

PHILIPPINE BIDDING DOCUMENTS

**Procurement of
INFRASTRUCTURE
PROJECTS**

Government of the Republic of the Philippines

***CONSTRUCTION OF ISOLATION
FACILITY***

**Sixth Edition
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Preface

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

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

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

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

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

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

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

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Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

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

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

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

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

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

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

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

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

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

GFI – Government Financial Institution.

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

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

GOP – Government of the Philippines.

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

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

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

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Section I. Invitation to Bid

Notes on the Invitation to Bid

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

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

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

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

Invitation to Bid for Construction of DSWD-CAR's CRCF Isolation Facility ITB 2021-DSWD-CAR-17

1. The **Department of Social Welfare and Development - Cordillera Administrative Region**, through the *General Appropriations Act of 2021* intends to apply the sum of **Three Million One Hundred Ninety-Eight Thousand Pesos Only (Php3,198,000.00)** being the Approved Budget for the Contract (ABC) to payments under the contract for **ITB 2021-DSWD-CAR-17**. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The **Department of Social Welfare and Development - Cordillera Administrative Region** now invites bids for the above Procurement Project. Completion of the Works is required within **One Hundred Fifty (150) Days after receipt of Notice to Proceed**. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
3. Bidding will be conducted through open competitive bidding procedures using non-discretionary "*pass/fail*" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
4. Interested bidders may obtain further information from **Monday to Fridays** and inspect the Bidding Documents at the address given below from **8:00AM to 5:00PM**.
5. A complete set of Bidding Documents may be acquired by interested bidders on **April 30, 2021 to 9:00 AM of May 19, 2021** from given address and website/s below. The bidding document fee costs **Php5,000.00**. The Procuring Entity shall allow the bidder to present its proof of payment for the fees **in person and the payment thereof shall be paid at the Procuring Entity's Cash Section**.
6. The **Department of Social Welfare and Development - Cordillera Administrative Region** will hold a **Pre-Bid Conference¹** on **10:00AM of May 7, 2021** at **DSWD-CAR Premises** and/or through videoconferencing/webcasting via *google meet* with a meeting ID of <https://meet.google.com/mch-bhcf-dnh>, which shall be open to prospective bidders.
7. Bids must be duly received by the BAC Secretariat via (i) manual submission at the office address as indicated below, on or before **9:00AM (PST) of May 19, 2021**. Late bids shall not be accepted.
8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB Clause 16**.

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

9. Bid opening shall be on **10:00 AM of May 19, 2021** at the given address below and/or through <https://meet.google.com/jjm-akxz-wsu>. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. The **Department of Social Welfare and Development - Cordillera Administrative Region** 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:

BAC SECRETARIAT
Procurement Section
DSWD-CAR
#40 Northdrive, Baguio City
bacsec.car@dswd.gov.ph
(074) 661-0430 Local 25025 / (02) 396-6580
12. You may visit the following websites for downloading of Bidding Documents:
<https://car.dswd.gov.ph/downloads/procurement-opportunities>

-SGD-
ENRIQUE H. GASCON JR.
BAC Chairperson

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, *Department of Social Welfare and Development - Cordillera Administrative Region* invites Bids for the *Construction of DSWD-CAR's CRCF Isolation Facility*, with Project Identification Number *ITB 2021-DSWD-CAR-17*

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

2. Funding Information

2.1. The GOP through the source of funding as indicated below for *CY 2021* in the amount of *Three Million One Hundred Ninety-Eight Thousand Pesos Only (Php3,198,000.00)*.

2.2. The source of funding is:

- a. NGA, the General Appropriations Act or Special Appropriations.

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

- a. Subcontracting is not allowed.

8. Pre-Bid Conference

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

9. Clarification and Amendment of Bidding Documents

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

10. Documents Comprising the Bid: Eligibility and Technical Components

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

11. Documents Comprising the Bid: Financial Component

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

12. Alternative Bids

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

13. Bid Prices

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

14. Bid and Payment Currencies

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

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

- a. Philippine Pesos.

15. Bid Security

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

15.2. The Bid and bid security shall be valid within 120 calendar days upon opening of bids. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

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

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

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

17. Deadline for Submission of Bids

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

18. Opening and Preliminary Examination of Bids

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

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

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

19. Detailed Evaluation and Comparison of Bids

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

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

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

20. Post Qualification

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

21. Signing of the Contract

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

Section III. Bid Data Sheet

Notes on the Bid Data Sheet (BDS)

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

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

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

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

Bid Data Sheet

ITB Clause	
5.2	For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be: <i style="text-align: center;">Construction of Building</i>
7.1	<i>Not Applicable</i>
10.3	<i>PCAB license should be at least "small b" as to size range and/or at least C&D as to license category</i>
10.4	Please see attached requirements for Key Personnel
10.5	See prescribed specifications
12	<i>Not Applicable</i>
15.1	The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts: <ul style="list-style-type: none"> a. The amount of not less than Sixty Three Thousand Nine Hundred Sixty Pesos Only (Php63,960.00) (2%) of ABCJ, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; b. The amount of not less than One Hundred Fifty-Nine Thousand Nine Hundred Pesos Only (Php159,900.00) (5%) of ABCJ if bid security is in Surety Bond.
19.2	<i>Not Applicable</i>
20	<i>Not Applicable</i>
21	Additional contract documents relevant to the Project - construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE.

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	<i>Not Applicable</i>
4.1	<i>Not Applicable</i>
6	<i>Not Applicable</i>
7.2	Fifteen (15) years.
10	a. Dayworks are applicable at the rate shown in the Contractor's original Bid.
11.1	<i>Not Applicable</i>
11.2	<i>Not Applicable</i>
13	The amount of the advance payment is <i>up to Php 479,700.00 (15% of the ABC only)</i> .
14	<i>Payment will not be allowed if equipment is not fully installed.</i>
15.1	The date by which operating and maintenance manuals are required is <i>within 5 days upon completion of the contract.</i> The date by which "as built" drawings are required is <i>within 5 days upon completion of the contract.</i> .
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 <i>Php50,000.00.</i>

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.

Section VII. Drawings

See attached drawings.

Section VIII. Bill of Quantities

Notes on the Bill of Quantities

Objectives

The objectives of the Bill of Quantities are:

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

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

Daywork Schedule

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

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

Provisional Sums

A general provision for physical contingencies (quantity overruns) may be made by including a provisional sum in the Summary Bill of Quantities. Similarly, a contingency allowance for possible price increases should be provided as a provisional sum in the Summary Bill of Quantities. The inclusion of such provisional sums often facilitates budgetary approval by avoiding the need to request periodic supplementary approvals as the future need arises. Where such provisional sums or contingency allowances are used, the SCC should state the manner in which they will be used, and under whose authority (usually the Procuring Entity's Representative's).

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

Signature Box

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

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

See attached Bill of Quantities.

Section IX. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

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

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

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

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class “A” Documents

Legal Documents

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

Technical Documents

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

- (j) Original duly signed Omnibus Sworn Statement (OSS); **and** if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

Financial Documents

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

Class "B" Documents

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

II. FINANCIAL COMPONENT ENVELOPE

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

Other documentary requirements under RA No. 9184

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



The minimum work experience requirements for key personnel are the following:

Key Personnel	General Experience	Relevant Experience
Project Manager	at least 3 years in project management	at least 2 years in building construction of at least 1 storey in height
Project Engineer	at least 2 years in civil works	at least 2 year in project supervision of vertical structures of at least 1 storey in height
Electrical Engineer / Master Electrician	at least 2 years in Electrical Works in Structures	At least 2 years in supervision of electrical works on vertical structures of at least 1 storey in height
Sanitary Engineer / Master Plumber	at least 2 years in Plumbing & Sanitary Works in Structures	At least 2 years in supervision of Plumbing & Sanitary Works on vertical structures of at least 1 storey in height
Safety Officer	at least 2 years in safety management	at least 2 years in building construction
Project Foreman	at least 2 years in building construction	at least 2 years in building construction

The minimum major equipment requirements are the following:

Equipment	Capacity	Number of Units
1. Mini Dump Truck	at least 2 cubic meter	at least three (3)
2. Speed Cutter	14 inches	at least one (1)
3. Bar Bender		at least two (2)
4. Welding Machine	300 amps	at least two (2)
5. Portable Plate Compactor		at least one (1)
6. Concrete Vibrator		at least one (1)
7. One Bagger Concrete Mixer		at least one (1)



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF SOCIAL WELFARE AND DEVELOPMENT
Cordillera Administrative Region
#40 North Drive, Baguio City

GENERAL SPECIFICATIONS

CONSTRUCTION OF ISOLATION FACILITY

WANGAL-MOTORPOOL ROAD, LA TRINIDAD, BENGUET



Prepared by:

JOHN PHILLIP J. LAMSIS
Engineer III-BGMS

General Conditions

GC – 1. DEFINITIONS

- i. The term "Owner" as used in these Specifications means the administration of the Department of Social Welfare and Development – Cordillera Administrative Region. (DSWD-CAR)
- ii. The term "Construction Architect/Engineer" shall mean the person executing the contract on behalf of the Owner for the construction of the project and the said Construction Architect/Engineer's duly authorized assistants or representatives.
- iii. The term "Contractor" means the entity that will provide all labor, materials, equipment, and perform all the work necessary for the completion of the project in accordance with the plans and specifications.
- iv. The term "Consultants" means the designer and planner of the owner.
- v. The term "Completion of Contract" shall mean full performance by the contractor of the contractor's obligations under the contract and all amendments and revisions thereof except the contractor's obligation concerning (1) release of liens and certificate of contractor, (2) other final documents. The term "completion" or "completion of the project" shall mean the contract and all amendments and revision thereof. The Certificate of Completion, signed by the Construction Architect/ Engineer and approved in writing by the Owner shall be the sole and conclusive evidence as to the date of completion.
- vi. The term "default" used herein shall include any such failure by the contractor to make progress in the prosecution of work so as to endanger the completion of the project within the calendar days allotted.
- vii. Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the direction, requirement, designation, or prescription, of the Construction Architect/Engineer is intended; and similarly, the words "approved", "acceptable to", or satisfactory to" of the Designer unless otherwise expressly stated.
- viii. Where "as shown", "as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided", as used herein shall be understood to mean "provided complete in place", that is, furnished and installed.

GC – 2. DIVISION OF THE SPECIFICATION

These specifications are divided for convenience into sections as set forth in the Table of Contents preceding the General Conditions. Any mention in these sections or indications on the drawings of articles, materials, operations, or methods, requires that the contractor furnish each item so mentioned or indicated, of the kind, type or design and quality specified or shown on the drawings, and that the contractor furnish all labor, equipment, incidentals, and superintendence necessary to complete the work in accordance with the true meaning and intent of these specifications even though such mention of articles, materials, operations, methods, quality, qualifications, or condition is not expressed in complete sentences. The contractor shall coordinate the work covered in each section with the work

of other sections. The necessary information – items, accessories, anchors, connections, patterns, templates etc. – shall be delivered when required in order to prevent any delay in the progress and completion of work.

GC – 3. SPECIFICATIONS AND DRAWINGS

- i. The contractor shall keep in the work place a copy of the drawings and specifications and shall at all times give the Construction Architect/Engineer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be like effect as if shown or mentioned in both. In case of difference between drawings and specifications the specifications shall govern. In case of discrepancy either in the figures, in the drawings, or specifications, the matter shall be promptly submitted to the Designing Architect who shall promptly make a determination in writing. Any adjustment by the contractor without such determination shall be at his risk and expense. The Consultants shall furnish from time to time such detailed drawings and other information as he may consider necessary, unless otherwise provided.
- ii. Omissions and misdescription. Omissions from the drawings or specifications or misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the contractor from performing such omitted or misdescribed details of work, but shall be performed as if fully and correctly set forth and described in the drawings and specifications.
- iii. Deviations from the drawings and dimensions therein given, whether or not error is believed to exist, shall be made only after written authority is obtained from the Designing Architect/Engineer.

GC – 4. PROGRESS SCHEDULE.

The work shall be prosecuted with faithfulness and energy and in the order of precedence as directed by the Construction Architect/Engineer. The Contractor shall submit a progress schedule as follows:

- i. The progress schedule shall be submitted within two weeks after the date of award of contract and shall be subjected to the approval of and/or modification by the Construction Architect/Engineer.
- ii. The progress schedule shall be in Chart Form or Critical Path Method (CPM) and shall show the order in which the contractor proposes to carry on the work, the dates on which he will start the several salient features (including procurement of materials, plant and equipment) and the contemplated dates completing the same.

GC – 5. TAXES, LICENSES, PERMITS, AND FEES.

All taxes, licenses, permits and fees which may be due to the local and/or National Government on account of the performance and completion of the work stipulated herein and fees for testing materials and specimens shall be paid for and obtained by the contractor while the building and occupancy permits shall be paid for by the contractor and Owner respectively.

GC – 6. INSURANCE.

The contractor shall take out and maintain throughout the construction period insurance with the minimum requirements.

GC – 7. CHANGES IN SPECIFICATIONS AND DRAWINGS.

