF-S-92, and Fed. Spec. FF-S-111.

d. Metal Purlins. High grade galvanized steel with minimum tensite strength of 275 MPa, 1.4mm in thickness or approved equal.

B. METAL FABRICATION

1 Malanais

- Steel and from if not specified otherwise, use standard mill-finished structurel steel shapes or bar iron in compliance with AISC Specifications for Design, Fabrication and Erection of Structural Steel for buildings.
- Bolts, Nuts, Studs and Rivets, ASTM A 307 and A 325
- g Screws, Fed. Spec FF-S-85, Fed. Spec FF-S-92, and Fed. Spec FF-S-111.
- h Metal Purlins. High grade getvenized steel with minimum tensile strength of 275 MPa, 1.4mm in thickness or approved equal.

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.

Metal Surfaces:

Surfaces shell be clean and free from all scale, tlake, rust and rust pitting, wellformed and finished to shape and size, with sharp lines, angle and smooth surface. Shearing and punching shall leave clean true lines and surfaces. Weld or nvet permanent connections. Weld and flush rivets shall be used and finished flush smooth on surfaces that will be exposed after installation. Do not use acrews or bolts where they can be avoided; when used, heads shall be countersunk, screwed uptight and threads nicked to prevent loosening.

4 Construction:

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

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.

IV. ARCHITECTURAL WORKS

A. FLOOR FINISHES

- 300mm x 300mm Non-Skid Homogeneous Tiles including tile adhesive
- 2 50mm concrete Topping with Plain Cement Finish

B. WALL FINISHES

- 300mm x 300mm Homogeneous Tiles including tile adhesive.
- 50mm concrete Topping with Plain Cement Finish

C. PAINTING WORKS

- Paint Materials, All types of paint material and other related products shall be subject
 to test as to material composition by the Bureau of Research and Standard, DPWH or
 the National Institute of Science and Technology.
- Tinting Colors. Tinting colors shall be first grade quality pigment ground in alkyd resin that disperses and mixes easity with paint to produce the color desired. Use the same brand of paint and tinting color to effect good paint body.
- Skim coet. Skim coat shall be fine powder type material tike kalsomine that can be mixed into putty consistency, with oil-based primers and paints to fill minor surface dents and imperfections.
- Paint Schedule.
 - Exterior Masonry Wall (plain cement plastered finish to be painted).
 - 1 coat skim coating, 1 coat primer, 2 coats electomeric paint finish.
 - Interior Masonry Wall (plain coment plastered finish to be painted).
 - 1 cost skim coating, 1 cost primer, 2 costs latex paint finish.
 - d. Interior Dry Well
 - 1 coat primer, 2 coats latex paint finish.
 - e. Ceiking Boards
 - i 1 cost printer, 2 costs latex paint finish.
 - f Şlab Soffit
 - 1 cost primer, 2 costs latex paint finish.
 - Metal / Steel Surfaces
 - 1 cost primar, 2 costs epoxy enamel finish
- 5. Surface Preparation All surfaces shall be in proper condition to receive the finish. Woodworks shall be hand-sanded smooth and dusted clean. All knot-holes pitch pockets or sappy portions shall be sealed with natural wood filler. Nail holes, cracks or defects shall be carefully puttied after the first coat, matching the color of paint.

Interior woodworks shall be sandpapered between coats. Cracks, holes of imperfections in plaster shall be fitted with patching compound and smoothed off to match adjoining surfaces.

Concrete and masonry surfaces shall be coated with concrete neutralizer and allowed to dry before any painting primer coat is applied. When surface is direct apply first coating. Hairline cracks and uneveniess shall be patched and sealed with approved putty or patching compound. After all defects are corrected apply the finish coats as specified on the Plans (color scheme approved).

Metal shall be clean, dry and free from mill scale and rust. Remove all grease and oil from surfaces. Wash, unprimed galvenized metal with etching solution and allow it to dry. Where required to prime coat surface with Red Lead Primer same shall be approved by the Engineer.

In addition, the Contractor shall undertake the following:

- Voids, cracks, nick etc. will be repaired with proper patching material and finished flushed with surrounding surfaces.
- Marred or damaged shop costs on metal shall be spot primed with appropriate metal primer.
- Panting and varnishing works shall not be commenced when it is too hot or cold.

- d. Allow appropriate ventilation during application and drying period.
- All hardware will be titted and removed or protected prior to painting and varnishing works.
- Application. Paints when applied by brush shall become non-fluid, thick enough to lay down as adequate film of wet paint. Brush marks shall have flawed out after application of pant.

Paints made for application by roller must be similar to brushing paint. It must be nonsticky when thinned to spraying viscosity so that it will break up easily into droplets.

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

- ii. Application shall be as per paint Manufacturer's specification and recommendation.
- Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, gless, finishes and other works.
- All applications and methods used shall strictly follow the Manufacturer's instructions and Specifications.
- All surfaces including masonry wall shall be thoroughly cleaned, puttied, sandpapered, rubbed and polished; masonry wall shall be treated with Neutralizer.
- vi 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.
- vii All other surfaces endangered by stains and paint marks should be taped and covered with craft paper.

D. CEILING FINISHES

6mm thick Fiber Cement Board including Metal Framing and Accessories

C. DOORS & WINDOWS

Follow as per approved plan and specifications.

D. FABRICATED MATERIALS

Follow as per approved plan and specifications

E. LETTERINGS

Follow as per approved plan and specifications

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:
 - Potable water supply system complete in all respects including but not limited to submittals, shop drawings, piping, water meters, velves, bibbs, insulation, all accessories required for complete and operational of the system
 - Water service connections including but not limited to water maters, float valves. Any and all other works involve in providing the complete operation of the water supply system.
 - Soil waste and vent system complete in all respect including but not limited to connection to existing sewer, submittals, shop drawings, pipes, littings, valves, cleanout, drains, etc. Complete and operational.
 - Storm drainage system complete in all respect including but not limited to connection to existing storm drainage, submittals, shop drawings, pipes, fittings, valves, clearquit, drains, etc. Complete and operational.
- C Workmanship and installation methods shall conform to the basi modern practice. Employ skilled tradesmen to perform work under the direct supervision of fully qualified personnel.
- D. Alt 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.
- 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.
- M. 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.
- 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, solverse 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.
- 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. Hydrautic tests shall be camed 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 felice 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-lested 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/SEL7
- Y. Instalt hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe arichors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.
- Install lateral bracing with pipe hangers and supports to prevent awaying.
- AA. Install building attachments within concrete stabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges, and strainers, NPS 2-1/2 (ON 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.Instalt hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections aboved by ASME B31 9 for building services piping

VI. ÉLECTRICAL WORKS

A CONDUITS, BOXES AND FITTINGS

- This item shall consist of the furnishing and installation of the complete conduit work, consisting of electrical conduits; conduit boxes such as junction boxes, pull boxes, utility boxes, octagonal and square boxes; conduit fittings, such as couplings, locknuts and bushings and other electrical materials needed to complete the conduit roughingin work of this project.
- All materials shall be brand new and shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark
- All works throughout shall be executed in the best practice in a workmanike manner by qualified and experienced electricians under the immediate supervision of a duly tipensed Electrical Engineer.
- 4. The work to be done under this division of specifications consists of the fabrication, furnishing, delivery and installation, complete in all details of the electrical work, at the subject premises and all work materials incidental to the proper completion of the installation, except those portions of the work which are expressly stated to be done by other fields. All works shall be done in accordance with the rules and regulations and with the specifications.
- 5 All lighting fixtures and lamps are as specified and listed on lighting fixture schedule.
- 6 All grounding system installation shall be executed in accordance with the approved plans. Grounding system shall include building perimeter ground wires, ground rods, clamps, connectors, ground wells and ground wire taps as shown in the approved design.
- All auxitiary systems such as telephone and intercom system, time clock system, fire alarm system and public address/nurse's call/paging system installations shall be done in accordance with the approved design.
- Upon completion of the electrical construction work, the confractor shall provide all
 test equipment and personnel and to submit written copies of all test results.
- 9. The contractor shall guarantee the electrical installation are done and in accordance with the approved plans and specifications. The contractor shall guarantee that the electrical systems are free from all grounds and from all defective workmanship and materials and will remain so for a period of one year from date and acceptance of works. Any defect shall be remedied by the Contractor at his own expense.

B. WIRES AND WIRING DEVICES

- This Item shall consist of the furnishing and installation of all wires and wiring devices
 consisting of electric wires and cables, wall switches, convenience receptacles, heavy
 duty receptacles and other devices shown on the approved Ptens but not mentioned
 in these specifications.
- Wires and cables shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark. Unless specified or indicated otherwise, all power and lighting conductors shall be insulated for 600 volts. All wires shall be copper, soft drawn and annealed, smooth and of cylindrical form and shall be centrally located inside the insulation.
- Conductors or wires shall not be drawn in conduits until after the cement praster is dry
 and the conduits are thoroughly cleaned and free from dirt and moisture. In drawing
 wires into conduits, sufficient stack shall be allowed to permit easy connections for
 futures, switches, receptacles and other wiring devices without the use of additional
 splices.
- 4. All conductors of convenience outlets and lighting branch circuit homeruns shall be wired with a minimum of 3.5 mm in size. Circuit homeruns to panel boards shall not be smaller than 3.5 mm but all homeruns to panel board more than 30 meters shall not be smaller than 5.5 mm. No conductor shall be less than 2 mm in size.

- 5 All wires of 14mm and larger in size shall be connected to panels end appearatus by means of approved type lugs or connectors of the solderless type, sufficiently large enough to enciose all strands of the conductors and securely fastened. They shall not loosers under vibration or normal strain.
- All joints, taps and splices on wires targer than 14 mm shall be made of suitable solderless connectors of the approved type and size. They shall be taped with rubber and PVC tapes providing insulation not less than that of the conductors
- 7. No splices or joints shall be permitted in either feeder or branch conductors except within outlet boxes or accessible junction boxes or pull boxes. All joints in branch circuit wiring shall be made mechanically and electrically secured by approved splicing devices and taped with rubber and PVC tapes in a manner which will make their insulation as that of the conductor.
- 8. All wall switches and receptacles shall be fitted with standard Bakelite face plate covers. Device plates for flush mounting shall be installed with all four edges in continuous contact with finished well surfaces without the use of coiled wire or similar devices. Plaster filling shall not be permitted. Plates installed in wet tocations shall be gasketed.
- When more than one switch or device is indicated in a single location, gang plate shall be used.

RALPHÖRIÉGÖR M. MANALO Planning and Programming Division JOCELYN A NAONG

Planning and Programming Division



Replublika ng Pitipinas Lungsod ng Quezon

CITY ENGINEERING DEPARTMENT

5^{7H}, 6^{7H}, 7^{7H}, Floors, QC Civic Center Building "B" Telephone Nos, 6988-4242 Local 8538



PROJECT TITLE: LOCATION:

PROPOSED REHABILITATION OF PLANAS SITE DAY CARE CENTER BARANGAY KAUNLARAN, DISTRICT 4, QUEZON CITY

TECHNICAL SPECIFICATIONS

I. GENERAL REQUIREMENTS

- A. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations, and standards. Any works performed 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)
 - 1 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.
 - 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
- Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmantike 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
 - All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.
 - 2 Temporary facilities shall be provided and maintained including sanitary facilities and first and stations.

- 3 Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication.
- Temporary enclosure shall be provided around the construction site with adequate guard lights, railings and proper aignage.
- Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period.
- 6 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.
 - A fully-trained Medical Aide shall be employed permanently on the site who shall be engaged solely to medical duries.
 - The medical room shall be grovided with waterproofing, 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
 - 3 The focation of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations and suitable notices in the site.
 - Additional safety precautions shall be provided in the event of a pandemic. Protocols
 set forth by the government shall be strictly followed.
 - 5 Personal Protective Equipment (PPE) shall consist of safety helmet/hard hat, safety reflectorized vest, safety insulated gloves, dust mask, safety shoes, safety goggles, and safety harness. Every skilled and unskilled worker, and the project foremen shall be provided PPE by the Contractor. Consideration of quantity shall be made for the Project Engineer, Materials Engineer, Safety Officer/Practitioner (as required) and project driver.
 - 6 Construction safety materials shall consist of safety not, fire extinguisher and safety signage and posters
- L. Necessary protections to the adjacent property shall be provided to avoid unloward incidents / accidents.
- M. Final cleaning of the work shall be employed prior to the final inspection for the 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 maintenence 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 work.
- B. This Item shall consist of the removal wholly or in part, and setisfactory disposal of all buildings, fences, structures, old pavements, abandoned pipe lines, and any other obstructions which are not designated or permitted to remain, except for the obstructions to be removed and disposed of under other items in the Contract.
 - Removal and/or 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.

The Contractor shall notify the Engineer sufficiently in advance of the beginning of any excavation so that cross-sectional elevations and measurements may be taken on the undisturbed ground. The natural ground adjecent to the structure shall not be disturbed without permission of the Engineer.

Trenches or foundation pits for structures or structure footings shall be excavated to the lines and grades or elevations shown on the Plans or as staked by the Engineer. They shall be of sufficient size to permit the placing of structures or structure footings of the full width and length shown. The elevations of the bottoms of footings, as shown on the Plans, shall be considered as approximate only and the Engineer may order, in writing, such changes in dimensions or elevations of footings as may be deemed necessary, to secure a satisfactory foundation.

Soulders, logs, and other objectionable materials encountered in excavation shall be removed

After each excavation is completed, the Contractor shall notify the Engineer to that effect and no footing, bedding material or pipe culvert shall be placed until the Engineer has approved the depth of excavation and the character of the foundation material.

D All excavated materials, so far as suitable, shall be utilized as backfill. The surplus materials shall be disposed of in such manner as not to obstruct the stream or otherwise impair the efficiency or appearance of the structure. No excavated materials shall be deposited at any time so as to endanger the partly finished structure.

All backfills shall be placed in layers not exceeding to 150mm in thickness and each leyer shall be thoroughly compacted by welting, tamping and rolling.

- E. Soil Poisoning, There are two methods usually adopted in soil poisoning which are as follows:
 - Cordoning. This method is usually adopted when there is no visible evidence of termite infestation. Trenches in concentric circles, aquares or rectangles are dug 150mm to 220mm wide and at least one meter apart and applied with Liquid Termicide Concentrate working solution at the rate of 8 liters per linear meter.
 - Drenching. When soil show termite infestation, this method shall be applied. The building area shall be thoroughly drenched with Liquid Termicide Concentrate working solution at the rate of 24 liters per square meter.

III. CIVIL / STRUCTURAL WORKS

A. ROOFING WORKS

- The roof shall be covered with Ga. 24 pre-painted G.I. nb-type roofing sheets as shown on the plans. The roofing shall be secured to the purlins with min. 2 ½1 max.
 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.
- 2. The roof shall be covered with 5mm thick Rib-type polycarbonate sheets as shown on the plans. The roofing shall be secured to the purins with min. 2 W 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.
- 3 All roofing sheets adjacent to concrete hollow block and other mesonry walls such as property line firewalls, shall be provided with Gauge 25 pre-painted plain G I Flashing to extend to the top and over to the other side of the wall. All fasteners shall be pleced at the top of the corrugations of the roofing sheets to prevent water from standing around the fasteners Materials:
 - a Steet and tron. If not specified otherwise, use standard mill-finished atructural steet shapes or ber iron in compliance with AISC Specifications for Design Fabrication and Erection of Structural Steet for buildings
 - Bolts, Nuts, Studs and Rivets, ASTM A 307 and A 325.
 - Screws Fed Spec FF-S-85. Fed. Spec FF-S-92, and Fed. Spec. FF-S-111

 Metal Purlins. High grade galvanized steel with minimum tensile strength of 275 MPa, 1.4mm in thickness or approved equal.

IV. ARCHITECTURAL WORKS

A. FLOOR FINISHES

- 1 300mm x 300mm Non-Skid Homogeneous Tiles including tile adhesive.
- 2 50mm concrete Topping with Plain Cement Finish.

B. WALL FINISHES

- 300mm x 300mm Homogeneous Tiles including tile achesive.
- 2 50mm concrete Topping with Plain Cement Finish.

C. PAINTING WORKS

- 1 Paint Materials. All types of paint material and other related products shall be subject to test as to material composition by the Bureau of Research and Standard, DPWH or the National Institute of Science and Technology.
- 2 Tinting Colors, Tinting colors shall be first grade quality pigment ground in alkyd resin that disperses and mixes easily with paint to produce the color desired. Use the same trand of paint and finting color to effect good paint body.
- Skim coat. Skim coat shall be fine powder type material like ketsomine that can be mixed into putty consistency, with oil-based primers and paints to fill minor surface dents and imperfections.
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 - Interior Masonry Wall (plain cament plastered (inish to be painted).
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 - d. Interior Dry Wall
 - 1 coat primer, 2 coats latex paint finish.
 - e. Ceiling Boards
 - i 1 coat primer, 2 coats latex paint finish.
 - f Slab Soffit
 - 1 coat primer, 2 coats latex paint finish.
 - q. Metal / Steel Surfaces
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- 5 Surface Preparation. All surfaces shall be in proper condition to receive the finish. Woodwarks shall be hand-sanded smooth and dusted dean. All knot-holes pitch pockets or sappy portions shall be sealed with natural wood filter. Nait holes, cracks or defects shall be carefully puttied after the first coat, matching the color of paint.

Interior woodworks shall be sandpapered between coals. Cracks, hotes of imperfections in plaster shall be filled with patching compound and smoothed off to match adjoining surfaces.

Concrete and masonry surfaces shall be coated with concrete neutralizer and allowed to dry before any painting primer coat is applied. When surface is dried apply first coating. Hairline cracks end unevenness shall be petched and sealed with approved putty or patching compound. After all defects are corrected apply the finish coats as specified on the Plans (color scheme approved).

Metal shall be clean, dry end free from mill scale and rust. Remove all grease and oil from surfaces. Wash, unpnmed galvanized metal with etching solution and allow it to dry. Where required to prime cost surface with Red Lead Primer same shall be approved by the Engineer.

In addition, the Contractor shall undertake the following:

- Voids, cracks, nick etc. will be repaired with proper patching material and finished flushed with surrounding surfaces
- Marred or damaged shop coats on metal shall be spot primed with appropriate metal primer.
- Pariting and varnishing works shall not be commenced when it is too hot or cold.
- d. Allow appropriate ventilation during application and drying period
- All hardware will be fitted and removed or protected prior to painting and varnishing works.
- Application: Paints when applied by brush shall become non-fluid, thick enough to lay
 down as adequate film of wet paint. Brush marks shall have flawed out after application
 of paint.

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

- ii. Application shall be as per paint Manufacturer's specification and recommendation.
- Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass, finishes and other works.
- Alt applications and methods used shall strictly follow the Manufacturer's instructions and Specifications.
- All surfaces including masonry wall shall be thoroughly cleaned, puttled, sandpapered, rubbed and polished, masonry wall shall be treated with Neutralizer.
- vi. All exposed finish hardware, lighting fixtures and accessories, glass and the like shall be adequately protected so that these are not steined with paint and other painting materials prior to painting works.
- vii. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper

D. CEILING FINISHES

Emm thick Fiber Cement Board including Metal Framing and Accessories.

B. DOORS & WINDOWS

Follow as per approved plan and specifications.

C. FABRICATED MATERIALS

Follow as per approved plan and specifications

D. LETTERINGS

Follow as per approved plan and specifications:

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:
 - 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.
 - Weter 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.
 - 3 Soil waste and vent system complete in all respect including but not limited to connection to existing sewer, submittats, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
 - 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 ekilled 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.
- Physical sizes of ski 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.
- 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. Date 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 orcumstances 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 senifary fittings and pipework shall be cleaned after installation and keep them in a new condition.
- N All instalted pipelines shall be flushed through with water, rodded when necessary to ensure clearance of debns.
- 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. Hydrautic 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. Dreinage pipe shall be tested by filting 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/storays required for testing.
- W. Drainage pressure pipe shall be hydraulic tested at minimum pressure 50 psi.
- X. Hangers and supports for plumbing plping and equipment shall withstand the effects of gravity loads and stresses within limits and under conditions indicated according to ASCE/SEL7
- 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 finalall 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; faster 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 gipe deflections allowed by ASME B31.9 for building services piping.

VI. ELECTRICAL WORKS

A. CONDUITS, BOXES AND FITTINGS

- This item shall consist of the furnishing and installation of the complete conduit work, consisting of electrical conduits; conduit boxes such as junction boxes, pull boxes, utility boxes, octagonal and square boxes; conduit fittings, such as couplings, locknuts and bushings and other electrical materials needed to complete the conduit roughingin work of this project.
- All materials shall be brand new and shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark.
- 3 All works throughout shall be executed in the best practice in a workmantike manner by qualified and experienced electricians under the immediate supervision of a duly ticensed Electrical Engineer.
- 4. The work to be done under this division of specifications consists of the fabrication, furnishing, delivery and installation complete in all details of the electrical work, at the subject premises and all work materials incidental to the proper completion of the installation, except those portions of the work which are expressly stated to be done by other fields. All works shall be done in accordance with the rules and regulations and with the specifications.
- All lighting fixtures and lamps are as specified and listed on lighting fixture achedule.
- 6. All grounding system installation shall be executed in accordance with the approved plans, Grounding system shall include building perimeter ground wires, ground rods, clamps, connectors, ground wells and ground wire taps as shown in the approved design.
- All auxiliary systems such as telephone and intercom system, time ctock system, fire stems system and public address/nurse's call/paging system installations shall be done in accordance with the approved design.
- Upon completion of the electrical construction work, the contractor shall provide all test equipment and personnet and to submit written copies of all test results.
- 9 The contractor shall guarantee the electrical installation are done and in accordance with the approved plans and specifications. The contractor shall guarantee that the electrical systems are free from all grounds and from all defective workmanship and materials and will remain so for a period of one year from date and acceptance of works. Any defect shall be remedied by the Contractor at his own expense.

B WIRES AND WIRING DEVICES

- 1 This item shall consist of the furnishing and installation of all wires and wring devices consisting of electric wires and cables, wall switches, convenience receptacles, heavy duty receptacles and other devices shown on the approved Plans but not mentioned in these specifications.
- 2. Whee and cables shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark Unless specified or Indicated otherwise, all power and tighting conductors shall be insulated for 600 volts. All wires shall be copper soft drawn and annealed, smooth and of cylindrical form and shall be centrally located inside the insulation.

- 3. Conductors or wires shall not be drawn in conduits until after the cement plaster is dry and the conduits are thoroughly cleaned and free from dirt and moisture. In drawing wires into conduits, sufficient stack shall be allowed to permit easy connections for fodures, switches, receptacles and other wiring devices without the use of additional spines.
- 4. All conductors of convenience outlets and lighting branch circuit homerons shall be wired with a minimum of 3.5 mm in size. Circuit homerons to panel boards shall not be smaller than 3.5 mm but all homerons to panel board more than 30 motors shall not be smaller than 5.5 mm. No conductor shall be less than 2 mm in size.
- 5. All wires of 14mm and larger in size shall be connected to panels and apparatus by means of approved type lugs or connectors of the solderless type, sufficiently large enough to enclose all strends of the conductors and securely fastened. They shall not loosen under vibration or normal strein
- 6. All joints, taps and splices on wires targer than 14 mm shall be made of suitable solderless connectors of the approved type and size. They shall be taped with rubber and PVC tapes providing insulation not less than that of the conductors.
- 7. No spices or joints shall be permitted in either feeder or branch conductors except within outlet boxes or accessible junction boxes or pull boxes. All joints in branch circuit wiring shall be made mechanically and electrically secured by approved splicing devices and taped with rubber and PVC tapes in a manner which will make their insulation as that of the conductor.
- 8 All wall switches and receptacles shall be fitted with standard Baketite face plate covers. Device plates for flush mounting shall be installed with all four edges in continuous contact with finished wall surfaces without the use of coiled wire or similar devices. Plaster fifting shall not be permitted. Plates installed in wet locations shall be gasketed.

9 When more than one switch or device is indicated in a single location, gang plate shall be used.

RALPHGREGOR M. MANALO Planning and Programming Division , JOCELYNA, BAONG Planning shit 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.]



1 LOCATION MAP

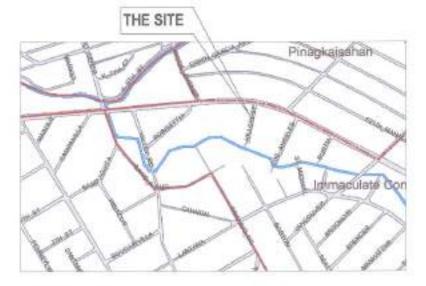




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PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF HILLCREST DAYCARE CENTERY

LODATION SHANCILLATE DONCEPOION, DISTRICT 4, CAMEZON 12/19

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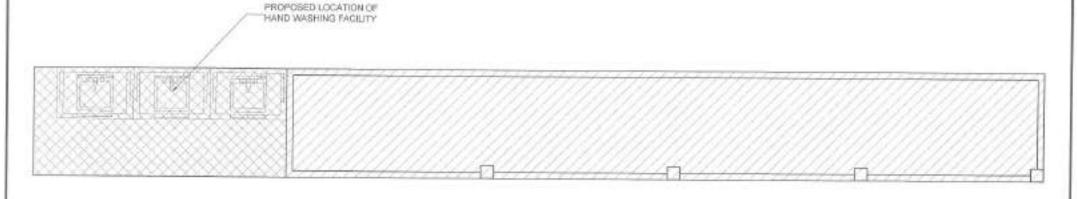
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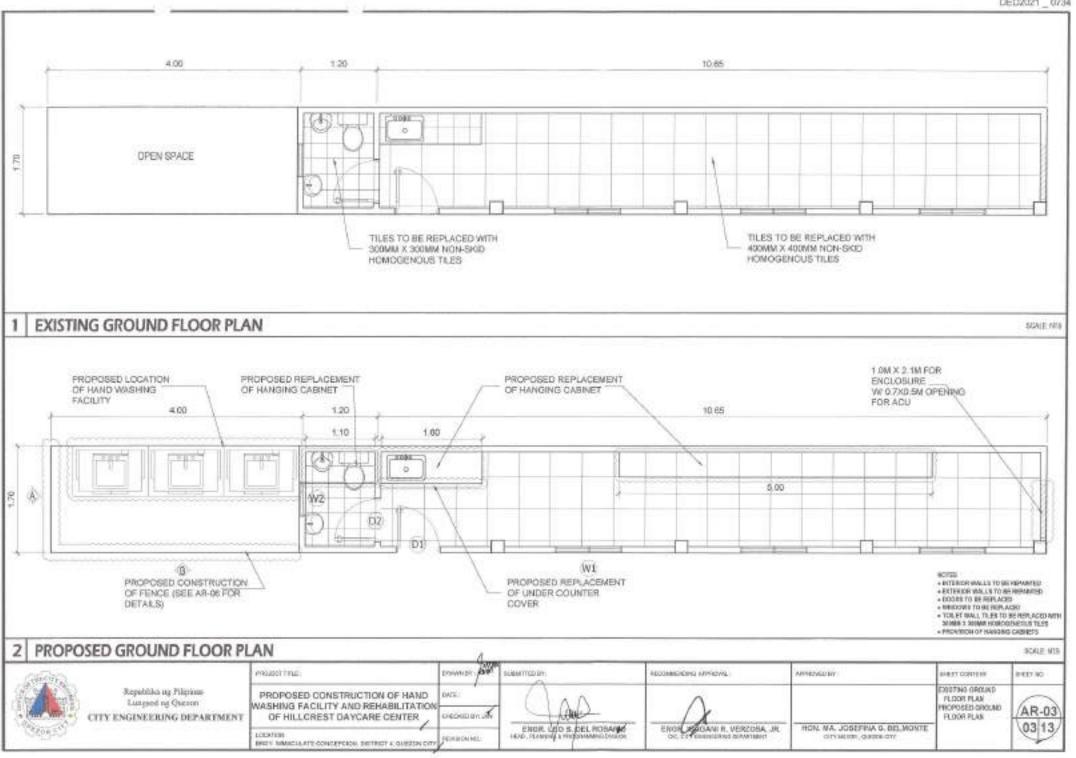
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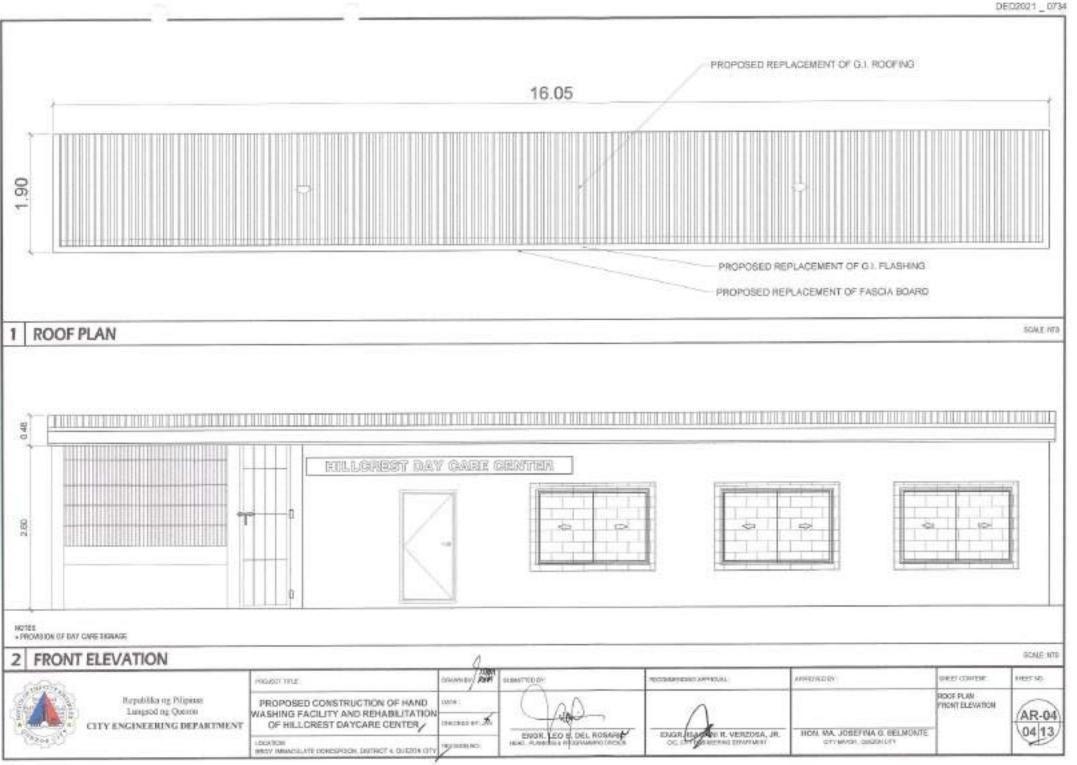
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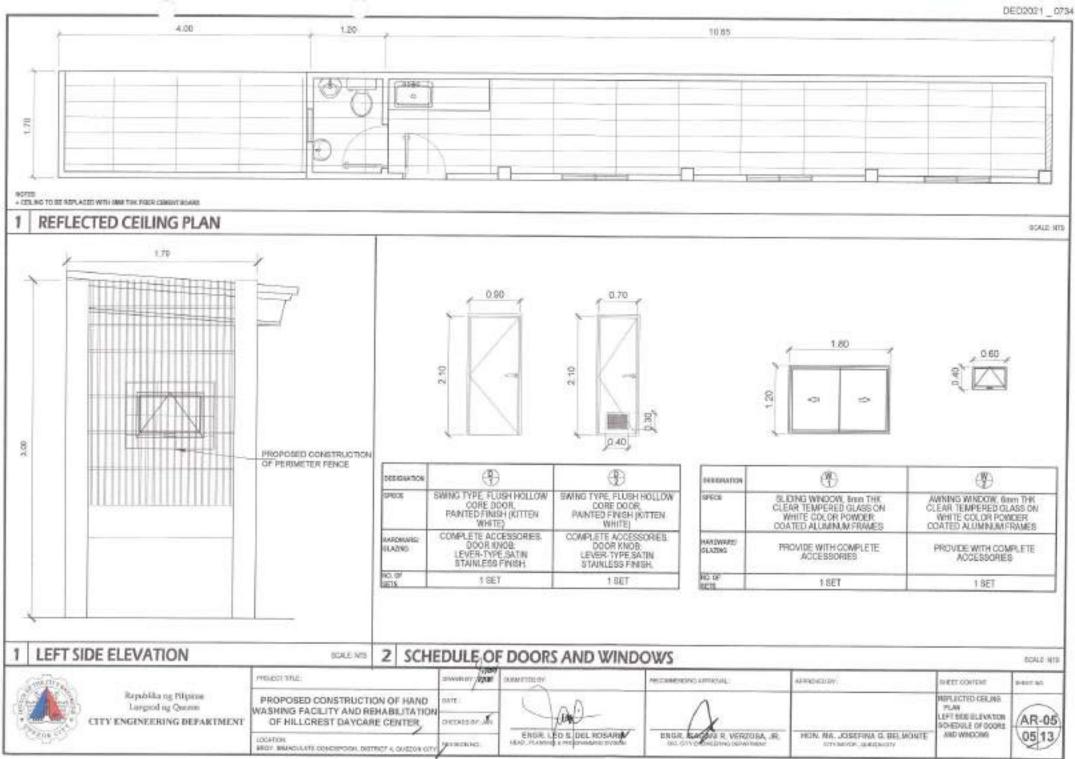
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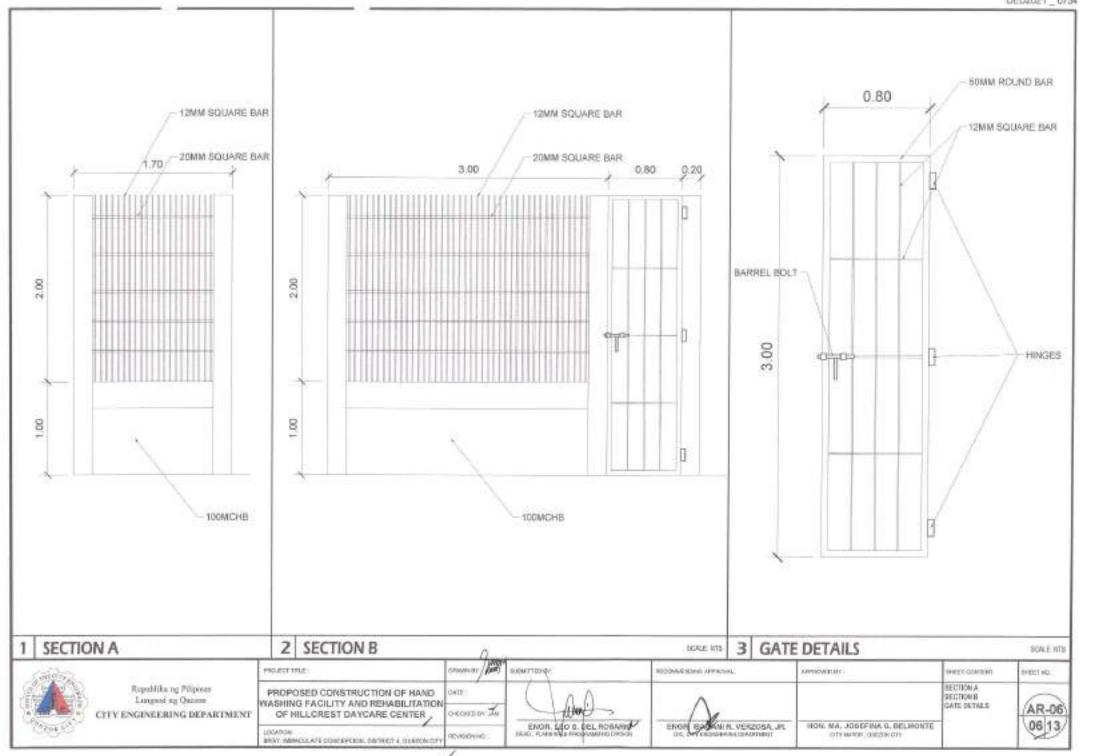
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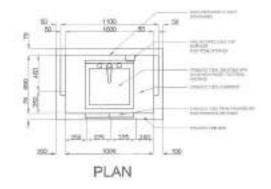
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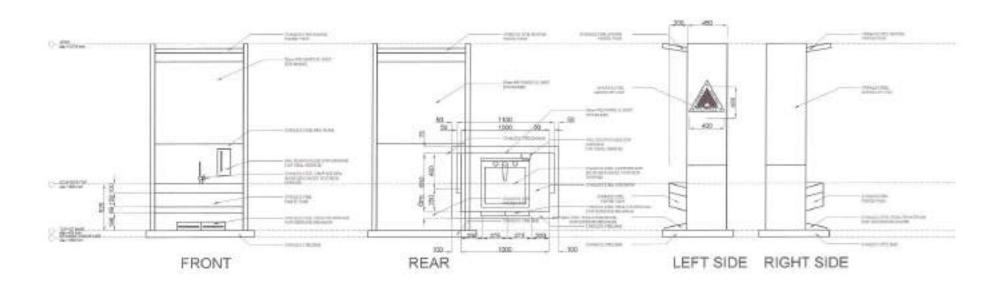






SINGLE SINK PORTABLE HAND WASHING STALL PLAN

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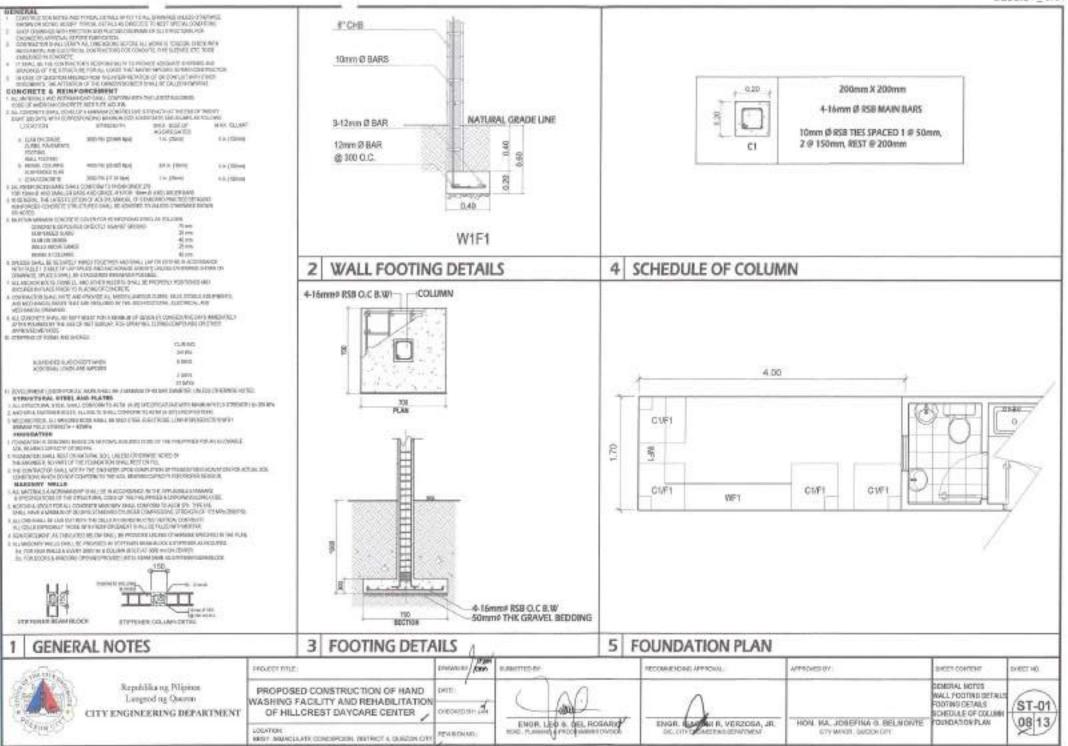
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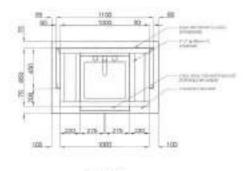
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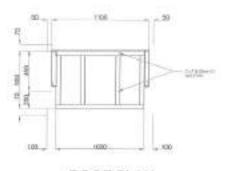
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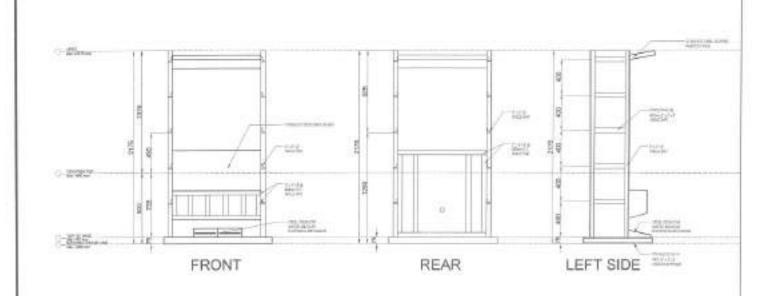


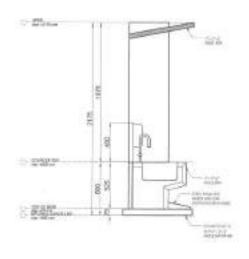
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SINGLE SINK PORTABLE HAND WASHING STALL PLAN

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PROPOSED CONSTRUCTION OF HAND
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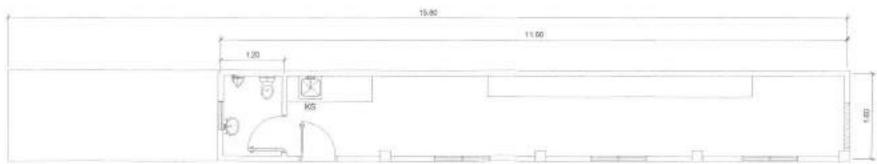
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Republika ng Pilipinan Lurgood ng Quozon CITY ENGINEERING DEPARTMENT

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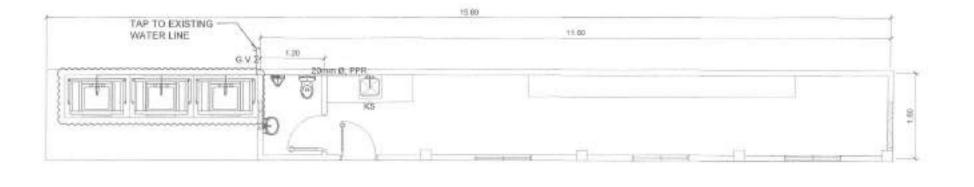
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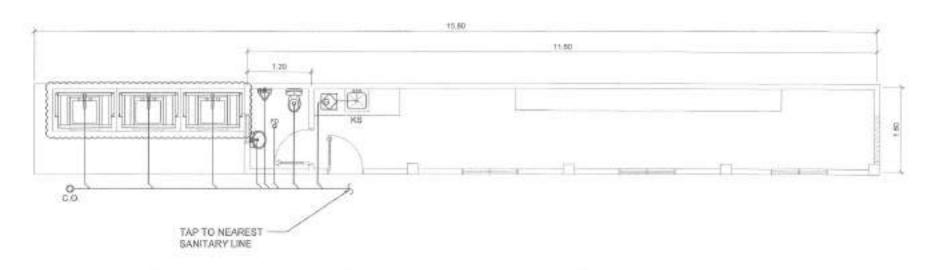
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1 GROUND FLOOR WATER LINE LAYOUT

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1 GROUND FLOOR SANITARY LINE LAYOUT

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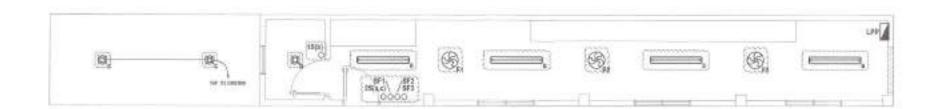
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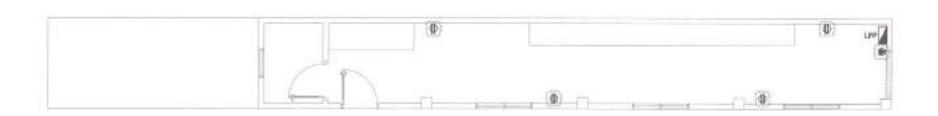


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- 8. PROVIDE GROUND EASLY DERRONT INTERROPTER CIRCUIT SHILARDS FOR LOADS HARDED THOUGHT HE PLAN.
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- 8. VALCOS OTREBUGE HOTED, MOUNTING HEIGHT FOR WALL BOUNTED DEVICES SHALL BE AS POLICIES.