The owner may, from time to time, during the progress of the construction of the project, make such changes in, additions to, or subtractions from the specifications and construction drawings as condition may warrant: provided, however, that if the cost to the contractor shall be materially increased by any such change, or addition, the owner shall pay the contractor for the reasonable cost thereof in accordance with a construction contract amendment signed by the owner and the contractor, but no claim for additional compensation for any such change or addition will be considered unless the contractor shall have made a written request therefore to the owner prior to the commencement of work in connection with such change or addition. Written notification shall be made by the owner to the consultants or designing architect prior to any change in specifications and drawings.

GC – 8. SUPERVISION AND INSPECTION.

- i. The contractor shall cause the construction work on the project to receive a constant supervision by a competent Project Architect/Engineer who shall be present at all times during the working hours where construction is being carried-on. The contractor shall employ, in connection with the construction of the project, capable, experienced, and reliable foremen and such skilled workmen as may be required for the various scope of work to be performed. Directions and instructions given to the Project Architect/Engineer by the owner shall be binding upon the contractor.
- ii. The manner of performance of the work, and all equipment used therein shall be subject to the inspection, tests, and approval of the owner. The owner shall have the right to inspect data and records of the contractor relevant to the work. The contractor will provide all reasonable facilities necessary for such inspection and tests. The contractor shall have an authorized agent to accompany the inspector when the final inspection is made and, if requested by the owner, when any other inspection is made.

GC – 9. PROGRESS PHOTOGRAPHS.

- i. The contractor, at his expense, shall furnish to the Construction Architect/Engineer progress photographs that shall be taken monthly starting when the work begins and continuing so long as the work is in progress, on the exterior or interior of the building, from the station points designated by the Construction Architect/Engineer.
- ii. The contractor shall clearly identify in the photographs the scope of work completed.
- iii. No partial payment shall be considered for approval without the above-mentioned photographs.

GC – 10. RELEASE OF LIENS.

Neither the final payment nor any part of the retained percentage shall become due until the contractor, if required shall deliver to the owner a complete release of all liens arising out of the contract, or receipts in full in lieu thereof and, if required in either case, an affidavit that so far as he has knowledge or information, the releases and receipts include all labor and materials for which a lien can be filed.

GC – 11. SUPERVISION.

All work shall meet with the approval of the Construction Architect/Engineer and shall be completed in conformity with the plans and specifications approved by, and on file with the owner, which plans and specifications will be made part of the contract to be entered into for the work referred herein. The contractor shall confer with the Construction Architect/Engineer before commencing any work under the contract. The contractor shall furnish all facilities for inspection at the construction site.

GC – 12. IDENTIFICATION OF EMPLOYEES.

The contractor shall be responsible for furnishing to each employee and for requiring each employee engaged in the work to display such identification as maybe approved and directed by the Construction Architect/Engineer.

GC – 13. SAMPLES.

The contractor shall submit 2 each of samples if required by the owner or Construction Architect/Engineer and these shall be properly identified with the contractor's name and manufacturer's name and catalog number, if applicable.

GC – 14. LIGHT, POWER, AND WATER.

The contractor shall furnish temporary water, light, and power, complete with connecting piping, wiring, lamps and similar equipment as required for the work. The contractor shall install, maintain, and remove his temporary line upon completion of the work. All expenses in connection with temporary services and facilities shall be paid by the contractor.

GC – 15. TEMPORARY OFFICE.

The contractor shall provide and maintain watertight office on the premises where directed for his own and sub-contractor's use and for the use of the Construction Architect/Engineer. This office shall be, provided with operating windows, doors with locks, tables, benches, racks for drawings and adequate electric lighting.

- i. The ceiling shall be 2.7m high. Floor and wall shall be plywood or equivalent.
- ii. The contractor shall provide janitorial services for these offices for the duration of the job.

GC – 16. STORAGE SHEDS.

The contractor shall provide and maintain on the premises where directed, watertight storage sheds for all materials which might be damaged by weather.

GC – 17. TEMPORARY TOILETS.

The contractor shall install and maintain in a sanitary condition suitable toilets and urinals for use of workmen. These toilets shall be in a location approved by the construction Architect/Engineer and connected to existing sewers, when feasible. There shall be a minimum of one (1) toilet for each multiple of thirty (30) contractor's employees or fractional part thereof, working at the job site.

GC – 18. LIGHTS, GUARDS, ETC.

The contractor shall provide such lights, guard, temporary fences, and warning signs as may be necessary for the safety during all the time from the execution of the contract until the final acceptance of the work, and shall be responsible for the installation and maintenance of lights, guards, fences and warning signs.

GC – 19. CLEANING.

Upon the completion of each part of the work as defined by the sections into which these specifications are divided or as separated by the various trades involved in the work, each area shall be cleaned of debris emanating from the work. The contractor shall remove remaining excess materials, waste, rubbish, debris, and his construction and installation equipments from the premises. Any dirt or stains caused by the work under the contract shall be removed from the surfaces of the structure and from the equipments and fixtures.

Miscellaneous Conditions

MP – 1. PROJECT SIGN.

The contractor shall provide a project sign fabricated to size.

MP – 2. USE OF OWNER FACILITIES BY CONTRACTOR.

The contractor will not be permitted to utilize any Owner's building or facility for his job-site office space or storage area for materials without prior written approval of the Construction Architect/Engineer.

MP – 3. INTERFERENCE WITH OWNER OPERATIONS.

The contractor shall establish work procedures and methods to avoid interference with existing operations within or adjacent to the construction area. Free passage into the adjoining or adjacent buildings not in the contract will not be permitted, except as approved by the Construction Engineer. Procedures and methods shall also provide for safe conduct of work and protection of property, which is to remain undisturbed.

ARCHITECTURAL

SECTION 1 CONSTRUCTION QUALITY CONTROL

1C.1. General. The contractor shall establish and maintain quality control for testing of materials to be furnished by him in accordance with the specifications and for determination of densities as required in the specifications to assure compliance as specified. The testing agency shall be approved. Certified copies of detailed laboratory test reports, attesting compliance with the test requirements as prescribed in the applicable referenced publications shall be submitted in triplicate, together with the submission of samples for conformation testing by the owner as required, and shall contain the name and address of the testing laboratory and the dates of the test to which the report applies.

1C.2. Sampling and Testing. Unless otherwise specified, materials to be sampled, time of submittal of samples, and other requirements for sampling shall be as specified in the various sections of each division under which the materials will be furnished. All samples for testing shall be provided by the contractor at no additional cost to the owner.

1C.3. Maintenance of records. The contractor will maintain current records of all inspections and test performed on an appropriate format. These records will provide factual evidence that required inspections or tests have been performed, including type and number of inspections or tests involved; results of the inspections or tests, etc. Additional forms for specific operations may be required by the Construction engineer to supplement the daily inspection forms.

1C.4. Time reports and deficiencies. Records of jobsite material inspections must be received prior to installation or incorporation of materials into the contract work. The contractor will not be permitted to build upon or conceal any features of the work containing uncorrected defects. Payment on deficient items will be withheld until satisfactorily corrected or other action has been taken approved.

SECTION 2 EARTHWORK

General

Include cut and fill, compaction and grading to acquire finished grade as required in the plan.

2.1 EXCAVATION

Structural excavation, to indicate bearing value. Extra care should be practiced to protect adjoining properties and existing utility lines. Excavation of trenches for pipe lines shall conform to the typical sections as Shown on the plans.

2.2 SITE CLEARING

2.2.1 All obstacles within the premises shall be disposed and cleared as directed by the Project Architect/Engineer.

2.2.2 All obstruction obstructing the work shall be removed to the designated places, unless otherwise directed by the Project Architect/Engineer.

2.2.3 All plant roots shall be disposed.

2.3 BACKFILL & FILL

2.3.1 Backfill of suitable excavated soil shall be placed in horizontal layers of 30 cm thick, compacted by hand or mechanically as required density.

2.3.2 Fill shall be as shown in the drawings unless otherwise directed and shall be compacted by mechanical means to require density of 95% optimum.

2.3.3 Excess earth-surplus earth from cut portion shall be placed in lower ground as desired by the Project Engineer to the nearest depressed area.

SECTION 3 DEMOLITION, CLEARING AND GRUBBING

3.1 EXAMINATION OF SITE

The Contractor shall visit the site of the work and examine the premises so as to fully understand all of the existing conditions relative to the work. No increase in cost of extension in performance time will be considered for the failure to know its condition.

3.2 DEMOLITION

Demolition of work in general shall consist of the following:

3.2.1 Remove all existing structures (if there shall be)

3.2.2 Tap all existing water and electrical lines for reconnection to new construction.

3.3 PROTECTION OF STRUCTURES AND PROPERTY

3.3.1 Execute demolition work with such manner as to insure adjacent property and premises of building against damage which occur or might occur from falling debris or other cause.

3.3.2 Repair damage done to property of any person or persons on or off premises by reason of required work.

3.3.3 Provision of proper enclosure within the perimeter to insure safety to possible damage on adjacent properties.

3.3.4 Storage of any hazardous or flammable materials is strictly prohibited, that would cause danger to people, property and adjacent property.

3.4 DISPOSAL OF MATERIALS

Observe good housekeeping, all trash, rubbish, and other waste shall be immediately disposed. The contractor should provide garbage cans for proper disposal of his wastes.

3.5 DEBRIS

3.5.1 Remove as it accumulates, debris resulting from demolition operation may not be burned on site.

3.5.2 Wood and other debris resulting from demolition operation may not be burned on site.

3.6 CLEANING

3.6.1 Upon the completion of work, remove all barricades, tools, materials, apparatus and debris.

3.6.2 Leave premises clean, neat and orderly.

SECTION 4 FOUNDATION AND EXCAVATION WORKS

4.1 Gravel Bed – 4" thick compacted on bottom of foundation and or footing trenches or provide lean concrete.

4.2 Minimum depth of Excavation – From natural grade line.

4.3 All excavation work for foundation based on drawing shall be from natural grade, no foundation shall rest on fill.

SECTION 5 FILLING, GRADING AND SLABS ON FILLS

5.1 1-part escombro, 2-part lastillas or Barrow earth for filling job, done 6 layers, compacted. Filling shall be confined on building areas.

5.2 Second Basement and side walk slabs on fill – 0.15 m thick, reinforced with 12 mm diameter bars spaced at 0.35m on center both ways, 3,000 psi.

5.3 2" thick gravel bedding is used for slabs on fill. Do not use unsuitable organic filling materials.

SECTION 6 CONCRETE AND REINFORCED CONCRETE

6.1 Test – Steel bars, cement, gravel, sand and concrete samples, shall be tested. Sample materials for testing shall be properly signed by the Project Engineer with corresponding date before issuing to private testing company. Results shall be officially signed or stamp and to be photo copied for four. The Owner shall be furnished a copy of every testing results.

6.2 Schedule of Concrete

6.2.1 Footing, tie beams, reinforced walls, wall footings, columns, and pedestal;

$f_c = 24.00$ MPa (3500 psi) at 28 days

6.2.2 Suspended slabs, beams, girders, stairs;

$f_c = 24.00$ MPa (3500 psi) at 28 days

6.2.3 Ground Floor slab on fill;

$f_c = 20.70$ MPa (3,000 psi) at 28 days

6.2.4 Others not specified – $f_c = 20.70$ MPa (3,000 psi) at 28 days

6.2.5 Cement – approved brand. Portland cement

6.2.6 Gravel – G-1 crushed, $\frac{1}{2}$ " to $\frac{3}{4}$ " in size

6.2.7 Sand – shall be river sand

6.2.8 Reinforcing Bars:

1. All mild reinforced bars shall be round deformed structural grade in accordance with ASTM A-615.

16mm & larger rebars – $f_y = 275.79$ MPa (40, 000 psi)

12mm & smaller – $f_y = 275.79 \text{ MPa}$ (40, 000 psi)

2. Verify Structural general notes. For specific grade of bars for specific use.

6.2.9 Forms – Use plywood or steel forms for all form works.

SECTION 7 MASONRY WORKS

7.1 Concrete Hollow Blocks – 5" thick for exterior wall, 3" or 4" thick for all interior partitions unless otherwise noted. Both 1" thick cement plastered. With compressive strength of 700 psi.

7.2 Reinforcement – 12mm dia. Bars at 0.40 m on center for vertical and every 3 layers of CHB for horizontal bars on all concrete hollow blocks wall.

7.3 Cement and other cement materials shall be delivered to the site and stored in unbroken bags, barrels, or other approved containers, plainly marked and labeled with the manufacturers name and brand. Concrete masonry units shall be handled with care to avoid chipping and breakage, and shall be stored as directed.

SECTION 8 STRUCTURAL STEEL WORKS

8.1 General. Connections for which details are not indicated shall be designed in accordance with the Steel Construction standard.

8.2 Handling, shipping and storing steel work. All Materials shall be handled, shipped, and stored in a manner that will prevent distortion or other damage. Materials shall be stored in a clean location and keep properly drained. All damaged materials shall be replaced or repaired by and the expense of the contractor.

8.3 Structural carbon steel for welded work shall conform to ASTM A36.

8.4 Submerged arc welding. Bare electrodes and flux for submerged arc welding shall conform to the requirements of AWS D1.0, and the grade of A36.

SECTION 9 DOORS AND WINDOWS

DOOR

See Architectural Plans for specifications.

WINDOW

See Architectural Plans for specifications.

SECTION 10 FLOOR FINISH SCHEDULE

See Architectural Plans for specifications.

SECTION 11 CEILING FINISH SCHEDULE

See Architectural Plans for specifications.

SECTION 12 PAINTING WORKS

- 12.1. Materials – Any Quality Paint or approved Equal.
- 12.2. Application – All applications and methods to be used shall follow strictly manufacturer's instructions and specifications.
- 12.3. SURFACE TREATMENT – All surface include masonry wall shall be thoroughly cleaned, puttied (masilla), sand papered rub and polish. All Masonry wall shall be treated first with penetrating sealer prior to painting.
- 12.4. SCHEDULE OF PAINTING FINISHES:
 1. All masonry wall cemented finished surfaced – 3 coats Flat Top Coat.
 2. Plywood surfaces or wood surfaces – 1 coat primer and 2 coats Semi-gloss Top Coat.
 3. Hardiflex – 1 coat primer, 2 coats Flat Top Coat. Color White.
 4. Steel and metal works. – 2 coats red oxide primer and 2 coats acqua epoxy or quick drying enamel.
 5. Steel Trusses – 2 coats red oxide primer and two coats acqua epoxy topcoat.
- 12.5 Extra Coats – shall be applied to achieve desired finish.

PLUMBING WORKS

SECTION 1 GENERAL

1.1 DESCRIPTION

- 1.1.1 Applicable provisions of "General Conditions" govern work under this section.
- 1.1.2 All fittings, connections and piping embedded in concrete shall be subjected to inspection by the Construction Architect/Engineer and/or his representative before completion.
- 1.1.3 The Contractor shall provide all items, articles, materials, operation or method listed, mentioned of schedule of the drawings and/or herein, including labor. Materials, equipment's and incidentals necessary and required for their completion.
- 1.1.4 It is not intended that the drawings shall show every pipe, fitting, valve and appliance. All such items whether specifically mentioned or not, or indicated on the drawing shall be furnished and installed, if necessary, to complete the system in accordance with the best practice of plumbing trade and to the satisfaction of the construction engineer and the owner.
- 1.1.5 The plumbing contractor is required to refer to all architectural, structural, mechanical and electrical plans and specifications and shall investigate all possible interferences and conditions affecting his work.
- 1.1.6 Electrical system is not included in this division, but the plumbing contractor will provide all facilities and make provisions for the installation of the work as construction progresses.

1.2 SCOPE OF WORK

Work include under this section of the specifications consists in furnishing all labor, tools and equipment, appliances and materials necessary for complete installation, testing and operation of the plumbing system in accordance with the contract.

- 1.2.1 Sanitary drains from the building and their connections to the point of discharge as shown in the plans as verified at the jobsite.
- 1.2.2 Roof and ground storm drainage system and connections to the storm drainage system as shown in the plans as verified at the jobsite.
- 1.2.3 Soil, waste and vent pipe system within the building.
- 1.2.4 Cold water distribution and supply pipes to the fixtures.
- 1.2.5 Plumbing fixtures, trims and accessories.
- 1.2.6 Supply and installation of the standpipe system complete with the valves and fire department connection.
- 1.2.7 Water meter and water connections to cold water main and/or other sources as shown in the plan schemes.
- 1.2.8 The contractor shall provide necessary shop drawing as-built plans.
- 1.2.9 All other works described in other sections of this document necessary for the completion of this contract.

1.3 SUBMITTALS

- 1.3.1 Within fifteen (15) days after award of contract, the plumbing contractor shall submit for the construction engineer's approval four (4) copies of all complete list of manufacturer's name of all materials he proposes to use.
- 1.3.2 After approval of the above list and before purchase of any equipment or materials. The plumbing contractor shall submit to the construction engineer for approval four (4) complete sets of detailed information consisting of manufacturer's bulletins, shop drawings and part list of the materials to be provided under this contract.
- 1.3.3 The plumbing contractor shall assume the cost of entire responsibility of any change in the work as shown in the contract drawings which may necessary be occasioned by approval of materials other than these specified.

1.4 APPLICABLE CODE AND STANDARDS

- 1.4.1 All plumbing works to be done and sizes of pipes to be used shall be in accordance with the National Plumbing Code of the Philippines.
- 1.4.2 The plumbing contractor shall specify the above paragraphs with each section of the specifications and coordinate his work so that the General Contractor will understand clearly the intent of the work to be done.

SECTION 2 PRODUCTS

2.1 DESCRIPTION

All materials to be used shall conform to the standards specified. All classes listed are not necessarily required for this project, of classes listed; only those specifically called for under sections of this Division or shown shall be provided. Use of materials shall further be governed by other requirements imposed on other sections of this specification. Materials shall be subjected to test necessary to ascertain their fitness if the Construction Architect/engineer so requires.

2.2 ALTERNATIVE MATERIALS

Use of any materials not specified in these specifications may be allowed, provided such alternate has been approved by the Construction Engineer, and provided further that a test, if required, shall be done by an approved agency in accordance with the generally accepted standards.

2.3 IDENTIFICATION OF MATERIALS

2.3.1 Each length of pipe, fittings, traps, fixtures and devices used in plumbing system have cast, stamped or indelibly marked on it in the manufacturer's trademark or name, the weight, type and classes of products when so required by the standards mentioned.

2.3.2 All materials and equipment mentioned in this specification, including all incidental items not specifically indicated but required to complete the contract shall be new and free from defects. If damaged during the course of construction, it shall be repaired or replaced as directed by the construction engineer at no additional cost to the owner.

2.4 STANDARD SPECIFICATION FOR MATERIALS AND EQUIPMENT

2.4.1 WATER LINE PIPES

All cold water lines inside the building shall be any brand but quality pipe for the purpose.

2.4.2 POLYVINYL CHLORIDE PIPE

1.Solvent Cement joint to ASTM D2564.

2.Series 1000 for downspouts, main vents and soil stacks including horizontal drain.

3.Series 600 for vent pipes and fittings.

SECTION 3 EXECUTION

3.1 PIPING INSTALLATION

3.1.1 General

1. Piping shall be installed as shown on the drawings, as recommended by the manufacturer and as directed during installation, straight and direct as

possible, forming right angles or parallel lines with building walls, and other pipes, and neatly spaced. Erect pipe risers plumb and true, parallel with walls and other pipes neatly spaced.

2. All piping shall be properly supported or supported on stands, clamps, hangers or equivalent of approved design.
3. The arrangement positions and connections of pipes, fixtures, drains, valves and the like, indicated on the drawings shall be followed as closely as possible. The right is reserved by the construction engineer to change locations and elevations to accommodate conditions which may arise during the progress of the work, prior to installations, without additional compensation for such changes.
4. The responsibility for accurately laying out of the work and coordination of installation with other contracts rests with this contractor. Any field layout interferences that occur shall be reported immediately to the construction engineer.
5. All pipes shall be cut accurately to measurements and shall be worked into places without springing or forcing. Changes in pipe sizes shall be made with reducing fittings.
6. Roughing-in for pipes and fixtures shall be carried along the building construction. Correctly located openings of proper sizes shall be provided where required in the walls and floors for the passage of pipes. All items to be embedded in concrete shall be thoroughly cleaned and free from all rust, scale and paint.
7. Pipes shall not pass through columns, footings, beams or ribs, except where noted in the drawings.

3.1.2 Cold Water System

1. The piping shall be extended to all fixtures, outlets and equipments from the gate valves installed in the branch near the riser.
2. All piping above ground shall be parallel with the lines of the building unless otherwise shown in the plans.
3. **No water piping shall be buried in floors** unless specifically indicated in the drawings or approved by the construction Architect/Engineer.
4. All service pipe, valves and fittings shall be kept at sufficient distance from the other work permit finished covering not less than one-half inch from the different service.
5. Changes in pipe shall be made with reducing fittings.
6. No valve shall be installed with its stem below horizontal. All valves shall be gate valves unless otherwise specified or noted on the drawings.
7. Unions shall be concealed in walls, ceilings and partitions, except where they are enclosed in the metal frame box and cover.

8. All cold water line shall be tested at 150 Psi from a period of two hours before covering.

3.1.3 Vent Systems

1. All main vertical soil and waste stacks shall be extended full size to above roof line to act as vents, except where otherwise specifically indicated.
2. Vent pipes in roof spaces shall be run as close as possible to underside of roof with horizontal piping pitched down to stacks without forming traps. Vertical vent pipes may be connected into the main vent riser above the highest vented fixtures.

3.1.4 Piping, Grades and Slopes

1. Keep all Horizontal runs of piping, except where concealed in partition, as high as possible and close the wall.
2. Piping shall be properly graded or pitched to insure easy circulation, drainage and prevent water hammer and noise. Slopes as follows unless otherwise indicated.
3. Cold water shall be pitched, up in the direction of flow at 1 inch 60 feet horizontal run.

ELECTRICAL WORKS

SECTION 1 GENERAL REQUIREMENT

1.1 GENERAL

1.1.1 General Description

1. The work to be done under this division of the specifications consist of the fabrication, finishing, delivery and installation, complete in all details of the Electric Work at the 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 others. All works shall be done in accordance with the governing Codes and Regulations and with the specifications. The specifications are intended to provide a broad outline of the required equipment, but are not intended to include all details of design and construction.
2. Under this Section of the Specifications, provide all labor, materials and equipment and performance of all work necessary for the complete execution of all the electrical works as shown in the electrical drawings except specifically indicated as to be provided by the other.

1.1.2 Codes , Inspections, Permits and Fees

1. The work under this contract is to be installed according to the requirements of the latest edition of the Philippine Electrical Code, the rules and regulations of the local authorities and the requirements of the local power utility and Telephone Company.

2. All permits and electrical fees required for this work shall be obtained by and at the expense of the contractor. The contractor shall furnish the Construction Engineer and the Owner final certificates electrical inspection and approval from the proper government authorities after completion of work. The Contractor shall prepare all as-built and all forms and documents required by the approving authority.

1.1.3 Guarantees

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 of acceptance of work. Any defects, appearing within aforesaid period, shall be remedied by the contractor at his own expense.

SECTION 2 INTERIOR WIRING SYSTEMS

2.1 GENERAL REQUIREMENTS

In each of the standards referred to herein, consider the advisory provisions to be mandatory, as though the word "shall" wherever it appears. Interpret reference in these standards to the "authority having jurisdiction", or words of similar meaning, to mean the Construction Engineer.

2.1 PRODUCTS

2.1.1 Conduits and Fittings:

1. All conduits shall be unplasticized Polyvinyl Chloride (uPVC) in heavy wall schedule unless indicated on plans.
2. EMT or IMC conduits shall be used in sizes 15mm, 20mm and 25mm diameters for indoor installations where PVC is not specified.

2.1.2 Outlets, Boxes and Fittings:

1. At all outlets of whatever kind, for all systems, there shall be provided suitable fitting, which shall be either a box or other device especially designed to receive the type of fitting to be mounted thereon.
2. At all outlets on concealed conduit work, provide galvanized pressed steel outlet boxes of standard make. These boxes shall be in all cases standard and where such boxes are not available on the market, special boxes shall be secured by the contractor at his own expense. In general outlet boxes shall be at least 100 mm in diameter, 53mm deep and No. 16 minimum gauge.

2.1.3 Junction and Pull boxes:

1. Junction and pull boxes, of Code gauge steel, galvanized shall be provided as indicated or as required for facilitating the pulling of wires and cables. Pull boxes in finished places shall be located and installed with permission and to the satisfaction of the Construction Engineer.

2. All junction and pull boxes on exposed conduit work shall be provided with hubs for threaded pipe entry and covers provided with neoprene gaskets.

2.3.4 Wires and Cables:

1. All wires shall be copper, soft-drawn and annealed, shall be of 98% conductivity, shall be smooth and true of a cylindrical form and shall be within 1% of the actual size called for.
2. All wires and cables shall comply with the requirements of the Underwriters Laboratories, the ASTM and ICEA as they apply to the particular usage.
3. All wires and cables shall be any quality brand or approved equal.
4. Wires and cables for power and lighting system shall be plastic insulated for 600 volts working pressure type "TW" unless otherwise noted on plans or specified.
5. Wires and cables for lighting systems installed or run throughout within the ballast compartment shall be plastic insulated for 600 volts working pressure type "THW" unless otherwise noted on plans or specified.
6. THHN/THWN wires can be used for the same size of wires provided the allowable current does not exceed that of TW/THW wires.

2.3.5 Wall Switches and Plates:

1. Wall switches shall be rated with ampere and voltage ratings as required. Switches shall be for flush mounting type and of the quiet type, spring operated. The type of switches shall be tumbler operation and the color, plating and appearance of wall plates shall be selected by the Consultants. Appropriate samples shall be submitted prior to the purchase of wall switches and face plates. Switches and plates shall be any quality brand, or approved equal.
2. All Utility boxes intended for switch devices shall be specially designed to receive the particular type of switch device to be mounted and should be deep enough to accept and fit the total number of conductors required as per drawings.