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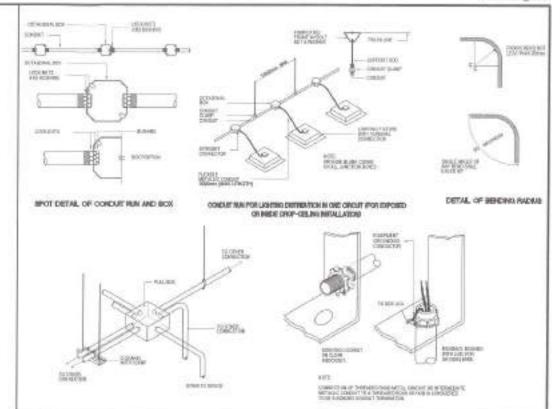
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_	LED TUBE LIGHT (FOR REPLACEMENT OF LED)
0	DUFLEX CONVENIENCE OUTLET (FOR REPLACEMENT)
(0)	AIRCON OUTLET (FOR REPLACEMENT)
(4)	ADDITIONAL CELLING FAN
LPP	PANEL BOARD

VIRGINOSPAN

1 GENERAL NOTES



Republika ng Pilipina Langsod ng Queson CITY ENGINEERING DEPARTMENT PROPOSED CONSTRUCTION OF HAND
WASHING FACILITY AND REHABILITATION
OF HILLCREST DAYCARE CENTER
OFFICE OFFI

BROY: MINKOULATE CONDIDITION, DISTRICT 4, DUSDON OTH

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RECOMMENDAD APPROVIL

HON, WA. JOSEPHA G. BELMONTE

BTY MOTOR, SUBSTRICTS

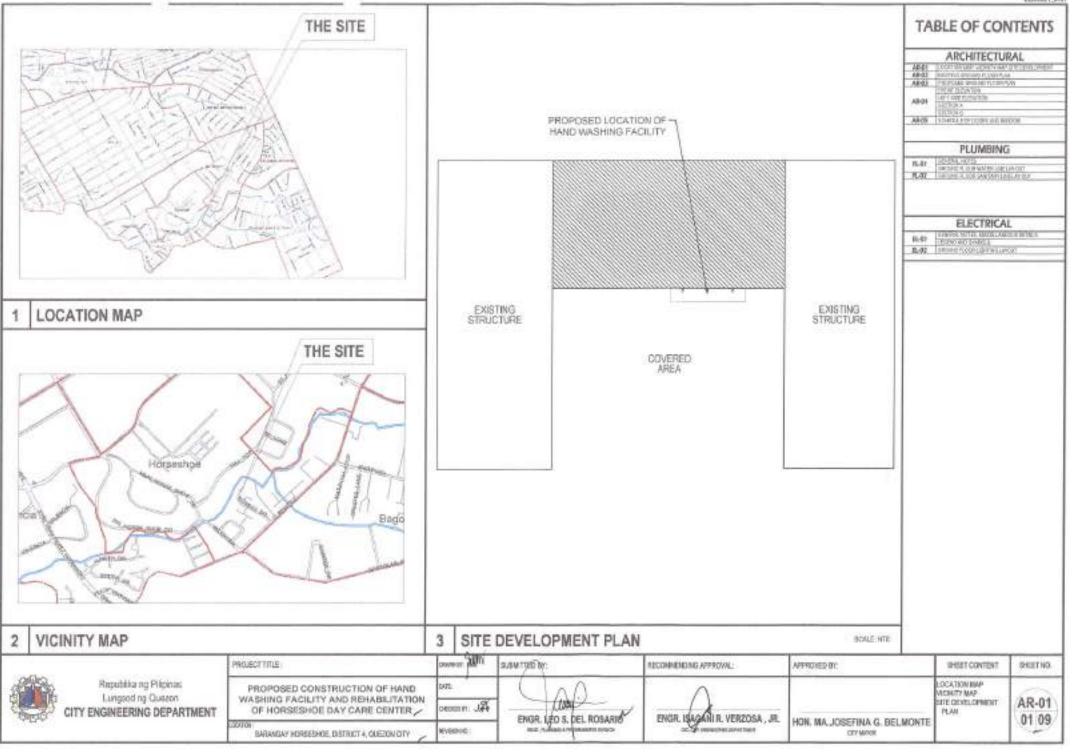
GENERAL NOTES
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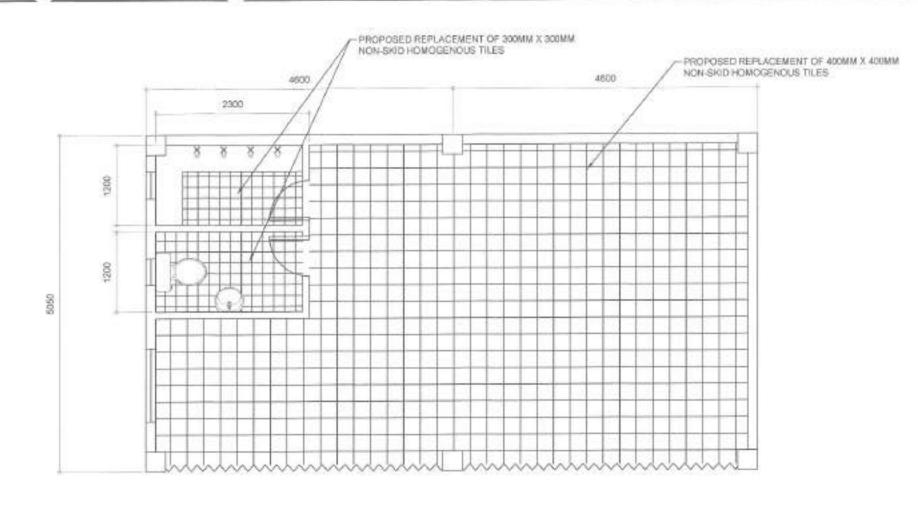
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SHIPT COSTRACT





- . EXISTING HAND WASHING FACILITY TO BE DEMOLISHED
- * ACCORDION DOOR TO BE REPLACED WITH DRYWALL

EXISTING GROUND FLOOR PLAN

SDALE: HIGH

WHEET NO.



Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT

PROJECT TITLE PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF HORSESHOE DAY CARE CENTER DODITION:

BARANGAY HORSESHOE, DISTRICT 4, QUEDON CITY

Downer MA BUBMITTED BY: oncern 4da ENGR. LIJO'S, DEL ROSARIO TOTAL PARTY AND ADDRESS OF THE PARTY AND ADDRE REVENUE OF

ENGR. SAMANI R. VERZOSA, JR. HON. MA. JOSEFINA G. BELMONTE IC,CTTININGIBIOGOVYMA

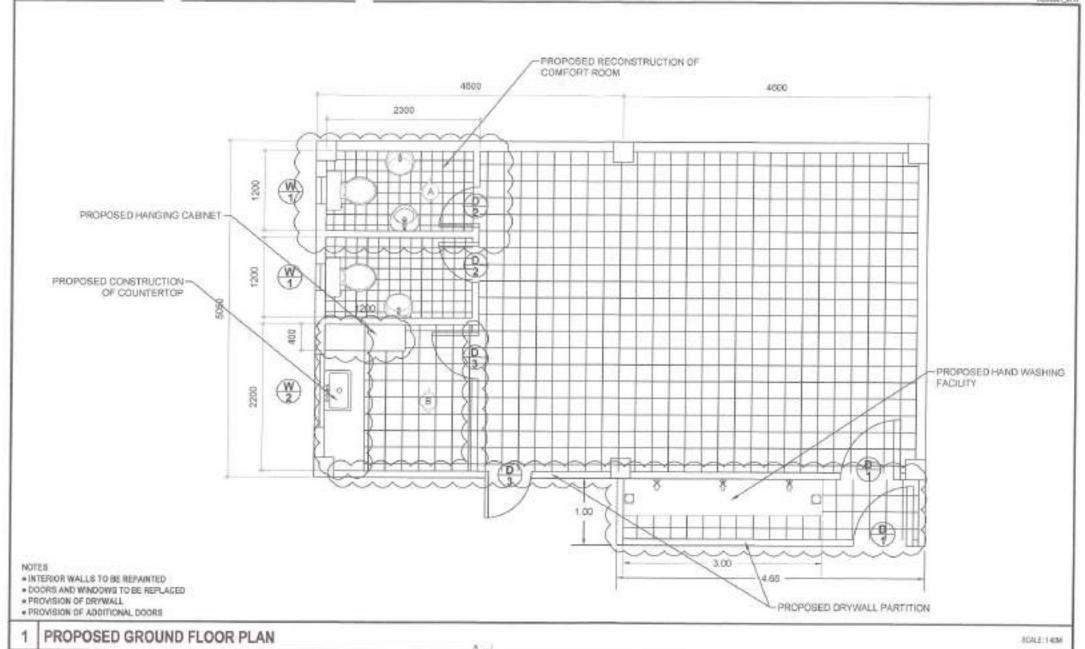
RECOMMENDING APPROVAL:

HROUND FLOOR PLAN

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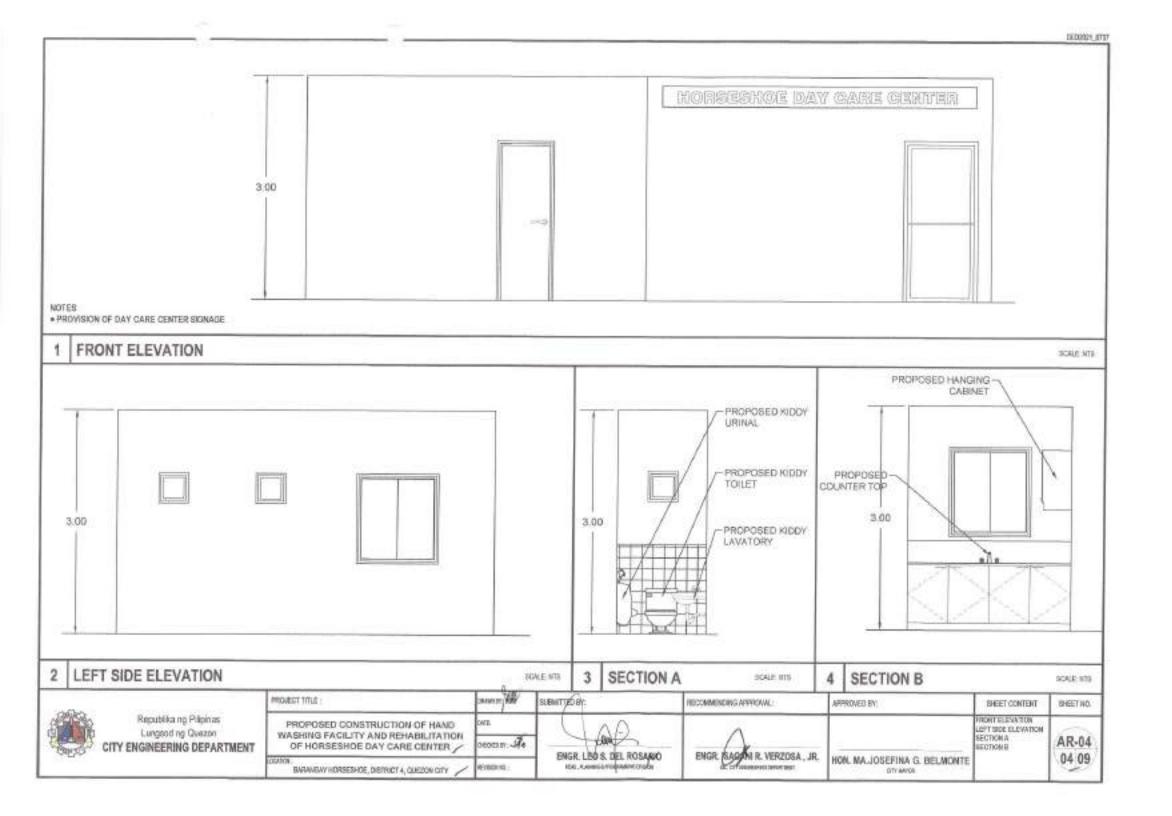
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Republika ng Pilpinas Lungsed ng Quezon CITY ENGINEERING DEPARTMENT

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NT	PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF HORSESHOE DAY CARE CENTER	ososor 164		Δ.		PROPOSED GROUNG PLOCK PLAN	AR-03
	DOURSE BARANDAY HORSESHOE, DISTRICT A, QUELTON CITY /	PEYBON SO.	ENGR. LBD S. DEL ROSARIO	ENGR, ISAGANT R. VERZOSA , JR.	HON, MA. JOSEFINA G. BELMONTE		03 09

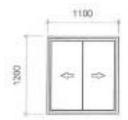












DESIGNATION	®	9	30
SPECS	ONE LEAF DOOR, 10mm THK CLEAR TEMPERED GLASS ON WHITE COLOR POWDER COATED ALUMINUM FRAMES	SWING TYPE, PVC DOOR, WITH 400mm x 300mm LOUVER, PAINTED FINISH (KITTEN WHITE)	SIMING TYPE, FLUSH HOLLOW CORE DOOR, PAINTED FINISH (KITTEN WHITE)
HARDIKARE! GLAZING	COMPLETE ACCESSORIES.	COMPLETE ACCESSORIES. DOOR KNOG: LEVER TYPE SATIN STAINLESS FINISH	COMPLETE ACCESSORIES DOOR KNOB LEVER-TYPE SATIN STAINLESS FINISH
NO. OF SETS	2 SETS	2 SETS	2 SETS

DESIGNATION	⊕	⊕
SPECS	AWNING WINDOW, 5mm THK CLEAR TEMPERED GLASS ON WHITE COLOR POWDER COATED ALUMINUM FRAMES	SLIDING WINDOW, Smm THK CLEAR TEMPERED GLASS ON WHITE COLOR POWDER COATED ALUMINUM FRAMES
HARDWAREI GLAZING	PROVIDE WITH COMPLETE ACCESSORIES	PROVIDE WITH COMPLETE ACCESSORIES
NO, OF SETS	2 SETS	1 SET

1 SCHEDULE OF DOORS AND WINDOWS

BOALE STS

SHEET WO.



Republika ng Pilipinas Lungsod ng Queson CITY ENGINEERING DEPARTMENT

NOUNCE THE !	
PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF HORSESHOE DAY CARE CENTER	
BANANGAY HOUSESHOE, DISTRICT 4, QUEZON OITY	





RECOMMENDING APPROVAL:

HON, MA.JOSEFINA G. BELMONTE

APPROVED BY:

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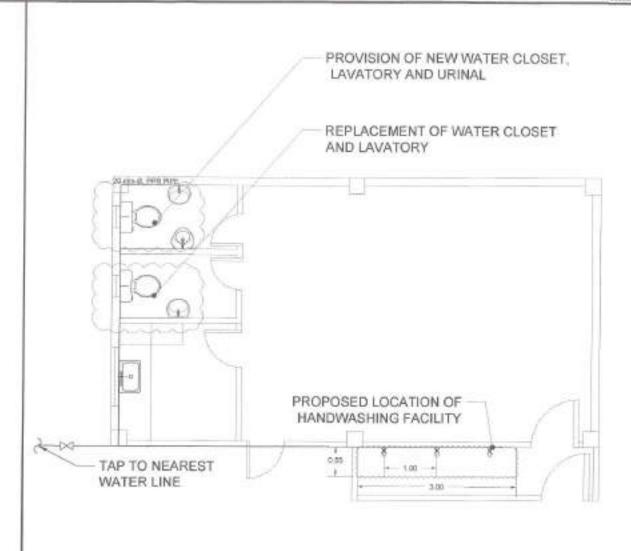
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1 GENERAL NOTES, LEGENDS AND SYMBOLS

2 GROUND FLOOR WATER LINE LAYOUT

SCALE WITH SHEET NO.



Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF HORSESHOE DAY CARE CENTER

BARANGAY HORSESHOE, DISTRICT A, QUILDON (37Y /

ORDITARY:

ENGR. LBG S. DEL ROSARIO

ENGR. L

DAMES CLAME BUBBITTED BY

ENGR. ISAGAN R. VERZOSA , JR.

RECOMMENDING APPROVAL

HON. MA.JOSEFINA G. BELMONTE

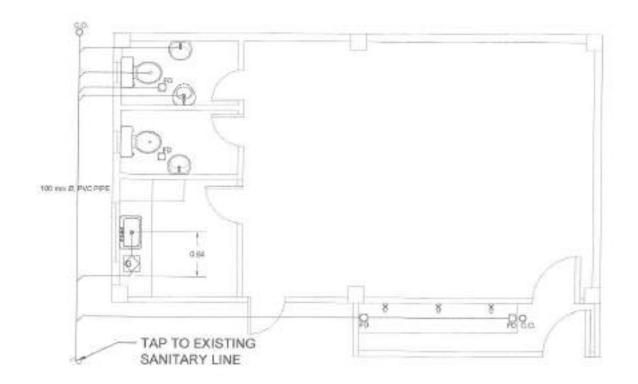
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SENERAL HOTER
SOCIED STANDOLS
SPOUND FLOOR WATER
LINE LAYOUT

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GROUND FLOOR SANITARY LINE LAYOUT

SCALE MIS.

SHEET NO.

Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT

HOWERT TITLE:	DAMES COME	SLEMITIED BY
PROPOSED CONSTRUCTION OF HAND	OVE	(100
OF HORSESHOE DAY CARE CENTER	OEDGEN JAN	chair .
BARANDAY HORSESHOE, DISTRICT A, QUIEDDINGTY	mente:	ENGR. LEO S. DEL ROSARIS

ENGR. MAGAINR. VERZOSA , JR.

RECOMMENDING APPROVAL

HON. MAJOSEFINA G. BELMONTE

APPROVED BY:

SHOUND FLOCK SAWITARY LINE LATOUR PL-02 07 09

ACADING OF

- 1. ALL ELECTRICAL WORKS SHALL BE GONE IN ACCOMPANCE WITH THE PROFISIONS OF THE LANGET COMPOSITION OF THE RELEVING OLD COMP THE LAWS AND ORDINANCED OF THE LOCAL CODE EMPORCED AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL MOVER AND TELEPHONE LITELITY COMPANY
- 2. THE CONTRACTOR SHALL SECURE ALL PERHAD AND RAY ALL PLES REQUIRED FOR THE WORK AND RHALL MIRRIED FOR CHARGE THROUGH THE ENGREESIS, PARK CERTIFICATES OF ILSECTRICAL INSPECTION AND APPROVING PROPER DOVERNMENT ACTION FIRST PROPERTIES OF
- 3. ALL ORIEDOSO BRANCH CHICATES SKALL BE FAC DEVISITE MED FOR EXPOSED INSTALL FROM U.H.L. SE NO GLEDOS TEX DY CONSULT CLAUME. EVERY TO MUNICIPAL
- A FIALL BOXES SHALL SE PROVINCE BY THE CONTRACTOR PARENTHER INCREMENT TO FACILITYTE WIRE PULLING DVEN IF THERE ARE NOT REDICATED ON THE PLANTS. SETSO OF AU. PILLSOUSS SHALL BY COMPLITED BASED ON THIS CODE REQUIREMENTS SUBJECT SHOP DRAWINGS TO THE INCREDITION APPROVAL PROFITD PARTICIPATION LOCATION OF PALLBOSES SHALL BE APPROVED BY THE ASCHITOCHEWGRICE) AND MUST BE REFLECTED ON THE WALK IN THAT
- F. ALL POWER OUTLETS AND SMITCHES BRAIL BY DRIVING BY SHITH PARKET, BUSTE FOR 200 F.
- 8 PROVIDE ORDERO PAULT CLARGEST HUTBREUFTER CROWN SREARS FOR LOADS MARKED SACTOR THE PLAN.
- F. ALL METALDO DONDUTO, DAZINETE AND EQUIPMENT BHALL BE PROPERLY DROUNDED AND BOSDED.
- 8. UNLESS OT RESIDES NOTED, MORETING HEIGHT FOR WALL BOURTES DEVICES SHALL BY AS FOLLOWS:

RECEPTACE OUTSET - 300 MW AFF. THOM WACKE WORKING COUNTER. TELEPHONE QUITLET - 300 WM APP GATY OUTLET - 30E MM AFF LIGHTING SIRTOR - 1460 MALLIFE FINELBOARD - 1000 HM AFF

- 9. REFER TO HEICHARICAL FILLIMENO ANY FIRE PROTECTION DOWNINGS FOR BATHICS AND LOCATIONS OF SQUIRINGS AS WILL, NO THEIR CONTROLL BROWNINGS AN INFORMED AND OR SHOWN UNDER THEIR RESPECTIVE ACCIDING.
- TO ALL MATERIALS TO BE OSED SHALL BE OF THE BEST SUALITY , MANY WAVAN SPECIFIED
- 11. THE DRAWNING AND SPECIFICATIONS ARE INTERDED TO PRESENT GENERAL LAPLAT AND GROAD OUTLASS/DESCRIPTION OF THE PROJECT PLT DO BUT HEGESSATE, THIS CATE DESCRIBED ASTUAL LOCATIONS, LIEVEL AND ISSTANCES OF THE TOIL PRINCIP. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE DICH ADJUSTMENT AT THE JOSSITE AS LOCATION, DISTANCES AND LOUD, AND GROWING BY ACTUAL FIELD CONDITIONS.
- 10. ANY DISCREPANCE BETWEEN THE PLASS AND STROPPONTONE SHALL BE RECEDED TO THE ATTENTION OF THE DISCREPANCE OF THE DISCREPANCE.
- 15. ALL LIGHTERS AND DON/TERFECT OUT; ET GROUTE SHALL BE 1,5 GG, MW. THANK I COPPER WAYE MILESE OTHERWISE ROTED MINISTER DOZ OF WIRE SHALL SE 3.5 SQ MIS COPPER WIFE ALL VIRNES AND CARLES SHALL BE COURS DODGE AS FOLLOWS:

LINE COLD LINE E-VELLOR NOUTHAL - HHITE DROUND - GREEN

14 BOXEL WIRE, GUITERS, ENCICKERS BRAIL BE PARRICHTED PROMISTRES, WITH THICKNESS AS FOLLOWS.

MALIN UNIVERTED OF THE INDIRECT CHIEFACE STEEL.

UP TO MOLIGING 153.40 MV

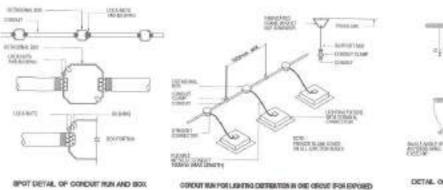
BA TREPARTHE WITH METAL PRIMER EPOCY AND TOROGRAT DOMESTICAL DISCOUNT OF COMES ART TO GRITH PARTED WITH METAL PRIMER EPIDITY AND TOPICION. BA 12 REALTED WITH METAL PRIMER PRODUCTION OF TOROCOLT.

CHARGE 467 THE RIGHT SELFT HIGH CHARGE TIES MAY WANTED AND ADDRESS.

DA 15 PAINTED HITH METAL PRIMER EPOLIS AND TOPICION. ALL DESTRUCT WORKS HERE WINNERS BY EXECUTED BY EXPERIENCED MER LYCORY THE ORIGIN SUPERVISION OF A FULL THIS LICENSES. ELECTRICAL ENGAGES: AND A DISLY ACCESSIVED IS ECTRICAL CONTRACTOR BY POAC WORKS SHALL BE REALLY PLACED, SECURELY

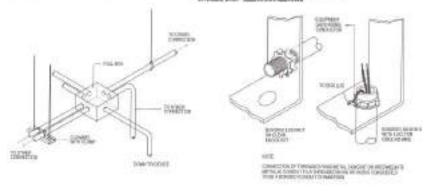
Final High

- 18. TWYS OF SERVICE SHITLINGS SHILL BE THICLS PHASE. TWO WHE PLUS BROUND, HE HERTZ TODAYS REMINE.
- 17. CONDUCTOR IN NO CASE SHALL THERE SE MORE THAN THE SOURALEST OF FROM DUARTER BEINGS IN ANY ONE MAY ALL CONDUCT SENSS SHALL BE. FELD MADE SYLLERO HYDRAXLET RESIDENCE MINISTER MINISTER BADNO BASIS OF IN ACCORDANCE TO THE CODE REQUIREMENTS.
- 18. UPOH COMPLETED OF ELECTRICAL CONSTRUCTION WORK, INDICATION RESISTANCE TEST AND PANCHONALITY TEST GIVAL BE PERFORMED BY THE CONTINUED RECURRANCE OF THE HISTALLATION TO BE DEPOSITED IN DETAILS ON FORMS AFFECTIVE BY THE QUESTION OFF TRESPECTATION. DEWATTHER T REPRESENTATIVE. THE GROUND RESISTANCE FOR ILLECTRICAL PROTEINS SHALL HOT BE MORE THAN 5 OHIS. COMMUNICATION. CONCRETE A STREET CARGE THAIL, NOT EXCEED 2 OH HIS



OF NIEDE DROF-CHILING WITHLIAMONE

DETAIL OF BONDING HADAR



MISCELLANEOUS DETAILS

LEGENDS AND SYMBOLS

BICALE NES

- (FOR REPLACEMENT)
- (TOR REPLACEMENT)
- EST WESTFRELE WITH LED SHILLS
- TOTALE TYPE WITH SKIRM LED TUBE LIGHT (FILM REPLICEMENT)
- SWILLIS CONVENIENCE SWILLT
- ADDITIONAL SECTION DATE
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APPROVED BY

GENERAL NOTES



Republika ng Pripinas Lungsod ng Quezen CITY ENGINEERING DEPARTMENT PROJECT TITLE:

PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF HORSESHOE DAY CARE CENTER

BARAMGAY HORSESHOE, DISTRICT 4, QUEZON (31Y)

DEDESTI JAN SEVERORIAL.

SUBMITTED BY:

ENGR. LEO, S. DEL ROSARIO HOR TOWNSON FORWARD THROUGH

ENGR. SAGANI R. VERZOSA , JR. OF POSTABLISHED SOMERAND

RECOMMENDING APPROVAL

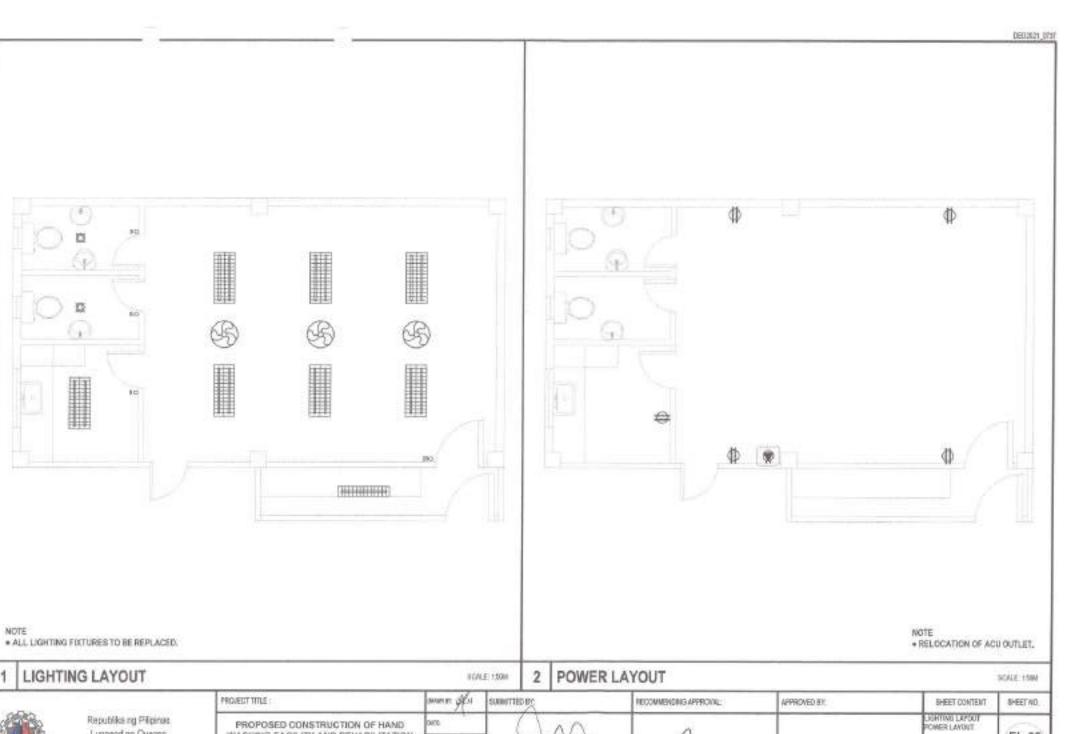
HON, MAJOSEFINA G, BELMONTE -CET MINOR

GENERAL NOTES MISCELL ANDOUG DETALS INVESTMENT AND SYMBOLE.

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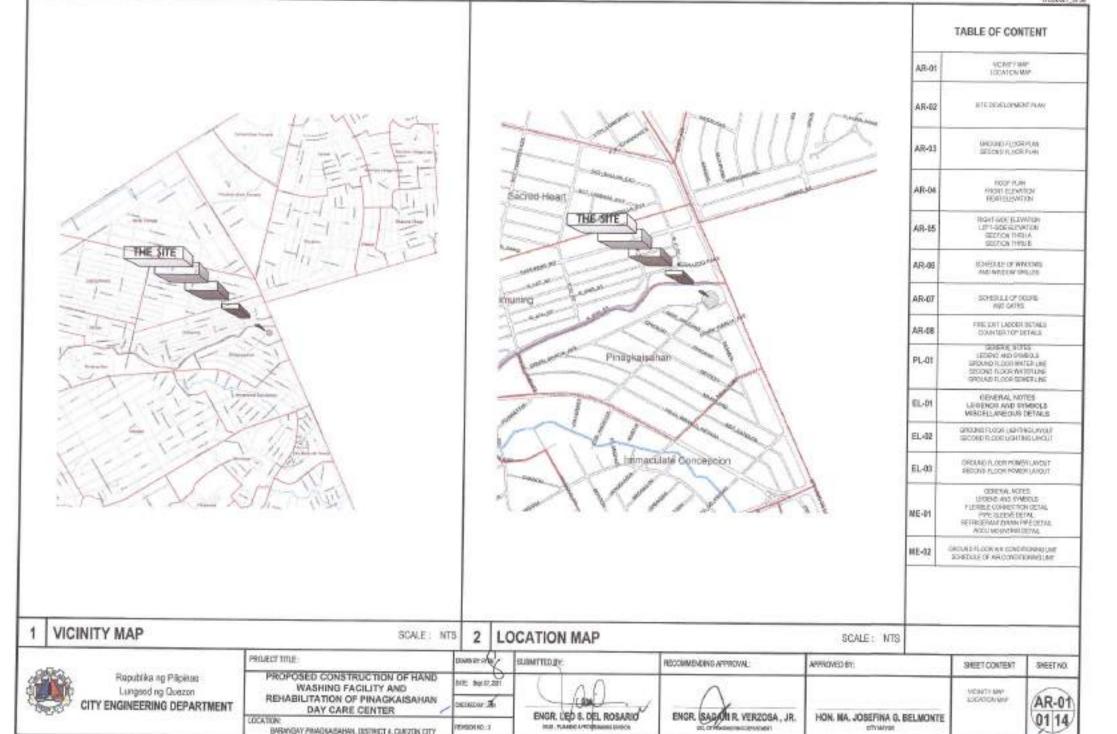
PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF HORSESHOE DAY CARE CENTER BARANSAY HORSESHOE, DISTRICT 4, QUEZON CITY

(MCDICORY) ENGR. LEGIS, DEL ROSARIO REMINISTRATION:

ENGR. ISAGANI R. VERZOSA., JR.

HON, MA JOSEFINA G. BELIMONTE

EL-02 09 09



INST. PLANED LYCOTHANIST SVICOL

TEMPORAL T

COCATION:

BARANGAY PINAGRAISAHAN, DISTRICT 4, CLIEZON CITY



1 SITE DEVELOPMENT PLAN

SCALE 1:75 M

Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT

PROJECT TITLE:	
PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINAGKAISAHAN DAY GARE CENTER	/
OCATION: BARANGAY PINAGKAISAHAN, DISTRICT 4, QUIEZON CITY	_

	Commission send	SUBMITTED BY:
	DATE SHERTH	101
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ENGR.	ISAGGIR VERZOSA, JR.

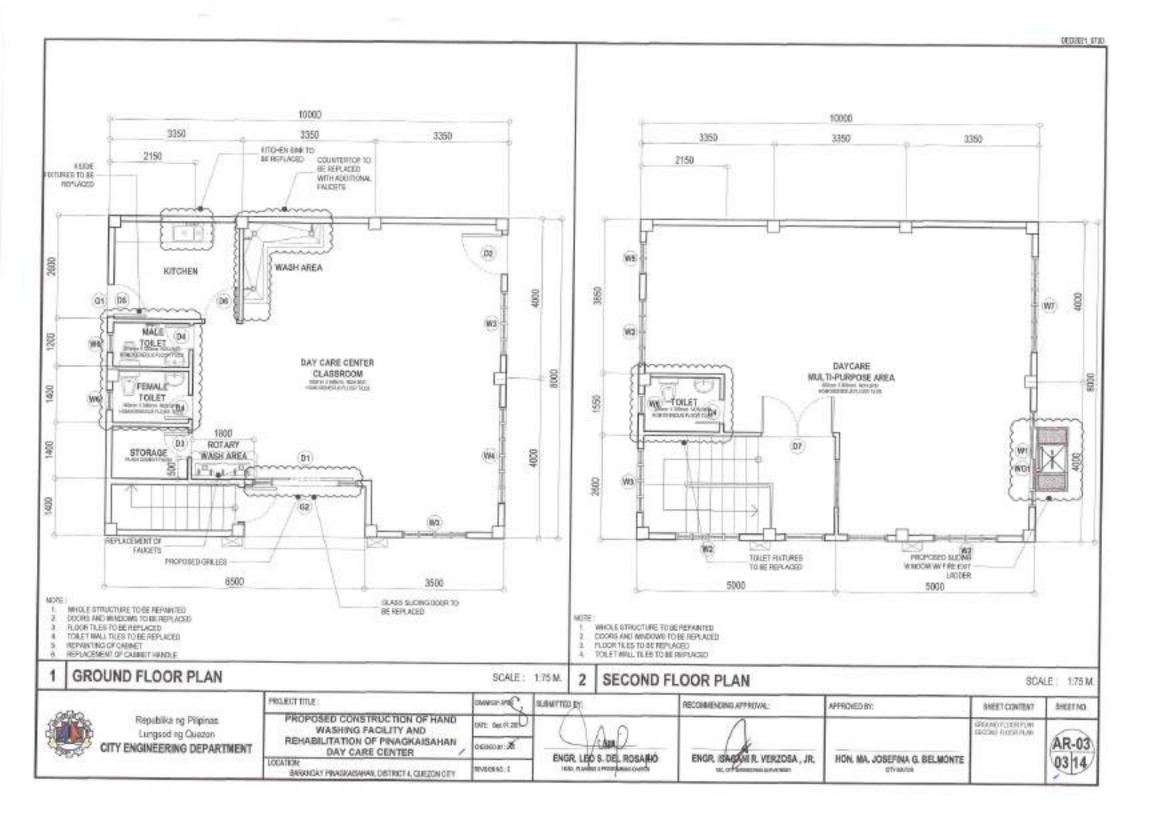
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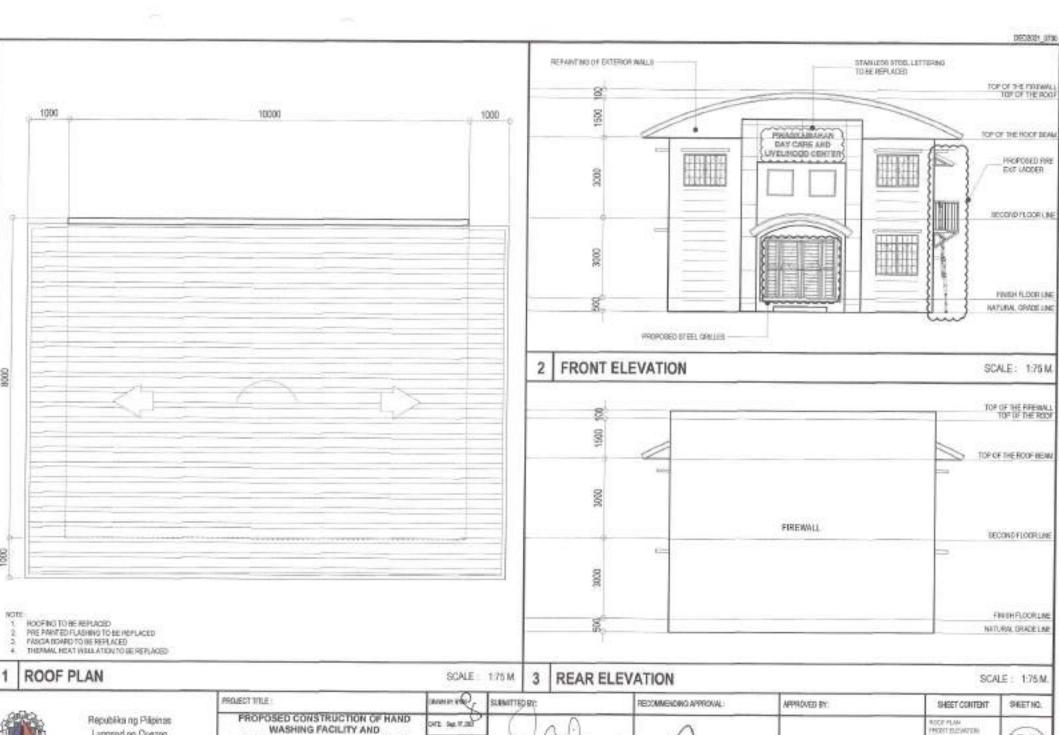
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HON, MA. JOSEFINA G. BELINONTE	

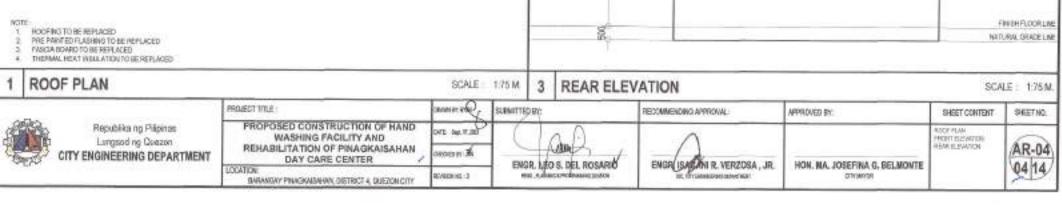
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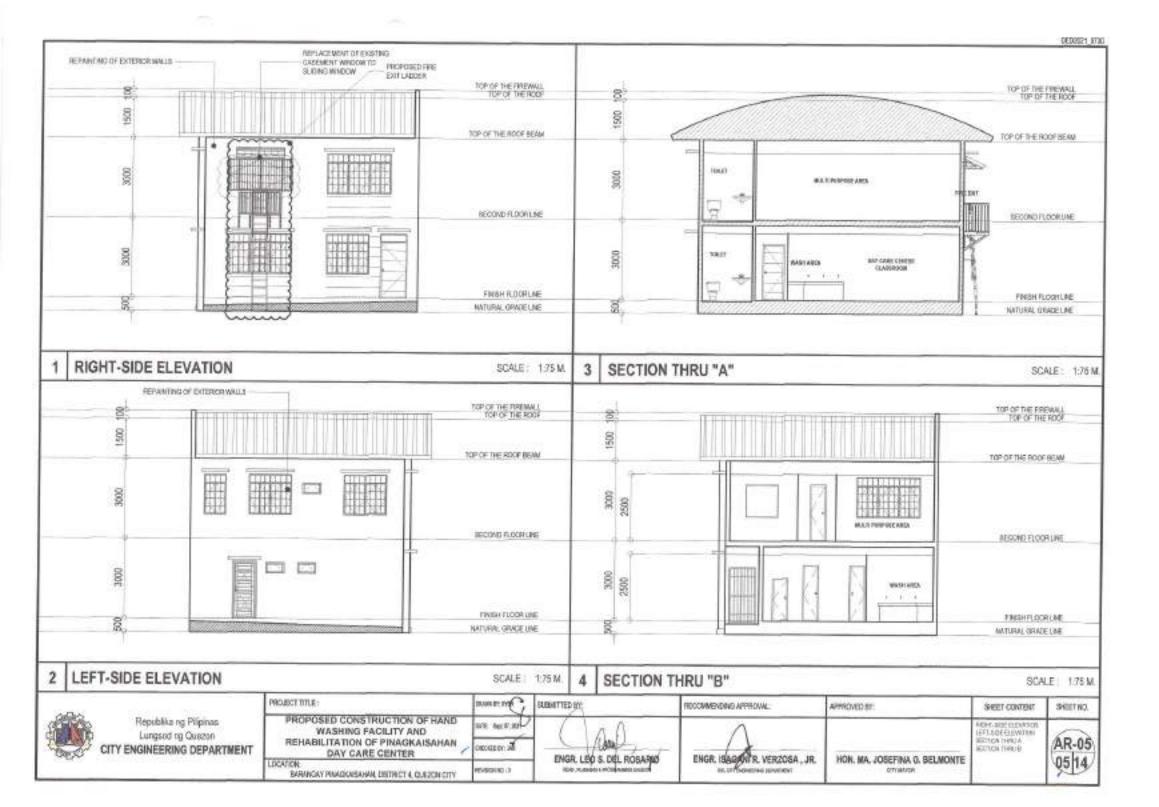
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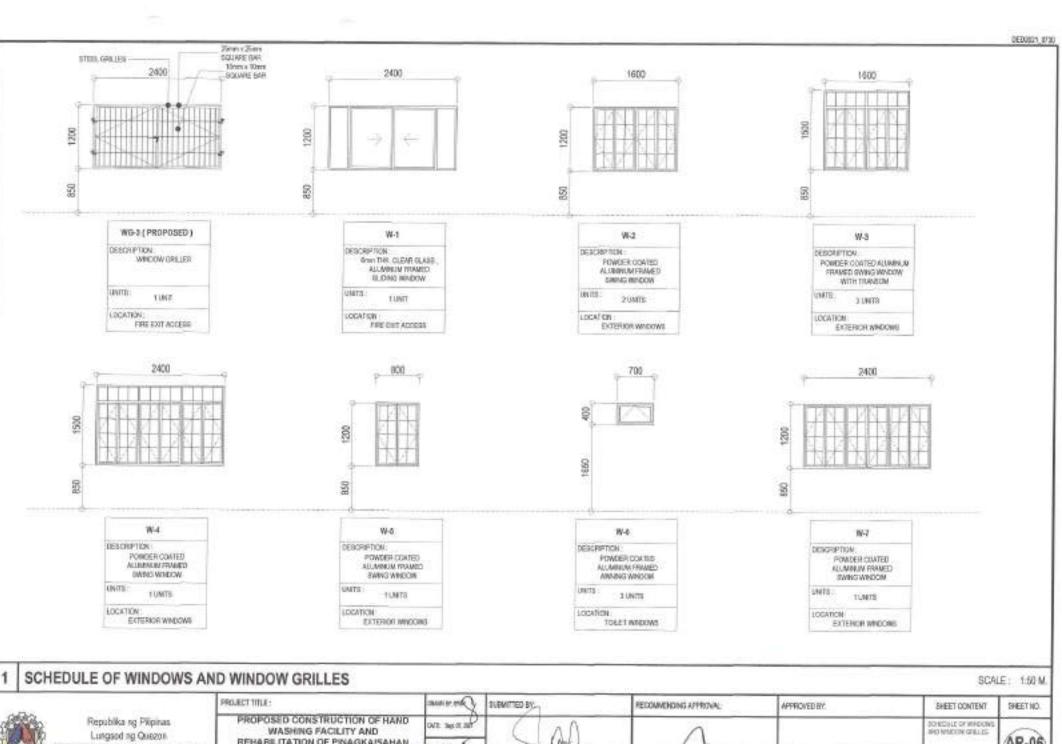
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CITY ENGINEERING DEPARTMENT

REHABILITATION OF PINAGKAISAHAN DAY CARE CENTER LOCATION BARANGAY PINASKASAHAN, DISTRICT 4, QUEZON CITY

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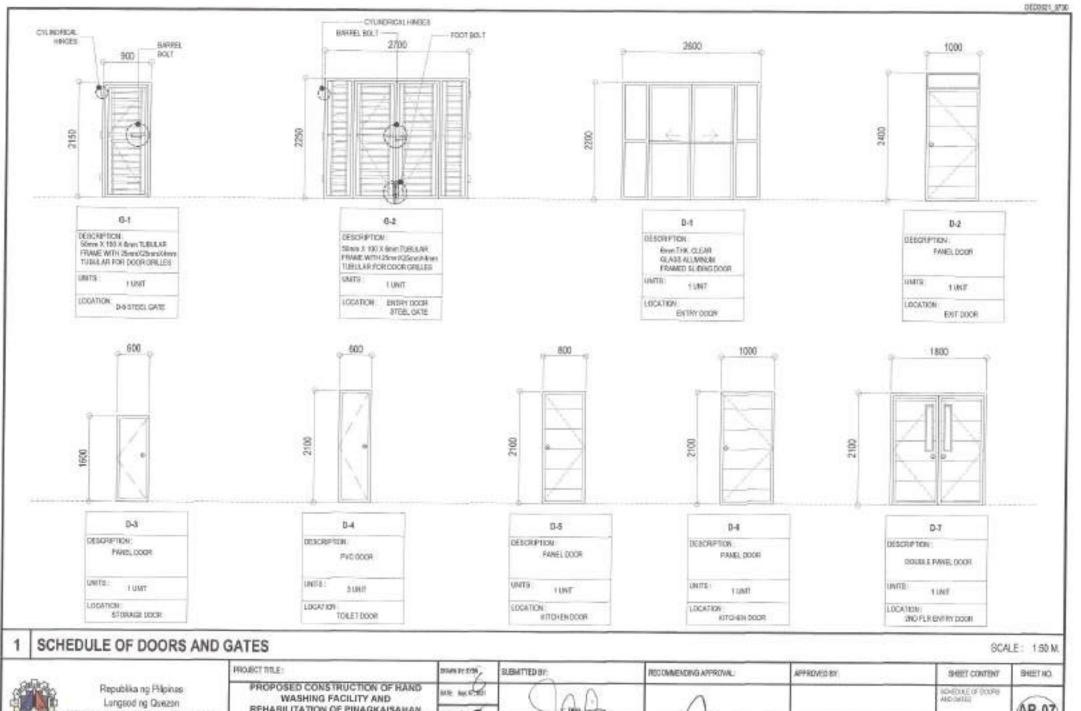
ENGR. LEWS. DEL ROSARIO REVENUE LE

ENGR. ISÁGARÍ R. VERZOSA , JR.

HON, WA. JOSEFINA G. BELMONTE OTY MARKS

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CITY ENGINEERING DEPARTMENT

REHABILITATION DAY CAR LOCATION: BARNACAY PINACKABAH

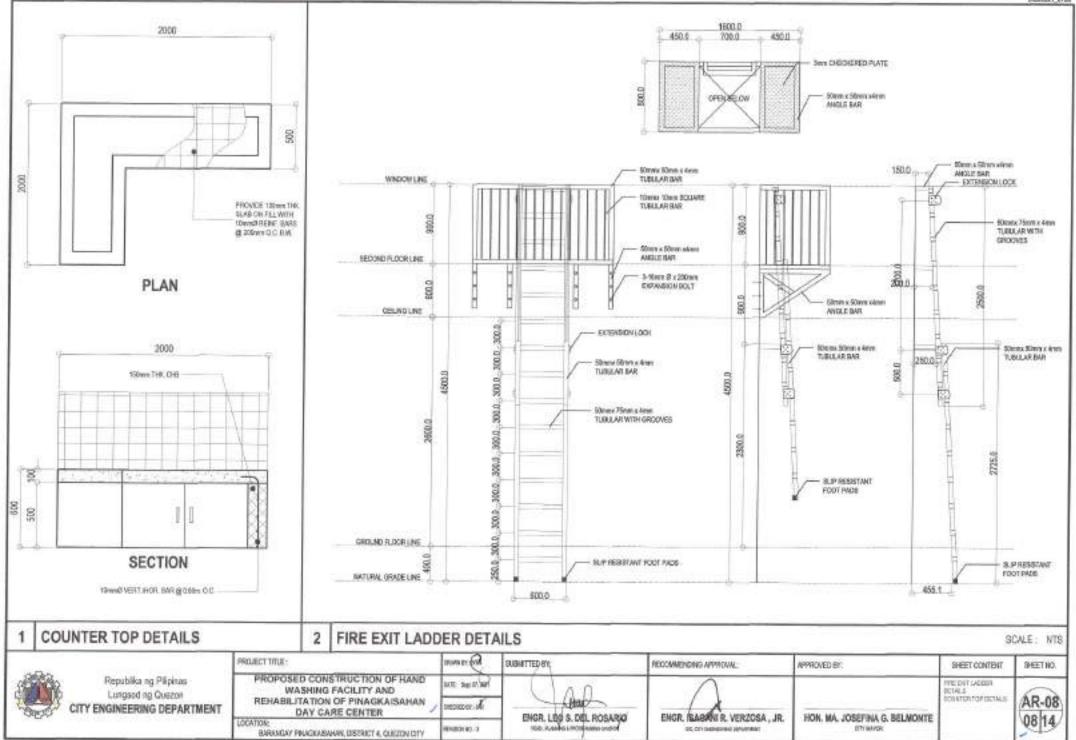
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ENGR. SAR	AN R. VERZOGA , JR.

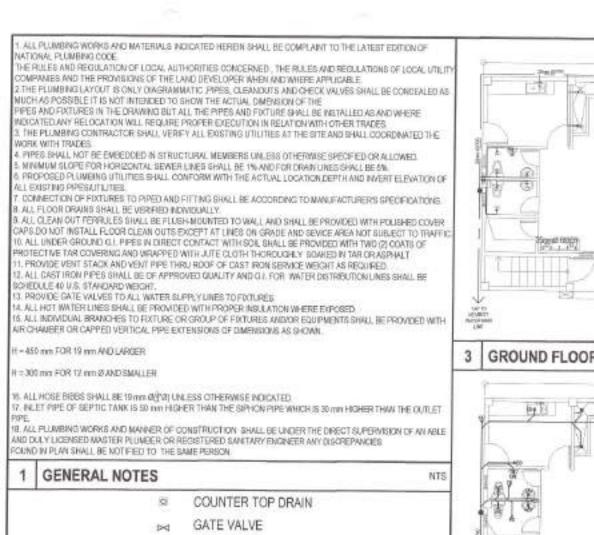
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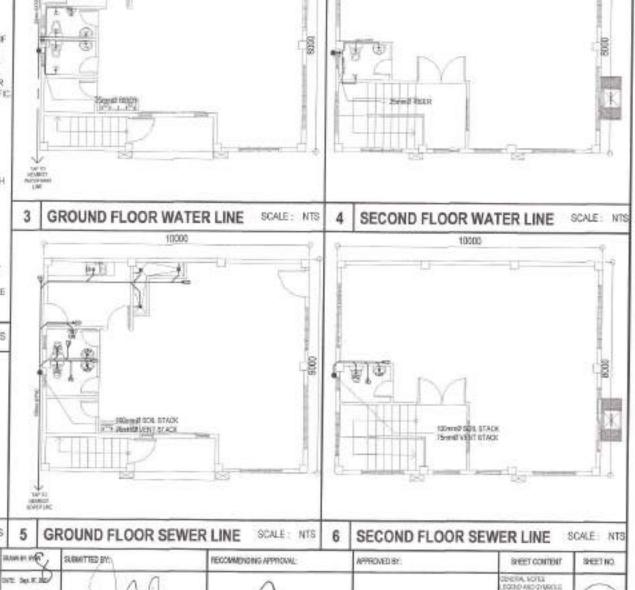
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Republika ng Pripinse Lungsoding Quezon CITY ENGINEERING DEPARTMENT

LEGEND AND SYMBOLS

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> PROJECT TITLE PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINAGKAISAHAN

DAY CARE CENTER LUCATION

BARANGAY PINASKAISAHAM, DISTRICT 4, QUEZON CITY

DVE. Sex F. 282/ SECULES A

RIVERSHIPS 12

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ENGR. LEG'S, DEL ROSARIO HEIS IT WANTS LIVE COMMAND SWINGS

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ENGR. ISAGGRIFR. VERZOSA, JR.

HON, MA, JOSEFINA G. BELMONTE

IGRAD AND SYMBOLD ACOUNT CLOCK 204075009 MIFR 166 BROLINGS FACTOR

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GENERAL NOTES:

- 1. ALL ILECTRICAL WORKS INVALVED CORE IN ACCORDANCE WITH THE RECUISION OF THE LATEST EXPLOYOF THE INVALVENCE. EUCCTRON, COOK, THE LIVING AND CREMINIONS OF THE LOCAL CICE ENFORCING AUTHORITIES INC. THE INCLUMENTAL OF THE LOCAL POWER AND TO STHOME UPLITY CONSWIY
- 1. THE CONTRACTOR SHALL SECURE ALL PERMITS AND PAY ALL PER ROQUED FOR THE WORK AND SHALL FURNISH THE GANCH THROUGH THE ENGINEERS, FINAL CERTIFICATES OF ELECTRICAL REPRECTOR AND INVESTIGAL PRODUCTION DOVERNMENT ALTHOR SEE FOR COMPLETION OF WORK.
- 1. ALL EMIEDRIC BRANCH CRICKTE INVALUE PLYC CONDUITS AND FOR EXPOSED INVOLLATION IS WILL RESIDENCE BY
- 4. HAL BOYCS SHALL BE PROVIDED BY THE CONTRACTOR WINDHOLD IN DELEGIANT TO FACULTISTS USED PLALIFIED FROM IF THESE WAS MOTHER ON THE PLANT. BEYOND OF ALL PLANTS THALL BE COMPLIED SHEED ON THE CODE POSITIONERS. SUBJECT SHOP (SHAWNESS TO THE IDENTIFIED WARROW), PRIOR TO PARRICATION, LISCATION OF MAJORISTICS OF APPRIORED BY THE ARCHITECTION GREEN AND MUST BE REPLECTED ON THE NAHALILLY RURK.
- E. ALL HOWER CUTLETTS AND SINITOHES SHALL BE SHICLARD NO TITMS WITH PARALLES SLOTE FOR SHIP.
- 8. PROVIDE GROUND FAULT OURSIAN BUSINESS CROCKET BROAKER HOR LOADS MARKEST TIPLET ON THE PLANS.
- 1. ALL MATALLIC CONDUSTS, CARRIETTS AND BOUNDARY SHALL BE PROPERLY GROUNDS OWN BONESS.
- UNLIGG OTHERWISE NOTES, SECURITIES RESOUT FOR WALL SIQUETED DEVICES SHALL BE AS FOLLOWS:

RECEPTACE & DUTLET - 1000 DAY JPF , (1 NOBER & BOOVE WORKING COLLETER)

TELEPHONE CUTLET - DIS MIN APP GATY GAPLET - 300 RM APT

LICENSIS EWITCH - MISC MISLER

PARELDOARD - 1600 MID AFF

- 8 REPER TO MECHANICAL PLUMBING ANTITIZE PROTECTION DRAWNOS FOR RICHARD INCL. LOCATIONS OF SOURWENT AS WALL AS THEIR CONTROL TROUBLESS AS SPECIFIED AND OR SHOWN UNDER THEIR RESPONDANCES BOTTOM.
- TEL ALL WATCHALS TO BE USED SHALL BE DY THE BOST SLEATY. HERBOOKER AS SPECIALS
- 11. THE ORNARIOS AND SPECIFICATIONS AND INFORMS TO PRESIDE GRANKS, LAYOUT AND RESIDE CHARACTERISTICS OF THE PROJECT BUT DO NOT SECURDABLY WID OUTSIDES FOR ACTUAL LIDOLTICAS, LOVIL AND COMPANDED OF THE DOMERNEY, THE CONTRACTOR IS REMEY REQUIRES TO MAKE SUCH REJUSTMENT AT THE JOSSITE AS LICENTER CISTANCES. AND LEVELS ARE DOVERNED BY ACTUAL FIELD OCNOTIONS.
- 1). Any dispression all twent the mank and shear cations shall be shought to the artistical of the available point. GLARIFFERTION SECRECY.
- 15. AU. LIBERTAIN AND CONVENIENCE OUTLET ENCOYS MINE, 65 55 50, 465, TAMAS CONTRA WING LIBERT CHARACTER INCIDEN MINUARY IDEA OF WING BALLS. HE SEE BY MAY CONTROL WHITE ALL, HAVE AND CAULES WANTE BE DOUGH CODED AS FOLLOWS.

LINE 1-1800-UNCS-VELION MEUTHAL - WHITE URDANO-SPRING

14. BOILD WEE SUTTIPS, BISLOSUPE SHALL BE PROPOSITIO FROM STEEL, MYST THICKNESS AS FOLLOWS.

MAXIMUM WESTH OF THE WIDEST SURFACE STEEL. THE TO OUR LIDERS THE RESIDEN

DA 16 79/HTED HETHMETH, PRIMER BROKY AND TOPOCHT GATH ANSIND INTHIMITAL INNIER EROSYAND YORCOLD

CHART (SC 40 MM BUT NOT OWN 407 20 CWIRT TRETAN

GA 12 AWATED WITHING IN, FRIBER EPOSY AND TOPOCAT GALLE MANTED WITH METAL, FRAMER ERONY MICHOROGAT

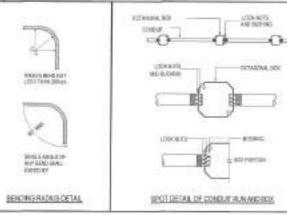
- 15. ALL CLOSTROVA WORKS HORISI SHALL BE EXECUTED BY EXPERIENCED MINI LINCOLD THE DIRECT SUPERIOSONOP A FIGURE LICENSED ELECTRICAL ENGINEER AND A DATA HOSPITED ELECTRICAL DISTRICTOR BY FORE MORRISHME. BRINGS FALSON, SECURISY WATERED MAD PROPERLY MAKEND.
- IS. TYPE OF STRUCK EMPROVED SHALL BE ISSULE PHICE. TWO WIRE PLUS DROUND, INFREST, INFREST, AND ACKNOWNS.
- TY CONDITION NO DATE SHALL THESE BE INSIDE THAN THE EQUIVALENT OF FOLK QUARTER BRIDGIN, MY ONE RUN, ALL CONCAT BEINE SHILL BE PELO MADE BY LESIO WARNING BRIGHES MINING SINDING RUDGE MUST BE IN ACCORDANCE.
- IN DESIGNATION OF ELECTRICAL CONSTRUCTION NOTE, INSULATION RESISTANCE TEST AND PLACETORILITY MET SHALL SEPREPORTED BY THE CONTRACTOR INCLUSIVE OF THE INSTALLATION TO SCREPORTED BY DETAILS OF FORMS AFRICADED. BY THE QUESTION OFFY ENGINEERING INFORMS INFORMS INFORMATION, THE DRICKING NEW STRAKE FOR ELECTRICAL GVETENIE EHALL NOT BE MORE THAN 5 DHAS, COMMUNICATION GROUNDING RESISTANCE SHALL NOT EXCEED 2 CHIEF.

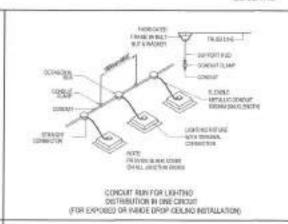
LOCATIONS

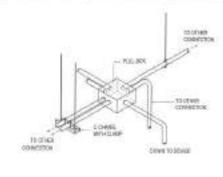
111111111111111111111111111111111111111	2x18W, LED TUBE LIGHT TROFFER TYPE	n	100mm# RECEPTABLE WITH TOW LED BUILD
	1x18W, 1ED TUBE LIGHT BOX TYPE	S	ONE GANG SWITCH
(9)	CEXUNG FAN	•S ₂	TWO GAVE SWITCH
dib	WALL FAN	•S ₃	THREE GANG SWITCH
0	CONVENENCE OUTLET, TWO DANC	LPP	PAREL BOARD
	100mm# PPLICHT	PUH	CRICUIT HOMERUN
0	150mm# PINUGHT		

LEGEND & SYMBOLS

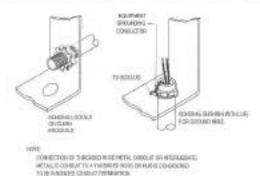
SCALE NTS







PROPER DONDLITT LAVOUT MIPUUL BOX



BONDED PALEIRAY TERMINATION FOR ISHEET METAL

GENERAL NOTES

BOALE NTS

MISCELLANEOUS DETAILS

SCALE NTS



Republika ng Plipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT PROJECT TITLE:

PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINAGKAISAHAN DAY CARE CENTER

BARRANGAY PINAGKAISAHAN, DISTRICT 4, QUEZON CITY

DATE BHILD, 781

OEDSDER: N ENGR. LEO S. DEL ROSARIO 1600, PLANTING PROFESSIONAL STATES WY50810:1

SUBMITTED BY:

ENGR. BAGAN R. VERZOSA , JR.

RECOMMENDING APPROVAL

HON, MA, JOSEFINA G. BELMONTE OTY MARCO

APPRIONED BY:

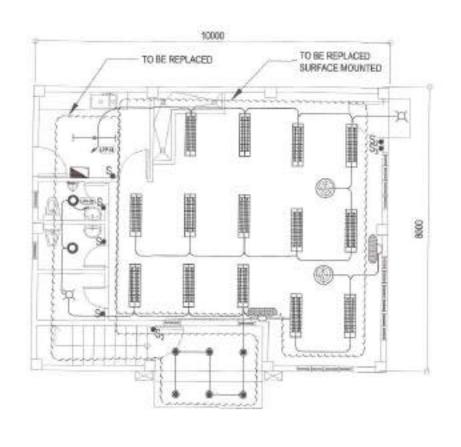
INDIVIDUAL NOTES LESSENGE AND EVEROLS

SHEET CONTENT

MISCRIL AVEOUR

EL-01 1014

SHEET NO.



TO BE REPLACED RECESS TYPE FIRE BUT SIGNAGE

HOTE:
1 TAP TO EXSTING PONCE SUPPLY

HOTE:

1. TAP TO EXISTING POWER SUPPLY

GROUND FLOOR LIGHTING LAYOUT

SCALE: 1:75 M.

Boune of C

PC1000000-5

SECOND FLOOR LIGHTING LAYOUT

RECOMMENDING APPROVAL:

SCALE: 1.75 M.

SHEET NO.

Republika ng Pilipinas Langeod ng Quezon CITY ENGINEERING DEPARTMENT

PROJECT TITLE: PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINAGKAISAHAN DAY CARE CENTER LOCATION BARANDAY PRIAGROISANIA, DISTRICT 4, QUEZON CITY

INTE BUILDING K. Hatacast ENGR. LEG S. DEL ROSARNO

BUBINITIED IN

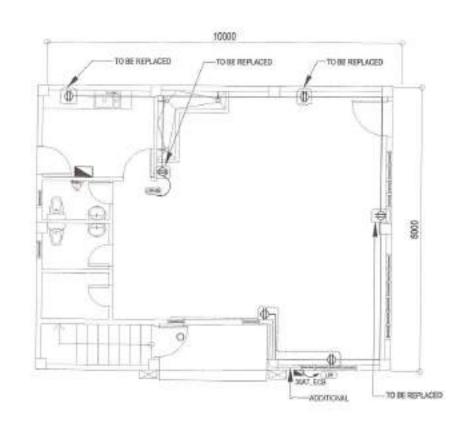
ENGR. SARARI R. VERZOSA , JR.

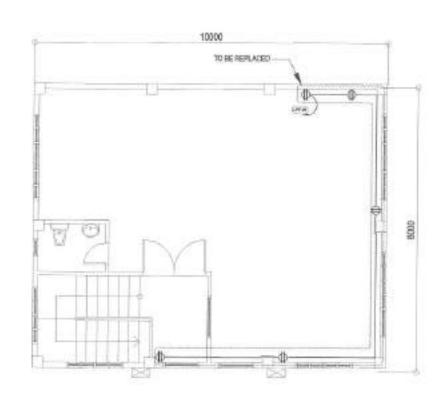
HON, MA. JOSEFINA G. BELMONTE CER WYCH

APPROVED BY

DESCRIPTION CHOCKS EL-02 BESCHE FLOOR CONTRIGUNOUS 1114







NOTE:

1. TAP TO EXETING POWER SUPPLY

NOTE:
1. 1AF 10 EXETING POWER SUPPLY

GROUND FLOOR POWER LAYOUT

SCALE: 1:75 M.

Commercial Commercial

SECOND FLOOR POWER LAYOUT

RECOMMENDING APPROVAL.

SCALE: 1:75 M

SHEET NO.

Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT

PROJECT TITLE:

PROPOSED CONSTRUCTION OF HAND
WASHING FACILITY AND
REHABILITATION OF PINAGKAISAHAN
DAY CARE CENTER

LOCATION

SARANGAY PINAGKAISAHAN, DISTRICT 4, QUEZON CITY

DECEMBER A ENGR LI

SUBMITTED BY

ENGR. LEO B. DEL ROSARFO

ENGR. MAGANER VERZOSA , JR.

HON, MA, JOSEFINA G. BELMONTE

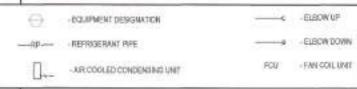
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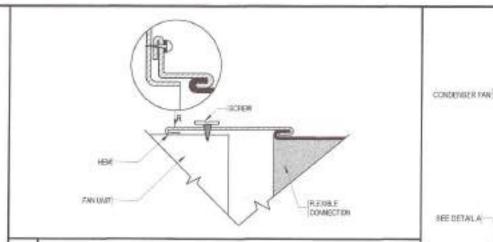
SSCARO FLOOM FOREST LIVERS 1214

ACCU

- 1. ALL MECHANICAL WORKS SHALL BE DONE IN ADCORDANCE. WITH THE LATEST REQUIREMENTS OF THE NATIONAL BUILDING CODE, PSME CODE AND THE RULES AND REGULATIONS OF QUEZON CITY.
- 2. THE SCOPE OF WORK SHALL INCLUDE ALL WORKS DESCRIBED IN PLANS.
- 3. THE WORKS SHALL BE EXECUTED IN CLOSE COORDINATION WITH ALL OTHER TRADES
- 4. ALL AIRCONDITIONED SPACES SHALL BE MAINTAINED AT 24°C DB AND 50% RH
- 5. DONTRACTOR SHALL SUBMIT SHOP DRAWINGS, MANUFACTURERS CATALOGUE, SPECIFICATIONS. SAMPLES, INCLUDING VIBRATION ISOLATORS BEFORE EXECUTION OF WORK.
- II. 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.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING AND COMMISSIONING OF THE WHOLE VENTILATION AND AIRCONDITIONING SYSTEM AND INSTALLATION.
- 9. ALL POWER WIRING SHALL BE ELECTRICAL AND TERMINATION TO EQUIPMENT SHALL BE MECHANICAL
- 10. PROVIDE CONTROL WIRING FOR AIRCONDITIONING EQUIPMENT.
- 11. PROVIDE THERMOSTAT FOR ALL INDOOR UNITS / FAN COIL UNITS.
- 12. VERIFY LOCATION OF CONTROLLERS AND SWITCHES ON ELECTRICAL PLANS.
- 13. ALL PIPE EQUIPMENT CONDENSATE DRAIN SHALL BE CONNECTED TO THE NEAREST FLOOR DRAIN / AD /CB
- 14. PROVIDE GUIDES, HANGERS, AND SUPPLEMENTAL STEEL SUPPORT FOR ALL PIPING, DUCTING AND EQUIPMENTS.
- 15. PROVIDE PIPE SLEEVES FOR ALL PIPING PASSING THRU BUILDING STRUCTURE.
- 16. ALL PIPE DIMENSIONS ARE IN MILLIMETER UNLESS: OTHERWISE NOTED.

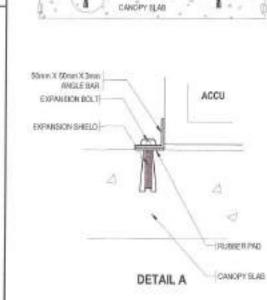


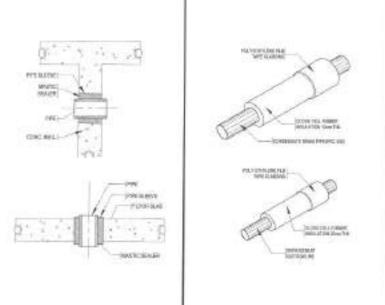




FLEXIBLE CONNECTION DETAIL

SCALE: NTS





LEGEND AND SYMBOLS

NTS

PIPE SLEEVE DET.

BOARS OF ON

5

NTB

REFRIGERANT/DRAIN PIPE INSULATION DET.

ACCU MOUNTING DETAIL

SCALE: NTS

SHEET NO.

Republika ng Plipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT

PROJECT TITLE: PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF PINAGKAISAHAN DAY CARE CENTER LDOATION

BARANDAY PIMAGKABAHAN, DISTRICT 4, QUESTON CITY

NO. No. 9', Ser M. vectores ENGR. LEO S. DEL ROSARIO HER SAMEGERSHAMMERIDEN EIGHDHNO: 3

SUBMITTED BY:

ENGR. SAGANI R. VERZOSA , JR.

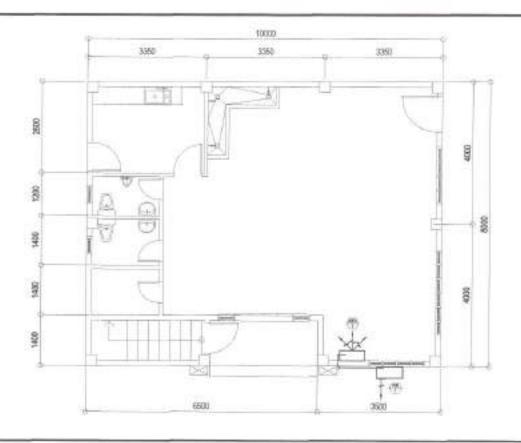
RECOMMENDING APPROVAL

NTS

APPROVED BY:

HON, MA, JOSEFINA G, BELMONTE STYMOOR

LESSING AND SHIPPINGS. PLEASE CONFESSION ME-01 WE SLITTLE BETWEE 1314 HET NOETSANDFORK NOOD INCOMENSATION DESCRIPTION



GROUND FLOOR AIR CONDITION UNIT LAYOUT

SCALE: 1:75 M.

SPLIT TYPE AIR-CONDITIONER AIR-COOLED CONDENSING UNITS.

DESIGNATION OUTDOOR INDOOR		TVOC	QUANTITY	COOLING CAPACITY			POWER INPUT	OWER INPUT ELECTRICA		UPPLY	REFRIGERANT PIPE		REMARKS
				HP	KJ/HR	AIR CIRCULATION	WATTS	VOLTS PHA	PHASE	HERTZ	LIQUID, cum G.	GAS, cum	FAN COIL UNIT SHALL B
ACCU 1	FCU	WALL MOUNTED	1 SET	4.0	38,000	900 CFM	3850	230.0	10	60.0	9.525	19.05	WALL MOUNTED TYPE. CONTRACTOR SUPPLY AND INSTALL

SCHEDULE OF AIR CONDITION UNIT

SCALE: 1.75 M.

SHEET NO.



Republika ng Pilipinas Lungsod ng Quezon CITY ENGINEERING DEPARTMENT

PROJECT TITLE:
PROPOSED CONSTRUCTION OF HAND
WASHING FACILITY AND REHABILITATION OF PINAGKAISAHAN
DAY CARE CENTER
LOCATION BAPANDAY PINADSAMAHAN DISTRICT 4. GLEZON DITY



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l	ENGR. ISAGANIR, VERZOSA, JR.
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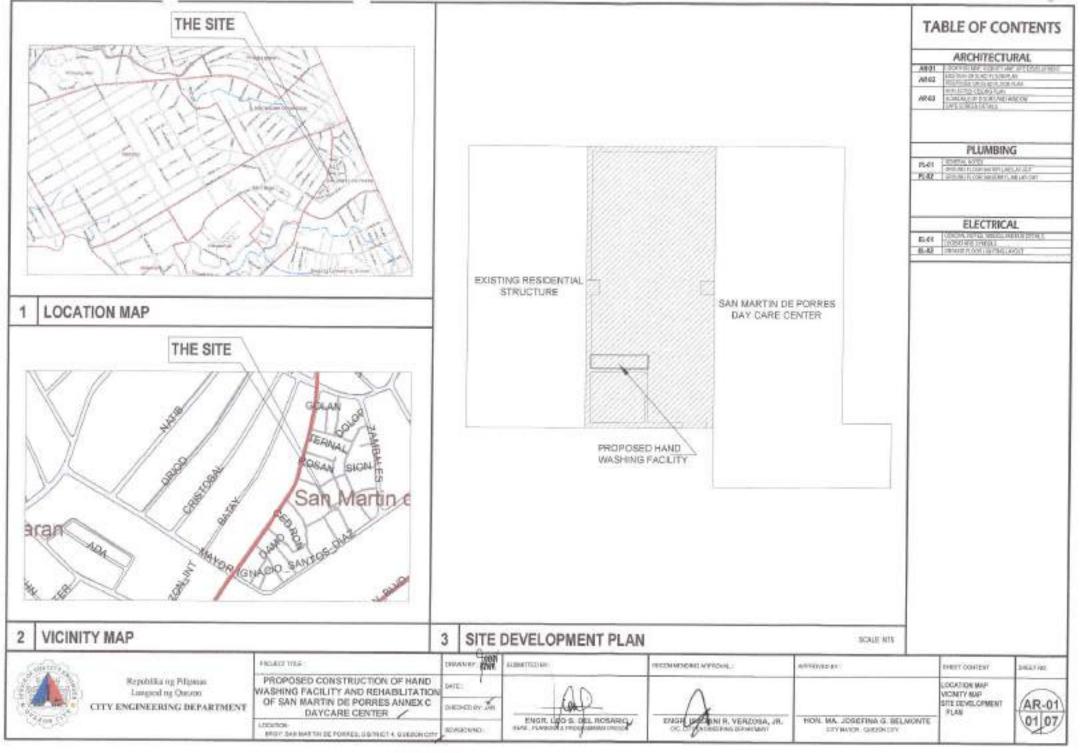
RECOMMENDING APPROVAL:

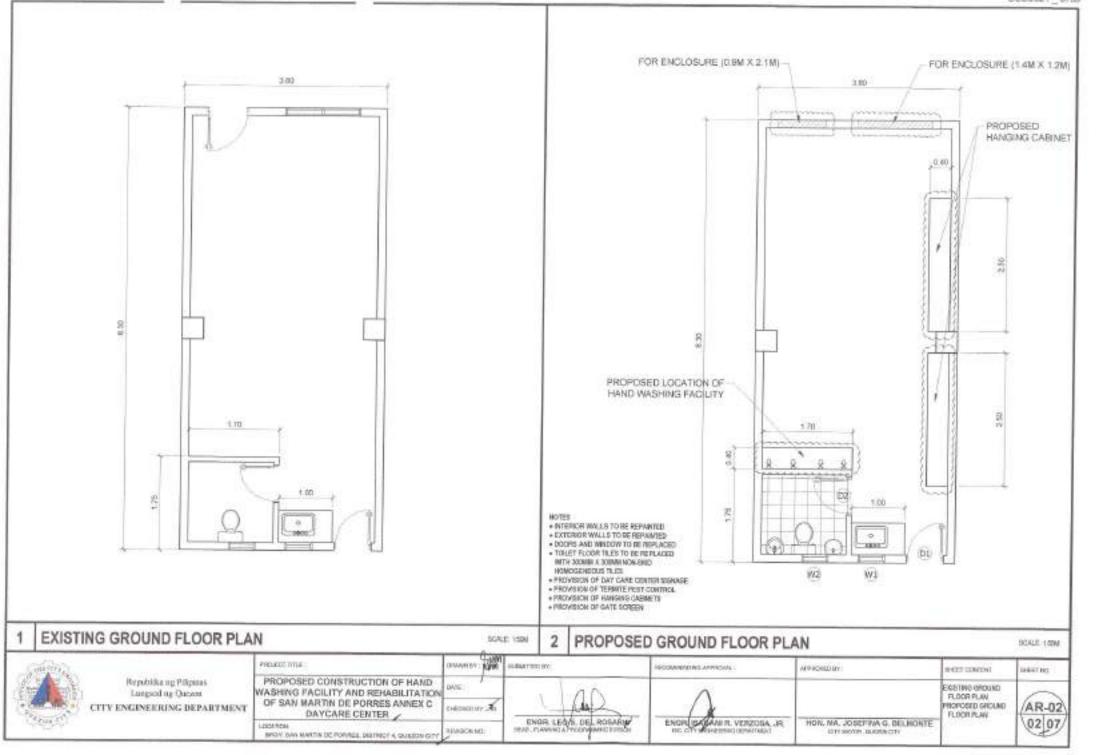
HON, MA. JOSEFINA G. BELMONTE ARCONDITION UNIT

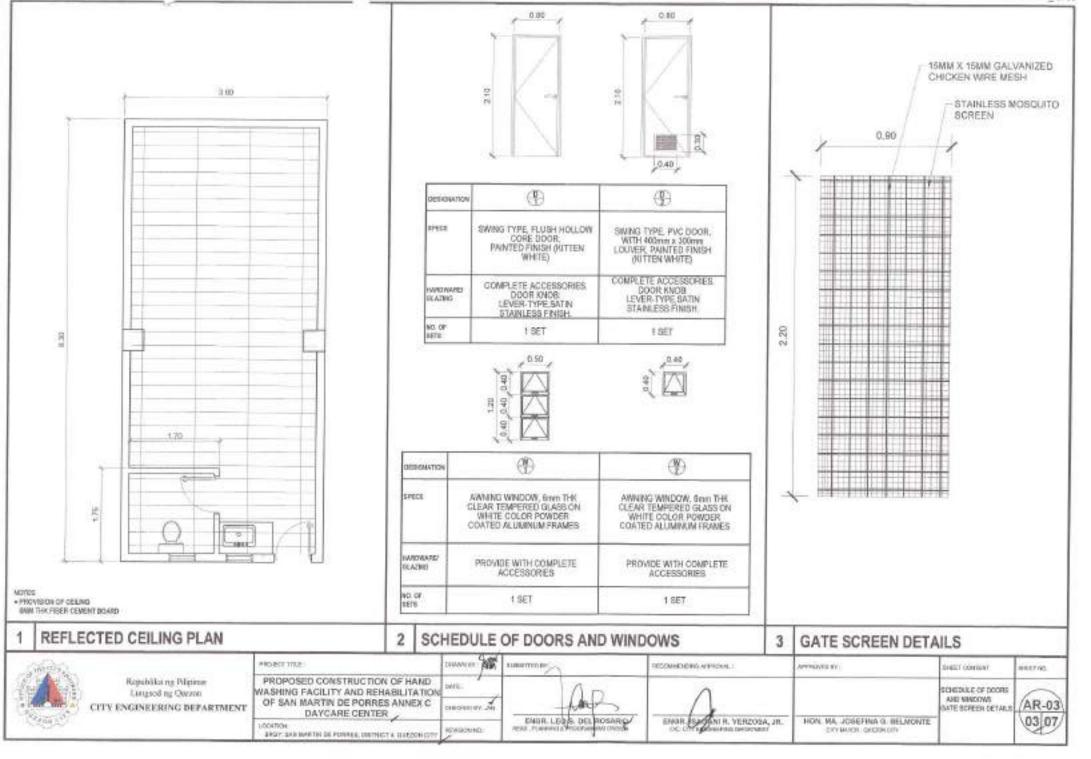
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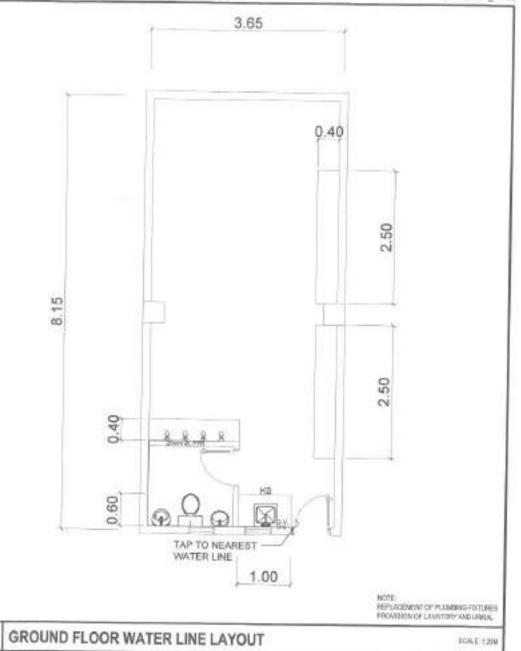
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GENERAL NOTES AND LEGENDS

DIRECTION OF FLOW

Republika ng Pilipinas

CITY ENGINEERING DEPARTMENT

Languard my Queson

PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF SAN MARTIN DE PORRES ANNEX C DAYCARE CENTER

ERSY, MAN MARTIN DE POSSES, DISTRICT 4, QUEZON CITY

DEDISH AN REVISION NU.