2.3.6 Wall Receptacles and Plates:

1. Receptacle outlets shall be 15 Ampere, 250 V, 2 pole, 3-wire parallel slot, grounding type. Parallel slot outlet rated 15A, 125V grounded type shall be acceptable for use with 250V system. Locking type and other special purpose receptacle outlets shall be as indicated in the drawings. Receptacle outlet and plates shall be as manufactured by any quality brand or approved equal.

2. Type and Color of receptacle outlet and plates shall be as selected by the Construction Architect/Engineer. Appropriate samples of outlets and plates shall be submitted prior to purchase of devices.
3. All utility boxes intended for receptacle outlet devices shall be specially designed to receive the particular type of receptacle outlet device to be mounted and should be deep enough to accept and fit the total number of conductors as required as per drawings.

2.3.7 Panels:

1. Standard panels and cabinets, as much as possible shall be used and assembled on job. All panels shall be dead front construction, furnished with trims for surface mounting. Cabinets shall be of Code gauge with gutters at least 100 mm wider if necessary. The trim for all panels shall be finished in industrial grey enamel over a coat of rust inhibitor.
2. Lighting panels shall be equipped with branch air circuit breakers as required and mains as noted on Plans or panel schedule. All circuit breakers shall be any quality brand, or approved equal.

2.3.7 Individual Breakers and Switches:

1. Provide individual circuit breakers, safety switches and disconnect switches where indicated on plans. Voltage ratings shall be suitable in each case of service application. Enclosures shall be General Purpose, NEMA Type 1, except where specifically noted on plans or assembled on panel cabinets.
2. Circuit breakers shall consist of quick-make, quick-break type entirely trip-free operating mechanism with contacts, arc-interrupter, and thermal magnetic trip unit shall provide time-delayed overload protection, and in case of overload or short circuit current in any one pole. Circuit breaker shall be trip indicating, with the tripped position of breaker handle midway between "ON" and "OFF" positions.
3. All circuit breakers shall be bolt-on type unless noted otherwise. Plug-in circuit breakers are not acceptable.

SECTION 3 EXECUTION

3.1 GENERAL REQUIREMENTS:

Electrical installations shall conform to the requirements of the Code and to the requirements specified herein.

3.2 WIRING METHODS:

Wiring method shall be insulated conductors installed, except where specifically indicated or specified otherwise, or required by the Code to be installed otherwise. An insulated equipment grounding conductor shall be provided in all branch circuits, including lighting circuits.

3.3 CONDUITS INSTALLTION:

Unless indicated otherwise, conceal, conduit within finished wall, and floor. Install conduit panel with or at right angles to ceilings, walls, and structural members where located above accessible ceilings and where conduit will be visible after completion of project.

1. Where conduits rise through floor slabs, the curved portion of bends shall not be visible the finish slab.
2. Conduit Support: Support conduit by pipe straps, wall brackets, hangers or ceiling trapeze. Fasten by machine screws, welded threaded studs, or spring-tension clamps on steel works. Do not weld conduits or pipe straps to steel structures. The load applied to fasteners shall not exceed one-fourth of the proof test load. In partitions of light steel construction, use sheet-metal screws.
3. Make changes in direction of runs with symmetrical bends or cast-metal fittings. Make field-made bends and offsets with hickey or conduit-bending machine. Do not install crushed or deformed conduits. Avoid trapped conduits. Prevent plaster, dirt, or trash from lodging in conduits, boxes, fittings, and equipment during construction. Free clogged conduits of all obstructions.
4. Install pull wires in empty conduits in which wire is to be installed. The pull wire shall be No. 14 AWG zinc-coated steel or plastic having not less than 200 pound tensile strength. Leave not less than 300 mm of slack at each end of the pull wires.
5. Conduit installed in Concrete Floor Slabs – Locate so as not to adversely affect the structural strength of the slabs. Install conduit within the middle one-third of the concrete slab. Space conduits horizontally not closer than three diameters except at cabinet locations. Curved portions of bends shall not be visible above the finish slab. Increase slab thickness as necessary to provide a minimum 25 mm cover over conduit. Where embedded conduits cross expansion joints, provide suitable watertight expansion fittings and bonding jumpers. Conduits larger than 25 mm trade size shall be parallel with or at right angles to the main reinforcement, the conduit shall be close to one of the supports of the slab.
6. Fasten conduits to sheet metal boxes and cabinets with two lockouts where required by the code, where insulated bushings are used, and where bushings cannot be brought into firm contact with the box; otherwise, use at least a single lockout and bushing. Lockouts shall be the type with sharp edges for digging into the wall of metal enclosures. Install bushings on the ends of conduits and provide insulating type where required by Code.

3.4 SPLICES:

Make splices in accessible locations. Make splices in conductors 5.5 mm² and smaller with an insulated pressure type connector. Make splices in conductors 8 mm² and larger with a solderless connector and cover with an insulation material equivalent to the conductor.

SECTION 4 LIGHTING SYSTEMS

4.1 SCOPE OF WORK:

The work includes supply and installation of lighting fixtures.

4.2 SUBMITTALS:

1. Data, shop drawings, and reports shall employ the terminology, classifications, and method prescribed by the IES Lighting Handbook, applicable, for the lighting system specified.
2. Manufacturer's Data – Lighting fixtures, including lamps and ballast.

4.3 PRODUCTS:

4.3.1 Fluorescent Lamps:

Provide the number, type, and wattage indicated in the fixture schedule.

4.3.2 Florescent Ballasts:

Ballast shall be electronic type and shall be designed to operate on voltage system to which they are connected. Ballast shall have sound rating "A". Fixtures and ballast shall be designed and constructed to limit the ballast case temperature to 90 degrees Celsius © when installed in an ambient temperature of 40 degrees C.

4.3.3 All florescent ballast shall be U.L. approved rapid start and energy saving type. Submit data and information for approval of the Owner of Construction Architect/Engineer.

4.3.3 Incandescent Lamps

Provide the number, type and wattage indicated or as required.

4.4 EXECUTION

4.4.1 Installation

Set lighting fixtures plumb, square and level with ceiling and walls, in alignment with adjacent lighting fixtures, and secure in accordance with manufacturer's directions and approved shop drawings. Mounting heights specified or indicated shall be bottom of fixtures for ceiling mounted fixtures and to center of fixture wall-mounted fixtures.

4.4.2 Grounding

Grounding non current-carrying parts of equipment. Where the copper grounding conductor is connected to a metal other than copper, provide specially treated or lined connectors suitable for this purpose.



PROJECT NAME :

CONSTRUCTION OF ISOLATION FACILITY

LOCATION :

WANGAL-MOTORPOOL ROAD,
LA TRINIDAD, BENGUET

SHEET CONTENT :

AS SHOWN

APPROVED BY

LEO L. QUINTILLA
OIC - Regional Director

CONFORMED BY

ENRIQUE H. GASCON JR.
OIC-Assistant Regional Director for Administration

CHECKED BY

RINA CLAIRE L. REYES
OIC Chief, Administrative Division

PREPARED BY

BERNARD L. ANGAYON
AO I, AS-BGMS

PROJECT/TA No:

DATE SUBMITTED:

DRAWING STATUS

DESCRIPTION/REMARKS	BY

SHEET NUMBER		A3 SIZE
A	1 / 8	



1 PROPOSED PERSPECTIVE
A-1 SCALE: NTS



2 VICINITY MAP
A-1 SCALE: NTS



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PROJECT/TA No:

DATE SUBMITTED:

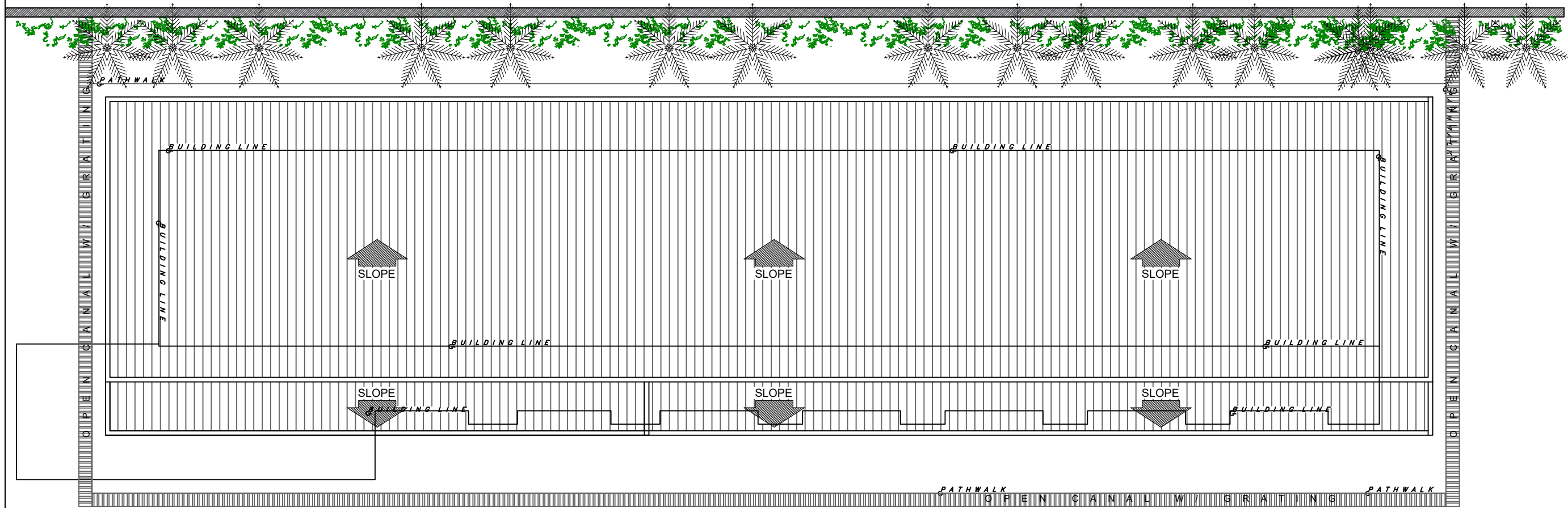
DRAWING STATUS

NO.	DESCRIPTION/REMARKS	BY

SHEET NUMBER

A 2 / 8

A3
SIZE



PROPOSED
1 SITE DEVELOPMENT PLAN
A-2 SCALE: 1:100 MTS



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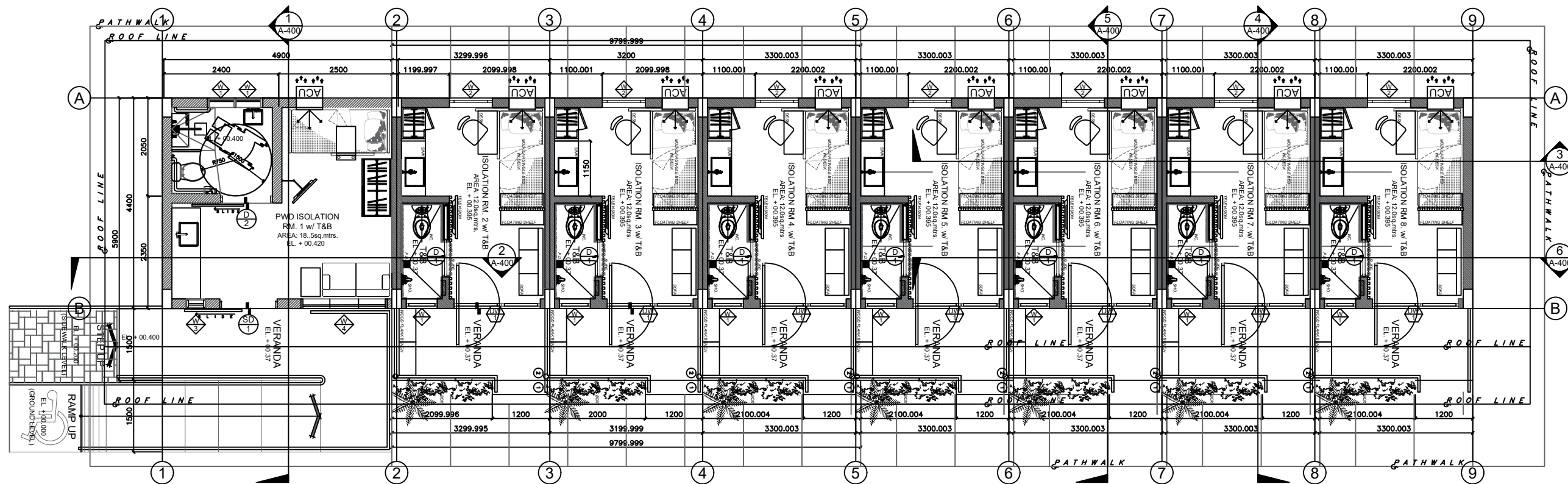
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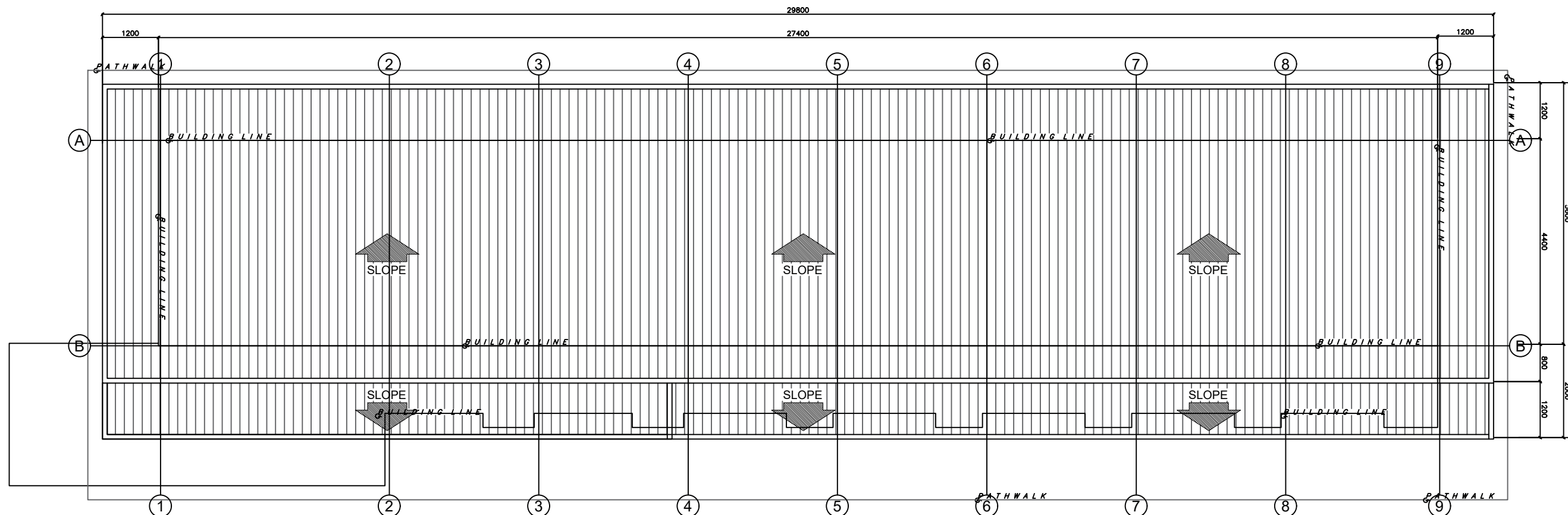
DATE	DESCRIPTION/REMARKS	BY