DANNER CLANS SCHOOL BY

ENGR. (NO S. DEL ROSARIA

DETERMENDABLA PRODUK

ENGRUSACION II. VERZOGA, JR. HON, MA. JOSEFINA G. BELMONTE

CITY WAYDER GUICENAPTY

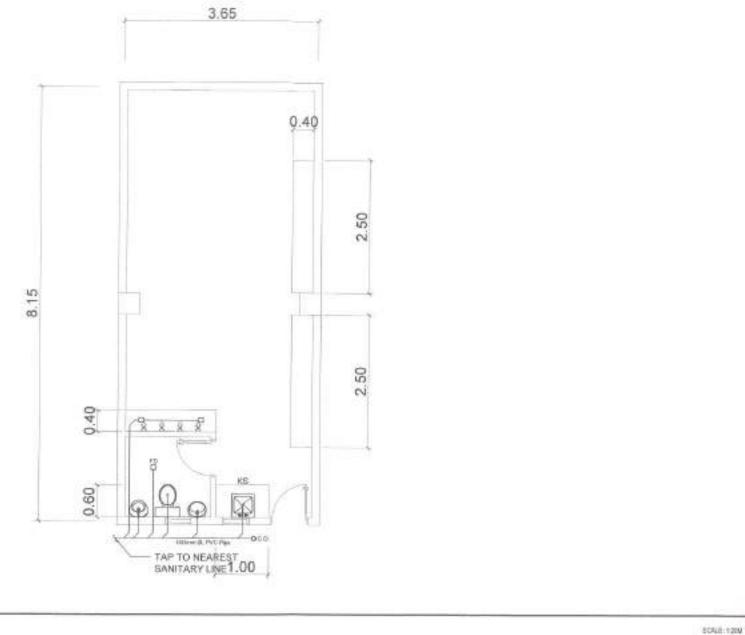
AFFERTEDBY:

LEGENDS GROWNO FLOOR: MATERILINE LAYOUT

SHART CONTON

SKILING

GENERAL WOTES AND PL-01 04 07



GROUND FLOOR SANITARY LINE LAYOUT

WEST NO.



Ropublika ng Pilipinat Enrysod ng Quezon CITY ENGINEERING DEPARTMENT

PROBEST TITLE PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF SAN MARTIN DE PORRES ANNEX C DAYCARE CENTER

BROY DAMBARTIN DE PORROS, DISTRICT A, ULEZOA CIT

OWNER CLARE DOWNER OF THE WAR District of ENGRIGED SI DEL ROSARGO 1690 / CAMBROS (TRODAMBRO BIROCK) DHORES.

ENGR. BARRY R. VERZOSA, JH.

RECOMMENDED AT FROME.

GROUND FLOOR SANTARY LINE LAYOUT HON WA JOSEFINA G BELMONTE STYMOON CURRENTY

APPROXIMENT:

PL-02 05 07

BHETT COMMENT

- 1. ALL ELECTRICAL MORRES SHALL SE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EXTREME STATES OF THE PIRE PLEATED ACCORDANCE WITH THE PROVISIONS OF THE LATEST EXTREME STATES OF THE PIRE PLANTS OF THE PIRE PROVIDED OF THE PIRE PLANTS OF THE PIRE PROVIDED OF THE PIRE PLANTS OF THE PIRE PROVIDED OF THE LAWS AND GROBALICES OF THE LOCAL COSC ENFORCING ALCHHOMES AND THE REQUIREMENTS OF THE LOCAL PLANCE AND TREATMENTS. UTUITY COMPRISES
- 5. THI CONTRACTOR SHALL SECURE ALL PERMITS AND PAY ALL ADDS REQUIRED FOR THE HIGHE AND QUALL PURBLE THE OWNER THROUGH THE DIGHIDING FINAL CERTIFICATES OF IDJUTTICAL INSPECTION AND APPROVING PROPRIAL RECVENIENCE AUTHORITICS FOR COMPLETION OF
- 9. ALL DIRECTORS DERIGH CIRCLES SHALL SE PAC DONOLITE AND FOR EXPOSITO METALLAROMINAL RESIDENCE EXPOSITION OF CONCENT CLAUPS. EVERY TREMUNICIENS
- 4. MUL BOASS SHALL BE PROVIDED BY THE CONTRACTOR AND REVISIONATE TO FACE THIS WAR PLALING BYES IF THESE AND BOT MEDICATED CONTRACTOR MUSICAL MUSICAL CALL PROJECT SECUL DE COMPUTED DATED ON THE CODE EDUCADED/NTS, GUIDAT SACO DISAMBICS TO THE BYOMSES FOR APPROVAL PRIOR TO FROM GOTOR LOCKTON OF PULLBOXES SHALL BE APPROVED BY THE ARCHITECTER/INSERS AND MUST BE REPLICISED ON THE VAN BUILTY FLAS.
- 5. ALL POWER DETLETS, AND EMPTERSE SHALL BE GROWNING TYPE WITH PARALLEL BLISTE FOR SHE'V.
- PROVIDE GROUND KNULT QUERRENT IS TERRUPTER CECUIT BREAKER FOR LOXDE MARKED TOTOT ON THE R. AM.
- T. ALL METRILLIC CONDUCTS, CARMETS AND DOSPINENT SHALL BE PROPERLY DISCUSSED AND ROUGED.
- 8. BILLESS OTHERWISE NOTED, MOLISTING HEIGHT FOR WALL MOUNTED DEVICES BAILLING AS POLLOWS.

RECEPTAGLE OF TLET - 300 MM.AFF., 1889M AROVE WORKING COUNTER. TELEPHONE CRITIES ... 300 HM APP. DATY OF THEY - DRUMM AFF LIGHTING BUTCH - 1400 MEXPF PANEL BOARD - 1909 MM AFF

- 8 REPORTO MEGINANCIAL PLUMBERS AND PROPERTIES DIAMANUS FOR RATINGS AND LOCATIONS OF SIGLIPMENT AS WELL AS THEIR CONTRIB. SACREMONS AS RESCHED AND OR SHOWN UNDER THEIR RESPECTIVE ASCRORG.
- TO ALL MATERIALS TO BE HEED SHALL BE OF THE BEST QUALITY, BROOM NEWAS GREGORIES
- 11. THE DEARWOOD AND DESCRIPTIONS ARE INTRINSICALLY DO THE PROJECT OUT OF THE PROJECT OUT OF THE PROJECT OUT OF NOT INSCRIBATELY WORD AT STITLED ACTUAL LIBRATIONS, LEVEL WAS DISTANCES OF THE COLUMN THIS COUNTRACTOR IS NAMED. REQUIRED TO MAKE SUCH ADJUSTMENT AT THE JOSEPH AS LOCATION, DISTANCES AND LEVELS AND GOVERNOR BY ACTUAL FISH O DOBBOTIONS.
- 12. ANY DESCRIPTION RETWEEN THE PLANS AND SPECIFICATIONS GIVE. III EROUGHT TO THE AFTERITION OF THE SECRECULAR POR CLARGE CATEGORY. DECISION
- 18. ALL LENTER DIRECTOR ON VEHICLE CATCUT CITICATE SHALL BE 3.5 SQ, MA. THIRM-2 COPPER WITE UNLESS OTHERWISE NOTED, MINIMARING SET OF WATER SHALL GET STORD WAS COPPER WITE. ALL WATER AND CHILLIES SHALL BE COLOR CODER ANY OLLOWS.

Lint +- RES LBB 7 - VELLOW RESTRAL-WHITE OROUND - OROUN

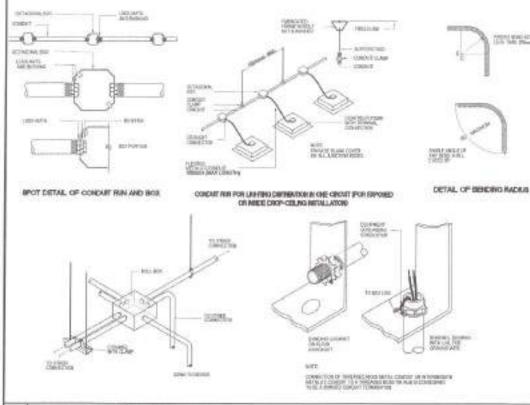
14 BOXES, WHIE, GUTTORS, EXCLOSURE SHALL BE PARKED THE PROSECURE, WITH THICKERS AS FOR LOWER MAXIMUMETH OF THE WIDERT SURFACE STEEL.

L/P TO RIGHT HONG HIS ALMAN SA SERVICED WITH METAL PRIMER SPORY AND TOPCOAT. CAVER THE REMAINS BUT, HET CHIEF HET DE GATA PARKING WITH METAL PRIMER EPOXY AND TOROGAT CIVER 457:30 MW BUT 907 CHER 700 HBM 6A /2 PARKTED WITH HE TAL FRAMER EPOXY AND TOROGRAT CIVER FIRE MAR GA TO PRINTED WITH METAL PRIMER EPOXY AND TOROUGH

19. ALL ELECTRICAL PORTS HORSE HAVE, DE CHECUTED BY COPER EXCEDIMENT STICKE THE DIRECT REPRESENCE OF A FUEL-THE EXCENSEST BLECTROPAL ANDRESSE WHO IS DIS Y ACCESSORED BLECTRICAL CONTRACTOR BY POAR MORRE BHALL DE HEATLY PLACED. BECURIE, Y ESCHOOLS VAN DROPERS V

THERRID

- 48. TYPE OF SCHOOLS SATEWAYS SHALL BE SHOULD PANDE. TWO WHIS PLUS DROUMS, NO HISTO, DOWNER WOMEN.
- IT. CONTRATA IN NO CASE BRAIL THERE BE INDIE THIN THE EQUIVALENT OF YOUR QUARTER BEACH IN ANY ONE BUIL ALL CONDUCT BRIDE SHALL BE FIELD MADE BY JUDING HYDRAIA, IC WID DETE, HERBLIM BURDING MACHINE BLUST BY W ACCORDANCE TO THE GODE REQUIREMENTS.
- 15. UPOR CONFECTION OF ELECTRICAL CONSTRUCTION WORK, INSULATION RESISTANCE TEST AND FUNCTIONAL TYTEST THALL BE PERFORMED BY THE CONTRACTOR BICLUMME OF THE INSTALLATION TO BE REPORTED IN DISTALLS ON FORMS APPROVIDED IN THE CHILDREN CITY BY DRIBERS IN CEPARAMOIT REPRESENTATIVE. THE GROUND RESIDENCE FOR ILLECTRICAL SYSTEMS SHALL NOT BE MORE THAN 9 CRASS. COMMISSIONES. OROGBOWS RESERVANCE SHALL NOT EXCEPT 2-CHAIR.



MISCELLANEOUS DETAIL

8	SMITCH (FOR REPLACEMENT)
п	E27 RECEPTACLE WITH LED BULB (ADDITIONAL)
-	ACCITIONAL LINEAR TWIN BATTEN WITH 2X18W LED TUBE LIGHT
(6)	DUPLEX CONVENENCE OUTLET (FOR REPLACEMENT)
(0)	AIRCON OUTLET (FOR REPLACEMENT)
69	ADDITIONAL COLING FAN
Tbb	PANEL BOARD

GENERAL NOTES



Republika ng Prilpinos Langioding Queson

CITY ENGINEERING DEPARTMENT

PROPERTY DOLLAR PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION

OF SAN MARTIN DE PORRES ANNEX C. DAYCARE CENTER

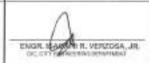
MRSY MAN MARKS IN POWING, DISTRICT & CLIEDS OF

thousand ov 1365 WARRING BY

DATE

BLIVE CHOOSE ENGRILEO SIDEL ROSANIO PROVISION INC.

LEGENDS AND SYMBOLS LAYON IA CARDINERSON



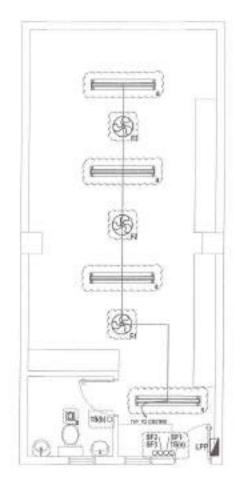
APPROXIMENTY.

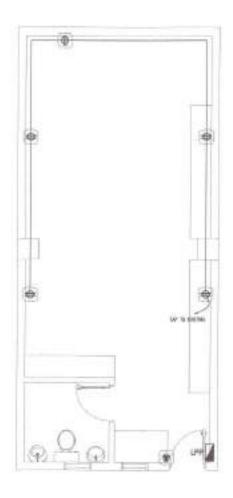
HON, MA, JOSEFINA G. BELMONTE OTH WAYDE QUESTION DITH

DHERT CONTENT GENERAL NOTES MISCELLANEOUS

DETALS INGENESS AND SYMBOLE.

MEST NO. EL-01 06 07





ADDITIONAL LIGHTING FRITURES. REPLACEMENT OF DUPLEX CONVENIENCE OUTLET. REPLACEMENT OF ADUBLICET.

DARREST CONTRACT

LIGHTING LAYOUT

SCALE 150M

BUGHITTOD RE

POWER LAYOUT

SCALD YORK

HERTING.

Republiko ng Pilipinon. Langued by Queson CITY ENGINEERING DEPARTMENT

PROJECT TRUE PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION OF SAN MARTIN DE PORRES ANNEX C DAYCARE CENTER

O COMPRESS LOGATION BEST SAMESIANTS OF PORRESS ORTHICT A CORUCE DTY revisionno:

ENGR. LEG S. DEL ROSARIO

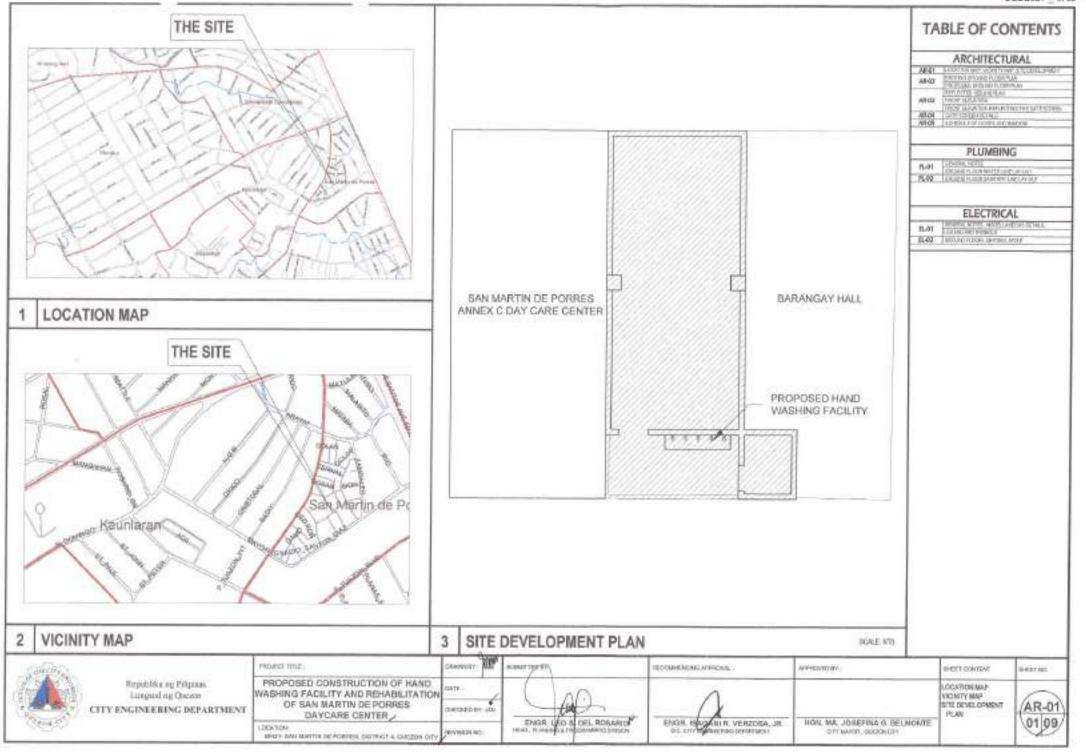
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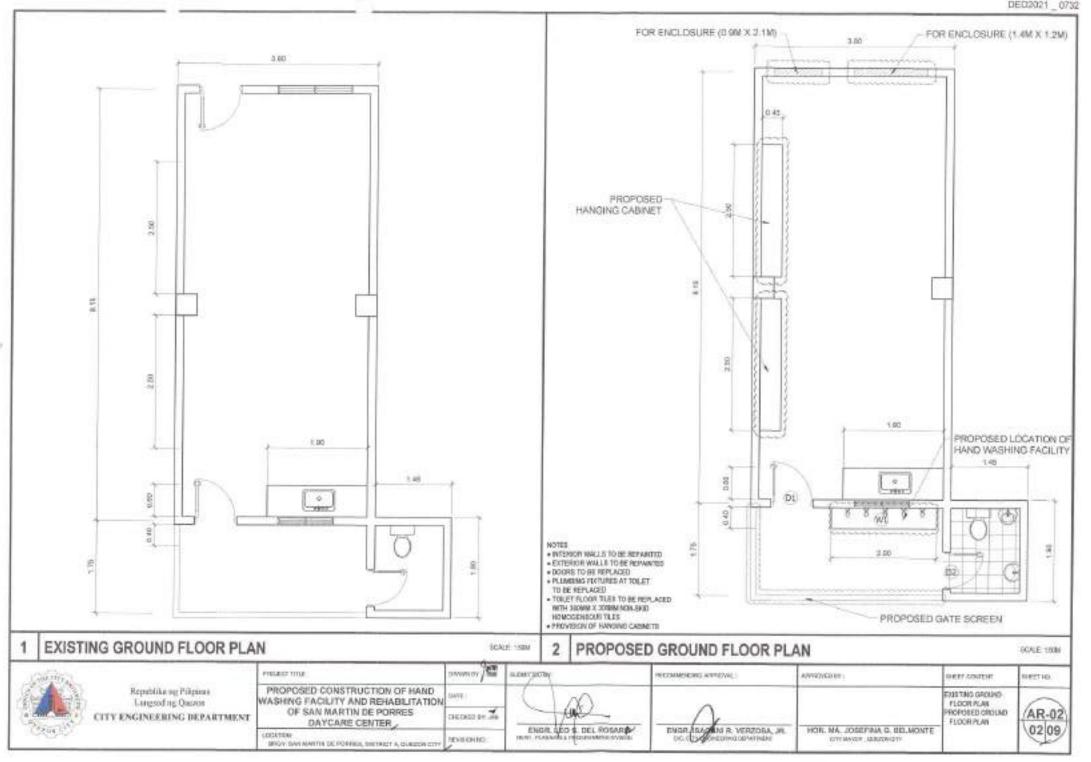
HECOMMODISM APPROVIL

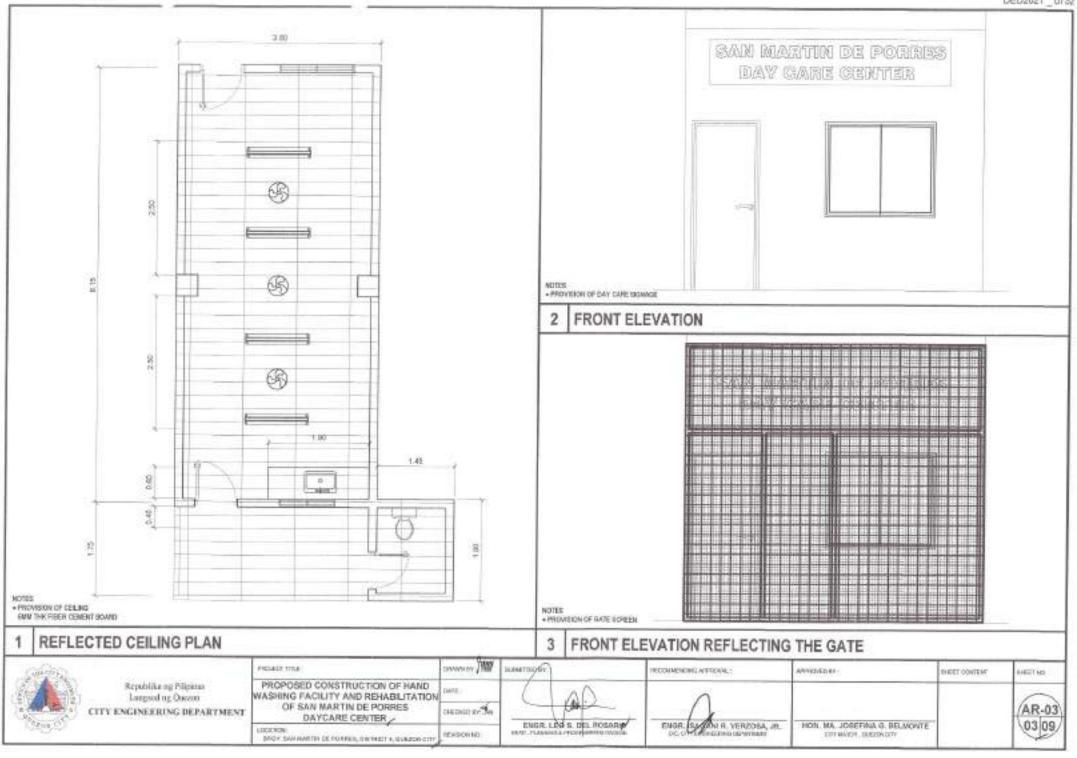
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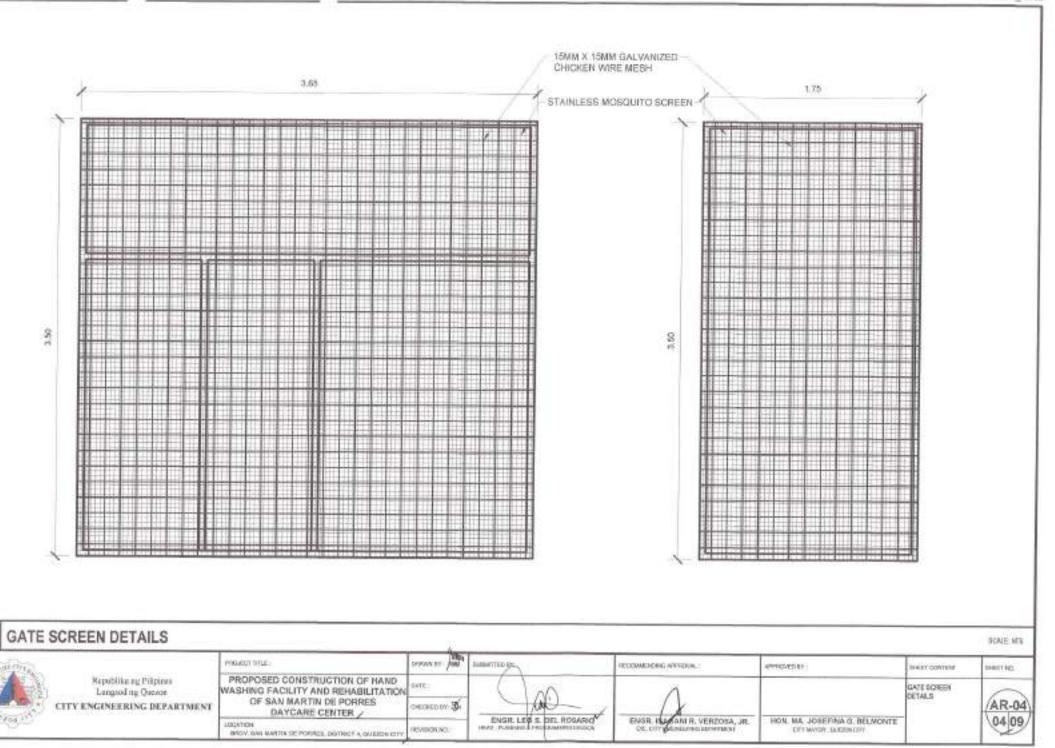
APPROXIBE

UBETING LAYOUT EL-02



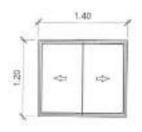












DESIGNATION	49	⊕
seecs	SWING TYPE, FLUSH HOLLOW CORE DOOR, PAINTED FINISH (KITTEN WHITE)	SWING TYPE, PVC DOOR, WITH 400mm x 300mm LOUVER, PAINTED FINISH (KITTEN WHITE)
HAROMAREI GLAZINO	COMPLETE ACCESSORIES. DOOR KNOB: LEVER-TYPE SATIN STAINLESS FINISH.	COMPLETE ACCESSORIES DOOR KNOB: LEVER-TYPE, SATIN STAINLESS FINISH.
MO, OF SETS	1 SET	1 SET

₩
SLIDING WINDOW, 5mm THK CLEAR TEMPERED GLASS ON WHITE COLOR POWDER COATED ALUMINUM PRAMES
PROVIDE WITH COMPLETE ACCESSORIES
1 SET

SCHEDULE OF DOORS AND WINDOW

STALE MIS

Herri HO

інит стопе



Republika ng Pilipinas Longood ng Quasen CITY ENGINEERING DEPARTMENT

PROPOSED CONSTRUCTION OF HAND
WASHING FACILITY AND REHABILITATION
OF SAN MARTIN DE PORRES
DAYGARE CENTER

WHEN SAN MARTIN OF PERFER, DISTRICT 4, 915200 GIT

ENOR LEG B. DEL ROSARRO

BURNITED BY

ENGR ISAGENTR VERZOSA JR.

WICCOMMISSIONS SPREAMS.

HOW, MA. JOSEFINA G. BELMONTE OTT INVEST. ILLUSTRATY

APPROVED BY:

AR-05 05 09

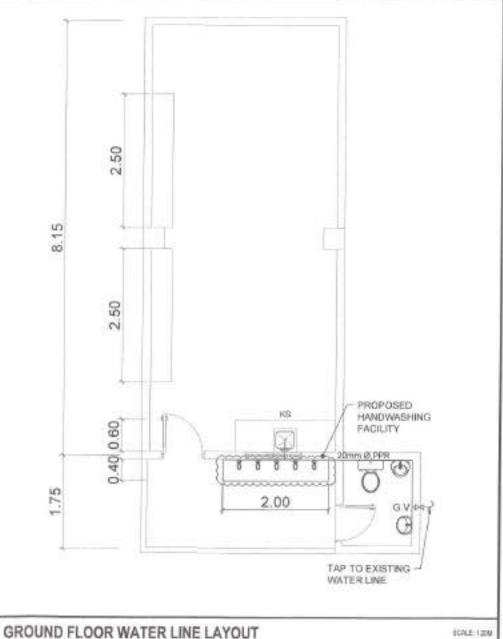
- \$ ASSESSING VEHICLES AND INSURED INSURED INSURED AND ADDRESS OF THE PROPERTY OF THE WARRANCE OF historial Purching Core, the label and registation of soul authorities commonly their register registerated from ability consumers and the provisions of the land threatput when and sinery applicable.
- If The placeting actual is only degreemable paper receivable delived volvey. Self-in-expressing any account in This self-instance above the entry to receive on the paper and between the dissable for placeting paper. professor malitie minited as our whole assumed king saturation will require higher measures an electric with
- I Veylating where training about pales of a vey and shit contrains to expect the cuts.
- 8 Plant (ref to 6 to annual tel in streeting imprise parties afternion appelled in privace)
- \$ Mile turn once for horsestal sover treatments 1% and he man investments 1%.
- # Proximal position of the deal performance in account out on, during not treat street observed of all acting power flow.
- I formation of the excepted and Ways shall a most log to constation's production.
- \$ 40 years of ferrors and by flat way and to set and mail to planting will pull to the case upon to set and the clear advanced as
- W. A. or begreen (C.) you in principality of the best and he provided with law (C.) and a constraint or covering and proposed (C.) bile dat from gift balled in bris sectod.
- TET Travers were stated over year force and or load your service weight an argument.
- SEAR resilies your Bell for if governi purity and Grapping well a specific wear delicated construction by building and the
- 18 Provide guilar altrast in all varior supply time in Names
- 14 III for each free that is provided with pages transfer where expressed
- 15 Windelted Experies to February proup of Regress refly assumed until the present of that construction appoint serial tips substance of dissertance an altern
- To All have be 18 new 28 and larger
- 25 000 con for 12 terr of anciatories
- Million Little State COV Market Service Could
- If that pay of agric late a CO on higher than the dates you very in 30 min righer than the publicase.
- All Archarding works and manner of construction shall be writer the prior approach or an electrical day beyond Highir Fundal in Replace/Sorbey Enginer. Any designation from the start for collectivities appropriate

I. PIKTURES AND OTHER LEGISME

FD	FLOOR	PE.0	994	£Ψ
M3	ROOF	DI	921	N.

- 6910 57-50WER WC WATER OLDSET
- LW LAUGHTORY
- Met. URBAL
- 8.5 KITCHEN SINK
- 90 BUILDING DRAFT
- вb DECK DRAIN 000 CELLWO DUSKNOUT
- #100HIGHOURD CLEASOUT
- DOWNSPOUT
- relikeeler
- OWN TRANSPERS
- 640 SHOWER CHAIN
- Cit CATCH BASIN
- MANHOLE
- GIVEAGE TRAF.





AFFROMSDIET:

GENERAL NOTES AND LEGENDS

DOUGHER OF THE PROPERTY IN

SCALE: 1 JON



Republika ng Pilipinas Lungsod ng Queson CITY ENGINEERING DEPARTMENT

DIRECTION OF FLOW

PROJECT TITLE PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION

OF SAN MARTIN DE PORRES CHECKED DE JA DAYCARE CENTER /

REVIDORNO BROY BAN WANTE OF PORKED, DISTRICT 6, DISTROH CITY

ENGR. LNO S. CEL ROSANIO

ENGR. ISANON R. VERZOSA, JR.

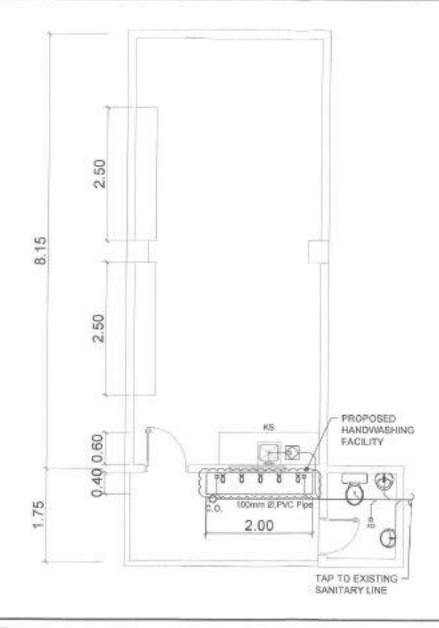
RECOMMENSATI ATTYCKIN.

GENERAL WOTER AND LEGENDS ERCUSE IN DOM WATER LIME LAYOUT HON, NA. JOSEFINA G. BELMONTE DAY MAKE STREET

HEST CONTENT

PL-01 06 09

19681AC



+ PROVESON OF LAWSTORY AND URBAN,

GROUND FLOOR SANITARY LINE LAYOUT

SCALE: 120M

A South

Republike og Pilpines Longsod og Quezon CITY ENGINEERING DEPARTMENT

PROPOSED CONSTRUCTION OF HAND
WASHING FACILITY AND REHABILITATION
OF SAN MARTIN DE PORRES
DAYCARE CENTER

BROY BAS MAKEN DIS PORRES, DISTRICT A QUESTINGS

DOWN BY : A JAME VARIABLE DO.

DATE:

CHECKELLY THE

ENGR. LEC'S. DEL ROSARIO
16140. TO SERVICE SHELL ROSARIO

ENGR SANDLIR, VERZOSA, JR.

PERCENTENDERS APPROVAL.

HON, MA JOSEFINA G. BELMONTE

ENVANON MARIADESCOY

APPROVED BY

PL-02 07 09

DHIEF NO.

(HEET CONTENT

- 4. ALL ELECTRICAL INDITIES SHALL BE DONE SHACCORDANCE WITH THE PROJECTION OF THE LATEST SECTION OF THE PROJECTION OF THE THE LAWS AND ORDINANCED OF THE LOCAL CODE EMPORCHIS AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL HOWER AND TELEPHONE
- 2. THE CONTRACTOR SHALL SECURE ALL PERSONS AND PART ALL PERSONS INCOME THE WORK AND SHALL PLANSES THE COMES THROUGH THE BINDRIBERS, PANI, CERTIFICATES OF BUSITIES ALING FED TON AND REPROVAL FACES PROPER SIGNERSHIPS TAUTHORITIES FOR DOMPLETON OF
- 2. ALL DIRECTION BRANCH CHACLETS SHALL BE THE CONDUCTO AND FOR EXPOSED HISTALL ATION DAVID, BE BELL ILLAMORTED BY CONDUCT O LAWRE. EVERY 700 MAJARETERS.
- 4. PLAT BOXES SHALL BE PROVIDED BY THE CONTRACTOR INVENEURS RECESSARY TO FACILITIES WITH PLATING EVEN IF THESE ARE BOX WORKSTED ON THE PLANE. SEED OF ALL PLALED SHALL BE COMPUTED BASES ON THE CODE SEQUED BASES ONCY DISCUSSION TO THE DWINNESS FOR APPROVAL PRIOR TO PRESENTING LOCATION OF MILLBOXES SHALL BE APPROVED BY THE ARCHITECTURES AND BUST BIT PREFERENCES ON THE YAS-BUILTY PLANE.
- 5. ALL POWER OF ILETE AND INVITED BY SHALL BE DETONIONED TYPE WITH PARALLEL SLOTS FOR 220 V.
- IN PROJUCE DECLIND PAULT GERRONT INTERRUPTER DIRECTIFF BREAGE FOR LOADS BARRED TOPOT ON THE PLAN.
- 7. AU. WETALLIC CONSUMS, CARRIEDS AND SICK PRIEST SHALL BE PROPERLY GROUNDED AND GONDED.
- B. USB BBS OTHERWAY MOTED MOUNTING HE DAT FOR WALL BIDLY NO DEVICES SHALL SE AS POLICIAE.

BISC RPTACLE OUTLET - 360 MW APF., 1909W ABOVE WORKING COOKERS. TELEPHONE OUTLET - 360 MM KIF CATY CUTLET - 300 MW APP CICHTING SWITCH - 1805 SRAWE PARELBOARD - 1000 ABA APT :

- 8. REFER TO MECHANICAL PLUMBERS AND PRINCIPATION DAMANICS FOR NATINGS AND LOCATIONS OF RELIPMENT AS WELL AS THEIR CONTROL. RECEIVENCES AS SPECIFIED AND DRIEHOWN LINCOR THEIR SERVICE THE SECTIONS.
- YE. WILLIAM TERMILIE TO BE USED SHALL BE OF THE BEST DUALITY, BRAND REWALL STOOTED.
- 11. THE DESCRIPTION AND REPORTED FOR THE PROJECT BUT DODGES TO PRESENT DEPRESANT LANGUET AND DESCRIPTION OF THE PROJECT BUT DO NOT NECESSARE, VINISCATISTICATIONS CONTINUED ACTUAL LOCATIONS, LEVEL AND DISTANCES OF THE DISSANDER. THE CONTINUED IS HEREBY REQUIRED TO MAKE GROW ADJUSTMENT AT THE JOBBITS AS LOCKHOOL DISTANCISH AND LEVELU ARE GOVERNED BY ACTUAL FIELD CONDITIONS
- 12. ANY DISCREPANCY SETWERS THE PLANS AND SPECIFICATIONS SHALL BE SKOUGHT TO THE ATTEMPOR OF THE SEGMENT FON CLARPHOATERS.
- TO ALL CONTINUAND DOMESTICADE DIFFLET CROCKIES SAVIL BY 3.5 DO MAI THANKS COPPER WAY UNLISTS OF MERCANDED SIMBLESS OF WHEN BHILL HE'S A SQ. MILL COPPER WHEN ALL HIRLDS AND CABLES WHALL HE COLOR CODED AS FOULDWIS-

LB01 1 - 8821 LARCO - HELLOW HID/TISAL - INNIVE ORGANIZ - GROSSI

15. BIGRIN JUNE, BUTTERN, BYCLOSUMS BRALL BE PAGRICATED FROM DTEEL WITH TAXONESS AN POLLOHIS.

MAKENIN WICTH OF THE WICEOF SURFINCE STEEL.

LIPTO BICLUDING 180-40 MM

GA 16 PARKED WITH NETAL PRINCE EPOKY WIS TOPOONT. DESTRUCTOR TURN AND AUTOMOTO OVER AST NO SWITE PAINTED WITH METW, PRINCE BROWN AND TOROGK!