SHEET NUMBER

A 3 / 8 A3
SIZE



1 PROPOSED FLOOR PLAN
A-3 SCALE: 1:100 MTS



2 PROPOSED ROOF PLAN
A-3 SCALE: 1:100 MTS



PROJECT NAME :

CONSTRUCTION OF ISOLATION FACILITY

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WANGAL-MOTORPOOL ROAD,
LA TRINIDAD, BENGUET

SHEET CONTENT :

AS SHOWN

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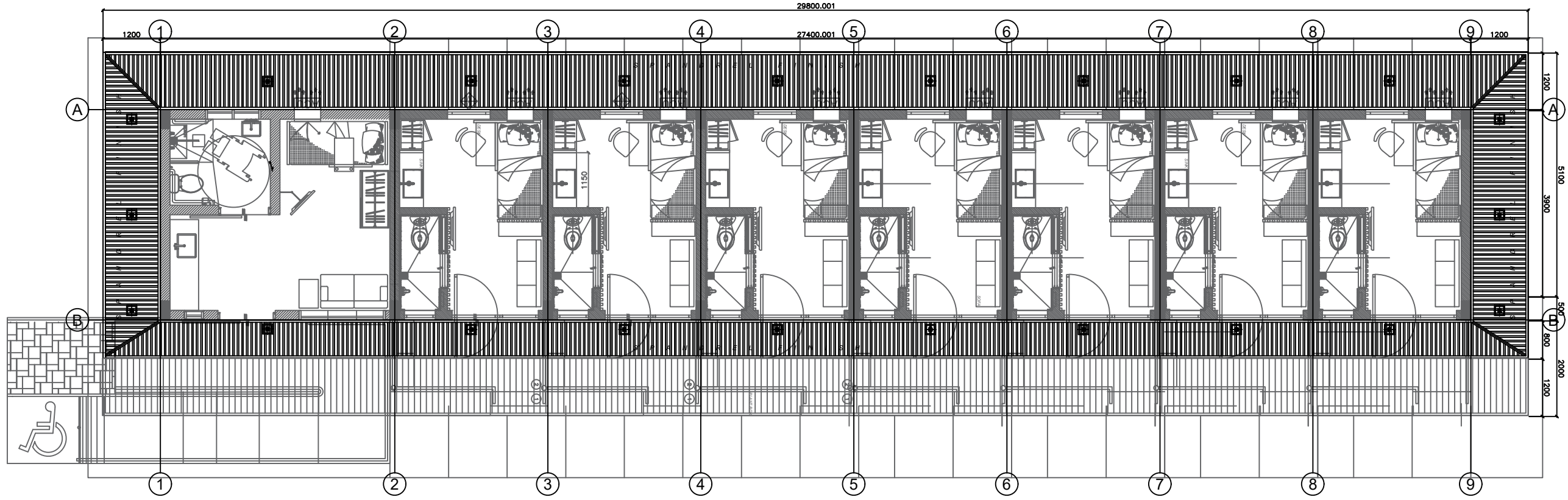
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DATE	DESCRIPTION/REMARKS	BY

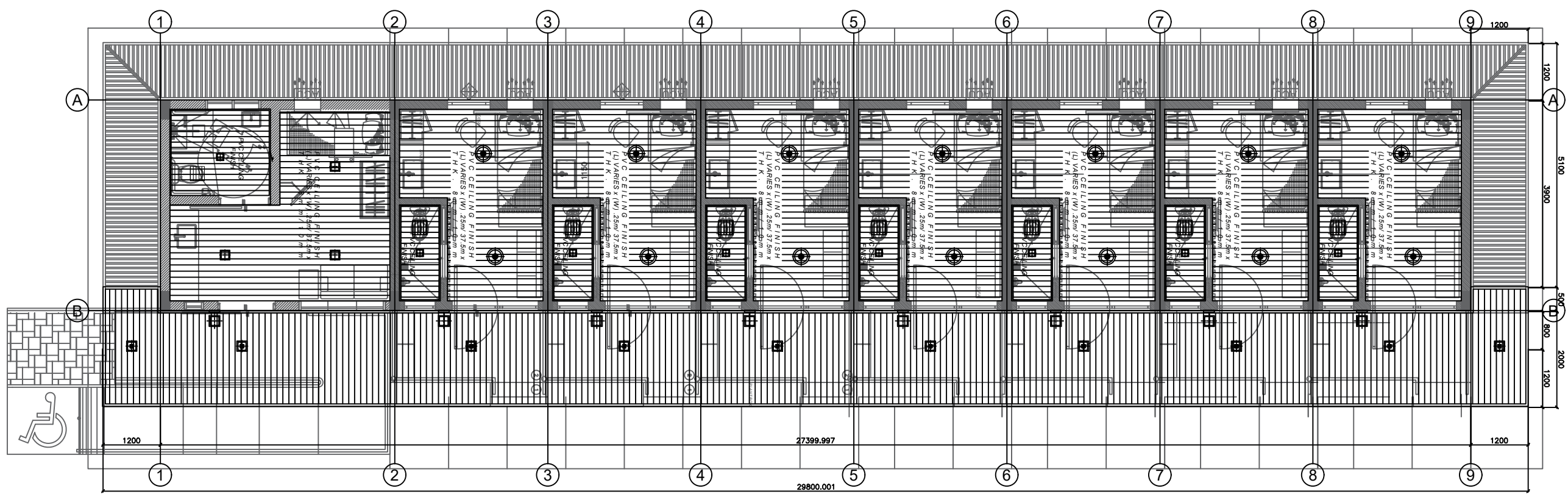
SHEET NUMBER

A 4 / 8

A3
SIZE



1 PROPOSED REFLECTED CEILING PLAN 1
A-4 SCALE: 1:100 MTS



2 PROPOSED REFLECTED CEILING PLAN 2
A-4 SCALE: 1:100 MTS



PROJECT NAME :

CONSTRUCTION OF ISOLATION FACILITY

LOCATION :

WANGAL-MOTORPOOL ROAD,
LA TRINIDAD, BENGUET

SHEET CONTENT :

AS SHOWN

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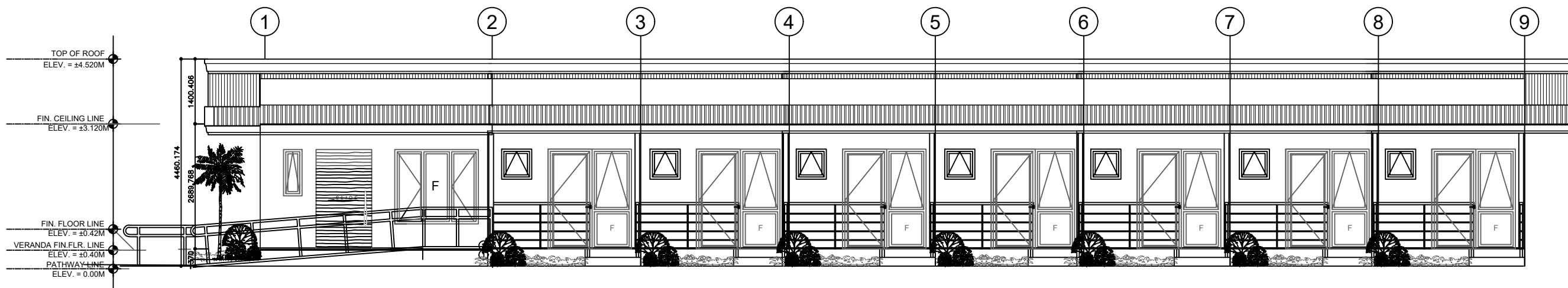
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DATE	DESCRIPTION/REMARKS	BY

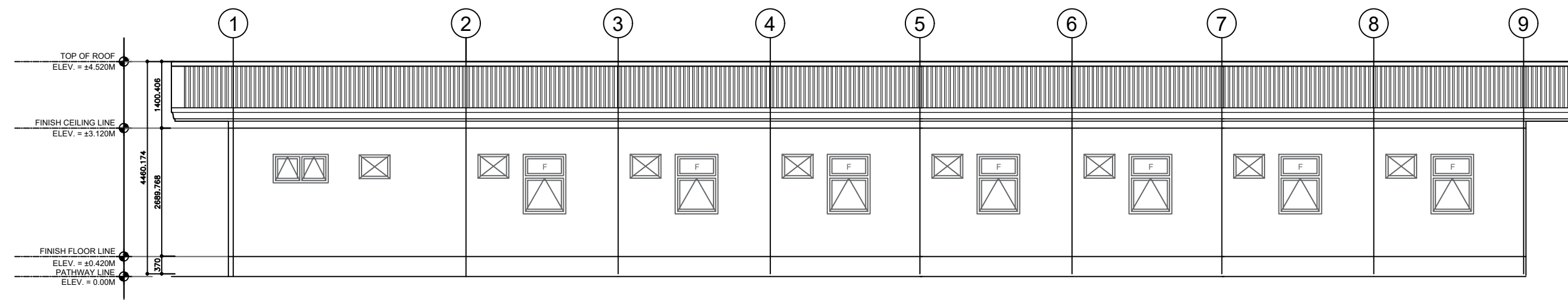
SHEET NUMBER

A 5 / 8

A3
SIZE



1 PROPOSED
FRONT ELEVATION
A-5 SCALE: 1:100 MTS



2 PROPOSED
REAR ELEVATION
A-5 SCALE: 1:100 MTS



PROJECT NAME :

CONSTRUCTION OF ISOLATION FACILITY

LOCATION :

WANGAL-MOTORPOOL ROAD,
LA TRINIDAD, BENGUET

SHEET CONTENT :

AS SHOWN

APPROVED BY

LEO L. QUINTILLA

OIC - Regional Director

CONFORMED BY

ENRIQUE H. GASCON JR.