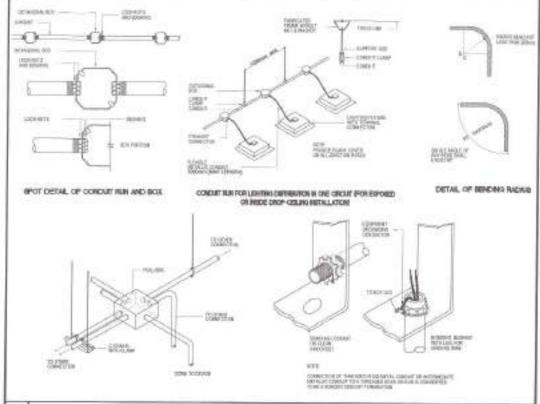
MALEST RELIGION TURNER SETS HAVE DA 12 ENNITED WITH METAL PRIMER GROWN AND TOPOGRE

- COVERN THE HAM DA 12 PANTED WITH BETAL PRIMER IPPORT AND TOPOCKT.

TO ALL SELECTS CALL WERROR HAVE BE SHALL BE EXECUTED BY EXPENSIONED HER LINESE THE DIRECT SUPERIORISM OF A FULL, THE LICENSED SUBSTRICAL ENGINEER AND A DISLY ACCREDITED SUBSTRICAL DOWNSCRIP MY PONE WIDNIG SHALL BE MONTLY ALACED, SEQUENCY FACTENED AND PROPERLY

PRINCIPLE

- HE TWYS OF BEHAVIOR SHITMANCE SHIPLE BE SHOULD PHAVE, TAKING WITH A LIG GROUND. BE HENTE, 2007 AC HOMBAN.
- 17. COMPARS IN NO CASA SHALL THERE BY MORE THAN THE BOUNDALENT OF FOUR CRAFTER BLDG IN ART CAS, RUE, ALL CONDUST MINDERS HALL BY PELO MADE BY USED HYDRAWLES BEADERS, MINNEY BEND NO SADIUS MUST SE IN ADDODRANCE TO THE CODE REQUIREMENTS.
- 15. LIPON COMPLETOR OF ELECTRICAL CONSTRUCTION WORLD, INSULATION RESISTANCE TEXT AND FERCITIONALITY THAT SHALL BE PERFORMED BY THE CONTRACTOR REQUISING OF THE WHEN LATERS TO AN REPORTED IN DETAILS ON FORMS APPROVED BY THE QUEDOS OFF ENGINEERING. DEPARTMENT REPROSENTATIVE THE OROUGH RESOURCE FOR D. D. TRICK, SHIFTENS SHALL FOR AS MORE THAN EXISTS. L'OWN-SCATION. DESCRIPTION OF RESISTANCE SHALL MOTERCOOK 2 CHAIN



MISCELLANEOUS DETAIL

LEGENDS AND SYMBOLS

H	SWITCH (FOR REPLACEMENT)
a	E27 RECEPTACLE WITH LED BULB (ACOMIONAL)
-	ADDITIONAL LINEAR TWIN BATTEN WITH 2X18W LED TUBE LIGHT
0	OUPLEX CONVENIENCE OUTLET (FOR REPLACEMENT)
0	ARCON OUTLET (FOR REPLACEMENT)
3	ADDITIONAL CEILING FAN
LFF	PANEL BOWID

GENERAL NOTES



Republika ng Pilipinas Lungsoding Qwater.

CITY ENGINEERING DEPARTMENT

WILLIAM TITLE PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION

OF SAN MARTIN DE PORRES. DAYGARE CENTER

ECCUTION REVISION NO. BROY SAN WARTER DE PORREIR, DISTRICT & QUESTON CITY

DOMAN BY

DECKED BY JOH

2419

BURBUTTEDEN ENGR. LED S. DEL ROSARIO-

ENGR. MASANI R. VERZOSA, JR.

LANCOPPING APPROVAL

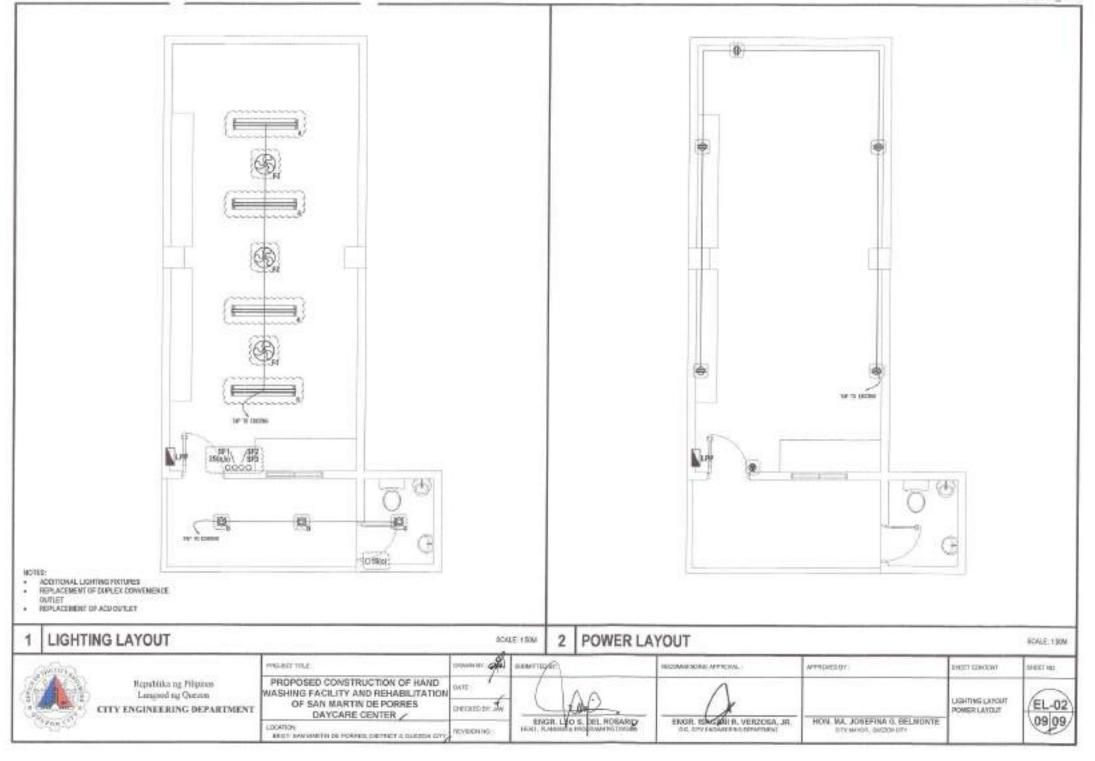
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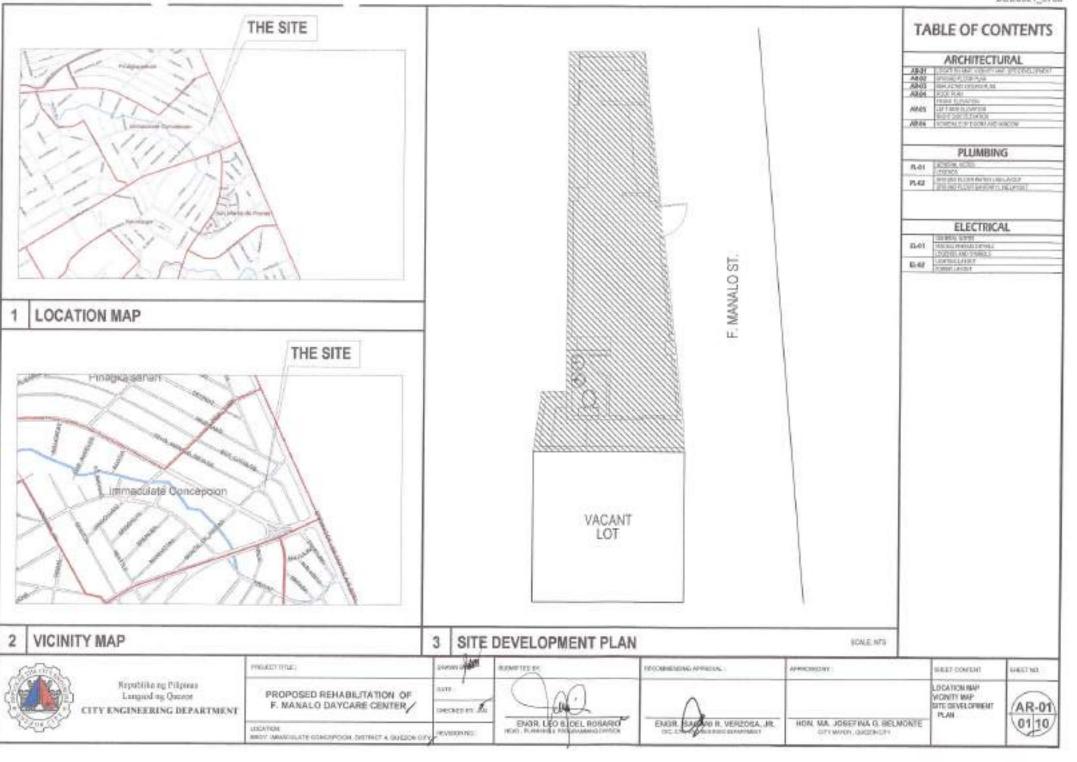
HON, MA, JOSEFINA G, BELMONTE OTY MATCH, GOSTONICTY

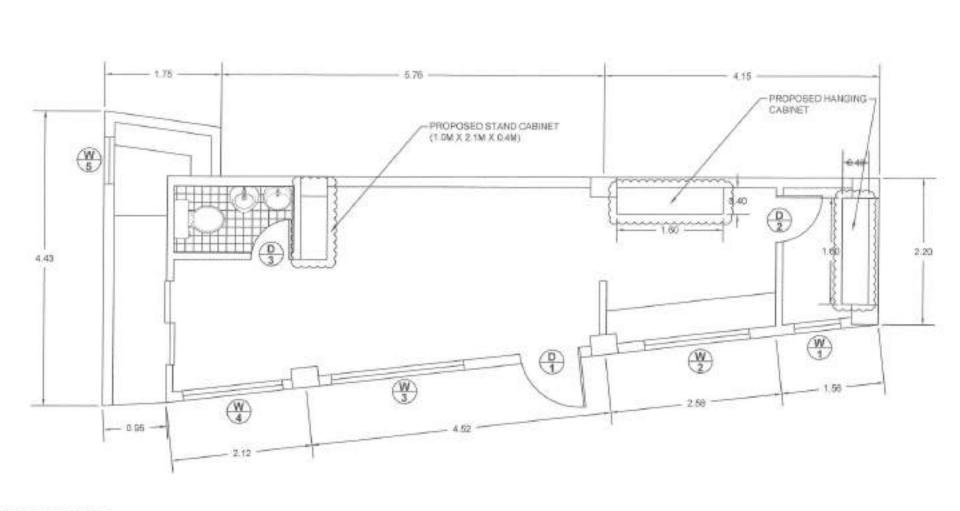
HART CONTINUE DENGRAL NOTER MISCELLANEOUS DETAILS LEGENCY AND SYMBOLE

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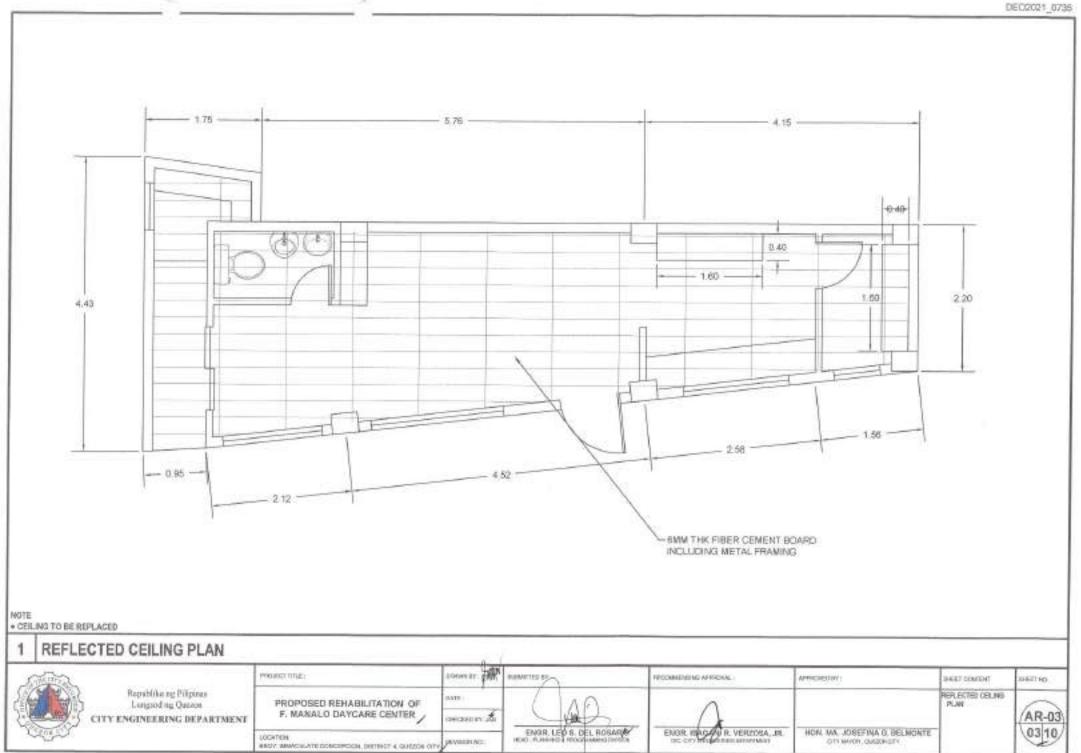


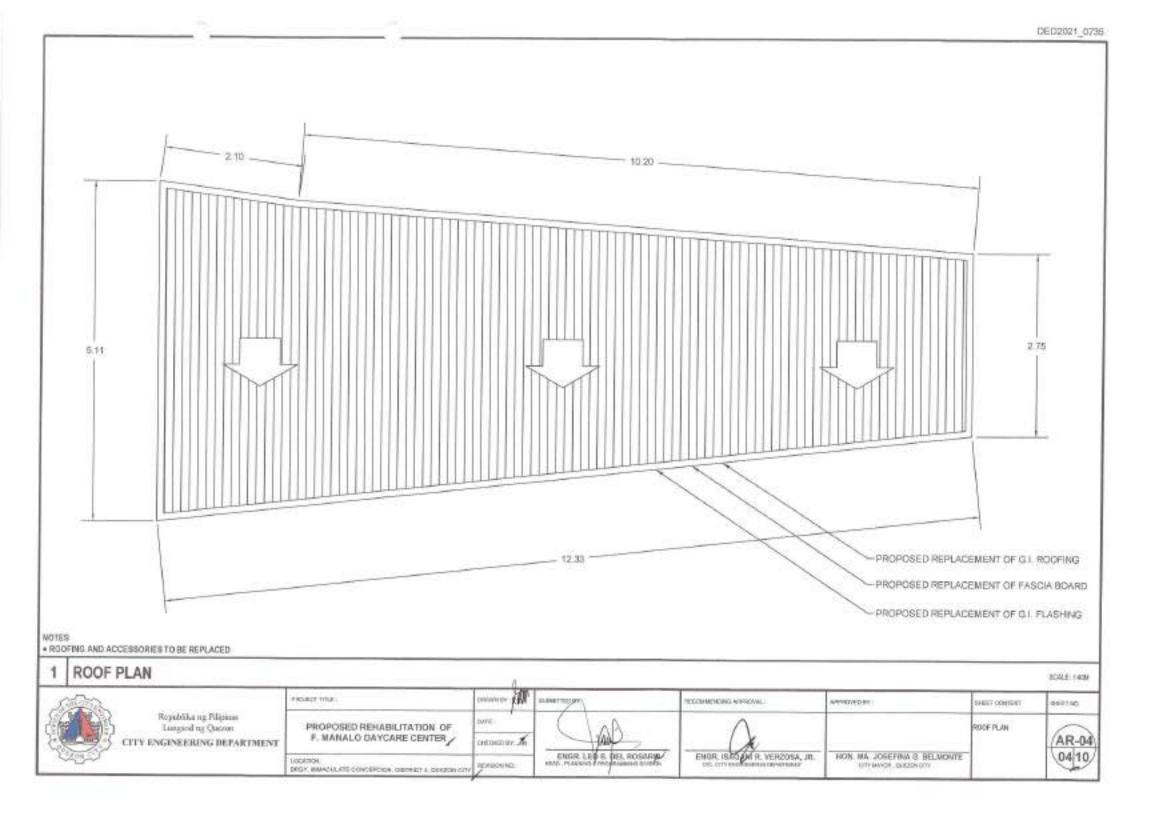


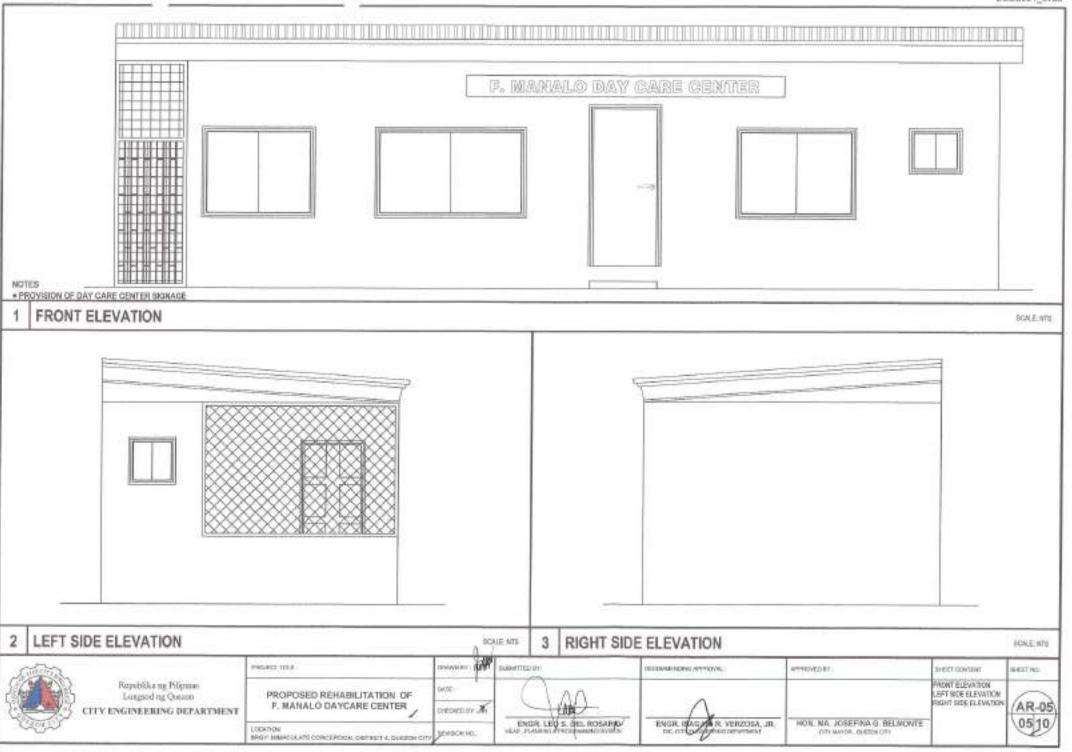
NOTES

- * INTERIOR WALLS TO BE REPAINTED
- * EXTERIOR WALLS TO BE REPAINTED
- . DOORS AND WINDOWS TO BE REPLACED
- * TOILET FLOOR TILES TO BE REPLACED WITH 300MM X 300MM HOMOGENEOUS TILES
- * PROVISION OF WINDOW GRILLES
- . PROVISION OF DAY CARE CENTER SIGNAGE
- . PROVISION OF STAND CABINET AND HANGING CABINET

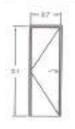
GROUND FLOOR PLAN SCALE 1986 W. server PROJECT TITLE: SUMMERS OF RESONAETOMILATTICIAL: APPROVIDURY: MERCE COMMON SHEET HEE Republika ng Pilipina PROPOSED REHABILITATION OF Lungsod og Quezon GROUND FLOOR PLAN F. MANALO DAYCARE CENTER / AR-02 CITY ENGINEERING DEPARTMENT W. YEBBERS 0210 EMGR, 65D S. DEL ROSARIO./ ENGR. ISANONI R. VERZOGA, JR. HON: NA. JOSEFINA G. HILLMONTE. DITY WARREST, GUARGISTERS MINY MINOURANCE CONCERNOON, DISTRICT 4, QUEDON DITY OF YOUR NO.







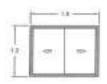


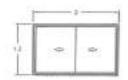


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estatuna	⊕	®	9
ePEDD	SWING TYPE, PLUBHHOLLOW COME DOOR, PWINTED THICH (SYTTEM WHITE)	DRING TYPE, FLUID WOLLOW COPE DOOR DANGED RASH JUSTEN WATED	SWING TYPIC, PAIC BOOK, WITH HONEY - MOVES LOUVIER, PRANTED PRISON (0077EN WHITE)
ELATRO	COMPLETE ACCESSORICE DOOR KMOR LEVER TYPE SATIN STANLESS FINESH	COMPLETE ACCESSORETE DOCER SINCE LEVER-TYPE SATIS STANLESS FRESH	COMPLETE ACCESSORES DOCA 10008 LEVER TYPE SATEM STABLEMS FINAN
10.0F	1507	UNIT	1161



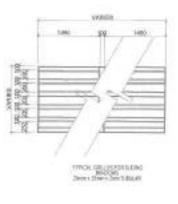






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III HW/OR	@	⊕	*	₩	(P)
PRES.	SIGNED ANN DORS then THE CLEAR TRISTENED CLASS ON MAN TE COLOR POWER CONTRO AUMINI, AN PRANSE	DUBAN TRANSPERO SEASONS ON WATER COLOR ROMBER COLOR ROMBER COATED ALLARISM FRANCE	SLUDIES WINDOW, INITIAL THE CITES THE PROPERTY OLLOW TOWARD TO THE CONTROL ALLOWS THE PROPERTY OF THE PROPERTY	SLEING WHOOW ENE THE CLEAN TEMPS RED GLASS ON WHITE COLOR POMBER (COLTE) A LAWMER FRANCE	SLEWG WHEIOW Grie THE CLEAR TEMPORED GLISIS ON WHITE COLOR PORIGER CONTED ALIMINUM FRANCO
NACESARE NACES	PROJECT WITH COMPLETE ACCESSORIES	PROVIDE WITH COMPLETE ACCESSORES	PROVIDE WITH COMPLETE ACCESSORES	PROVIDE WITH COMPLETE ACCESSORES	PROVIDE WITH COMPLETE ACCENTIONES
0.0 W1	£967	1887	182	1861	1581



APPROVED 61:

SCHEDULE OF DOORS AND WINDOWS

SCALE NO

043790

HEET CONTENT



Republika ng Pilipines Lungsod ng Quezon CITY ENGINEERING DEPARTMENT PROJECT SILE

PROPOSED REHABILITATION OF F. MANALO DAYCARE CENTER/

DOORTEN.
BROY BRACKLATE CONCEPCION, DISTRICT 4, GUESON CITY

DCH CHECUSIUM AND

DEMANEST:

ENGR. LEG S. DEL ROSARIES SEVERON NO.

SHARRETTER BY

TEXTIMENONG APPROVAL

ENGRIBATION R. VERZOSA, JR.

SIGHEDULE OF DOORS. AND WINDOWS HON, MA: JOSEFINA G: BELMONTE

ERY MYCH, SHEKKETTY

AR-06 06 10

- 1 At plumbing works and materials indicated herein shall be complicat to the provisions of the latest edition of fluidated Plumbing Code, the rules and regulations of local authorities concerned, the rules and regulations of local utility consumes and the provisions of the land developer when and where applicable.
- 2 The plumbing layout is only diagrammatic, plues, cleanings and check valves shall be concealed as much as possible. His not intended to show the actual dimension of the pipes and fedures in the drawing but all the pipes. and factures shall be inscalled as and where indicated. Any relocation will require proper seasurism in relation with
- \$ This plunding contractor shall verify all existing affilies at the site and anytic coordinate the notice with other trades.
- 4 Piper shall not be unbacked in physhanic remitten unless otherwise specified or allowed.
- 5 Minimum alope for harizontal sever lines shall be 1% and for does these shall be 5%.
- 6 Proposed plumbing utilities shall confirm with the actual location, depth and levert elevation of all existing passivalities.
- If Connection of fictures to pipes and fiftings shall be according to manufacturary specifications.
- BAI foor drains shall be wreted extremely.
- 9 All clean out fembles shall be fis discrepated to wall and shall be provided with polaried ower caps. Do not install floor clean such except at thes on grade and sevice areas not subject to traffic.
- 10 At unlarground G.I. pippe in direct contact with soil shall be provided with two (2) contact protective far covering and engaged with little doth thoroughly sopked in tar or eighest.
- \$1 Provide wint stack and very pipe first read of cost iron service-weight as required.
- 12 All cost into pipes shall be of approved quality and 0.1, pipes for water distribution lines shall be Schedule 40 U.S. standed weight.
- 41 Provide gale values to oil mater supply lines to fictures.
- 14 All hot water lines shall be provided with proper insulation where asposed.
- 15.A8 individual branches to finance or group of fedures and/or appreciate shall be provided with all shanders or support vertical pipe extensions of dimensions as shown:
- 16 = 450 nine for 18 new of and larger
- H = 300 mm for 12 vars Q and ampley
- 16 All horse bibbs shall be 19 non-3 (1/4" 25 unless otherwise indicated.
- 17 feld plot of septo task is 50 into higher than the sigher page which is 35 ram higher than the outer plot.
- 18 All plumbing works and manner of construction shall be under the sirest supervision of an able and duty issurand Master Plumber or Registered Santiery Engineer. Any discrepanties found in plan shall be notified to the same person.

I. FIXTURES AND OTHER LEDE!	

- FD FLOOR DRAIN
- en-ROOF DRAIN
- \$140 SHOWER
- WC WATER CLOSEY LAV LAWATORY
- UR URINAL
- K8 KITCHEN SINK
- BD BUILDING DRAIN
- DD DECK DRAIN
- CEILING CLEANOUT
- FLOOR/GROUND CLEANOUT
- DOWNSPOUT
- milimeter iner.
- mm DIAMETER
- SHD SHOWER DRAW
- CB. CATCH BASIN
- MH MANHOLE
- DIRECTION OF FLOW



GREASS THAP

	UNION PATENT
	CHECK VALVE
81	BUILDING SEWER
90	BUILDING DRAIN
PT	WASTELINE
AD-CB.	AREA DRAW / CATCH BASIN
PD	FLOOR DRAIN
. 0	DUMETER
	WASTELINE
	WATERLINE
	GATE VALVE
ner	DECK DRAIN
6D	CLEANOLIT
	PPE DOWN
	PPEIP
100	MILL METER
- OV	GATE VALVE
13	AREA DRAIN / CATCH BASIN
MIC	WATER CLOSET
LAW	LAVATORY
Alle	MANHOLE
16	HOSE BIBB
	STORM ORAN LINE
	VENTURE
we	VENT ABOVE CELLING
GP/RGP	COMORETE PIPE / REINF, CONC. PIPE
VIR	VENT THRU ROOF
6.00	DRECTION OF H.OW/SLOPE
	DIVECTION OF FURNISHOPE

GENERAL NOTES

PRODUCTIONS:

Langsod ng Quezon

PROPOSED REHABILITATION OF F. MANALO DAY CARE CENTER

BRID'S WANACOUNTE DONOEPORON, BRITAINST 4, QUARTE OF

SOF

SECURIOR DESCRIPTION AND ADDRESS OF THE PARTY OF THE PART

PRINTED CAMPAGEMENTS

ENGR. LED S. DEL ROSARM

2 LEGENDS

ECONOMINENO MYTEMAL

APPROVED BY:

BICALE 120M

DE TEN

гиштиро тавня

GENERAL NOTES

1,698,000

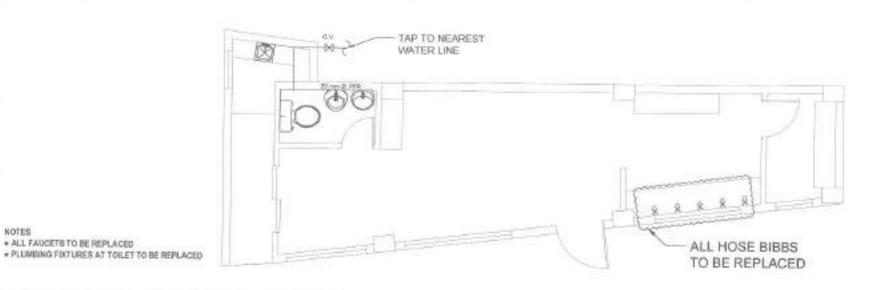
Republika ng Pilipinas CITY ENGINEERING DEPARTMENT

SCYNONINO.

ENGR. BAGENI R. VERZOSA, JR.

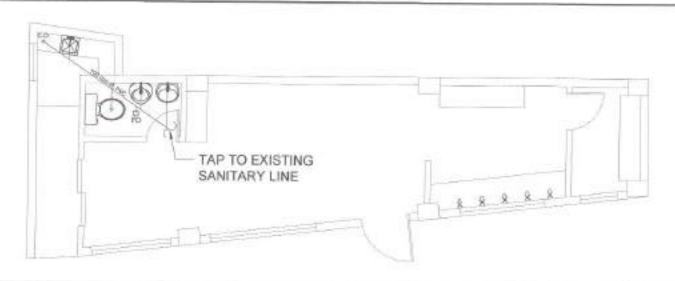
HON MA. JOSEPHA G. DELMONTE CHYMITTH DIRECTLY

PL-01 07 10



GROUND FLOOR WATER LINE LAYOUT

SCALE-LISTS



2 GROUND FLOOR SANITARY LINE LAYOUT

BOALE: 100M



NOTES

. ALL FAUCETS TO BE REPLACED

Republika ng Pilipinus Longsod ng Queson CITY ENGINEERING DEPARTMENT

PROJECT FIRMS PROPOSED REHABILITATION OF F. MANALO DAY CARE CENTER

BRIDE MANCHLATE CONCENTION, DISTRICT 4, SURZON DAY



	0
	/\-
-	ENGR MAGNER VERZOSA IN

RECOMMENDATIONS.

GROUND FLOOR WATER LINE LAYOUT GROUND FLOOR SAMTARY LINE LAYOUT TION, MA. JOSEFINA G. BELMONTE STYMOTH, GREEN DTY

WYROVED BY



B467.90

SHEET CONTINUE.

- 1. ALL ELECTRICAL ROBRES SHALL BE OCHE M ACCORDANCE WITH THE PREVIOUS OF THE LAYBET COTTON OF THE PREJECTION CETTE. THE LAWS AND DESIGNATION OF THE LOCAL CODE ENFORCING AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE
- E. THE CONTRACTOR SHALL RECLIRE ALL PERMITS AND ANY ALL PASS REQUIRED FOR THE HIGHE AND SHALL FLARREN THE GAMES THROUGH THE BINDRESS, FINAL CERTIFICATED OF GLICTHICA. BIS POTTION AND ADDROGNAL FROM HIS DRIVE EXCUSIONMENT AS TRANSPORTED FOR COMPLEXICAL OR
- 3. ALL RIMETORS BRANCH CROSS TO BLAIL BE PAG ESPOSITEARS FOR EXPOSED INSTRUMENTAL RELACE SEPTORTED BY CONCULT CLARPS. EVERY FOR MURIETIES
- 4. HIS LICENSE SHULL BE PROVIDED BY THE CONTRACTOR WITHOUT RECEIVERY TO FACULTATE MAKE HALRIS EVEN IF THESE ARE NOT RESCREES OR THE PLANE. DESIGN OF ALL PALLECIES GRALL BE COMPUTED MAKED ON THE CODE RECORD BROWN SHOWS DRIVE DRIVEN ON TO THE ENGINEER HOW APPROVAL, IN SIZE TO PASSECUCION LIDEATION OF PELLIDONOS GRALL DE APPROVADI DE THE AND PEST PERMANENTE. THE REPLECTED ON THE YAS-BUILT PLAN.
- 5. ALL POMER OUTLITTS INTO SINTONES SHALL BE GROUNDING TYPE WITH FABRILLE, SLOCK FOR 200 V.
- 8. PROVIDE ORDUND PAULT CLIER BUT INTERRUPTING CIRCUIT DREAKED FOR LEAGURMANNED TOPOT ON THE PLAN.
- ALL MICHALLES CONDUSTS, CARNETS AND COLUMBRIS SHALL BE PROPERLY CROUNDED AND ROADING
- 8. LIVE 256 CTHOMNSE NOTCO LICENTHIS WITH THE WALL MINESTED DEVICES SHALL BE AS POLICION.

RECEMBLE OUTLET - 200 BM AVE. I SISSEE ABOVE WORKERG COLUNTUR. TICLEPHENE DATLET - TOO HAN KIPP. CATUCUITET - DOMMATE LIGHTING OWNER - 1 got ope AFF PANEL BOKES - 1600 MALAFE

- REPORTO HEICHRACAL, PLIANTING ANY FIRE PROTECTED INVANAGE FOR PATHOS AND LOCATIONS OF ECONOMIST AS WELL AS THEIR CONTROL. SECRETACES AS SPECIFIED AND OR SHOWN LINES THEN RESPECTIVE MICHIGAN.
- 17. ALL HAVEBALD TO HE USED BHALL DE OF THE DEST QUALITY. MAKED NOW AS SPECIFIED.
- THE DAMANGE AND SPECIFICATIONS ARE INTRODUCTO PRESCNE GENERAL LABOUR AND INCAD OUT, INCIDENCES OF THIS PROJECT BUT DO NOT RECEIBBARLY RESCARSSESSMEED NOTURE LOOKYTOWN, LEWIS, AND DISTANCES OF THE EQUIPMENT. THE CONTRACTOR REPORTED REGISTED TO MAKE SUCK ALLIESTIGHT AT THE JORGITE AS LOCATION, DISCARCES MICH LIVELS MRS GOVERNED OF ACTUAL PIELD CONSTITURE.
- 12. ANY DECREMANCY BETWEEN THE PLANE AND SPECIFICATION SHALL BE INDUCETTO THE ATTENTION OF THE INCIDENT MOROLANICATION.
- 48. ALL LIGHTING AND CONVENIENCE OUTLET GROUTS SHALL ME 24 NO HIRE THANKS COMPER HATE LINES DE HARMANIN HOTEL DE WHETHALL BE \$ 5 DO, NO. COPPER WAS ALL WHITE AND GARLES SHALL BE ODLOG DODGE AS POLICIAS.

DNR-1-HBD LEET-VELLOW WILLIAM - WHOSE CHOUSE GREEN

18. BODER, WAY, GUTTERO, ENCLOSURE SHALL BE FARR-CATED FROM STEEL, WITH THICKNESS AND PERLICIAN.

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WILLIAM COLOUR TOWN MORE THE HIM DA 12 PRINTED WITH METAL PRINCE CROSS AND TORGOST

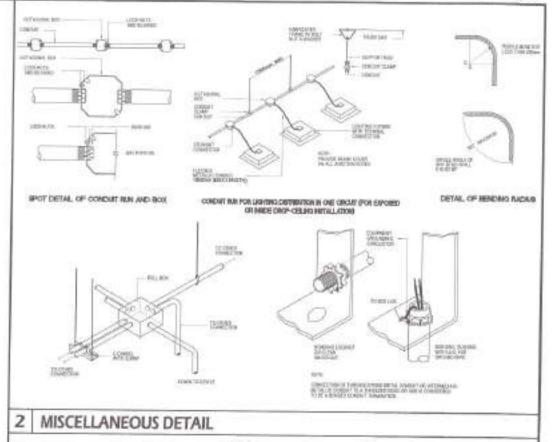
CHEST THE HIM DA 15 PRINTED WHY MISTN. PRINTED ROOM WAS TOROUGH.

TE. ALL ELECTRICAL WORKS HERE IN GUALL BE EXECUTED BY EXPENSIVED MEN UNDER THE DIRECT EXPENSIVENCE A PLAL. THE LIGHTED BLECTRICAL ENGINEER, AND A DULY ACCRESSTED PLECTRICAL CONTRACTOR BY HOME WERKS SAALL BE MEATLY PLACED, DECEMBER FARTENED AND PROPERTY HARRIST

- HE TYPE OF BERTHER INSTRUMES WHALL BE THIS CEPTIONS, TWO-WINE PLUS ORDUND, -00 HERTZ, 2007 AC NORMAN,
- 17. DORDUCE BEIND CARR BRAIL THERE BE MORE THAN THE EQUINALANT EPYTRIR GUARTER SENDS IN MY ONE MAY AND THE MULTIPLE SENDS IN MAY FILLD WATER WILLIAMS HYDRAULIC GONDERG, MINIMUM SENSING SACKIS BEINT GET IN ACCORDANCE TO THE CODE RECORDANCE
- TO SPECIAL COMPLETION OF ELECTRICAL CONSTRUCTION VIOLENCE, BRULLFROM REDISTANCE TEST AND RESISTANCE TEST SHALL BE RESISTANCE TO THE CONTRACTOR REQUIRED OF THE HISTACIATION TO BE REPORTED IN DETAILS ON FORMS APPROVED BY THE BURGON CITY ENGINEERING. SEPARTMENT REPRESENTATIVE. THE SHOUND RESISTANCE FOR RESISTANCE, EVENERAL WAY AN MOVE THAN 5 OHMS, COMMUNICATION GROUNDING RESISTANCE SHALL NOT EXCRED 2 DAME.

House time

LOCATION



SHELF GANG SWITCH (FOR REPLACEMENT)

TWO SAVE SWITCH (TOR SUPLACEMENT)

THREE GAME SWITCH (FOR REPLACEMENT)

USP RECEPTACLE WITH LES SULD FOR REPLACEMENT)

UNDER TWIN BUTTEN WITH 2XTHW LIZE TURE LUCHT (FOR REPLACEMENT)

(FOR REPLACEMENT)

BUPLEX COMERNOS OFFICE STOR REPLACEMENTS

WILL-MOUNTED COMMITT RAY

PAREL ISONES

GENERAL NOTES



Republika ng Pilipinas Limpsed og Quesen:

CITY ENGINEERING DEPARTMENT

PROPOSED REHABILITATION OF F. MANALO DAYCARE CENTER .

BROY, MANACELATE CONCERCORS, DETRIET & BUSION OF

HEROCOPIC AND

SEARCHIST.

ENGR. LEG S. DEL ROSARIA RESERVE CAMPBELLO DE LA CAMBRILLA CONTRA L'ASCOR

FLEATTED BYC

ENGH. SAMATIN. VERZOGA, JR.

WORKS WYTEN

2 LEGENDS AND SYMBOLS

APPROXIMATION OF

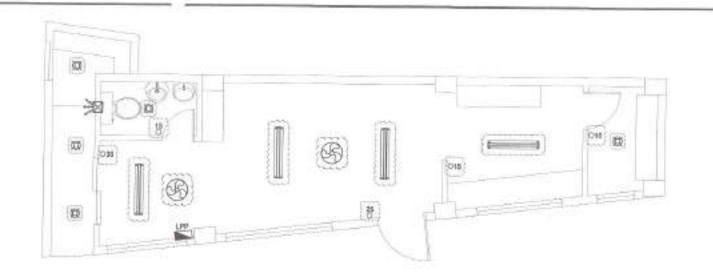
HOM. MA. JOSEFINA G. BELMUNTE DEPVIMINGS OF SERVICES

SHEET CONTEST GENERAL WOTER MISCELL ANEOUS DETAILS FORKING MET

THMROLD.

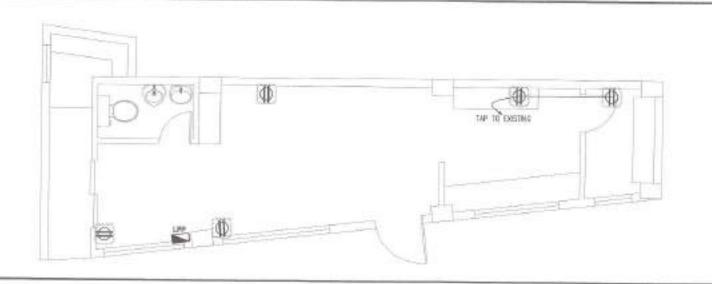
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ON TUBE



1 LIGHTING LAYOUT

SCALE 100V



NOTE: REPLACEMENT OF LIGHTWIG FUTURES. REPLACEMENT OF DUPLEY CONVENIENCE OUTLET.