OIC-Assistant Regional Director for Administration

CHECKED BY

RINA CLAIRE L. REYES

OIC Chief, Administrative Division

PREPARED BY

BERNARD L. ANGAYON

AO I, AS-BGMS

PROJECT/TA No:

DATE SUBMITTED:

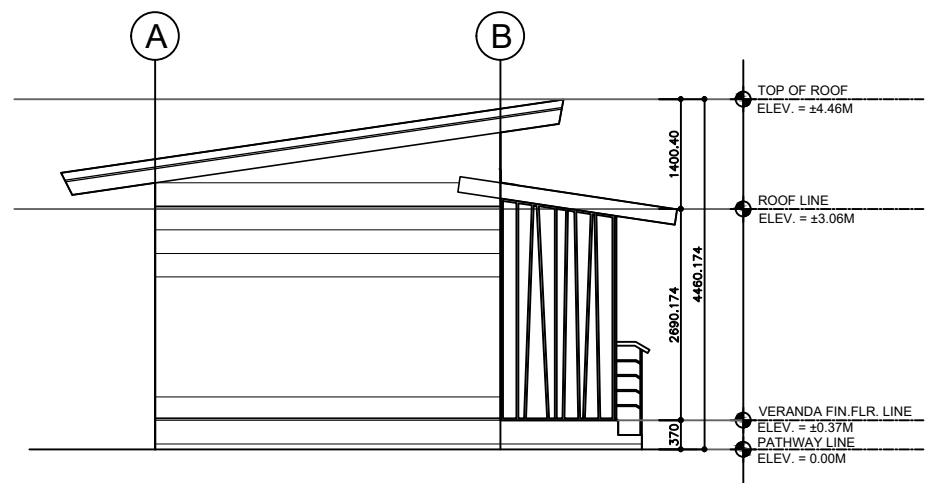
DRAWING STATUS

DATE	DESCRIPTION/REMARKS	BY

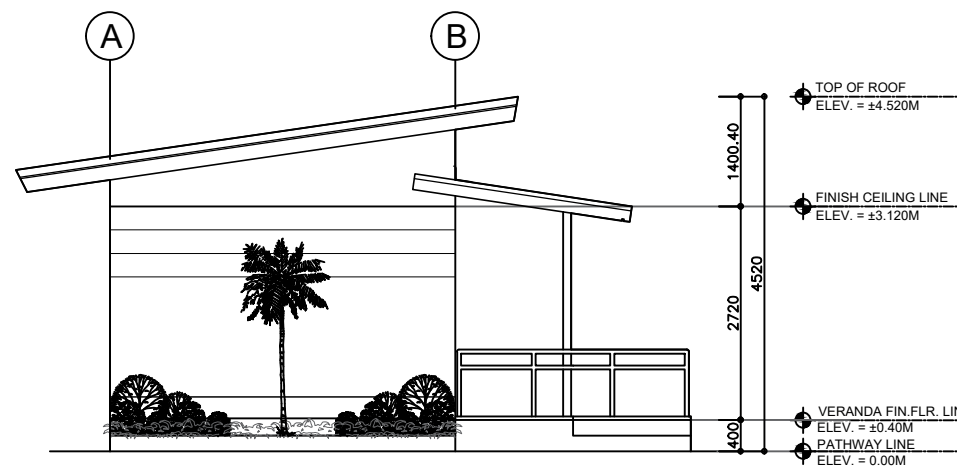
SHEET NUMBER

A 6 / 8

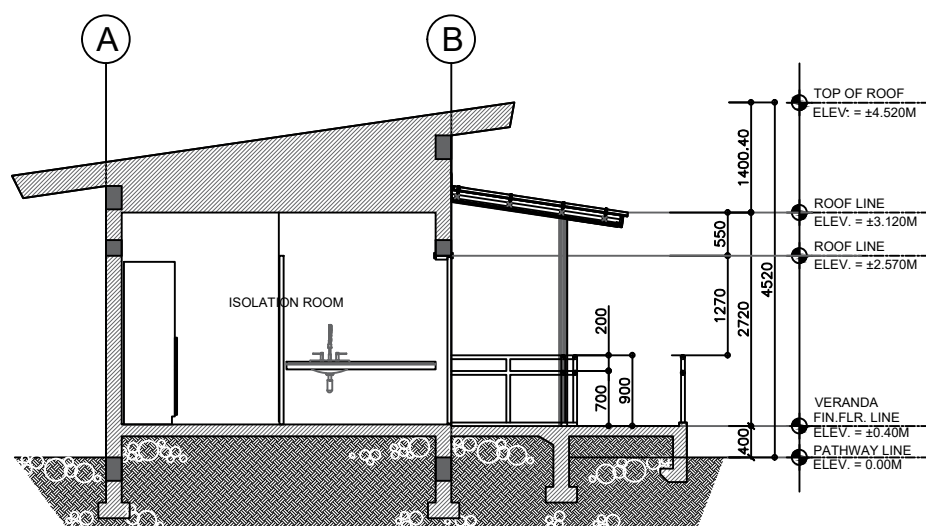
A3
SIZE



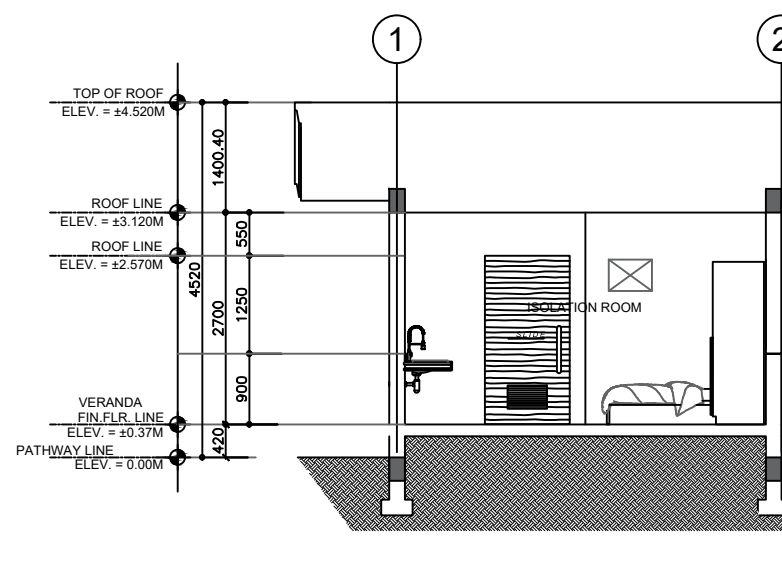
1 PROPOSED RIGHT ELEVATION
A-6 SCALE: 1:100 MTS



2 PROPOSED LEFT ELEVATION
A-6 SCALE: 1:100 MTS



3 PROPOSED CROSS SECTION 1
A-6 SCALE: 1:100 MTS



4 PROPOSED CROSS SECTION 2
A-6 SCALE: 1:100 MTS



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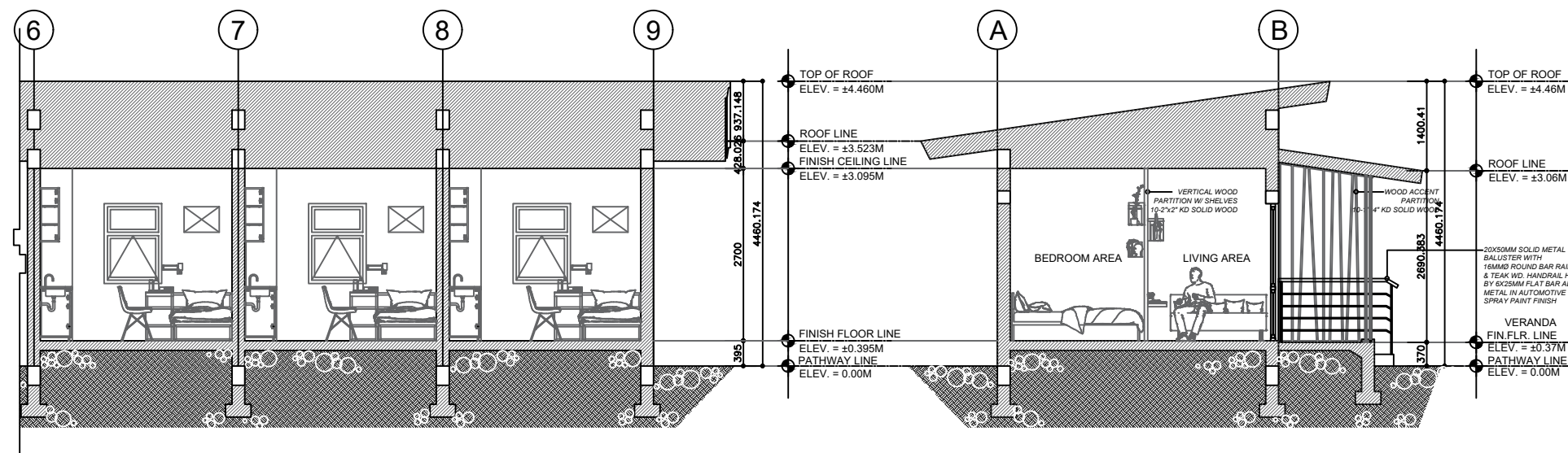
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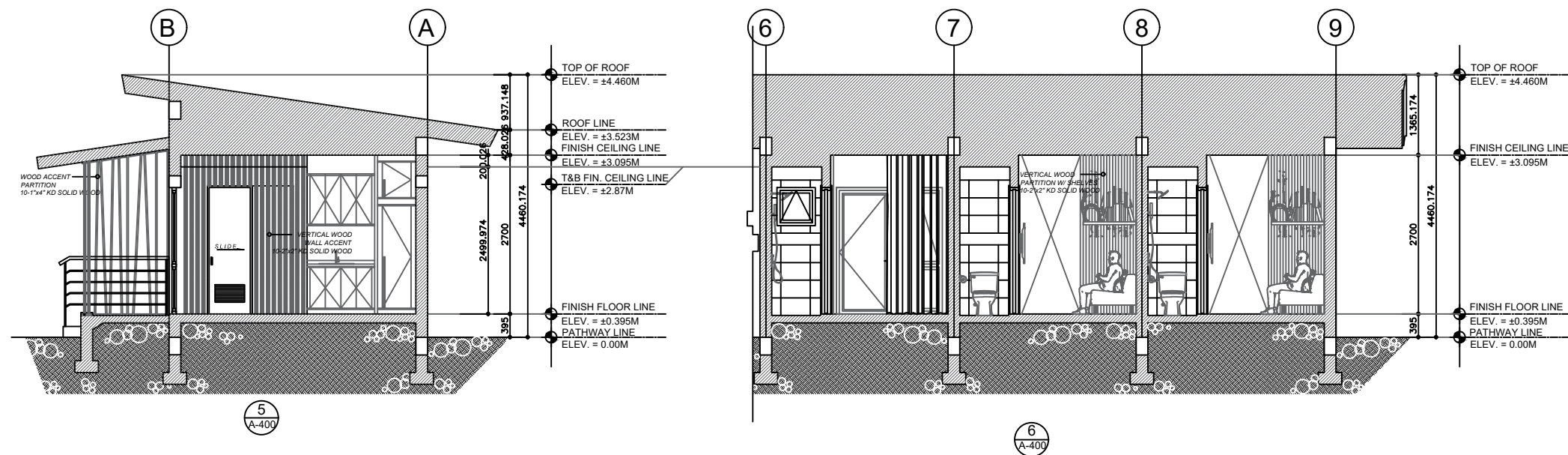
A 7 / 8

A3
SIZE



1 PROPOSED LONGITUDINAL SECTION 1
A-7 SCALE: 1:100 MTS

2 PROPOSED CROSS SECTION 3
A-7 SCALE: 1:100 MTS



3 PROPOSED CROSS SECTION 4
A-7 SCALE: 1:100 MTS

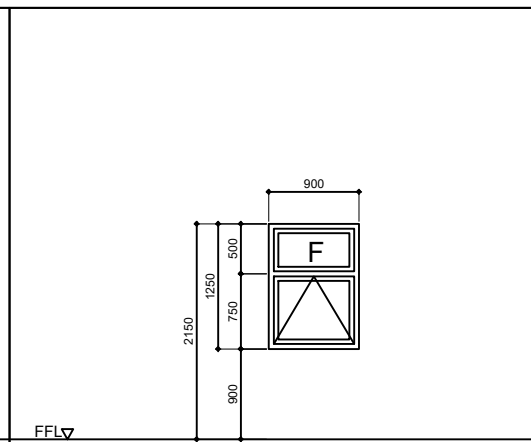
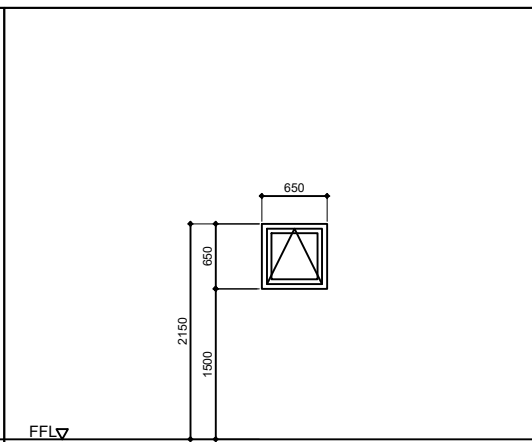
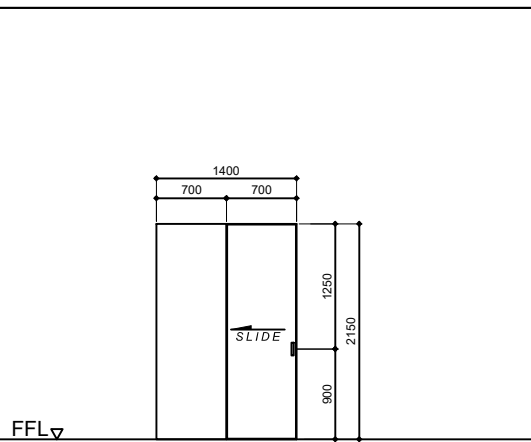
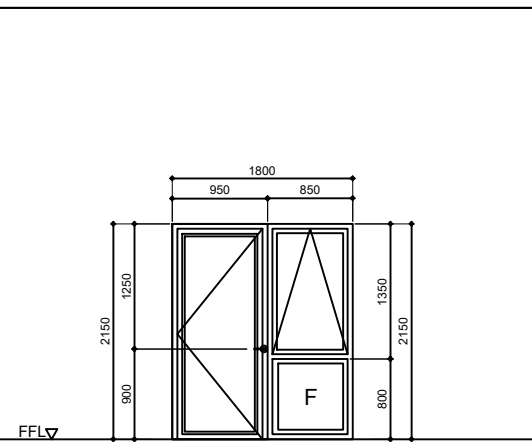
4 PROPOSED LONGITUDINAL SECTION 2
A-7 SCALE: 1:100 MTS



D O O R & W I N D O W E L E V A T I O N S

GENERAL NOTES

1. VERIFY ACTUAL CONDITION AND QUANTITY PRIOR TO FABRICATION OF ALL WINDOWS.
2. REFER TO FLOOR PLANS FOR WINDOW MARKS.
3. CORRELATE WITH SPECIFICATIONS REGARDING MATERIALS AND HARDWARES.
4. MEASURE WINDOW WIDTH AND HEIGHT FROM THE ROOM INTERIOR.
5. ALL ALUMINUM WINDOWS IN CONTACT WITH CONCRETE, SHALL BE PROVIDED WITH RUBBER VINYL STRIPPING.
6. SUBMIT SHOP DRAWINGS, FABRICATIONS ASSEMBLY AND INSTALLATION DRAWINGS TO BE APPROVED BY THE ARCHITECT.
7. APPLY SILICON WATER SEALANT FOR ALL EXPOSED WINDOWS.
8. PROVIDE COMPLETE WEATHER STRIPPING FOR ALL DOORS.
9. ALL ALUMINUM SECTIONS OF WINDOWS SHALL BE OF APPROVED ALUMINUM SECTIONS.
10. SUBMIT SAMPLE FABRICATION (MOCK-UP) OF DOORS & WINDOWS, FOR ARCHITECT'S APPROVAL.



TAG	DESCRIPTION	SINGLE SWING DOOR WITH ALUMINUM FRAME FIXED WINDOW & AWNING WINDOWS
DW-1	NUMBER OF SETS	7
DW-1	LOCATION	GF-LIVING AREA

TAG	DESCRIPTION	SLIDING WOODEN PANEL DOOR(POCKET DOOR) BY: CAVIWALL
D-1	NUMBER OF SETS	7
D-1	LOCATION	T & B

TAG	DESCRIPTION	AWNING WINDOW
W-1	NUMBER OF SETS	9
W-1	LOCATION	GF-GUEST ROOM T & B

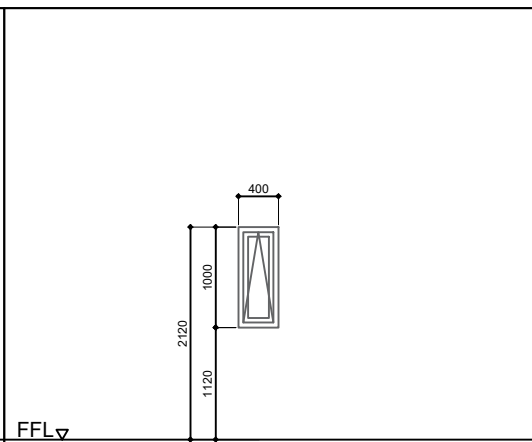
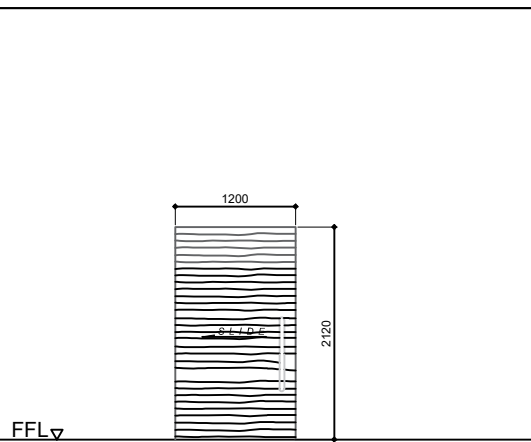
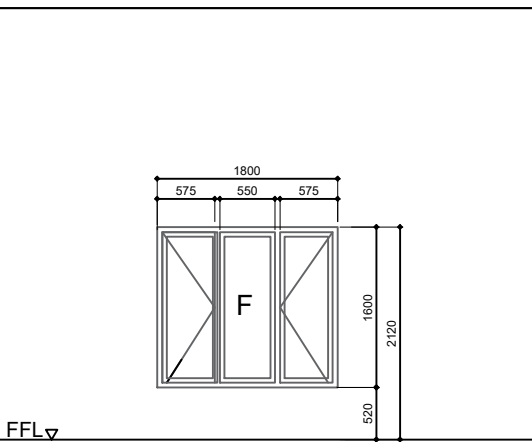
TAG	DESCRIPTION	AWNING & FIXED WINDOW
W-2	NUMBER OF SETS	7
W-2	LOCATION	GF-MAIN KITCHEN AREA

WINDOW SPECS

- 1-AWNING & FIXED WINDOW**
USE 10MM THK. CLEAR TEMPERED GLASS ON 50MM X 100MM ALUMINUM JAMB & HEADERS ON AWNING WINDOWS, 50MM X 100MM ALUMINUM PERIMETER FRAME & 50MM X 100MM ALUMINUM BASE FRAME IN POWDERCOAT FINISH. COLOR BY ARCHITECT. COMPLETE HARDWARES BY MANUFACTURER.
- 2-AWNING WINDOW**
USE 10MM THK. CLEAR TEMPERED GLASS ON 50MM X 100MM ALUMINUM JAMB & HEADERS ON AWNING WINDOWS, IN POWDERCOAT FINISH. COLOR BY ARCHITECT. COMPLETE HARDWARES BY MANUFACTURER.

DOORS SPECS

- 3-SINGLE SWING PANEL DOOR**
USE SOLID WOOD PANEL DOOR OR EQUIVALENT. WITH TANGUILE WOOD FRAMES, JAMB SHALL BE FROM 2"x6" K.D. TANGUILE WOOD. ALL SURFACES SHALL BE IN DUCO PAINT FINISH.
USE SUNKEN FLAT HEAD SCREWS FOR ATTACHMENT. USE 4 PCS. BA2F 4 X 4 X 3mm 2BALL BEARING STAINLESS STEEL HINGES. 1 SET DL6 STUTTGART CYLINDRICAL LEVERSET PRIVACY FUNCTION ANSI GRADE 1 AND 1 SET TS90 CAM ACTION PARALLEL ARM DOOR CLOSER BY DORMA OR EQUIVALENT.
- 4-SLIDING DOOR (SOLID WOOD PANEL)**
USE SOLID WOOD PANEL DOOR OR EQUIVALENT. WITH TANGUILE WOOD FRAMES, JAMB SHALL BE FROM 2"x6" K.D. TANGUILE WOOD. ALL SURFACES SHALL BE IN DUCO PAINT FINISH.
FOR ACCESSORY VERIFY SUPPLIER/MANUFACTURER



TAG	DESCRIPTION	SWING WINDOW WITH ALUMINUM FRAME FIXED WINDOW
W-4	NUMBER OF SETS	1
W-4	LOCATION	PWD ISOLATION LIVING AREA

TAG	DESCRIPTION	SLIDING WOODEN PANEL DOOR
SD-1	NUMBER OF SETS	1
SD-1	LOCATION	PWD ISOLATION AREA

TAG	DESCRIPTION	AWNING WINDOW
W-3	NUMBER OF SETS	1
W-3	LOCATION	PWD ISOLATION AREA

D O O R & W I N D O W S C H E D U L E

TAG	DESCRIPTION	DIMENSION(mm)		NO. OF SETS	REMARKS
		WIDTH	HEIGHT		
DW-1	SINGLE SWING DOOR WITH ALUMINUM FRAME FIXED WINDOW & AWNING WINDOWS	1800	2150	7	COMPLETE HARDWARE & ACCESSORIES, BY SUPPLIER OR MANUFACTURER
D-1	SLIDING WOODEN PANEL DOOR	700	2150	7	HEAVY TRACK, HEAVY DUTY DOOR HANDLE & LOCK, DOOR STOPPER, VERIFY SUPPLIER
W-1	AWNING WINDOW	650	650	9	SS SCREEN & COMPLETE HARDWARE & ACCESSORIES
W-2	AWNING & FIXED WINDOW	1600	1300	7	SS SCREEN & COMPLETE HARDWARE & ACCESSORIES
W-4	SWING WINDOW WITH ALUMINUM FRAME FIXED WINDOW	1600	1800	1	COMPLETE HARDWARE & ACCESSORIES, BY SUPPLIER OR MANUFACTURER
SD-1	SLIDING WOODEN PANEL DOOR	1200	2120	1	HEAVY TRACK, HEAVY DUTY DOOR HANDLE & LOCK, DOOR STOPPER, VERIFY SUPPLIER
W-3	AWNING WINDOW	400	1000	1	COMPLETE HARDWARE & ACCESSORIES, BY SUPPLIER OR MANUFACTURER

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DRAWING STATUS

DATE	DESCRIPTION/REMARKS	BY

SHEET NUMBER

A 8/8

A3 SIZE



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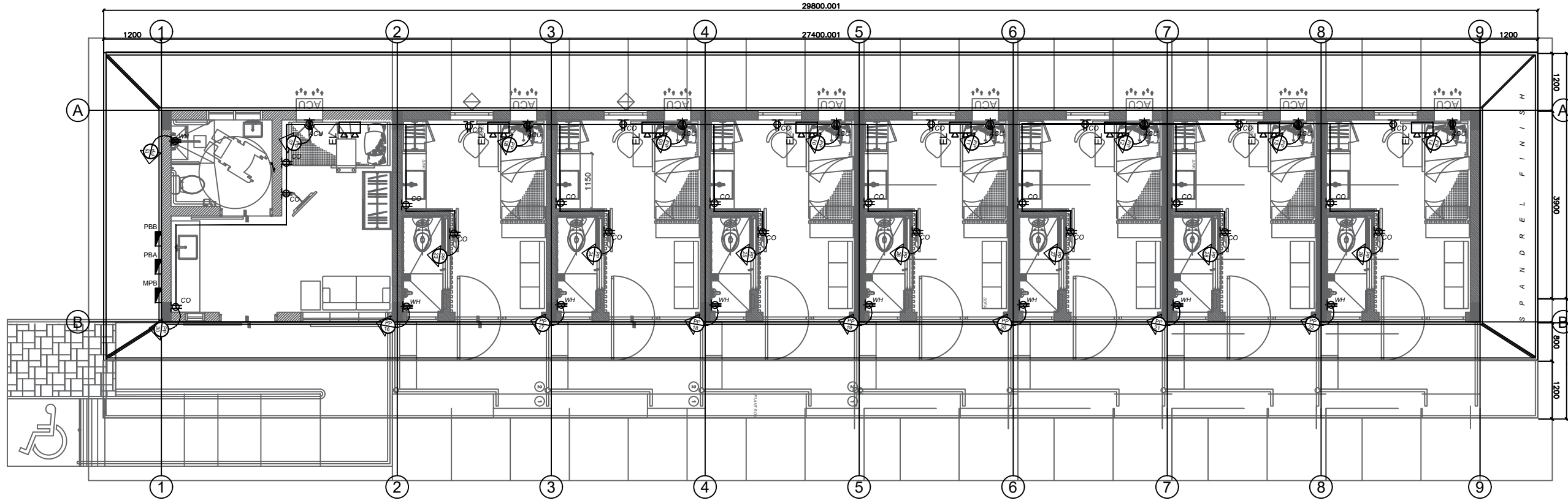
DRAWING STATUS

DATE	DESCRIPTION/REMARKS	BY

SHEET NUMBER

E 2 / 4

**A3
SIZE**



1 PROPOSED POWER LAYOUT
E-2 SCALE: 1:100 MTS

LEGEND:

POWER FIXTURES	
	ACU WINDOW TYPE UNIT
	EXHAUST FAN (CEILING TYPE)
	MISCELLANEOUS OUTLET FOR (MICROWAVE, TOASTER, RICE COOKER)
	CONVENIENCE OUTLET (AIRCON)
	CONVENIENCE OUTLET (WATER HEATER)
	DOUBLE CONVENIENCE OUTLET
Sa	SINGLE SWITCH SINGLE POLE
Sbc	2-GANG SWITCH SINGLE POLE
Sdef	3-GANG SWITCH SINGLE POLE
LP	PANEL BOARD

LIGHTING FIXTURES	
SYMBOL	DISCRIPTION
	RECESSED L.E.D. DOWNLIGHT(12W)
	SURFACE-MOUNTED L.E.D. DOWNLIGHT(25W)
	RECESSED L.E.D. DOWNLIGHT (25W)
	L.E.D. WALL LIGHT (15W)
	L.E.D. STRIP LIGHT
S_{abc}	SWITCHES
S₃	3 WAY SWITCH
	EMERGENCY LIGHT

GENERAL NOTES

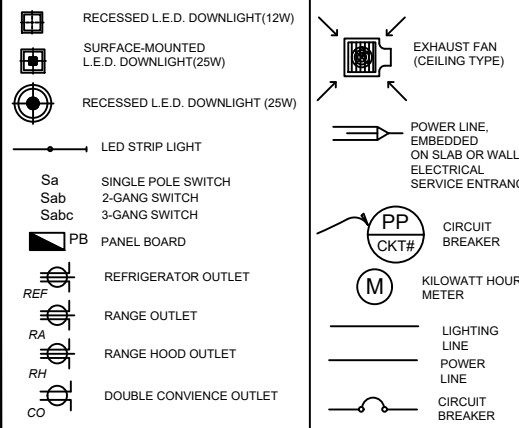
ALL ELECTRICAL WORKS HEREIN SHALL BE ONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST APPROVED EDITION OF THE PHILIPPINE ELECTRICAL CODE (PEC), THE LAWS AND ORDINANCES OF THE LOCAL CODE ENFORCING AUTHORITIES AND REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE COMPANY.