MARKET CONTRACT

2 POWER LAYOUT

DOME 180M



Republika ng Pilipinan Langsod ng Quescri CITY ENGINEERING DEPARTMENT

PROPO ARTMENT PROPO

PROPOSED REHABILITATION OF F. MANALO DAYCARE CENTER

LOCATION BROY: MAJOS LATE-CORCEPCION, DISTRICT A. GUIZZON CO

mening A

PERSONNS

ENGR LEGS DE ROSARIO

0.000 min en



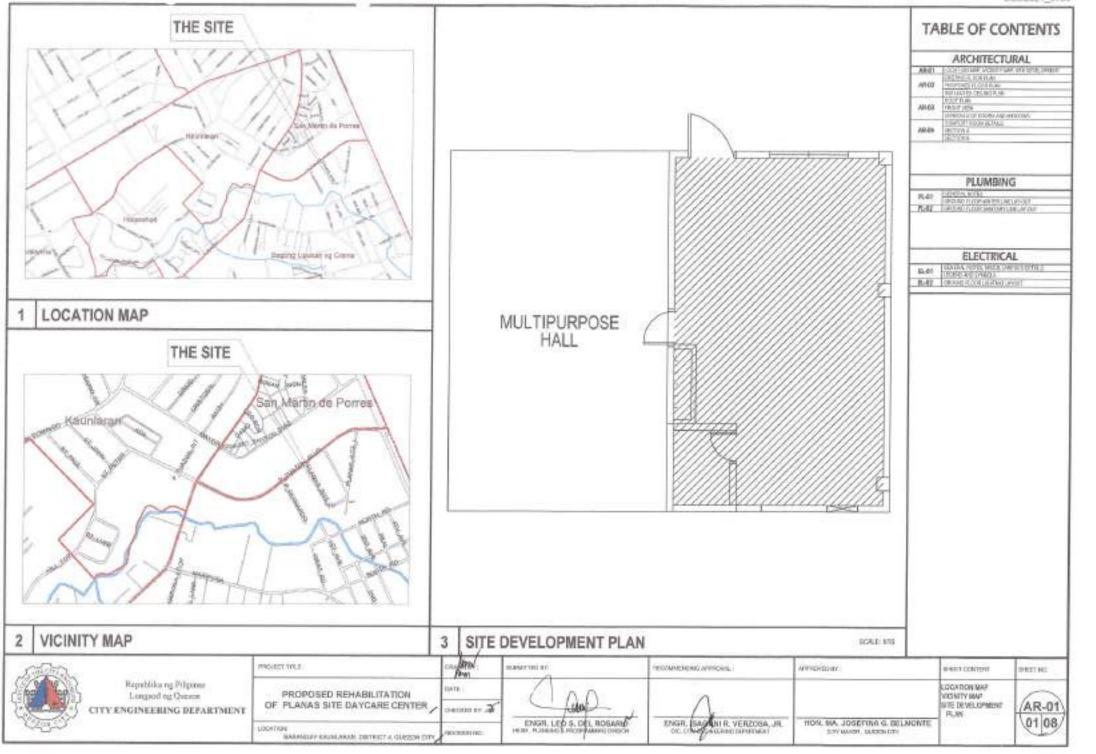
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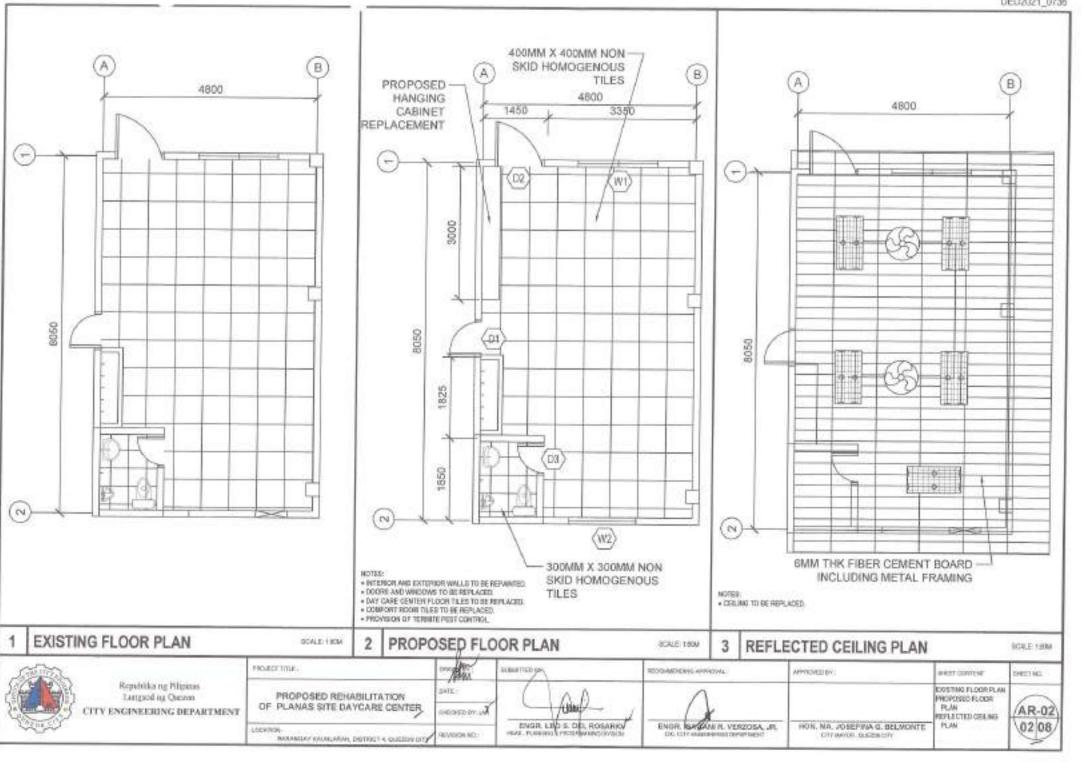
HON, MA, JOSEFINA G. BELINONTE STY MYOR, GESCHIJTY

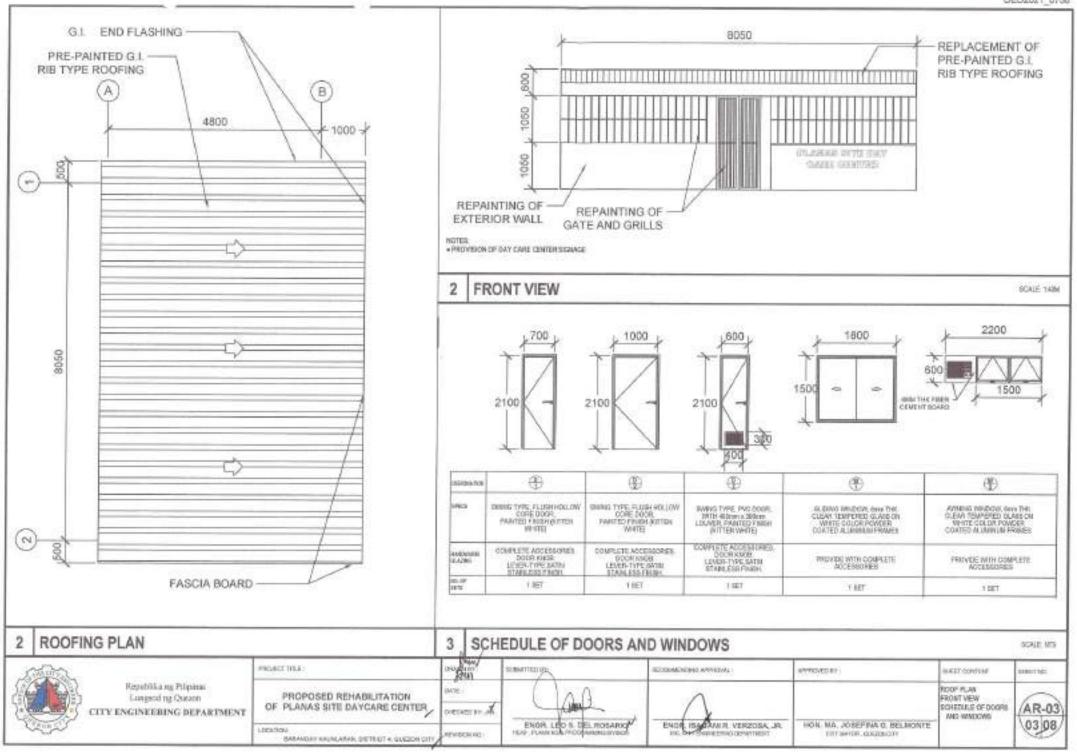
APPROVED BY

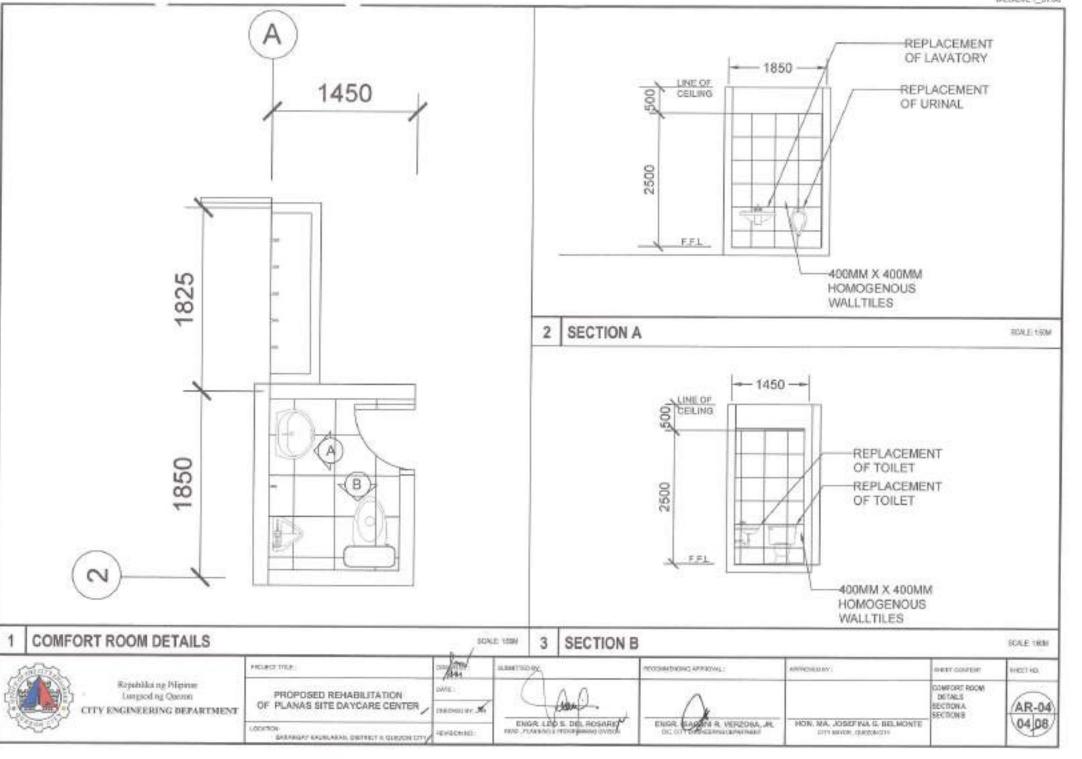


BREET NO.



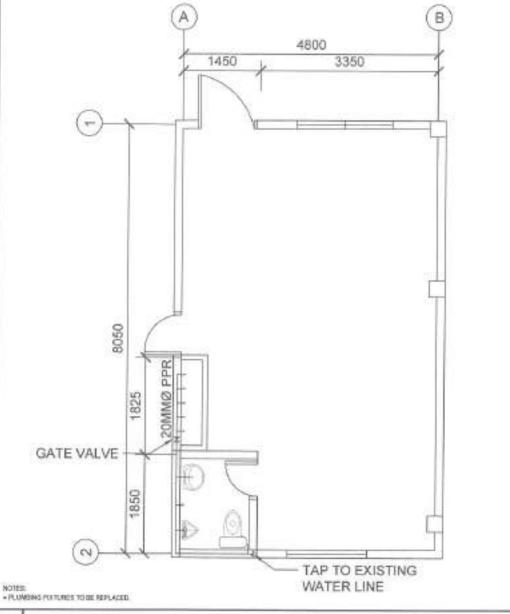






- 4. All planting works and common indicated movers to the completed to the provisions of the islant soliton of Authorial Planting Code. the rates and regulations of local authorities continue and the local authorities of head office companies and the premission of the after developer after that and where applicable.
- 2. The planning beaut is ody (lagranument), signs, elements and elemit valves shallow concentrate much as periodic. If is not intended to drow the actual documents of the place and find are in the downing for all the opinion and find are the installed as and where indicated. Any retroduce will regarding proper execution to relation with other kinds.
- 3 The pluriting contractor shall verify all assisting utilities at the site and shall constitute their early with other basis.
- 4 Pipes start to the estandard in structural receipts unless alterates specified or allowed.
- If Woman steps for horizoidal power lines shall be 1% purply contribute disclose and the 2%
- A Proposed planning utilities shall contain with the action leaders, depth and ment assets or all moting operations.
- 7 Commercies of finitures to pipes and fillings shall be according to manufacturer's specifications.
- If All floor anches shall be vented introductor.
- 9 At state and factors shall be facts recorded to seed and shall be provided with policinal cover uses. To not liabel has steen our except at three or produced sentences and subject to traffic.
- 18.60 interpreted CC, pipes in the disorder with tall that be provided with two (2) count of providing the covering and support with just plots from gifty starked in the or augit of
- 15 Provide sent shall and very pass that and of oat han senton weight acrequind.
- 12/All cost is or pipes shall be of approved godby and GC pipes for water detributionings shall be 3checks 45 U.S. Marchest exact.
- Th Francis gate values to all water stoppy lines to below.
- 54 KI had water them about he promoted with proper receiption where expected.
- 15 All individual invalues to foliose or group of folions profer equipments shall be provided with all chartens or pagest vertical object orderings of observances and observances are shown.
- H v 456 servier 18 cen Want brys:
- H 100 sen for 12 etc Duck market
- \$8.00 Notes block short be \$5 mm \$1 (\$0.00) is shown in health stated
- 17 interspend septo tent is SI was higher than the option operation to 20 mic ligher than the cuttle pays.
- 18 All physicing works and namer of construction shall be under the closed supervision of an also and duty her sed Marine Plumber or Registered Earday y Engineer. Any observer uses found to plan shall be collected to some parton.

Cremin	DESCRIPTION OF THE PARTY SHARES	THE THROWS
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111711	Primitation of maleston out makeston outcomes being outcomes being outcomes outcomes outcomes outcomes outcomes outcomes outcomes outcomes outcomes	Description
63	2004021608	



GENERAL NOTES AND LEGENDS

2 WATER LINE LAYOUT

DESCRIPTION LANGE OF THE PARTY OF THE PARTY

ROUE 1588

MART NO

SHOOT CONTINUE

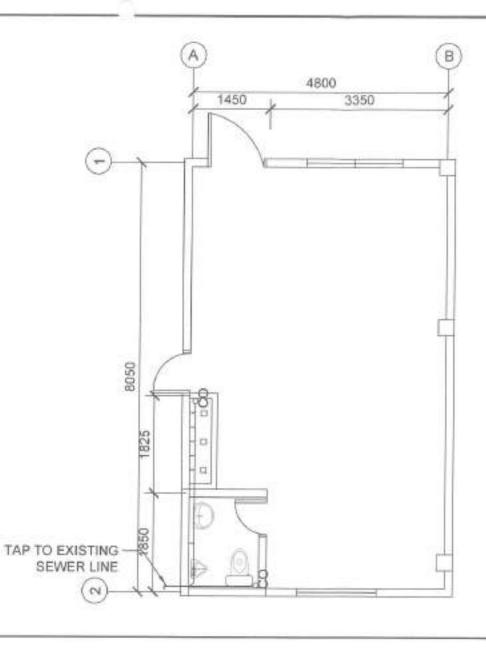


Republika ng Pilipinas Langsod ng Queson CITY ENGINEERING DEPARYMEN PROJECT TITLE:

NT	PROPOSED REHABILITATION OF PLANAS SITE DAYCARE CENTER	DATE:	And ,	A		WATER LINE LAVOIR	PL-01	
	LOOK FOR SHARMAN PARTIES AND SOUTH STOP	AFFERNIC:	ENOR VEO S. DEL ROBARIS HEAD, PLANSKO & PROGRESAMED SYSICS	ENOR SAGENE R. VERZOSA, JR. DC OT: VILLER PRILIDAMINENT			05 08	

ADDOMESTIC AS HISTORY

APPROBRIEN:



1 SANITARY LINE LAYOUT

BONE 150V



Republika ng Pilpinin Langsod ng Quezon CITY ENGINEERING DEPARTMENT PROPOSED REHABILITATION OF PLANAS SITE DAYCARE CENTER

BARAHDAY NAURIAHAN, DISTRICT & GUEZOR GITY

DATE DATE DE ROSAND DE ROS



посонномний истеми.

SAHITARY LINE
LAYOUT

HON, MA, JOSEFINA G, BELLIOWTE
CRYMNOR, GIRLOR CRY

APPENDING BY

PL-02 06 08

SHEETING:

EHEET CONTENT.

- 1. ALL BLACKWICK, RIGHTS SHALL OF DOME & ACCOMMANDE WITH THE PROVIDENCE OF THE LATEST BLATCH OF THE HILLIAM OF THE PROVIDENCE OF THE PROVIDE OF THE PR THE LAWS AND DECEMBERS OF THE LOCAL CODE ENFORCED ALTHORISTS AND THE REQUESTED OF THE LOCAL POWER AND TELEFACINE
- 5. THE CONTRACTOR SHALL SCOUTE ALL PERSON AND FAV ALL, FREE REQUIRED FOR THE WORK AND SHALL PLEASED THE DAM OF THE CAMER THE ENGINEERS FEAL CONTRICATES OF IS SCHOOL INSPECTION AND ARROAD. FROM PROPER COMMISSION INTRODUCES FOR COMPLETION OF
- 2. ALL DISSIDUED BRANCH CIRCUTTO WALL BY, PAG CONDUITS AND POR EMPOSED MOTALLANCE DAMA, LISE AND REPORTED BY CONTRACT OL LAWS. EVERY 700 NE MOTERN.
- 4. PLUI BOXES SHALL BE PROVIDED BY THE CONTRACTOR BARNETER HISCESSARY TO CACE DATE WISC PLEASURED SHEET ARE MIT INDIGATED OR THE PLANE. BOING OF ALL PULLBOINGS SHILL BE COMPUTED WARREN ON THE CODE RESERVENESS. SHIRLT INFOP DRAWARDS TO THE DISPATES FOR APPROVAL PRICE TO PRESENTED LOCATION OF PILLEONES SHALL BE APPROVED BY THE ARCH SECTION ORGANICAL AND WLET 88 FEP LISCISSION THE TAS-BLILLY PLAN
- 5. ALL POWER OUTLITS. AND SWITCHES SAALE BE ISSOURDING TYPE WITH AVAILUSE SLCPS FOR 196 V.
- B. HADVIDE DROUND PAULT CURRENT INTERPRETER ORGANI BRIGARDE FOR LOADE MARKED THEIR OR THE PLAN.
- 7. AU, WETALLE CONDUSTS, DARWETS AND EQUIPMENT SHALL BE IMPREST V DECURDED AND BOADED.
- 8. STREAMS STREETWINE RICHED, WOLFITRID RESOUT FOR VALL, RIQUSTED DEVELOR SHALL BE AS FOLLOWS:

RECEPTACIE DET, ET - 300 MM APF., 163MM ABOVE MORE RECORDER. TELEPHONE OUTLET - 300 MM APP. CATVIOUTLET - 200 MW AFF LEGHTHES BAVEON - 1405 HBM AFF PARKET ROWNS - TRUST BRICARY

- S. REFER TO MICHAELE, PLINNING MAY PRIM PROTECTION DRAWNINGS FOR RATINGS AND LOCATIONS OF SIGNAPHANIC MOMELL AS THEIR CONTROL. STREAM FROM AN APPEARED AND ON SHOWN UNDER THEIR RESPECTIVE SECTIONS.
- TO. ALL HATERIALD TO DO USED SHALL BE OF THE BEST QUALITY. BESARD NEW AS INTO OTHO
- 11. THE DRAWINGS AND EMECH CATCHE ARE INTO DEED TO PRESENT GENERAL LAYOUT AND BROKE DUT, MISTERSTRATED CRITICAL REPORT OF NOT HECESBARK'S RECOGNESSED ACTUAL LOCATIONS, LEVEL AND DISTANCES OF THE COLUMNAT. THE CONTRACTOR IS HERBITY REQUISED TO MISSE SUCH ADJUSTMENT STITLE JOSSITE AS LOCATION, DISTANCES AND LESSUE AND GRAVINGED BY ACTUAL PELDICIPIOTIONS.
- 12. ANY DISCREPANCY BITNALS AT THE PLASS AND SPECIFICATION IS NOT LESS REQUEST TO THE ATTENTION OF THE DISCREPANCE CARRIED FOR CLASS CONTROLS.
- M. AU, DEFINIS AND DOWNERSHOE SUTLET CREDITS SHALL BE SEED MA. THORNES COPPER WAY USE FOR CHIEDWISE MOTED, WARRING SUIL OF WIRE BOAL, \$6 2,000, Mill COPPER WIRE, ALL WIRES AND CARLES SHALL BE COLOR CODED AS POLICIAN.

FIRE S - ARTOOM MEDITTH ALL - MARTIE паколир-сиеви

18. BELANK PARK DIFFERE, ENGLOSSARE KHALL BY FARRICATED PROHOTED, WITH THERMOSE AN POLLOWIN

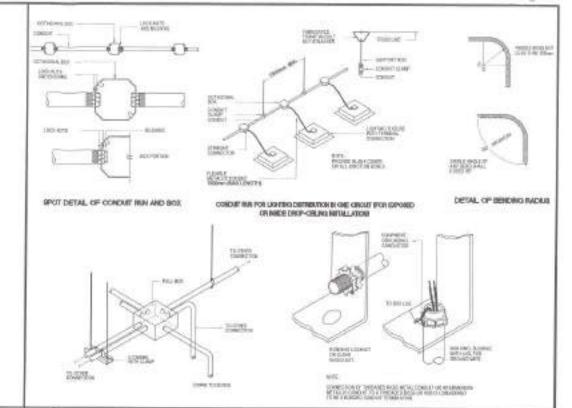
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COVER THE NAME.

OA 15 PWYTEST WITH HETAL PRIMES EPOXY AND TOROGAT DATH PARTIED WITH METAL PRIMER ISPORT KND TOPOCKT ISA 13 PANTES WITH BETAL PRINCE EPONY AND TOPOORT GA 15 FAMILED WITH METAL PRIMER BYSSET AND TOPOORT.

- 15. ALL ELECTRICAL WORKS HARRY BHALL BE EXECUTED BY EXPERIENCED HER UNDER THE GREET BLUESKNEROW OF APAIL. THE LICENSES BURCHWORL ERRORDER AND A ROLLY ADDRESSTED OLD CONTRACTOR BY PCAR MICROSTRUM, BE MEANLY IN ACED ORGANIZATION. PASTERED AND PROPERLY PRINTER
- 15. TYPE OF SERVICE DATE SALES BASEL HE SPECIAL PROPERTY WOUNDERFY IS GROUND, NO HERE'S VOW AC HOMBAN.
- 17. CONDUTE IN NO CASE SHALL THISSE BE MORE THAN THE RESPONSE DEPOT OF FOUR GRAPTER SCHOOL IN ARY CHE DUE. ALL CONDUT BRICE DIVAL 16. FIELD BASIS BY URBID SYDMAULIC BENDRING MINISTER REQUIRE RACKED MAY FIRST NO ACCORDANCE TO THE CODE REQUIREMENTS.
- 18. LPDM DOMPLETERS OF ELECTRICAL CONTINUENTER WORK, HEILATION ECONOMICS TOOT AND PLACEDURALITY TREE DAWL BE PERFORMED BY THE CONTRACTOR WILLIAMS OF THE INSTALLATION TO BE REPORTED IN DETAILS ON PURPLE APPROVED BY THE QUEZOR OFFY ENGINEERING DEPARTMENT REPRODUCTIONS. THE CREATED PROGRAMME PORTER SUCCESSES SHALL NOT BE MORE THAN 5 CHEEL CLEENING ATTEN GROUNDING RESISTANCE BLALL NOT EXISTED & OWNE.



MISCELLANEOUS DETAIL

INGLE DANG SWITCH (FOR REPLACEMENT)

TWO GANG SWITCH (FOR REPLACEMENT)

E27 RECEPTABLE WITH LESS SILLS (FOR REPLACEMENT)

LED TUBE LIGHT BOX TYPE (FOR REPLACEMENT)

TROFFER TYPE WITH 2X18W LED TUBE LIGHT (FOR REPLACEMENT)

CELLING FAN (FOR REPLACEMENT)

DUPLEX CONVENENCE CUTLET (FOR REPLACEMENT)

GENERAL NOTES



Republika ng Filipsma Largeof ng Queson CITY ENGINEERING DEPARTMENT REPORT AND

LOCATION-

PROPOSED REHABILITATION OF PLANAS SITE DAYGARE CENTER

BARANDAY RALINLANAN, BIOTRECT & CURZON CITY

\$40°E: SECRED BY: JA

THE PARTIES

CONTROL NO

DOMESTICS BY

ENGR. \$50 S. \$61. ROSARIQ* HERE, POMINION E PROGRAMMED CHES

NECOMMENDALS APPROVAL.

ENGR SAMON R. VERZOSA, JR.

APPROPRIEST STY

CITY MUTCH COHOON ETTY

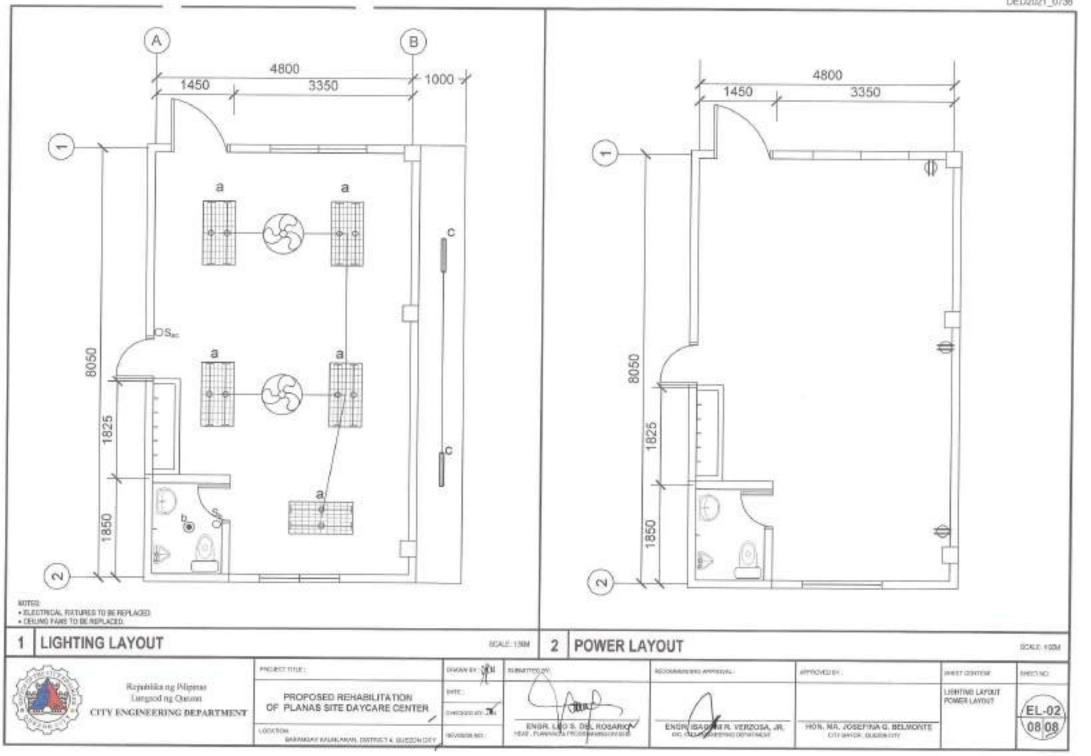
GENERAL NOTES MISCELLANEDUR DETAILS LEGENDS AND HON, MA, JOSEFININ G. BELMONTE SYMBIOLS.

THEST DON'TESHS

EL-01 07 08

SHEET NO.

LEGENDS AND SYMBOLS



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 CONSTRUCTION OF HAND WASHING FACILITY AND

REHABILITATION OF DAY CARE CENTER AT DISTRICT 4 / AREA XX

LOCATION: BARANGAY HORSESHOE, IMMACULATE CONCEPCION, KAUNLARAN,

PINAGKAISAHAN AND SAN MARTIN DE PORRES, DISTRICT 4, QUEZON CITY

PROJECT NO. : 21 - 00173

DURATION: Sixty (60) Calendar Days

BREAKDOWN OF COST

ITEM NO.	ITEM OF WORK (DESCRIPTION)	MATERIALS COST	LABOR COST	INDIRECT COST	AGGREGATE COST
	BARANGAY HORSESHOE				
I	GENERAL REQUIREMENTS				
II	CONSTRUCTION OF HAND WASHING FACILITY				
III	REHABILITATION OF DAY CARE CENTER				
	HILLCREST DAY CARE CENTER, BARANGAY IMMACULATE CONCEPCION				
I	GENERAL REQUIREMENTS				
II	CONSTRUCTION OF HAND WASHING FACILITY				
III	REHABILITATION OF DAY CARE CENTER				
	F. MANALO DAY CARE CENTER, BARANGAY IMMACULATE CONCEPCION				
I	GENERAL REQUIREMENTS				
II	SITE WORKS				
III	CIVIL / STRUCTURAL WORKS				
IV	ARCHITECTURAL WORKS				
V	SANITARY / PLUMBING WORKS				
VI	ELECTRICAL WORKS				
	PLANAS SITE DAY CARE CENTER, BARANGAY KAUNLARAN				
I	GENERAL REQUIREMENTS				
II	SITE WORKS				
III	CIVIL / STRUCTURAL WORKS				
IV	ARCHITECTURAL WORKS				
V	SANITARY / PLUMBING WORKS				
VI	ELECTRICAL WORKS				
	BARANGAY PINAGKAISAHAN				
I	GENERAL REQUIREMENTS				

ITEM No.	ITEM OF WORK (DESCRIPTION)	MATERIALS COST	LABOR COST	INDIRECT COST	AGGREGATE COST
П	CONSTRUCTION OF HAND WASHING FACILITY				
III	REHABILITATION OF DAY CARE CENTER				
	BARANGAY SAN MARTIN DE PORRES				
I	GENERAL REQUIREMENTS				
П	CONSTRUCTION OF HAND WASHING FACILITY				
III	REHABILITATION OF DAY CARE CENTER				
	SAN MARTIN DE PORRES ANNEX C DAY CARE CENTER, BARANGAY SAN MARTIN DE PORRES				
I	GENERAL REQUIREMENTS				
Ш	CONSTRUCTION OF HAND WASHING FACILITY				
III	REHABILITATION OF DAY CARE CENTER				
			T	OTAL COST	P

			·	
LUMP SUM BID IN WORDS	:	 		
_		 		
Contractor :				

Bid Form Page 3 of 3

(Building Construction/Rehabilitation Project)

PROJECT TITLE: PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION

OF HORSESHOE DAY CARE CENTER

LOCATION : BARANGAY HORSESHOE, DISTRICT 4, QUEZON CITY

PROJECT NO. : 21 - 00173

SCOPE OF WORK:

General Requirements include temporary enclosure, billboard, scaffolding, construction safety & health and clearing, hauling and disposal of construction materials and debris.

- II Construction of Hand Washing Facility.
- a Installation of hand washing facility.
- b Site Works include chipping of concrete for sanitary / plumbing works.
- c Civil / Structural Works include restoration of concrete for sanitary / plumbing works.
- d Sanitary / Plumbing Works include installation of roughing-ins, fixtures and accessories.
- III Rehabilitation of Day Care Center
- a Site Works include removal works and cleaning and clearing for painting preparation.
- b Architectural Works include floor finishes, wall finishes, painting works, installation of doors and windows, fabricated materials and letterings.
- c Sanitary / Plumbing Works include installation of roughing-ins, fixtures and accessories.
- d Electrical Works include installation of roughing-ins, wirings, devices and fixtures.
- VII 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
ı	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)	35	sq.m.		
	Temporary Enclosure Around the Construction Area (h= 2.4m)	10	l.m.		
				DIRECT COST I	₽
II	CONSTRUCTION OF HAND WASHING FACILITY				
Α	HAND WASHING FACILITY				
	Kiddie Countertop	3	l.m.	₱	₱
				MATERIALS COST-A	₱
				LABOR COST-A	
				DIRECT COST-A	₱
В	SITE WORKS				
	Removal Works				
	Chipping of Concrete (Sanitary / Plumbing Works)	3	sq.m.	₱	₽
				DIRECT COST-B	₽
С	CIVIL / STRUCTURAL WORKS				
	Masonry Works				
	Restoration of Concrete (Sanitary / Plumbing Works)	3	sq.m.	₱	₽
				MATERIALS COST-C	₽
				LABOR COST-C	

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
				DIRECT COST-C	₱

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
D	SANITARY / PLUMBING WORKS				
	Sewer Line / Storm Drainage System				
	Roughing-Ins				
	50 mm Ø, PVC with Hub	2	piece	₱	₽
	50mm Ø, P-Trap	1	piece		
	75 mm Ø, PVC with Hub	1	piece		
	50mm Ø, 1/8 Bend	3	piece		
	100mm Ø, 1/8 Bend	2	piece		
	75mm Ø x 75mm Ø, Tee	1	piece		
	75mm Ø, 1/4 Bend	1	piece		
	100mm Ø x 50mm Ø, Wye	1	piece		
	Waterline System				
	Roughing-Ins				
	20mm Ø, Pipe PPR	2	piece		
	20mm Ø, Elbow	2	piece		
	20mm Ø, Coupling	2	piece		
	20mm Ø, Tee Equal	2	piece		
	Fixtures		1		
	Floor Drain, 100mm x 100mm, Stainless	2	piece		
	Hose Bibb, Stainless (Water Efficient)	3	set		
	Miscellaneous & Consumables				
	400cc Solvent Cement	1	can		
	All-Around Sealant	1	can		
	Hacksaw Blade	1	piece		
	Teflon Tape	1	roll		
	Waste Cloth	1	kg		
			9	MATERIALS COST-D	₽
				LABOR COST-D	1
				DIRECT COST-D	₽
				DIRECT GOOT-D	1
				MATERIALS COST II	P
				LABOR COST II	•
				DIRECT COST II	P
Ш	REHABILITATION OF DAY CARE CENTER			DIRECT COOT II	•
A	SITE WORKS				
^	Removal Works				
	Removal of Dilapidated Door	4	set	₽	₽
	Removal of Dilapidated Window	2	sq.m.		1
	Removal of Tiles	59	sq.m.		
	Removal of Water Closet	1	set		
	Removal of Lavatory	1	set		
	Removal of Countertop	2	sq.m.		
	Cleaning and Clearing for Painting Preparation	87	sq.m.		
	Searning and Security for Fainting Froparation	0,		DIRECT COST-A	₽
В	ARCHITECTURAL WORKS			DIKECT COST-A	Г
В	Floor Finishes				
	Floor Topping Preparation of Tile Works	45	sq.m	₽	₽
	1 1001 Topping I Topalation of The Works	10	24	'	'

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	400mm x 400mm Non-Skid Homogeneous Tiles	39	sq.m		
	Wall Finishes				
	300mm x 300mm Homogeneous Tiles	18	sq.m		
	6mm thk Double Wall Fiber Cement Board with Complete	56	sq.m		
	Framing and Accessories				
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱

	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Installation of Doors				
	D1 - (0.90m x 2.10m) One Leaf Door, 10mm Thick Clear Temper	2	set	₽	₽
	Glass White Color Powder Coated Aluminum Frames				
	D2 - (0.60m x 2.10m) Swing Type PVC Door	2	set		
	Painted Finish (Kitten White) w/ 400mm X 300mm Louver				
	D3 - (0.70m x 2.10m) Swing Type Flush Hollow Core Painted Fir	2	set		
	Door jamb				
	D3 - (0.70m x 2.10m) Swing Type Flush Hollow Core Door	2	set		
	Hardware and Accessories				
	Door Hinges, Heavy Duty, Stainless	12	set		
	Door Knob, Lever Type, Stainless	4	set		
	Installation of Windows	<u> </u>			
	W1 -(0.40m x 0.40m) Awning Window, 6mm Thk,	2	set		
	Clear Tempered Glass White Color Powder Coated Aluminum	_			
	Frame with Complete Accessories				
	W2 -(1.10m x 1.20m) Sliding Window, 6mm Thk,	1	set		
	Clear Tempered Glass White Color Powder Coated Aluminum	•	001		
	Frame with Complete Accessories				
				Materials Cost	₽
				Labor Cost	I
				Subtotal	₽
	Painting Works			Subtotal	1
	Flat Latex Paint Finish				
	Dry Wall	111	sq.m	₽	₽
	Interior Wall	91	sq.m		
	Fabricated Materials		04		
	Hanging Cabinet	4	sq.m		
	Countertop with Aluminum Cover	3	l.m.		
	Letterings				
	200mm Stainless Steel Lettering	22	set		
	"HORSESHOE DAY CARE CENTER"				
				Material Cost	₽
				Labor Cost	
				Subtotal	₽
				Cubicial	1
				MATERIALS COST-B	₽
				LABOR COST-B	:
				DIRECT COST-B	₽
С	SANITARY / PLUMBING WORKS			5	
<u> </u>	Sewer Line / Storm Drainage System				
	Roughing-Ins				
	50 mm Ø, PVC Pipe with Hub	3	piece	₽	₽
	75 mm Ø, PVC Pipe with Hub	4	piece		
	100mm Ø, PVC Pipe with Hub	6	piece		
	50mm Ø, P-Trap	4	piece		
	75mm Ø, P-Trap	1	piece		
	50mm Ø, 1/8 Bend	<u></u>	piece		
, .	·····	4			

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	75mm Ø, 1/4 Bend	2	piece		
	75mm Ø x 75mm Ø, Tee	3	piece		
	100mm Ø x 75mm Ø, Tee	2	piece		
	100mm Ø x 50mm Ø, Wye	4	piece		
	100mm Ø x 75mm Ø, Wye	1	piece		
	100mm Ø, Cleanout with Adapter	2	piece		
	Waterline System				
	Roughing-Ins				
	20mm Ø, PPR Pipe	4	piece		
	20mm Ø, Elbow	12	piece		
	20mm Ø, Coupling	4	piece		
	20mm Ø, Tee Equal	6	piece		
	20mm Ø, Female Threaded, Elbow	7	piece		
	Valves and Appurtenances				
	20mm Ø Gate Valve, PPR	1	piece		
	Fixtures				
	Bidet with Complete Accessories, Stainless (Water Efficient)	2	set		
	Floor Drain, 100mm x 100mm, Stainless	2	piece		
	Grease Trap, 5GPM, Stainless	1	set		
	Kitchen Faucet Lever Type, Stainless (Water Efficient)	1	set		
	Kitchen Sink, Single Tub, Stainless	1	set		
	Lavatory, Faucet, Lever Type, Stainless, Heavy Duty (Water Effi	2	set		
	Lavatory, Kiddy, Wall Hung	2	set		
	Urinal, Kiddy, Flush Valve-Type (Water Efficient)	1	set		
	Water Closet, Kiddy, Tank-Type (Water Efficient)	2	set		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Accessories				
	Angle Valve, Single Way, Stainless Steel	4	piece		
	Angle Valve, Two Way, Stainless Steel	4	piece		
	Flexible Hose, Stainless Steel	6	piece		
	Miscellaneous & Consumables				
	400cc Solvent Cement	2	can		
	All Around Sealant	2	can		
	Hacksaw Blade	2	piece		
	Teflon Tape	2	roll		
	Waste Cloth	1	kg		
		'	9	MATERIALS COST-C	₽
				LABOR COST-C	1
				DIRECT COST-C	₽
D	ELECTRICAL WORKS			DIRECT COST-C	1
U	Roughing-ins				
+	20mmØ PVC Pipe	20	piece	₽	₽
+	20mmØ PVC Flexible Hose	40	I.m.		1
	16mm x 16mm x 2.44m Rectangular PVC Moulding	15	piece		
	Fittings and Accessories	15	piece		
	20mmØ PVC Adaptor	20	nioco		
	20mmØ PVC Locknut & Bushing	20	piece		
	<u>-</u>	20	piece		
	50mm x 100mm PVC Utility Box	20	piece		
	100mm x 100mm PVC Junction Box with Cover	10	piece		
	Wires and Cables				
	3.5mm² THHN Wire	120	l.m.		
	Lighting Fixtures (Energy Efficient)				
	18W LED Bulb	2	set		
	E27 Receptacle	2	set		
	600mm x 1200mm, 2 x 18w LED, Troffer Type with Complete Accessories	7	set		
	300mm x 1200mm, 2 x 18w LED, Troffer Type	1	set		
	with Complete Accessories				
	Wiring Devices and Other Fixtures				
	Aircon Outlet, Multipurpose outlet 250V/20A	1	set		
	Orbit Fan with Selector Switch	3	set		
	Outlet with Grounding, Two-Gang	5	set		
	Switch with Plate and Cover, One-Gang	3	set		
+	Switch with Plate and Cover, Two-Gang	2	set		
	Miscellaneous & Consumables				
+	400cc Solvent Cement	1	can		
+	Electrical Tape	5	roll		
	Hacksaw Blade	2	piece		
	Torch with Butane	1	set		
1	1010H WIRT DUIGHO	1	301	MATERIALS COST-D	₽
					Γ
+				LABOR COST-D	₽
				DIRECT COST-D	F
				MATERIALS COST III	P

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
				LABOR COST III	
				DIRECT COST III	₽

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
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SUMMARY

ITEM NO.	WORK DESCRIPTION	TOTAL COST	
 	GENERAL REQUIREMENTS CONSTRUCTION OF HAND WASHING FACILITY REHABILITATION OF DAY CARE CENTER		₽
	E: Overhoods relative to the est applicable DPWH Memorandum	TOTAL DIRECT COST ead, Contingencies and Miscellaneous Expenses (OCM) Profit VAT TOTAL ESTIMATED COST	

(Building Construction/Rehabilitation Project)

PROJECT TITLE: PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION

OF HILLCREST DAY CARE CENTER

LOCATION: BARANGAY IMMACULATE CONCEPCION, DISTRICT 4, QUEZON CITY

PROJECT NO. : 21 - 00173

SCOPE OF WORK:

General Requirements include temporary enclosure, billboard, scaffolding, construction safety & health and clearing, hauling and disposal of construction materials and debris.

- II Construction of Hand Washing Facility.
- A Supply and installation of foot operated single sink handwashing facility.
- B Site Works include chipping of concrete for sanitary / plumbing works.
- C Civil / Structural Works include restoration of concrete for sanitary / plumbing works.
- D Sanitary / Plumbing Works include installation of roughing-ins, fixtures and accessories.
- III Rehabilitation of Day Care Center
- A Site Works include removal / demolition works, cleaning and clearing for painting preparation and earthworks.
- B Civil / Structural Works include concrete works, masonry works, metal works and roofing works.
- C Architectural Works include floor finishes, wall finishes, ceiling works, painting works and installation of doors and windows, fabricated materials and letterings.
- D Sanitary / Plumbing Works include installation of roughing-ins, fixtures and accessories.
- E Electrical Works include installation of roughing-ins, wirings, devices and fixtures.
- VII 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
ı	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)	36	sq.m.		
	Temporary Enclosure Around the Construction Area (h= 2.4m)	18	l.m.		
				DIRECT COST I	₽
II	CONSTRUCTION OF HAND WASHING FACILITY				
Α	HAND WASHING FACILITY				
	Single Sink Portable Hand Washing Facility	3	unit	₱	₽
				DIRECT COST-A	₱
В	SITE WORKS				
	Removal Works				
	Chipping of Concrete (Sanitary / Plumbing Works)	2	sq.m.	₱	₽
				DIRECT COST-B	₱
С	CIVIL / STRUCTURAL WORKS				
	Masonry Works				_
	Restoration of Concrete (Sanitary / Plumbing Works)	2	sq.m.	₱	₽
				MATERIALS COST-C	₽
				LABOR COST-C	
				DIRECT COST-C	₽

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
D	SANITARY / PLUMBING WORKS				
	Sewer Line / Storm Drainage System				
	Roughing-Ins				
	50 mm Ø, PVC Pipe with Hub	1	piece	₱	₽
	75 mm Ø, PVC Pipe with Hub	1	piece		
	100 mm Ø, PVC with Hub	2	piece		
	50mm Ø, 1/8 Bend	2	piece		
	100mm Ø, 1/8 Bend	2	piece		
	75mm Ø, 1/4 Bend	2	piece		
	100mm Ø x 50mm Ø, Wye	2	piece		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Waterline System				
	Roughing-Ins				
	20mm Ø, Pipe PPR	3	piece		
	20mm Ø, Elbow	2	piece		
	20mm Ø, Coupling	3	piece		
	Miscellaneous & Consumables				
	400cc Solvent Cement	1	can		
	All-Around Sealant	1	can		
	Hacksaw Blade	1	piece		
	Teflon Tape	1	roll		
	Waste Cloth	1	kg		
				MATERIALS COST-D	₽
				LABOR COST-D	
				DIRECT COST-D	₽
				MATERIALS COST II	₽
				LABOR COST II	
				DIRECT COST II	₽
Ш	REHABILITATION OF DAY CARE CENTER				
Α	SITE WORKS				
	Removal Works				
	Removal of Ceiling	21	sq.m.	₽	₱
	Removal of Dilapidated Door	3	set		
	Removal of Dilapidated Window	3	sq.m.		
	Removal of Hanging Cabinet	7	sq.m.		
	Removal of Tiles	29	sq.m.		
	Removal of Water Closet	1	set		
	Removal of Urinal	1	set		
	Removal of Lavatory	1	set		
	Removal of Under Counter Cover	2	sq.m.		
	Removal of Roofing and Accessories	31	sq.m.		
	Cleaning and Clearing for Painting Preparation	160	sq.m.		
	Excavation for Structures	4	cu.m		
	Backfill and Compaction	2	cu.m		
				Subtotal	₽
	Gravel Bedding	1	cu.m	₱	₱
	-			Materials Cost	₽
				Labor Cost	
				Direct Cost	₱
				MATERIALS COST-A	₽
				LABOR COST-A	
				DIRECT COST-A	₽
В	CIVIL / STRUCTURAL WORKS				
	Concrete Works				
	On-Site Mix Concrete, 21 Mpa, 3/4" Gravel @ 28 Days	2	cu.m	₱	₽
	Reinforcing Steel Bars				

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Grade 40 Reinforcing Steel Bar including G.I. Tie Wire # 16				
	10mm Ø Column	215	kg		
	12mm Ø Wall Footing	22	kg		
	Grade 60 Reinforcing Steel Bar including G.I. Tie Wire # 16				
	16mm Ø Footing	60	kg		
	16mm Ø Column	110	kg		
	Formworks				
	Wall Footing	2	sq.m		
	Footing	4	sq.m		
	Column	7	sq.m		
	Masonry Works				
	100mm CHB Wall Laying, Including Mortar, Reinforcement	14	sq.m		
	and Two-Face Plastering				
	150mm CHB Wall Laying, Including Mortar, Reinforcement	3	sq.m		
	and Two-Face Plastering				
	Metal Works				
	Fence				
	12mm Square Bar	150	kg		
	20mm Square Bar	24	kg		
	Gate				
	12mm Square Bar	13	kg		
	50mmØ Round Bar	19	kg		
	38mm Barrel Bolt	1	set		
	Cylindrical Hinge, Heavy Duty	3	piece		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Miscellaneous & Consumables				
	Acetylene Tank (Refill)	1	tank		
	Cut Off Blade	10	piece		
	Grinding Disc for Metal	10	piece		
	Oxygen Tank (Refill)	1	tank		
	Welding Rod	1	box		
	Roofing Works				
	Pre-painted G.I. Rib Type Roofing	33	sq.m.		
	Pre-painted G.I. End Flashing	21	l.m.		
	12mm x 300mm Fiber Cement Fascia Board	21	l.m.		
	6mm Thk One-sided Aluminum Foil Thermal Insulation	33	sq.m.		
	Tekscrew	63	piece		
	Blind Rivets	107	piece		
	Silicon Sealant	3	tube		
				MATERIALS COST-B	₱
				LABOR COST-B	
				DIRECT COST-B	₱
С	ARCHITECTURAL WORKS				
	Floor Finishes				
	Floor Topping Preparation of Tile Works	22	sq.m	₽	₱
	300mm x 300mm Non-Skid Homogeneous Tiles	3	sq.m		
	400mm x 400mm Non-Skid Homogeneous Tiles	20	sq.m		
	Wall Finishes				
	300mm x 300mm Homogeneous Tiles	9	sq.m		
	Ceiling Works				
	6mm thk Fiber Cement Board including Metal Framing	33	sq.m		
				Materials Cost	₽
				Labor Cost	
				Subtotal	₽
	Installation of Doors				
	D1 - (0.90m x 2.10m) Swing Type Flush Hollow Core Painted Finish	1	set	₽	₽
	D2 - (0.70m x 2.10m) Swing Type PVC Door	1	set	4,016.04	4,016.04
	Painted Finish (Kitten White) w/ 400mm X 300mm Louver			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	Door jamb				
	D1 - (0.90m x 2.10m) Swing Type Flush Hollow Core Door	1	set		
	Hardware and Accessories				
	Door Hinges, Heavy Duty, Stainless	6	set		
	Door Knob, Lever Type, Stainless	2	set		
	Installation of Windows				
	W1 -(1.80m x 1.20m) Sliding Window, 6mm Thk,	1	set		
	Clear Tempered Glass White Color Powder Coated Aluminum				
	Frame with Complete Accessories				
	W2 -(0.60m x .040m) Awning Window, 6mm Thk,	1	set		
	Clear Tempered Glass White Color Powder Coated Aluminum				
	Frame with Complete Accessories				
				Materials Cost	₽
				Labor Cost	

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
				Subtotal	₱
	Painting Works				
	Elastomeric Paint Finish (Exterior Wall)	86	sq.m	₱	₱
	Flat Latex Paint Finish				
	Ceiling	33	sq.m		
	Interior Wall	75	sq.m		
	Fabricated Materials				
	Hanging Cabinet (Day Care Center)	5	sq.m		
	Hanging Cabinet (Pantry)	2	sq.m		
	Hanging Cabinet (Toilet)	2	sq.m		
	Under Counter Aluminum Cover (Pantry)	2	l.m.		
	Letterings				
	200mm Stainless Steel Lettering	22	set		
	"HILLCREST DAY CARE CENTER"				
				Material Cost	₱
				Labor Cost	
				Subtotal	₱
				MATERIALS COST-C	₱
				LABOR COST-C	
				DIRECT COST-C	₱

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
D	SANITARY / PLUMBING WORKS				
	Sewer Line / Storm Drainage System				
	Roughing-Ins				
	50 mm Ø, PVC Pipe with Hub	3	piece	₽	₽
	75 mm Ø, PVC Pipe with Hub	4	piece		
	100mm Ø, PVC Pipe with Hub	4	piece		
	50mm Ø, P-Trap	4	piece		
	75mm Ø, P-Trap	1	piece		
	50mm Ø, 1/8 Bend	9	piece		
	75mm Ø, 1/8 Bend	2	piece		
	100mm Ø, 1/8 Bend	4	piece		
	75mm Ø, 1/4 Bend	2	piece		
	75mm Ø x 75mm Ø, Tee	2	piece		
	100mm Ø x 75mm Ø, Tee	2	piece		
	100mm Ø x 50mm Ø, Wye	9	piece		
	100mm Ø x 75mm Ø, Wye	2	piece		
	100mm Ø x 100mm Ø, Wye	4	piece		
	100mm Ø x 50mm Ø, Tee Reducer	1	piece		
	100mm Ø, Cleanout with Adapter	3	piece		
	Waterline System		'		
	Roughing-Ins				
	20mm Ø, PPR Pipe	2	piece		
	20mm Ø, Elbow	10	piece		
	20mm Ø, Coupling	2	piece		
	20mm Ø, Tee Equal	2	piece		
	20mm Ø, Female Threaded, Tee	4	piece		
	20mm Ø, Female Adapter	1	piece		
	32mm Ø x 20mm Ø, Reducer	2	piece		
	32mm Ø, Union Patente	1	piece		
	Valves and Appurtenances		p.000		
	20mm Ø Gate Valve, PPR	1	piece		
	Fixtures		p.000		
	Bidet with Complete Accessories, Stainless (Water Efficient)	1	set		
	Floor Drain, 100mm x 100mm, Stainless	<u>'</u> 1	piece		
	Grease Trap, 5GPM, Stainless		set		
	Kitchen Faucet Lever Type, Stainless (Water Efficient)	1 1	set		
	Kitchen Sink, Single Tub, Stainless	1	set		
	Lavatory, Faucet, Lever Type, Stainless Heavy Duty (Water Effi		set		
	Lavatory, Kiddy, Wall Hung	11	set		
	Urinal, Kiddy, Flush Valve-Type (Water Efficient)	1	set		
	Water Closet, Kiddy, Tank-Type (Water Efficient)	1	set		
	Accessories	1	૩ ೮૧		
	Accessories Angle Valve, Single Way, Stainless Steel	2	piece		
	Angle Valve, Single Way, Stainless Steel Angle Valve, Two Way, Stainless Steel	3	-		
	Flexible Hose, Stainless Steel	11	piece		
	Miscellaneous & Consumables	4	piece		
+			60-		
	400cc Solvent Cement	3	can		
	All Around Sealant	1	can		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Hacksaw Blade	2	piece		
	Teflon Tape	2	roll		
	Waste Cloth	1	kg		
				MATERIALS COST-D	₽
				LABOR COST-D	
				DIRECT COST-D	₱
Е	ELECTRICAL WORKS				
	Roughing-ins				
	20mmØ PVC Pipe	30	piece	₱	₽
	20mmØ PVC Flexible Hose	50	l.m.		
	Fittings and Accessories				
	20mmØ PVC Adaptor	20	piece		
	20mmØ PVC Locknut & Bushing	20	piece		
	50mm x 100mm PVC Utility Box	8	piece		
	100mm x 100mm PVC Junction Box with Cover	15	piece		
	Wires and Cables				
	3.5mm² THHN Wire	1	roll		
	Lighting Fixtures (Energy Efficient)				
	18W LED Bulb	3	set		
	E27 Receptacle	3	set		
	T8, 18W LED Tube Light	4	set		
	Wiring Devices and Other Fixtures				
	Aircon Outlet, Multipurpose Outlet 250V/20A	1	set		
	Orbit Fan with Selector Switch	3	set		
	Outlet with Grounding, Two-Gang	4	set		
	Switch with Plate and Cover, One-Gang	1	set		
	Switch with Plate and Cover, Two-Gang	1	set		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Miscellaneous & Consumables				
	400cc Solvent Cement	1	can		
	Electrical Tape	4	roll		
	Hacksaw Blade	2	piece		
	Torch with Butane	1	set		
				MATERIALS COST-E	₱
				LABOR COST-E	
				DIRECT COST-E	₱
				MATERIALS COST III	₽
				LABOR COST III	
				DIRECT COST III	₽

SUMMARY

ITEM NO.	WORK DESCRIPTION	TOTAL COST	
- = =	GENERAL REQUIREMENTS CONSTRUCTION OF HAND WASHING FACILITY REHABILITATION OF DAY CARE CENTER		₽
	E: Overhed	TOTAL DIRECT COST ad, Contingencies and Miscellaneous Expenses (OCM) Profit VAT TOTAL ESTIMATED COST	

(Building Construction/Rehabilitation Project)

PROJECT TITLE: PROPOSED REHABILITATION OF F. MANALO DAY CARE CENTER

LOCATION: BARANGAY IMMACULATE CONCEPCION, DISTRICT 4, QUEZON CITY

PROJECT NO. : 21 - 00173

SCOPE OF WORK:

- General Requirements include temporary enclosure, billboard, scaffolding, construction safety and health and clearing, hauling and disposal of construction materials and debris.
- II Site Works include removal works and cleaning and clearing for painting preparation.
- III Civil / Structural Works include metral works and roofing works.
- IV Architectural Works include floor finishes, wall finishes, ceiling works, painting works, installation of doors and windows, fabricated materials and letterings.
- V Sanitary / Plumbing Works include installation of roughing-ins, fixtures and accessories.
- VI Electrical Works include installation of roughing-ins, wirings, devices and fixtures.
- VII 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
- 1	GENERAL REQUIREMENTS				
	Billboard	1	unit	₽	₽
	Clearing, Hauling and Disposal of Construction Materials and Debris	3	t.l.		
	Construction Safety and Health	1	unit		
	Scaffolding (Rental)	37	sq.m.		
	Temporary Enclosure Around the Construction Area (h= 2.5m)	14	l.m.		
				DIRECT COST I	₽
II	SITE WORKS				
	Removal Works				
	Removal of Dilapidated Door	3	set	₽	₽
	Removal of Dilapidated Window	8	sq.m.		
	Removal of Ceiling	35	sq.m.		
	Removal of Tiles	9	sq.m.		
	Removal of Water Closet	1	set		
	Removal of Sink	1	set		
	Removal of Roofing and Accessories	48	sq.m.		
	Cleaning and Clearing for Painting Preparation	132	sq.m.		
				DIRECT COST II	₽
Ш	CIVIL / STRUCTURAL WORKS				
	Metal Works				
	Window Grilles				
	25mm X 25mm X 2mm Tubular Bar	137	kg		
	Miscellaneous & Consumables				
	Acetylene Tank (Refill)	1	tank		
	Cut Off Blade	3	piece		
	Grinding Disc for Metal	3	piece		
	Oxygen Tank (Refill)	1	tank		
	Welding Rod	1	box		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Roofing Works				
	Pre-Painted Rib-type G.I. Roofing	51	sq.m		
	Pre-painted G.I. End Flashing	14	l.m.		
	6mm Thk One-sided Aluminum Foil Thermal Insulation	51	sq.m.		
	12mm X 300mm Fiber Cement Fascia Board	22	l.m.		
	Blind Rivets	112	piece		
	Tekscrew	42	piece		
	Silicon Sealant	2	tube		
				MATERIALS COST III	₽
				LABOR COST III	
				DIRECT COST III	₱

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
IV	ARCHITECTURAL WORKS				
	Floor Finishes				
	Floor Topping Preparation of Tile Works	2	sq.m	₱	₽
	300mm x 300mm Non-Skid Homogeneous Tiles	2	sq.m		
	Wall Finishes				
	300mm x 300mm Homogeneous Tiles	8	sq.m		
	Ceiling Works				
	6mm thk Fiber Cement Board including Metal Framing	37	sq.m		
				Materials Cost	₽
				Labor Cost	
				Subtotal	₱
	Installation of Doors				
	D1 - (0.90m x 2.10m) Swing Type Flush Hollow Core Painted Finish	1	set	₽	₽
	D2 - (0.70m x 2.10m) Swing Type Flush Hollow Core Painted Finish	1	set		
	D3 - (0.60m x 2.10m) Swing Type PVC Door	1	set		
	Painted Finish (Kitten White) w/ 400mm X 300mm Louver				
	Door jamb				
	D1 - (0.90m x 2.10m) Swing Type Flush Hollow Core Door	1	set		
	D2 - (0.70m x 2.10m) Swing Type Flush Hollow Core Door	1	set		
	Hardware and Accessories				
	Door Hinges, Heavy Duty, Stainless	9	set		
	Door Knob, Lever Type, Stainless	3	set		
	Installation of Windows				
	W1 -(0.70m x 0.60m) Sliding Window, 6mm Thk,	1	set		
	Clear Tempered Glass White Color Powder Coated Aluminum				
	Frame with Complete Accessories				
	W2 -(1.60m x 1.20m) Sliding Window, 6mm Thk,	1	set		
	Clear Tempered Glass White Color Powder Coated Aluminum				
	Frame with Complete Accessories				
	W3 -(2.00m x 1.20m) Sliding Window, 6mm Thk,	1	set		
	Clear Tempered Glass White Color Powder Coated Aluminum				
	Frame with Complete Accessories				
	W4 -(1.50m x 1.20m) Sliding Window, 6mm Thk,	1	set		
	Clear Tempered Glass White Color Powder Coated Aluminum				
	Frame with Complete Accessories				
	W4 -(0.70m x 0.70m) Sliding Window, 6mm Thk,	1	set		
	Clear Tempered Glass White Color Powder Coated Aluminum				
	Frame with Complete Accessories				
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Painting Works				
	Elastomeric Paint Finish (Exterior Wall)	52	sq.m	₽	₱
	Flat Latex Paint Finish				
	Ceiling	37	sq.m		
	Interior Wall	87	sq.m		
	Fabricated Materials				

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Hanging Cabinet	4	sq.m		
	Standing Cabinet	3	sq.m		
	Letterings				
	200mm Stainless Steel Lettering	21	set		
	"F. MANALO DAY CARE CENTER"				
				Material Cost	₱
				Labor Cost	
				Subtotal	₱
				MATERIALS COST IV	₽
				LABOR COST IV	
				DIRECT COST IV	₽
٧	SANITARY / PLUMBING WORKS				
	Sewer Line / Storm Drainage System				
	Roughing-Ins				
	50 mm Ø, PVC Pipe with Hub	3	piece	₱	₱
	75 mm Ø, PVC Pipe with Hub	4	piece		
	100mm Ø, PVC Pipe with Hub	2	piece		
	50mm Ø, P-Trap	3	piece		
	75mm Ø, P-Trap	1	piece		
	50mm Ø, 1/8 Bend	3	piece		
	75mm Ø, 1/8 Bend	1	piece		
	100mm Ø, 1/8 Bend	1	piece		
	75mm Ø, 1/4 Bend	2	piece		
	75mm Ø x 75mm Ø, Tee	2	piece		
	100mm Ø x 75mm Ø, Tee	2	piece		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	100mm Ø x 50mm Ø, Wye	4	piece		
	100mm Ø x 75mm Ø, Wye	1	piece		
	100mm Ø, Cleanout with Adapter	1	piece		
	Waterline System				
	Roughing-Ins				
	20mm Ø, PPR Pipe	2	piece		
	20mm Ø, Elbow	8	piece		
	20mm Ø, Coupling	2	piece		
	20mm Ø, Tee Equal	2	piece		
	20mm Ø, Female Threaded, Elbow	4	piece		
	20mm Ø, Female Adapter	2	piece		
	Valves and Appurtenances				
	20mm Ø Gate Valve, PPR	1	piece		
	Fixtures				
	Bidet with Complete Accessories, Stainless (Water Efficient)	1	piece		
	Floor Drain, 100mm x 100mm, Stainless	1	piece		
	Grease Trap, 5GPM, Stainless	1	piece		
	Kitchen Faucet Lever Type, Stainless (Water Efficient)	1	piece		
	Kitchen Sink, Single Tub, Stainless	1	piece		
	Lavatory, Faucet, Lever Type, Stainless Heavy Duty (Water Efficie	1	piece		
	Lavatory, Kiddy, Wall Hung	1	piece		
	Urinal, Kiddy, Flush Valve-Type (Water Efficient)	1	unit		
	Water Closet, Kiddy, Tank-Type (Water Efficient)	1	unit		
	Accessories				
	Angle Valve, Single Way, Stainless Steel	3	piece		
	Angle Valve, Two Way, Stainless Steel	1	piece		
	Flexible Hose, Stainless Steel	4	piece		
	Miscellaneous & Consumables				
	400cc Solvent Cement	2	can		
	All Around Sealant	2	can		
	Hacksaw Blade	2	piece		
	Teflon Tape	1	roll		
	Waste Cloth	1	kg		
				MATERIALS COST V	₽
				LABOR COST V	
				DIRECT COST V	₽
VI	ELECTRICAL WORKS				
	Roughing-ins				
	20mmØ PVC Pipe	10	piece	₱	₽
	20mmØ PVC Flexible Hose	40	l.m.		
	16mm x 16mm x 2.44m Rectangular PVC Moulding	15	piece		
	Fittings and Accessories				
	20mmØ PVC Adaptor	20	piece		
	20mmØ PVC Locknut & Bushing	20	piece		
	50mm x 100mm PVC Utility Box	15	piece		
	100mm x 100mm PVC Junction Box with Cover	10	piece		
	Wires and Cables				
	3.5mm² THHN Wire	80	l.m.		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Lighting Fixtures (Energy Efficient)				
	18W LED Bulb	5	set		
	E27 Receptacle	5	set		
	Linear Twin Batten with 2x18W LED Tube Light	4	set		
	Wiring Devices and Other Fixtures				
	Orbit Fan with Selector Switch	2	set		
	Outlet with Grounding, Two-Gang	5	set		
	Switch with Plate and Cover, One-Gang	3	set		
	Switch with Plate and Cover, Two-Gang	1	set		
	Switch with Plate and Cover, Three-Gang	1	set		
	Miscellaneous & Consumables				
	400cc Solvent Cement	1	can		
	Electrical Tape	5	roll		
	Hacksaw Blade	2	piece		
	Torch with Butane	1	set		
			I	MATERIALS COST VI	₽
				LABOR COST VI	
				DIRECT COST VI	₱
				_	

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
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SUMMARY

ITEM NO.	WORK DESCR	TOTAL COST	
	GENERAL REQUIREMENTS SITE WORKS CIVIL / STRUCTURAL WORKS ARCHITECTURAL WORKS SANITARY / PLUMBING WORKS ELECTRICAL WORKS		₽
	etly enforce Health Protocols relative to the est applicable DPWH Memorandum	TOTAL DIRECT COST Overhead, Contingencies and Miscellaneous Expenses (OCM) Profit VAT TOTAL ESTIMATED COST	

(Building Construction/Rehabilitation Project)

PROJECT_TITLE: PROPOSED CONSTRUCTION OF HAND WASHING AND REHABILITATION OF

OF PINAGKAISAHAN DAY CARE CENTER

LOCATION : BARANGAY PINAGKAISAHAN, DISTRICT 4, QUEZON CITY

PROJECT NO. : 21 - 00173

SCOPE OF WORK:

I GENERAL REQUIREMENTS

General Requirements include temporary enclosure, billboard, scaffolding, construction safety and health, and clearing, 'hauling and disposal of construction materials and debris.

II CONSTRUCTION OF HAND WASHING FACILITY

- 1 Construction of Hand Washing Facility with undercounter cabinet
- 2 Sanitary / Plumbing Works include installation of roughing-ins, fixtures and accessories.

III REHABILITATION OF DAY CARE CENTER

- 1 Site Works include demolition/removal works, clearing and cleaning for painting preparation and cleaning of aluminum cladding.
- 2 Civil / Structural Works include masonry works, moisture protection, metal works and roofing works.
- Architectural Works include floor finishes, wall finishes, ceiling finishes, painting works,installation of doors and windows,
- fabricated materials, and lettering.
- 4 Sanitary / Plumbing Works include installation of roughing-ins, fixtures and accessories.
- 5 Electrical Works include installation of roughing-ins, wirings, devices, fixtures, panelboard and accessories.
- 6 Mechanical Works include installation of roughing-ins, equipment and accessories.

IV TESTING AND COMMISSIONING

All necessary testing and commissioning shall be performed in accordance to standards.

ITEM NO.	GENERAL REQUIREMENTS	QTY.	UNIT	UNIT COST	TOTAL COST
I	GENERAL REQUIREMENTS				
	Billboard	1	unit	₱	₱
	Clearing, Hauling and Disposal of Construction Materials and Debris	4	t.l.		
	Construction Safety and Health	1	unit		
	Scaffolding (Rental)	54	sq.m.		
	Temporary Enclosure Around the Construction Area (h=2.4)	36	l.m.		
				DIRECT COST I	₱
II	CONSTRUCTION OF HAND WASHING FACILITY				
Α	Hand Washing Facility				
	Hand Washing with Undercounter Cabinet	4	l.m.	₱	₱
				Direct Cost A	₱
В	Sanitary / Plumbing Works				
	Sewer Line System / Roughing-ins				
	50mmØ PVC Pipe with Hub	1	piece	₱	₱
	100mmØ PVC Pipe with Hub	1	piece		
	50mmØ x 100mmØ Wye	3	piece		
	100mmØ x 100mmØ Wye	1	piece		
	50mmØ 1/8 Bend	3	piece		

ı	GENERAL REQUIREMENTS			
	100mmØ 1/4 Bend	1	piece	
	100mmØ 1/8 Bend	3	piece	
	100mmØ Cleanout	1	piece	
	50mmØ P-Trap	3	piece	

ı	GENERAL REQUIREMENTS				
	Waterline System / Roughing-ins				
	20mmØ PPR Pipe	2	piece		
	20mmØ 90° Elbow	1	piece		
	20mmØ x 12mm Ø Female Threaded Tee	3	piece		
	20mmØ End Cap	1	piece		
	Plumbing Fixtures				
	Hose Bibb, Lever Type, Stainless Heavy Duty	3	set		
	(Water Efficient)				
	Floor Drain, 100mm x 100mm Stainless Steel	3	piece		
	Miscellaneous				
	400cc Solvent Cement	1	can		
	Hacksaw Blade	1	piece		
	Teflon Tape	1	roll		
	Waste Cloth	1	kg		
				Materials Cost B	₽
				Labor Cost B	
				Direct Cost B	₽
				MATERIALS COST II	₽
				LABOR COST II	
				DIRECT COST II	₽
III	REHABILITATION OF DAY CARE CENTER				
Α	SITE WORKS				
	Removal / Demolition Works				
	Removal of Water Closet	3	set	₽	₱
	Removal of Lavatory	3	set		
	Removal of Floor Drain	4	set		
	Removal of Urinal	1	set		
	Removal of Dilapidated Tiles	191	sq.m.		
	Removal of Roofing and Accessories	124	sq.m.		
	Removal of Ceiling	160	sq.m.		
	Removal of Doors	9	set		
	Removal of Windows	21	sq.m.		
	Chipping of Concrete Wall (For Electrical Works)	1	sq.m.		
	Chipping of Concrete Wall (For Plumbing Works)	3	sq.m.		
	Demolition of Countertop	3	sq.m.		
	Cleaning and Clearing for Painting Preparation	440	sq.m.		
	Cleaning of Aluminum Cladding	24	sq.m.		
				Subtotal	₽
В	CIVIL / STRUCTURAL WORKS				
	Masonry Works				
	Restoration of Concrete (Electrical Works)	1	sq.m	₽	₽
	Moisture Protection		-		
	Waterproofing Works				
	Cementitious Capillary Type Waterproofing (CR)	11	sq.m.		
	Metal Works				
1		1		1	

I	GENERAL REQUIREMENTS			
	Gate 1			
	50mm x 100mm x 6mm Tubular Bar	93	kg	
	25mm x 25mm x 4mm Tubular Bar	45	kg	
	38mmØ Barrel Bolt	1	piece	
	Cylindrical Hinge, Heavy Duty	3	piece	
	Gate 2			
	50mm x 100mm x 6mm Tubular Bar	395	kg	
	25mm x 25mm x 4mm Tubular Bar	187	kg	
	38mmØ Barrel Bolt	1	piece	
	38mmØ Foot Bolt	2	piece	
	Cylindrical Hinge, Heavy Duty	6	piece	
	Window Grilles (Fire Exit)			
	25mm x 25mm Square Bar	68	kg	
	10mm x 10mm Saure Bar	37	kg	
	38mmØ Barrel Bolt	1	piece	
	Cylindrical Hinge, Heavy Duty	4	piece	
	Miscellaneous and Consumables			
	Acetylene Tank Refill	2	tank	
	Assorted Metal Drill Bit	5	piece	
	Cut Off Blade	5	piece	
	Grinding Disc Metal	5	piece	
	Oxygen Tank Refill	4	tank	
	Welding Rod	2	box	

I	GENERAL REQUIREMENTS				
	Roofing Works				
	Pre-painted Rib Type G.I. Roofing	164	sq.m.		
	Pre-painted G.I. Flashing	63	l.m.		
	12mm x 300mm Fiber Cement Fascia Board	63	l.m.		
	6mm thk. One Sided Aluminum Foil Thermal	139	sq.m.		
	Tekscrew	1000	piece		
	Blind Rivets	630	piece		
	Silicon Sealant	20	tube		
				Materials Cost B	₽
				Labor Cost B	
				Direct Cost B	₽
С	ARCHITECTURAL WORKS				
	Floor Finishes				
	600mm x 600mm Non-Skid Homogeneous Tiles	160	sq.m.	₽	₱
	300mm x 300mm Non-Skid Homogeneous Tiles	9	sq.m.		
	Floor Topping Preparation for Tile Works	169	sq.m.		
	Plain Cement Finish	7	sq.m.		
	Wall Finishes and Partitions		•		
	300mm x 300mm Homogeneous Tiles	30	sq.m.		
	Ceiling Finishes		•		
	6mm Fiber Cement Board including Metal Framing	120	sq.m.		
	Fabricated Materials		•		
	Undercounter Cabinet	4	l.m.		
	Fire Exit Ladder	1	set		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Installation of Doors				
	D1 - (2.6m x 2.2m) Sliding Glass Door	1	set	₱	₱
	D2 - (1.0m x 2.4m) Panel Door	1	set		
	D3 - (0.6m x 1.6m) Panel Door	1	set		
	D4 - (0.6m x 2.1m) PVC Door with Louver	3	set		
	D5 - (0.8m x 2.1m) Panel Door	1	set		
	D6 - (1.0m x 2.1m) Panel Door	1	set		
	D7 - (1.0m x 2.1m) Double Panel Door	1	set		
	Door Jamb				
	D1 - (2.6m x 2.2m) Sliding Glass Door	1	set		
	D2 - (1.0m x 2.4m) Panel Door	1	set		
	D3 - (0.6m x 1.6m) Panel Door	1	set		
	D5 - (0.8m x 2.1m) Panel Door	1	set		
	D6 - (1.0m x 2.1m) Panel Door	1	set		
	D7 - (1.0m x 2.1m) Double Panel Door	1	set		
	Hardware and Accessories	1			
	Cabinet Handle	16	piece		
	Door Hinge, Heavy Duty, Stainless	23	set		
	Door Knob, Lever Type, Stainless	8	set		

I	GENERAL REQUIREMENTS				
	Installation of Windows				
	W1- (2.4m x 1.5m) Sliding Window on Aluminum	1	set		
	Coated Framing with Complete Accessories				
	W2- (1.6m x 1.2m) Swing Window on Aluminum	2	set		
	Powder Coated Framing with Complete Accessories				
	W3- (1.6m x 1.5m) Swing Window on Aluminum	2	set		
	Powder Coated Framing with Complete Accessories				
	W4- (2.4m x 1.5m) Swing Window on Aluminum	1	set		
	Powder Coated Framing with Complete Accessories				
	W5- (0.8m x 1.2m) Swing Window on Aluminum	1	set		
	Powder Coated Framing with Complete Accessories				
	W6- (0.7m x 0.4m) Awning Window on Aluminum	3	set		
	Coated Framing with Complete Accessories				
	W7- (2.4m x 1.2m) Swing Window on Aluminum	1	set		
	Coated Framing with Complete Accessories				
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱

	GENERAL REQUIREMENTS				
-'-	Painting Works				
	Elastomeric Paint Finish (Exterior Wall)	189	sq.m.	₽	₽
	Epoxy Enamel Paint Finish (Steel Surface)	87		Г	Г
	Quick Dry Enamel Finish (Cabinet and Shelves)	27	sq.m.		
	Flat Latex Paint Finish	21	sq.m.		
		400			
	Ceiling	168	sq.m.		
	Interior Wall	189	sq.m.	Marilo	
				Materials Cost	₽
				Labor Cost	_
				Subtotal	₱
	Cleaning and Retouching of Painting with Simple	21	sq.m.	₽	₱
				Subtotal	₱
	Letterings				
	200mm Stainless Steel Lettering	26	set	₱	₱
	"PINAGKAISAHAN DAY CARE CENTER"				
				Materials Cost	₽
				Labor Cost	
				Subtotal	₱
				Materials Cost C	₱
				Labor Cost C	
				Direct Cost C	₱
D	SANITARY / PLUMBING WORKS				
	Sewer Line System / Storm Drainage System				
	50mmØ PVC Pipe with Hub	2	piece	₱	₱
	100mmØ PVC Pipe with Hub	5	piece		
	50mmØ x 100mmØ Wye	3	piece		
	100mmØ x 100mmØ Wye	4	piece		
	50mmØ x 50mmØ Tee	16	piece		
	100mmØ x 50mmØ Tee	4	piece		
	50mmØ 1/4 Bend	5	piece		
	50mmØ 1/8 Bend	10	piece		
	100mmØ 1/4 Bend	16	piece		
	100mmØ 1/8 Bend	8	piece		
	100mmØ Cleanout	2	piece		
	50mmØ P-Trap	11	piece		
	Waterline System				
	20mmØ PPR Pipe	3	piece		
	25mmØ PPR Pipe	3	piece		
	20mmØ x 20mmØ Tee Equal	7	piece		
	25mmØ x 20mmØ Tee Unequal	1	piece		
	20mmØ 90° Elbow	3	piece		
	25mmØ 90° Elbow	1	piece		
	20mmØ x 12mm Ø Female Threaded Tee	14	piece		
	20mmØ End Cap	12	piece		
Ī	ZUITITIE LITU Cap	12	piece		

I	GENERAL REQUIREMENTS			
	25mmØ End Cap	1	piece	
	20mmØ Union Patent	3	piece	
	20mmØ Male Adaptor	3	piece	
	Valve and Appurtenances			
	20mmØ Gate Valve	3	piece	
	Fixtures			
	Bidet, Heavy-Duty, Stainless Steel (Water Efficient)	3	set	
	Floor Drain, 100mm x 100mm Stainless Steel	3	piece	
	Grease Trap, 5GPM, Stainless	1	set	
	Hose Bibb, Lever Type, Stainless Heavy Duty	3	set	
	(Water Efficient)			
	Lavatory Faucet, Lever Type, Stainless Heavy Duty	8	unit	
	Lavatory, Wall Hung, Kiddy	3	set	
	Water Closet, Tank Type, Kiddy (Water Efficient)	3	set	
	Kitchen Sink Faucet Lever Type, Heavy Duty (Water	1	piece	
	Kitchen Sink, Stainless Single, Tub	1	set	

	GENERAL REQUIREMENTS				
	Hardware and Accessories				
	Angle Valve, Single-Way Stainless Steel	4	piece		
	Angle Valve, Two-Way Stainless Steel	3	piece		
	Metal Door Hook	3	piece		
	Flexible Hose	7	piece		
	Miscellaneous	•	piooo		
	400cc Solvent Cement	2	can		
	Hacksaw Blade	2	piece		
	Teflon Tape	2	roll		
	Waste Cloth	1	kg		
	waste diditi	'	Ng	Materials Cost D	₽
				Labor Cost D	1
				Direct Cost D	₱
Е	ELECTRICAL WORKS			Direct Cost D	Г
	Roughing-ins	445			
	20mmØ PVC Pipe	145	piece		
	25mmØ PVC Pipe	10	piece		
	Fittings and Accessories	440	_		
	20mmØ PVC Adaptor	140	piece		
	20mmØ PVC Locknut and Bushing	140	pair		
	25mmØ PVC Adaptor	2	piece		
	25mmØ PVC Locknut and Bushing	2	pair		
	50mm x 100mm PVC Utility Box	25	piece		
	100mm x 100mm PVC Junction Box with Cover	45	piece		
	Wires and Cables				
	3.5mm² THHN Wire	6	roll		
	5.5mm² THHN Wire	70	l.m.		
	2.0mm² TW Wire	1	roll		
	3.5mm² TW Wire	35	l.m.		
	Lighting Fixtures (Energy Efficient)				
	300mm x 1200mm, 2 x 18w LED, Troffer Type with	14	set		
	Complete Accessories, Surface Mounted				
	300mm x 1200mm, 2 x 18w LED, Troffer Type with	16	set		
	Complete Accessories, Recessed Type		_		
	1 x 18W LED, Tube Light, Box Type	1	piece		
	100mmØ Receptacle with 10W LED Bulb	2	set		
	100mmØ Round Recessed Pinlight	6	piece		
	150mmØ Round Recessed Pinlight	3	piece		
	LED Exit Sign with Left and Right Arrow,	1	set		
	Alum Alloy Frame 2.4V 800mAH				
	Wiring Devices & Appliances				
	Convenience Outlet with Ground, Two-Gang	11	piece		
	Orbit Fan, Heavy Duty with Selector Switch	2	piece		
	Wall Fan, Heavy Duty with Selector Switch	2	piece		
	Switch with Plate & Cover, One Gang	5	piece		
	Switch with Plate & Cover, Two Gang	4	piece		

I	GENERAL REQUIREMENTS				
	Switch with Plate & Cover, Three Gang	2	piece		
	Panel Board				
	Enclosed Circuit Breaker: 30AT, 2P	1	assy		
	Miscellaneous & Consumables				
	400cc Solvent Cement	2	can		
	Electrical Tape	16	roll		
	G.I Tie Wire	2	kg		
	Hacksaw Blade	4	piece		
	Pulling Lubricant	1	gal		
	Rubber Tape	7	roll		
				Materials Cost E	₱
				Labor Cost E	
				Direct Cost E	₱

ı	GENERAL REQUIREMENTS				
F	MECHANICAL WORKS				
	Refrigerant Pipe System				
	10mm Ø Copper Coil Tubing	6	lm	₱	₱
	20mm Ø Copper Coil Tubing	6	lm		
	10mm Ø x 20mm thick Rubber Foam Insulation	6	lm		
	20mm Ø x 20mm thick Rubber Foam Insulation	6	lm		
	Condensate Water Drainage System				
	32mm Ø x 3m uPVC Pipe	5	piece		
	32mm Ø x 12mm thick Rubber Foam Insulation	15	lm		
	32mm Ø 90° uPVC Pipe Elbow	2	piece		
	32mm Ø x 25mm Ø uPVC Pipe Coupling Reducer	1	piece		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₽
	Equipment and Accessories				
	SACU 1 - Wall Mounted Split Type Air Conditioning Unit	1	unit	₽	₽
	Inverter Type, 4HP, 3.0TR, 900cfm, 9.53mm Ø L,				
	19.05mm Ø G, 3850W, 230V / 1φ / 60Hz				
	· · · · ·			Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Pipe Hangers and Supports			 	
	Condensate Water Drainage System Support	15	lm	₱	₽
	Refrigerant Pipe System Support (150mm Ø U-Bolt)	6	lm		
	ACCU Support	1	unit		
	Vibration Isolator	4	piece		
	Miscellaneous & Consumables				
	400cc Solvent Cement	1	can		
	25mm wide x 50m long Polyethylene Tape	4	roll		
	Brazing Rod (10pcs/box)	1	box		
	Waste Cloth	1	kg		
				Materials Cost	₽
				Labor Cost	
				Subtotal	₽
				Capitolai	
				Materials Cost F	₽
				Labor Cost F	
				Direct Cost F	₱
				2,,000,00001	
				MATERIALS COST III	₽
				LABOR COST III	
				DIRECT COST III	₱

SUMMARY

I NO	GENERAL REQUIREMENTS		
NO			
1	GENERAL REQUIREMENTS		₽
П	CONSTRUCTION OF HAND WASHING FACILITY		
Ш	REHABILITATION OF DAY CARE CENTER		
NOT	E:	TOTAL DIRECT COST	P
	Strictly enforce health protocols relative to the latest applicable DPWH memorandum	Overhead, Contingencies and Miscellaneous and Consumables Expenses (OCM)	
		Profit	
		VAT	
		TOTAL ESTIMATED COST	₽

BILL OF QUANTITIES

(Building Construction/Rehabilitation Project)

PROJECT TITLE: PROPOSED REHABILITATION OF PLANAS SITE DAY CARE CENTER

LOCATION : BARANGAY KAUNLARAN, DISTRICT 4, QUEZON CITY

PROJECT NO. : 21 - 00173

SCOPE OF WORK:

- General Requirements include temporary enclosure, billboard, scaffolding, construction safety and health and clearing, hauling and disposal of construction materials and debris.
- II Site Works include removal works, cleaning and clearing for painting preparation, cleaning and re-touching of painted walls and termite treatment.
- III Civil / Structural Works include roofing works.
- IV Architectural Works include floor finishes, wall finishes, ceiling works, painting works, installation of doors and windows, fabricated materials and letterings.
- V Sanitary / Plumbing Works include installation of roughing-ins, fixtures and accessories.
- VI Electrical Works include installation of roughing-ins, wirings, devices and fixtures.
- VII 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
ı	GENERAL REQUIREMENTS				
	Billboard	1	unit	₱	₽
	Clearing, Hauling and Disposal of Construction Materials and Debris	4	t.l.		
	Construction Safety and Health	1	unit		
	Scaffolding (Rental)	36	sq.m.		
	Temporary Enclosure Around the Construction Area (h= 2.4m)	13	l.m.		
				DIRECT COST I	₽
II	SITE WORKS				
	Removal Works				
	Removal of Dilapidated Door	3	set	₱	₽
	Removal of Dilapidated Window	4	sq.m.		
	Removal of Ceiling	54	sq.m.		
	Removal of Tiles	38	sq.m.		
	Removal of Lavatory	1	set		
	Removal of Water Closet	1	set		
	Removal of Urinal	1	set		
	Removal of Hanging Cabinet	2	sq.m.		
	Removal of Roofing and Accessories	54	sq.m.		
	Cleaning and Clearing for Painting Preparation	130	sq.m.		
	Cleaning and Re-Touching of Painting with Simple Design	28	sq.m.		
				Subtotal	₱
	Termite Treatment	2	gal	₱	₽
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
				MATERIALS COST II	₽

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
				LABOR COST II	
				DIRECT COST II	₽
III	CIVIL / STRUCTURAL WORKS				
	Roofing Works				
	Pre-Painted Rib-type G.I. Roofing	57	sq.m	₱	₱
	Pre-painted G.I. End Flashing	32	l.m.		
	6mm Thk One-Sided Aluminum Foil Thermal Insulation	57	sq.m.		
	12mm X 300mm Fiber Cement Fascia Board	23	l.m.		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Blind Rivets	117	piece		
	Tekscrew	96	piece		
	Silicon Sealant	7	tube		
				MATERIALS COST III	₽
				LABOR COST III	
				DIRECT COST III	₽
IV	ARCHITECTURAL WORKS				
	Floor Finishes				
	Floor Topping Preparation of Tile Works	40	sq.m	₱	₱
	300mm x 300mm Non-Skid Homogeneous Tiles	3	sq.m		
	400mm x 400mm Non-Skid Homogeneous Tiles	37	sq.m		
	Wall Finishes				
	300mm x 300mm Homogeneous Tiles	7	sq.m		
	Ceiling Works 6mm thk Fiber Cement Board Including Metal Framing	57	sq.m		
		3,	24	Materials Cost	₽
				Labor Cost	•
				Subtotal	₽
	Installation of Doors			Subtotal	Г
	D1 - (0.70m x 2.10m) Swing Type Flush Hollow Core Painted Finish	1	set	₱	P
	D2 - (1.00m x 2.10m) Swing Type Flush Hollow Core Painted Finish	1	set		
	D3 - (0.60m x 2.10m) Swing Type PVC Door	1	set		
	Painted Finish (Kitten White) w/ 400mm X 300mm Louver				
	Door jamb				
	D1 - (0.70m x 2.10m) Swing Type Flush Hollow Core Door	1	set		
	D2 - (1.00m x 2.10m) Swing Type Flush Hollow Core Door	1	set		
	Hardware and Accessories	•			
	Door Hinges, Heavy Duty, Stainless	9	set		
	Door Knob, Lever Type, Stainless	3	set		
	Installation of Windows		001		
	W1 -(1.80m x 1.50m) Sliding Window, 6mm Thk,	1	set		
	Clear Tempered Glass White Color Powder Coated Aluminum	'	001		
	Frame with Complete Accessories				
	W2 -(1.50m x 0.60m) Sliding Window, 6mm Thk,	1	set		
	Clear Tempered Glass White Color Powder Coated Aluminum	'	301		
	Frame with Complete Accessories				
				Materials Cost	₽
				Labor Cost	Г
				Subtotal	₽
	Painting Works			Subtotal	•
	Elastomeric Paint Finish (Exterior Wall)	44	sq.m	₽	₽
	Epoxy Enamel Paint Finish (Metal Surfaces)	3	sq.m	-	-
	Flat Latex Paint Finish		54.111		
	Ceiling	57	sq.m		
	Interior Wall	93	sq.m		
		33	34.111		
	Fabricated Materials Hanging Cabinet	3	sq.m		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Letterings				
	200mm Stainless Steel Lettering	23	set		
	"PLANAS SITE DAY CARE CENTER"				
				Material Cost	₽
				Labor Cost	
				Subtotal	₽
				MATERIALS COST IV	₽
				LABOR COST IV	
				DIRECT COST IV	₽
٧	SANITARY / PLUMBING WORKS			3	
	Sewer Line / Storm Drainage System				
	Roughing-Ins				
	50 mm Ø, PVC Pipe with Hub	2	piece	₱	₽
	75 mm Ø, PVC Pipe with Hub	4	piece		
	100mm Ø, PVC Pipe with Hub	2	piece		
	50mm Ø, P-Trap	3	piece		
	75mm Ø, P-Trap	1	piece		
	50mm Ø, 1/8 Bend	6	piece		
	75mm Ø, 1/8 Bend	1	piece		
	100mm Ø, 1/8 Bend	4	piece		
	75mm Ø, 1/4 Bend	2	piece		
	75mm Ø x 75mm Ø, Tee	2	piece		
	100mm Ø x 75mm Ø, Tee	2	piece		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	100mm Ø x 50mm Ø, Wye	4	piece		
	100mm Ø x 75mm Ø, Wye	1	piece		
	100mm Ø x 100mm Ø, Wye	2	piece		
	100mm Ø, Cleanout with Adapter	1	piece		
	100mm Ø, Coupling	2	piece		
	Waterline System				
	Roughing-Ins				
	20mm Ø, PPR Pipe	3	piece		
	20mm Ø, Elbow	9	piece		
	20mm Ø, Coupling	3	piece		
	20mm Ø, Tee Equal	2	piece		
	20mm Ø, Female Threaded, Elbow	10	piece		
	20mm Ø, Coupling	3	piece		
	25mm Ø x 20mm Ø, Reducer	1	piece		
	Valves and Appurtenances				
	20mm Ø Gate Valve, PPR	1	piece		
	Fixtures	<u>'</u>	p.000		
	Bidet with Complete Accessories, Stainless (Water Efficient)	1	set		
	Floor Drain, 100mm x 100mm, Stainless	3	piece		
	Hose Bibb Lever Type, Stainless Heavy Duty (Water Efficient)	6	set		
	Lavatory, Faucet, Lever Type, Stainless Heavy Duty (Water	- 0	301		
	Efficient)	1	set		
	Lavatory, Wall Hung, Kiddy	1	set		
	Urinal, Flush Valve-Type, Kiddy (Water Efficient)	1	set		
	Water Closet, Tank-Type, Kiddy (Water Efficient)	1	set		
	Accessories				
	Angle Valve, Single Way, Stainless Steel	2	piece		
	Angle Valve, Two Way, Stainless Steel	1	piece		
	Flexible Hose, Stainless Steel	3	piece		
	Miscellaneous & Consumables				
	400cc Solvent Cement	2	can		
	All Around Sealant	1	can		
	Hacksaw Blade	2	piece		
	Teflon Tape	2	roll		
	Waste Cloth	1	kg		
				MATERIALS COST V	₽
				LABOR COST V	
				DIRECT COST V	₽
VI	ELECTRICAL WORKS				
	Roughing-ins				
	20mmØ PVC Pipe	20	piece	₱	₽
	20mmØ PVC Flexible Hose	40	l.m.		
	16mm x 16mm x 2.44m Rectangular PVC Moulding	15	piece		
	Fittings and Accessories				
	20mmØ PVC Adaptor	20	piece		
	20mmØ PVC Locknut & Bushing	20	piece		
	50mm x 100mm PVC Utility Box	8	piece		
	100mm x 100mm PVC Junction Box with Cover	12	piece		
	Wires and Cables				

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	3.5mm² THHN Wire	80	l.m.		
	Lighting Fixtures (Energy Efficient)				
	18W LED Bulb	1	set		
	E27 Receptacle	1	set		
	T8, 18w LED Tube light, Box type	2	set		
	600mm x 1200mm, 2 x 18w LED, Troffer Type, with Complete Accessories	5	set		
	Wiring Devices and Other Fixtures				
	Orbit Fan with Selector Switch	2	set		
	Outlet with Grounding, Two-Gang	3	set		
	Switch with Plate and Cover, One-Gang	1	set		
	Switch with Plate and Cover, Two-Gang	1	set		
	Miscellaneous & Consumables				
	400cc Solvent Cement	1	can		
	Electrical Tape	5	roll		
	Hacksaw Blade	2	piece		
	Torch with Butane	1	set		
			ı	MATERIALS COST VI	₽
				LABOR COST VI	
				DIRECT COST VI	₽

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
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SUMMARY

ITEM NO.	WORK DESC	TOTAL COST	
 V V	GENERAL REQUIREMENTS SITE WORKS CIVIL / STRUCTURAL WORKS ARCHITECTURAL WORKS SANITARY / PLUMBING WORKS ELECTRICAL WORKS		₽
	etly enforce Health Protocols relative to the est 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 CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION

OF SAN MARTIN DE PORRES DAY CARE CENTER

LOCATION: BARANGAY SAN MARTIN DE PORRES, DISTRICT 4, QUEZON CITY

PROJECT NO. : 21 - 00173

SCOPE OF WORK:

- General Requirements include temporary enclosure, billboard, scaffolding, construction safety & health and clearing, hauling and disposal of construction materials and debris.
- II Construction of Hand Washing Facility.
- a Installation of hand washing facility.
- b Site Works include chipping of concrete for sanitary / plumbing works.
- c Civil / Structural Works include restoration of concrete for sanitary / plumbing works.
- d Sanitary / Plumbing Works include installation of roughing-ins, fixtures and accessories.
- III Rehabilitation of Day Care Center
- a Site Works include removal works, cleaning and clearing for painting preparation and termite treatment.
- b Civil / Structural Works include masonry works and metal works.
- Architectural Works include floor finishes, wall finishes, ceiling works, painting works and installation of doors and windows, fabricated materials and letterings.
- d Sanitary / Plumbing Works include installation of roughing-ins, fixtures and accessories.
- e Electrical Works include installation of roughing-ins, wirings, devices and fixtures.
- VII 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)	37	sq.m.		
	Temporary Enclosure Around the Construction Area (h= 3.0m)	6	l.m.		
				DIRECT COST I	₽
II	CONSTRUCTION OF HAND WASHING FACILITY				
Α	HAND WASHING FACILITY				
	Kiddie Countertop	2	l.m.	₱	₱
				MATERIALS COST-A	₱
				LABOR COST-A	
				DIRECT COST-A	₱
В	SITE WORKS				
	Removal Works				
	Chipping of Concrete (Sanitary / Plumbing Works)	2	sq.m.	₱	₽
				DIRECT COST-B	₽
С	CIVIL / STRUCTURAL WORKS				
	Masonry Works				
	Restoration of Concrete (Sanitary / Plumbing Works)	2	sq.m.	₱	₽
				MATERIALS COST-C	₽

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
				LABOR COST-C	
				DIRECT COST-C	₱
D	SANITARY / PLUMBING WORKS				
	Sewer Line / Storm Drainage System				
	Roughing-Ins				
	50 mm Ø, PVC with Hub	1	piece	₱	₽
	75 mm Ø, PVC with Hub	2	piece		
	100 mm Ø, PVC with Hub	1	piece	_	

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	50mm Ø, 1/8 Bend	3	piece		
	100mm Ø, 1/8 Bend	2	piece		
	100mm Ø x 50mm Ø, Wye	3	piece		
	Waterline System				
	Roughing-Ins				
	20mm Ø, Pipe PPR	1	piece		
	20mm Ø, Elbow	2	piece		
	20mm Ø, Coupling	1	piece		
	20mm Ø, Tee Equal	4	piece		
	20mm Ø, Female Threaded, Tee	5	piece		
	25mm Ø x 20mm Ø, Reducer	1	piece		
	32mm Ø x 20mm Ø, Reducer	1	piece		
	Fixtures				
	100mm x 100mm, Floor Drain	2	piece		
	Hose Bibb Lever Type, Stainless (Water Efficient)	5	piece		
	Miscellaneous & Consumables				
	400cc Solvent Cement	1	can		
	All-Around Sealant	1	can		
	Hacksaw Blade	1	piece		
	Teflon Tape	1	roll		
	Waste Cloth	1	kg		
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•		MATERIALS COST-D	₽
				LABOR COST-D	1
				DIRECT COST-D	₱
				DIRECT COST-D	,
				MATERIALS COST II	₽
				LABOR COST II	F
				DIRECT COST II	₽
Ш	REHABILITATION OF DAY CARE CENTER			DIKEOT GOOT II	F
	SITE WORKS				
Α	Removal Works				
	Removal of Dilapidated Door	3	set	₽	a
	Removal of Dilapidated Window	4	sq.m.	1	₱
	Removal of Tiles	11	sq.m.		
	Removal of Water Closet	1	set		
	Removal of Under Counter Cover	2	sq.m.		
	Cleaning and Clearing for Painting Preparation	101	sq.m.		
	Cleaning and Cleaning for Fainting Freparation	101	5q.111.	Subtotal	
				Subtotal	
	Termite Treatment	2	gol	₽	
	Terrince Treatment		gal		₱
			1	Materials Cost	
				Labor Cost	
				Subtotal	
				MATERIALS COST-A	₱
				LABOR COST-A	_
_	ONUL / CTRUCTURAL WORKS			DIRECT COST-A	₱
В	CIVIL / STRUCTURAL WORKS		L		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Masonry Works				
	150mm CHB Wall Laying, Including Mortar, Reinforcement and Two-Face Plastering	4	sq.m	P	₱
	Metal Works				
	Gate Screen				
	Galvanized Welded Wire Mesh	20	sq.m		
	Stainless Steel Mosquito Screen	20	sq.m		
	Miscellaneous & Consumables				
	Acetylene Tank (Refill)	1	tank		
	Cut Off Blade	3	piece		
	Grinding Disc for Metal	3	piece		
	Oxygen Tank (Refill)	1	tank		
	Welding Rod	1	box		
				MATERIALS COST-B	₱
				LABOR COST-B	
				DIRECT COST-B	₽

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
С	ARCHITECTURAL WORKS				
	Floor Finishes				
	Floor Topping Preparation of Tile Works	3	sq.m	₽	₽
	300mm x 300mm Non-Skid Homogeneous Tiles	3	sq.m		
	Wall Finishes				
	300mm x 300mm Homogeneous Tiles	9	sq.m		
	Ceiling Works				
	6mm thk Fiber Cement Board including Metal Framing	48	sq.m		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Installation of Doors				
	D1 - (0.80m x 2.10m) Swing Type Flush Hollow Core Painted Finish	1	set	₽	₽
	D2 - (0.60m x 2.10m) Swing Type PVC Door	1	set		
	Painted Finish (Kitten White) w/ 400mm X 300mm Louver				
	Door jamb				
	D1 - (0.80m x 2.10m) Swing Type Flush Hollow Core Door	1	set		
	Hardware and Accessories				
	Door Hinges, Heavy Duty, Stainless	6	set		
	Door Knob, Lever Type, Stainless	2	set		
	Installation of Windows				
	W1 -(1.40m x 1.20m) Sliding Window, 6mm Thk,	1	set		
	Clear Tempered Glass White Color Powder Coated Aluminum				
	Frame with Complete Accessories				
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Painting Works				
	Elastomeric Paint Finish (Exterior Wall)	18	sq.m	₱	₽
	Flat Latex Paint Finish				
	Ceiling	50	sq.m		
	Interior Wall	88	sq.m		
	Fabricated Materials				
	Hanging Cabinet	8	sq.m		
	Under Counter Aluminum Cover (Pantry)	2	l.m.		
	Letterings				
	200mm Stainless Steel Lettering	30	set		
	"SAN MARTIN DE PORRES DAY CARE CENTER"				
				Material Cost	₱
				Labor Cost	
				Subtotal	₽
				MATERIALS COST-C	₱
				LABOR COST-C	
				DIRECT COST-C	₽
D	SANITARY / PLUMBING WORKS				
	Sewer Line / Storm Drainage System				

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Roughing-Ins				
	50 mm Ø, PVC Pipe with Hub	1	piece	₱	₱
	75 mm Ø, PVC Pipe with Hub	2	piece		
	100mm Ø, PVC Pipe with Hub	2	piece		
	50mm Ø, P-Trap	3	piece		
	75mm Ø, P-Trap	1	piece		
	50mm Ø, 1/8 Bend	7	piece		
	75mm Ø, 1/8 Bend	2	piece		
	100mm Ø, 1/8 Bend	2	piece		
	75mm Ø, 1/4 Bend	2	piece		
	75mm Ø x 75mm Ø, Tee	2	piece		
	100mm Ø x 75mm Ø, Tee	2	piece		
	100mm Ø x 50mm Ø, Wye	7	piece		
	100mm Ø x 75mm Ø, Wye	2	piece		
	100mm Ø x 100mm Ø, Wye	2	piece		
	100mm Ø, Cleanout with Adapter	1	piece		
	100mm Ø, Coupling	2	piece		
	Waterline System				
	Roughing-Ins				
	20mm Ø, PPR Pipe	2	piece		
	20mm Ø, Elbow	9	piece		
	20mm Ø, Coupling	2	piece		
	20mm Ø, Tee Equal	2	piece		
	20mm Ø, Female Threaded, Elbow	5	piece		
	20mm Ø, Female Adapter	2	piece		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Valves and Appurtenances				
	20mm Ø Gate Valve, PPR	1	piece		
	Fixtures				
	Bidet with Complete Accessories, Stainless (Water Efficient)	1	piece		
	Floor Drain, 100mm x 100mm, Stainless	1	piece		
	Grease Trap, 5GPM, Stainless	1	piece		
	Kitchen Faucet Lever Type, Stainless (Water Efficient)	1	piece		
	Kitchen Sink, Single Tub, Stainless	1	piece		
	Lavatory, Faucet, Lever Type, Stainless Heavy Duty (Water Efficient)	1	piece		
	Lavatory, Kiddy, Wall Hung	1	piece		
	Urinal, Kiddy, Flush Valve-Type (Water Efficient)	1	unit		
	Water Closet, Kiddy, Tank-Type (Water Efficient)	1	unit		
	Accessories				
	Angle Valve, Single Way, Stainless Steel	3	piece		
	Angle Valve, Two Way, Stainless Steel	1	piece		
	Flexible Hose, Stainless Steel	4	piece		
	Miscellaneous & Consumables				
	400cc Solvent Cement	2	can		
	All Around Sealant	1	can		
	Hacksaw Blade	1	piece		
	Teflon Tape	2	roll		
	Waste Cloth	1	kg		
				MATERIALS COST-D	₽
				LABOR COST-D	
				DIRECT COST-D	₱
Е	ELECTRICAL WORKS				
	Roughing-ins				
	20mmØ PVC Pipe	25	piece	₱	₱
	20mmØ PVC Flexible Hose	50	l.m.		
	16mm x 16mm x 2.44m Rectangular PVC Moulding	25	piece		
	Fittings and Accessories				
	20mmØ PVC Adaptor	20	piece		
	20mmØ PVC Locknut & Bushing	20	piece		
	50mm x 100mm PVC Utility Box	10	piece		
	100mm x 100mm PVC Junction Box with Cover	16	piece		
	Wires and Cables				
	3.5mm² THHN Wire	2	roll		
	Lighting Fixtures (Energy Efficient)				
	18W LED Bulb	3	set		
	E27 Receptacle	3	set		
	Linear Twin Batten with 2x18W LED Tube Light	4	set		
	Wiring Devices and Other Fixtures				
	Aircon Outlet, Multipurpose outlet 250V/20A	1	set		
	Orbit Fan with Selector Switch	3	set		
	Outlet with Grounding, Two-Gang	5	set		
	Switch with Plate and Cover, One-Gang	1	set		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Switch with Plate and Cover, Two-Gang	1	set		
	Miscellaneous & Consumables				
	400cc Solvent Cement	1	can		
	Electrical Tape	4	roll		
	Hacksaw Blade	2	piece		
	Torch with Butane	1	set		
				MATERIALS COST-E	₽
				LABOR COST-E	
				DIRECT COST-E	₽
				MATERIALS COST III	₽
				LABOR COST III	
				DIRECT COST III	₽

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
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SUMMARY

ITEM NO.	WORK DESCRIPTION &	TOTAL COST	
- = =	GENERAL REQUIREMENTS CONSTRUCTION OF HAND WASHING FACILITY REHABILITATION OF DAY CARE CENTER		₽
	E: Overhead ctly enforce Health Protocols relative to the est applicable DPWH Memorandum	TOTAL DIRECT COST d, Contingencies and Miscellaneous Expenses (OCM) Profit VAT TOTAL ESTIMATED COST	

BILL OF QUANTITIES

(Building Construction/Rehabilitation Project)

PROJECT TITLE: PROPOSED CONSTRUCTION OF HAND WASHING FACILITY AND REHABILITATION

OF SAN MARTIN DE PORRES ANNAEX C DAY CARE CENTER

LOCATION : BARANGAY SAN MARTIN DE PORRES, DISTRICT 4, QUEZON CITY

PROJECT NO. : 21 - 00173

SCOPE OF WORK:

General Requirements include temporary enclosure, billboard, scaffolding, construction safety & health and clearing, hauling and disposal of construction materials and debris.

- II Construction of Hand Washing Facility.
- a Installation of handwashing facility.
- b Site Works include chipping of concrete for sanitary / plumbing works.
- c Civil / Structural Works include restoration of concrete for sanitary / plumbing works.
- d Sanitary and Plumbing Works include installation of sewerline and waterline.
- III Rehabilitation of Day Care Center
- a Site Works include removal works, cleaning and clearing for painting preparation and termite treatment.
- b Civil / Structural Works include masonry works and metal works.
- Architectural Works include floor finishes, wall finishes, ceiling works, painting works and installation of doors and windows, fabricated materials and letterings.
- d Sanitary / Plumbing Works include installation of roughing-ins, equipment and accessories.
- e Electrical Works include installation of roughing-ins, wirings, devices and fixtures.
- VII 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)	37	sq.m.		
	Temporary Enclosure Around the Construction Area (h= 2.4m)	6	l.m.		
				DIRECT COST I	₽
II	CONSTRUCTION OF HAND WASHING FACILITY				
Α	HAND WASHING FACILITY				
	Kiddie Countertop	2	l.m.	₱	₱
				MATERIALS COST-A	₱
				LABOR COST-A	
				DIRECT COST-A	₱
В	SITE WORKS				
	Removal Works				
	Chipping of Concrete (Sanitary / Plumbing Works)	2	sq.m.	₽	₽
				DIRECT COST-B	₱
С	CIVIL / STRUCTURAL WORKS				
	Masonry Works				
	Restoration of Concrete (Sanitary / Plumbing Works)	2	sq.m.	₱	₽
				MATERIALS COST-C	₱

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
				LABOR COST-C	
				DIRECT COST-C	₽
D	SANITARY / PLUMBING WORKS				
	Sewer Line / Storm Drainage System				
	Roughing-Ins				
	50 mm Ø, PVC with Hub	2	piece	₱	₽
	75 mm Ø, PVC with Hub	1	piece		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	50mm Ø, 1/8 Bend	2	piece		
	100mm Ø, 1/8 Bend	2	piece		
	75mm Ø, 1/4 Bend	1	piece		
	100mm Ø x 50mm Ø, Wye	1	piece		
	Waterline System				
	Roughing-Ins				
	20mm Ø, Pipe PPR	1	piece		
	20mm Ø, Elbow	2	piece		
	20mm Ø, Coupling	1	piece		
	Fixtures				
	Floor Drain, 100mm x 100mm, Stainless	2	piece		
	Hose Bibb, Lever Type, Stainless, Heavy Duty (Water Efficient)	4	piece		
	Miscellaneous & Consumables				
	400cc Solvent Cement	1	can		
	All-Around Sealant	1	can		
	Hacksaw Blade	1	piece		
	Teflon Tape	1	roll		
	Waste Cloth	1	kg		
				MATERIALS COST-D	₱
				LABOR COST-D	
				DIRECT COST-D	₽
				MATERIALS COST II	₽
				LABOR COST II	
				DIRECT COST II	₽
III	REHABILITATION OF DAY CARE CENTER				
Α	SITE WORKS				
	Removal Works				
	Removal of Dilapidated Door	3	set	₱	₱
	Removal of Dilapidated Window	3	sq.m.		
	Removal of Sink	1	set		
	Removal of Tiles	15	sq.m.		
	Removal of Water Closet	1	set		
	Cleaning and Clearing for Painting Preparation	94	sq.m.		
				Subtotal	
	Termite Treatment	2	gal	₽	₽
	. SS Fromition	_	941		Г
				Materials Cost	
				Labor Cost Subtotal	
				Subioial	
				MATERIALS COST-A	₽
1				LABOR COST-A	•
				L COOL COOL-A	
					₽
R	CIVIL / STRUCTURAL WORKS			DIRECT COST-A	₽
В	CIVIL / STRUCTURAL WORKS Masonry Works				P

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	and Two-Face Plastering				
	Metal Works				
	Gate Screen				
	15mm X 15mm Galvanized Welded Wire Mesh	3	sq.m		
	Stainless Steel Mosquito Screen	3	sq.m		
	Miscellaneous & Consumables				
	Acetylene Tank (Refill)	1	tank		
	Cut Off Blade	3	piece		
	Grinding Disc for Metal	3	piece		
	Oxygen Tank (Refill)	1	tank		
	Welding Rod	1	box		
				MATERIALS COST-B	₽
				LABOR COST-B	
				DIRECT COST-B	₱

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
С	ARCHITECTURAL WORKS				
	Floor Finishes				
	Floor Topping Preparation of Tile Works	4	sq.m	₱	₽
	300mm x 300mm Non-Skid Homogeneous Tiles	4	sq.m		
	Wall Finishes				
	300mm x 300mm Homogeneous Tiles	12	sq.m		
	Ceiling Works				
	6mm thk Fiber Cement Board including Metal Framing	32	sq.m		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₽
	Installation of Doors				
	D1 - (0.80m x 2.10m) Swing Type Flush Hollow Core Painted Finish	1	set	₽	₽
	D2 - (0.80m x 2.10m) Swing Type PVC Door	1	set		
	Painted Finish (Kitten White) w/ 400mm X 300mm Louver				
	Door jamb				
	D1 - (0.80m x 2.10m) Swing Type Flush Hollow Core Door	1	set		
	Hardware and Accessories				
	Door Hinges, Heavy Duty, Stainless	6	set		
	Door Knob, Lever Type, Stainless	2	set		
	Installation of Windows				
	W1 -(0.5m x 1.20m) Awning Window, 6mm Thk,	1	set		
	Clear Tempered Glass White Color Powder Coated Aluminum				
	Frame with Complete Accessories				
	W2 -(0.4m x 0.40m) Awning Window, 6mm Thk,	1	set		
	Clear Tempered Glass White Color Powder Coated Aluminum				
	Frame with Complete Accessories				
				Materials Cost	₽
				Labor Cost	
				Subtotal	₽
	Painting Works				
	Elastomeric Paint Finish (Exterior Wall)	12	sq.m	₱	₱
	Flat Latex Paint Finish				
	Ceiling	34	sq.m		
	Interior Wall	87	sq.m		
	Fabricated Materials				
	Hanging Cabinet	8	sq.m		
	Letterings				
	200mm Stainless Steel Lettering	36	set		
	"SAN MARTIN DE PORRES ANNEX C DAY CARE CENTER"				
				Material Cost	₽
				Labor Cost	
				Subtotal	₽
				MATERIALS COST-C	₱
				LABOR COST-C	
				DIRECT COST-C	₱

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
D	SANITARY / PLUMBING WORKS				
	Sewer Line / Storm Drainage System				
	Roughing-Ins				
	50 mm Ø, PVC Pipe with Hub	3	piece	₱	₽
	75 mm Ø, PVC Pipe with Hub	4	piece		
	100mm Ø, PVC Pipe with Hub	8	piece		
	50mm Ø, P-Trap	4	piece		
	75mm Ø, P-Trap	1	piece		
	50mm Ø, 1/8 Bend	3	piece		
	75mm Ø, 1/8 Bend	1	piece		
	100mm Ø, 1/8 Bend	4	piece		
	75mm Ø, 1/4 Bend	4	piece		
	75mm Ø x 75mm Ø, Tee	3	piece		
	100mm Ø x 75mm Ø, Tee	3	piece		
	100mm Ø x 50mm Ø, Wye	5	piece		
	100mm Ø x 75mm Ø, Wye	2	piece		
	100mm Ø, Cleanout with Adapter	2	piece		
	Waterline System				
	Roughing-Ins				
	20mm Ø, PPR Pipe	2	piece		
	20mm Ø, Elbow	10	piece		
	20mm Ø, Coupling	2	piece		
	20mm Ø, Tee Equal	8	piece		
	20mm Ø, Female Threaded, Elbow	5	piece		
	25mm Ø x 20mm Ø, Reducer	1	piece		
	25mm Ø, Union Patente	1	piece		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Valves and Appurtenances				
	20mm Ø Gate Valve, PPR	1	piece		
	Fixtures				
	Bidet with Complete Accessories, Stainless (Water Efficient)	1	piece		
	Floor Drain, 100mm x 100mm, Stainless	1	piece		
	Grease Trap, 5GPM, Stainless	1	piece		
	Kitchen Faucet Lever Type, Stainless (Water Efficient)	1	piece		
	Kitchen Sink, Single Tub, Stainless	1	piece		
	Lavatory, Faucet, Lever Type, Stainless Heavy Duty (Water Efficient)	1	piece		
	Lavatory, Kiddy, Wall Hung	1	piece		
	Urinal, Kiddy, Flush Valve-Type (Water Efficient)	1	unit		
	Water Closet, Kiddy, Tank-Type (Water Efficient)	1	unit		
	Accessories				
	Angle Valve, Single Way, Stainless Steel	2	piece		
	Angle Valve, Two Way, Stainless Steel	1	piece		
	Flexible Hose, Stainless Steel	3	piece		
	Miscellaneous & Consumables				
	400cc Solvent Cement	3	can		
	All Around Sealant	2	can		
	Hacksaw Blade	2	piece		
	Teflon Tape	2	roll		
	Waste Cloth	1	kg		
				MATERIALS COST-D	₽
				LABOR COST-D	
				DIRECT COST-D	₽
Е	ELECTRICAL WORKS				
_	Roughing-ins				
	20mmØ PVC Pipe	25	piece	₽	₽
	20mmØ PVC Flexible Hose	50	l.m.		
	16mm x 16mm x 2.44m Rectangular PVC Moulding	25	piece		
	Fittings and Accessories				
	20mmØ PVC Adaptor	20	piece		
	20mmØ PVC Locknut & Bushing	20	piece		
	50mm x 100mm PVC Utility Box	10	piece		
	100mm x 100mm PVC Junction Box with Cover	16	piece		
	Wires and Cables	1.0			
	3.5mm² THHN Wire	2	roll		
	Lighting Fixtures (Energy Efficient)				
	18W LED Bulb	1	set		
	E27 Receptacle	1	set		
	Linear Twin Batten with 2x18W LED Tube Light	4	set		
	Wiring Devices and Other Fixtures				
	Aircon Outlet, Multipurpose outlet 250V/20A	1	set		
		-	set		
	Orbit Fan with Selector Switch				Î.
	Orbit Fan with Selector Switch Outlet with Grounding, Two-Gang	3			
	Orbit Fan with Selector Switch Outlet with Grounding, Two-Gang Switch with Plate and Cover, One-Gang	5 2	set set		

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT UNIT COST		TOTAL COST
	400cc Solvent Cement	1	can		
	Electrical Tape	4	roll		
	Hacksaw Blade	2	piece		
	Torch with Butane	1	set		
				MATERIALS COST-E	₽
				LABOR COST-E	
				DIRECT COST-E	₽
				MATERIALS COST III	₽
				LABOR COST III	
				DIRECT COST III	₽

NO WORK DESCRIPTION & SCOPE OF WORKS Q11 UNIT COST TOTAL COST	ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
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SUMMARY

ITEM NO.	WORK DESCRIPTION & SCOPE OF WORKS	TOTAL COST
- = =	GENERAL REQUIREMENTS CONSTRUCTION OF HAND WASHING FACILITY REHABILITATION OF DAY CARE CENTER	P
	TOTAL DIRECT COST Overhead, Contingencies and Miscellaneous Expenses (OCM) est applicable DPWH Memorandum TOTAL ESTIMATED COST	

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

Leg	al Do	<u>cuments</u>
	(a)	Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);
	(b)	and 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;
	(c)	and 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).
Tec	chnica	l 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;
	(i)	 <u>and</u> registration for the type and cost of the contract to be bid; <u>and</u> Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;
	(j)	or Original copy of Notarized Bid Securing Declaration; and 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

see attached prescribed form required by the QC - BAC for Infrastructure and Consultancy); and Original duly signed Omnibus Sworn Statement (OSS); \sqcap (k) 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 (1) 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 The prospective bidder's computation of Net Financial Contracting Capacity П (m) (NFCC) (please see attached prescribed form required by the QC – BAC for *Infrastructure and Consultancy*). Class "B" Documents If applicable, duly signed joint venture agreement (JVA) in accordance with \square (n) 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 Original of duly signed Bid Prices in the Bill of Quantities; and П (p)

lessor/vendor for the duration of the project, as the case may be (please

rentals used in coming up with the Bid; and

Cash Flow by Quarter.

Duly accomplished Detailed Estimates Form, including a summary shee indicating the unit prices of construction materials, labor rates, and equipmen

(q)

(r)

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:

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

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].
- 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:

- 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.
- I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:
 - Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
 - 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
 - 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;
 - 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.

N 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:

- 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.
- 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);
 - Drawings/Plans:
 - ii. Specifications;
 - iii. Bill of Quantities:
 - iv. General and Special Conditions of Contract;
 - v. Supplemental or Bid Bulletins, if any;
 - 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. <u>Winning bidder agrees that</u> 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.
- 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)	
) 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:

- I/We understand that, according to your conditions, to guarantee the faithful performance by the supplier/distributor/manufacturer/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.
- 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;
- 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:
 - 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
 - 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]

NAME OF CONTRACTOR:	

PROJECT TITLE [Name of the Contract] E EXACT PROJECT LOCATION DATE OF CONTRACT DURATION DURATION POSTAL ADDRESS NATURE OF WORK	 CONTRACTOR'S ROLE TOTAL DATE OF		PROFESSOR SURCONTACTOR TOTAL	TOTAL	PERCE	NTAGE				
	INTEREST IN A 3/) and PERCENTAGE OF PARTICIPATION	CONTRACT VALUE AT AWARD	COMPLETION or ESTIMATED COMPLETION TIME	VALUE AT COMPLETION IF APPLICABLE	ACTUAL ACCOMPUSHMENT	PLANNED ACCOMPUSHMENT	VALUE OF OUTSTANDIN WORKS (IN PHP)			
								TOTAL AMOUNT OUTSTANDING V		

PHOTOCOPY ADDITIONAL FORMS, IF NECESSARY

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

OF CONTRACT (Php)

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

PHOTOCOPY ADDITIONAL FORMS, IF NECESSARY

Page___of___

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, SURCONTRACTOR, PARTHNER IN A JVI and PERCENTAGE OF PARTICIPATION	TOTAL CONTRACT VALUE AT AWARD	DATE OF COMPLETION OF ESTIMATED COMPLETION TIME	TOTAL CONTRACT VALUE AT COMPLETION IF APPLICABLE

	4	
Page	4.04	
- W. B. W.		

LIST OF MAJOR EQUIPMENT TO BE USED FOR THE PROJECT

NAME OF CONTRACTOR:				
DDOISCT TITLE				
PROJECT TITLE:				

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

Page		
1 age	OI.	

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.

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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 YEY STARTED CONTRACTS SUBMITTED

KELU) S. S.		
	AFFIDAVIT OF UNDERTAKING		
REPR	I, of legal age, Filipino,	[OFFICER	OF
with o	office address at g been duly sworn to in accordance with law, hereby voluntary depose and stat		afte
having	g been duly sworn to in accordance with law, hereby voluntary depose and stat	te:	
	That I am duly authorized representative of the <u>IName of Bidder</u> undertaking as evidenced by Secretary's Certificate and Board Resolution.	to execute	this
	That [Name of Bidder] bidding for the (Name of Project)		
	That relative to the aforementioned Project, the <u>[Name of Bidder]</u> here that the equipment to be use and the key personnel to be assign shall exclusive will only perform to the said project until its completion.	by undertake rely be used a	and
	That I am executing this affidavit to attest to the truth of the foregoing and in with the submission of the technical requirements for the public bidding of the	compliance se said projec	t.
of	IN WITNESS HEREOF, I have hereunto signed my name below thi	s	day
	AFFIANT FURTHER SAYETH NAUGHT.		
	Affiant		
	SUBSCRIBED AND SWORN TO BEFORE ME this day of		_
affiant		issued	at
Doc. No	0. ;		
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Notary Public