- SERVICE POWER SHALL BE 230V, SINGLE-PHASE, 2-WIRE+GROUND, 60 HERTZ.
- WIRING METHOD SHALL BE DONE IN POLYVINYL CHLORIDE (PVC) FOR LIGHTING, POWER AND AUXILIARY SYSTEM, AND RIGID STEEL CONDUIT (RSC) FOR MAIN FEEDER LINE, RESPECTIVELY.
- SMALLEST BRANCH CIRCUIT WIRE SHALL BE NO. 3.5 MMSQ. THHN FOR POWER AND LIGHTING SYSTEM AND RACEWAY 15 MM DIAMETER TRADE SIDE EMT CONDUIT PIPE. ALL WIRES SHALL BE INSULATED FOR 600 VOLTS (PHELPS DODGE BRAND).
- ALL BRANCH CIRCUITS SHALL BE INSTALLED AS INDICATED IN THE PLANS. INDIVIDUAL BRANCH CIRCUIT HOMERUNS SHALL NOT BE COMBINED IN THE SAME RACEWAY.
- WHENEVER NECESSARY, PULLBOXES OF PROPER SIZE AND DIMENSIONS SHALL BE PROVIDED ALTHOUGH NOT INDICATED IN THE PLAN.
- ALL JUNCTION AND PULLBOXES SHALL BE PROVIDED WITH METAL PLATE COVERS.
- ALL FLOURESCENT LAMP SHALL BE RAPID START TYPE WITH HIGH POWER FACTOR BALLAST, SPRING LOADED LAMP HOLDERS AND ENCLOSED IN A METALLIC BOX.
- AL MATERIALS TO BE USED SHALL BE BRAND NEW AND APPROVED TYPE FOR ITS LOCATION AND PURPOSE.
- ALL EXPOSED CONDUIT RUN SHALL BE INSTALLED PARALLEL TO OR PERPENDICULAR WITH THE BUILDING LINE AND SUPPORTED BY CONDUIT CLAMPS FOR EVERY 1.5 METERS DIAGONAL CONDUIT RUN SHALL NOT BE ACCEPTED.
- THE ELECTRICAL CONTRACTOR IS REQUIRED TO VISIT THE SITE TO ASCERTAIN HIMSELF TO THE LOCAL CONDITIONS THAT MAY AFFECT HIS WORK.
- ALL WIRES AND CABLES SHALL BE COLOR CODED AS FOLLOWS :

LINE 1	- RED
LINE 2	- BLUE
LINE 3	- BLACK
GROUND	- GREEN
- MOUNTING HEIGHTS NOT SHOWN IN THE PLAN SHALL BE AS FOLLOWS :

LIGHT CONTROLLED SWITCHES	- 1400 MM AFFL @ CENTER
CONVENIENCE AND TEL. OUTLET	- 300 MM AFFL @ CENTER
100 MM ABOVE COUNTER IN BASEBOARD HEIGHT IN LOW PARTITION PANEL BOARD	- 1400 MM AFFL @ CENTER UNLESS OTHERWISE INDICATED BY THE FIELD CONDITION
- THE ELECTRICAL CONTRACTOR SHALL SECURE ALL WIRING PERMITS AND ALL FEES REQUIRED FOR THE WORK AND SHALL FURNISH THE OWNER THROUGH THE PROJECT MANAGER, CERTIFICATE OF FINAL ELECTRICAL INSPECTION (CFEI) AND APPROVAL FROM THE PROPER AUTHORITIES.
- ALL ELECTRICAL WORKS SHALL BE DONE UNDER THE DIRECT AND IMMEDIATE SUPERVISION OF DULY LICENSED ELECTRICAL ENGINEER OR MASTER ELECTRICIAN.
- UPON COMPLETION OF ELECTRICAL WORK, INSULATION TEST, GROUNDING TEST AND LOAD BALANCE TEST SHALL BE CONDUCTED BY THE CONTRACTOR IN THE PRESENCE OF THE PROJECT MANAGER.
- THE ELECTRICAL CONTRACTOR IS REQUIRED TO REPORT ANY DISCREPANCY TO THE PLANS, AND SPECIFICATIONS IN THE ACTUAL SITE CONDITIONS.

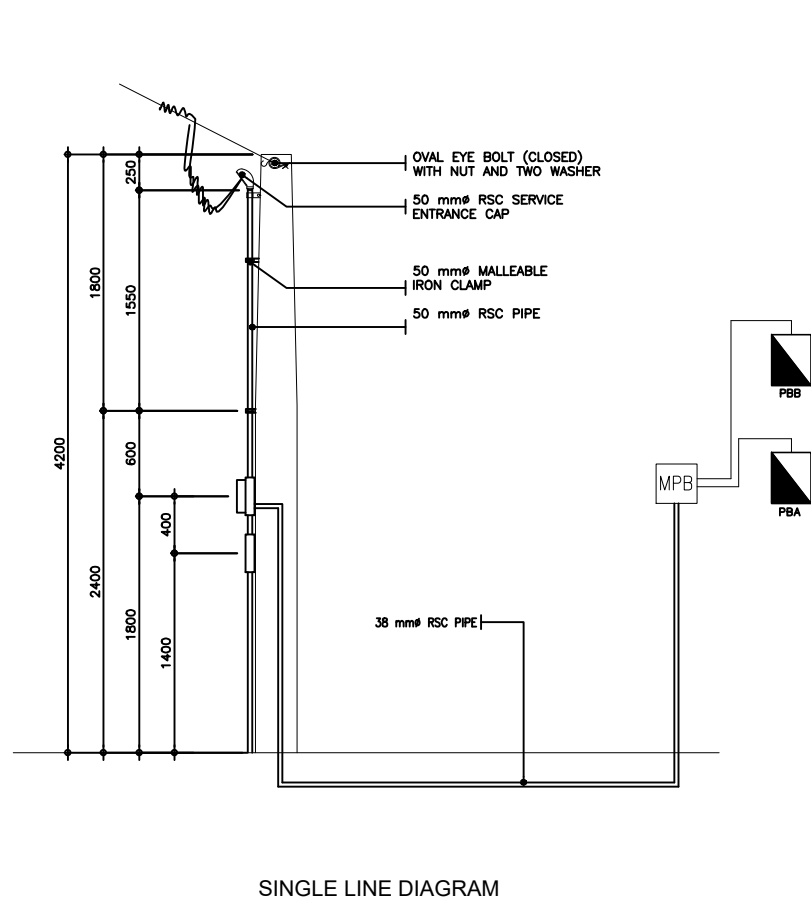
ELECTRICAL LEGEND



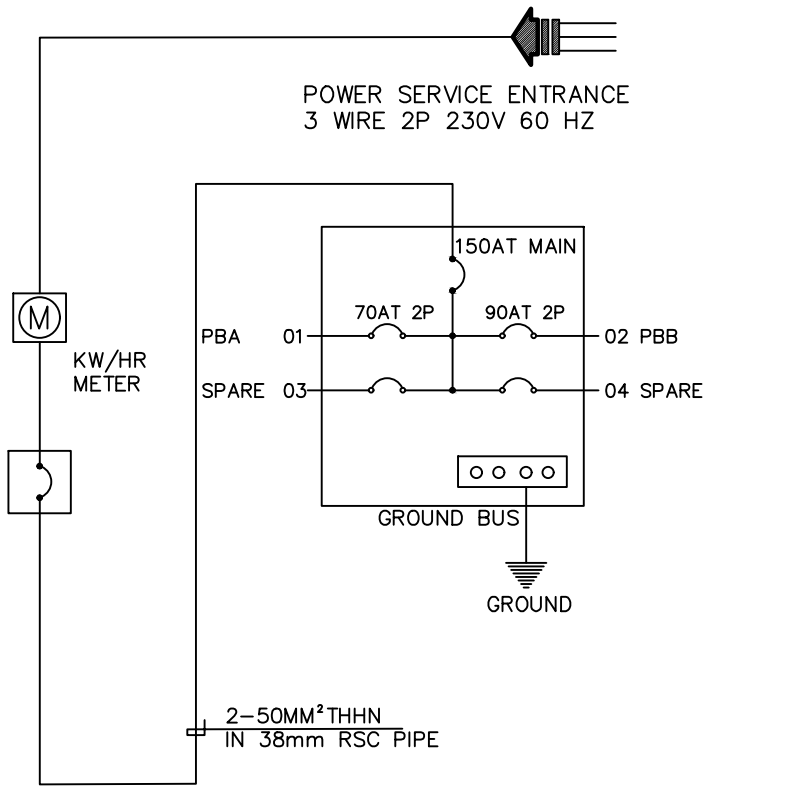
ABBREVIATIONS

#	NUMBER
Ω	OHM
Φ	PHASE
A	AMPERES
AC	ALTERNATING CURRENT
A/C	AIR CONDITIONING
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
ATS	AUTOMATIC TRANSFER SWITCH
ATC	AUTOMATIC TEMPERATURE CONTROL
AWG	AMERICAN WIRE GAUGE
BTU	BRITISH THERMAL UNITS
C	CONDUIT
CATV	CABLE TELEVISION OR COMMUNITY ANTENNAE TELEVISION
CB	CRITICAL BRANCH CIRCUIT BREAKER
C/B	CIRCUIT BREAKER
CBM	CERTIFIED BALLAST MANUFACTURER
CCT	CIRCUIT (ALSO: CIR, CKT)
CCTV	CLOSED CIRCUIT TELEVISION
CD	CANDELA
CIR	CIRCUIT (ALSO: CCT, CKT)
CKT	CIRCUIT (ALSO: CCT, CIR)
CLF	CURRENT LIMITING FUSE
CPT	CONTROL POWER TRANSFORMER
CT	CURRENT TRANSFORMER
CU	COPPER
DB	DECIBEL
DC	DIRECT CURRENT
DIA	DIAMETER
EB	EQUIPMENT BRANCH
EC	ELECTRICAL CODE OR ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
ELEV	ELEVATOR
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EP	EMERGENCY POWER
EPO	EMERGENCY POWER OFF (BUTTON OR SWITCH)
EW	ELECTRIC WATER COOLER
FA	FIRE ALARM
FAA	FIRE ALARM ANNUNCIATOR
FLA	FULL LOAD AMPERES
FMC	FLEXIBLE METAL CONDUIT
G	GROUND
GFICI, GFI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
GRMC	GALVANIZED RIGID METAL CONDUIT
HOA	HAND-OFF-AUTOMATIC SWITCH
HVAC	HEATING, VENTILATION, AIR CONDITIONING
HZ	HERTZ
IEE	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
INT	INTERLOCK
KCMIL	THOUSAND CIRCULAR MILS
KVA	KILOVOLT-AMPERES
KVAR	KILOVOLT-AMPERES REACTIVE
LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT
LTG	LIGHTING
LRA	LOCK ROTOR AMPS
MC	METAL CLAD CABLE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTION
MI	MINERAL INSULATED
MLO	MAIN LUGS ONLY
MW	MEGAWATT
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NL	NIGHT LIGHT
NO	NORMALLY OPEN OR NUMBER
PRL	PUSH BUTTON OR PANIC BUTTON OR PULL BOX
PWR	POWER
PT	POTENTIAL TRANSFORMER
QTY	QUANTITY
REQ	REQUIRED
RMC	RIGID METAL CONDUIT
RMS	ROOT MEAN SQUARED
RNC	RIGID NON-METALLIC CONDUIT
RIS	REMOTE TEST STATION
RTU	ROOF TOP UNIT
ST	SHUNT TRIP
SW	SWITCH
SYM	SYMMETRICAL
TEL	TELEPHONE
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TMCB	THERMAL MAGNETIC CIRCUIT BREAKER
UG	UNDER GROUND
UL	UNDERWRITERS LABORATORY
VA	VOLT-AMPERE
VT	VOLTAGE TRANSFORMER
W	WATT OR WIRE
WH	WATER HEATER
WP	WEATHER PROOF
XFMR	TRANSFORMER

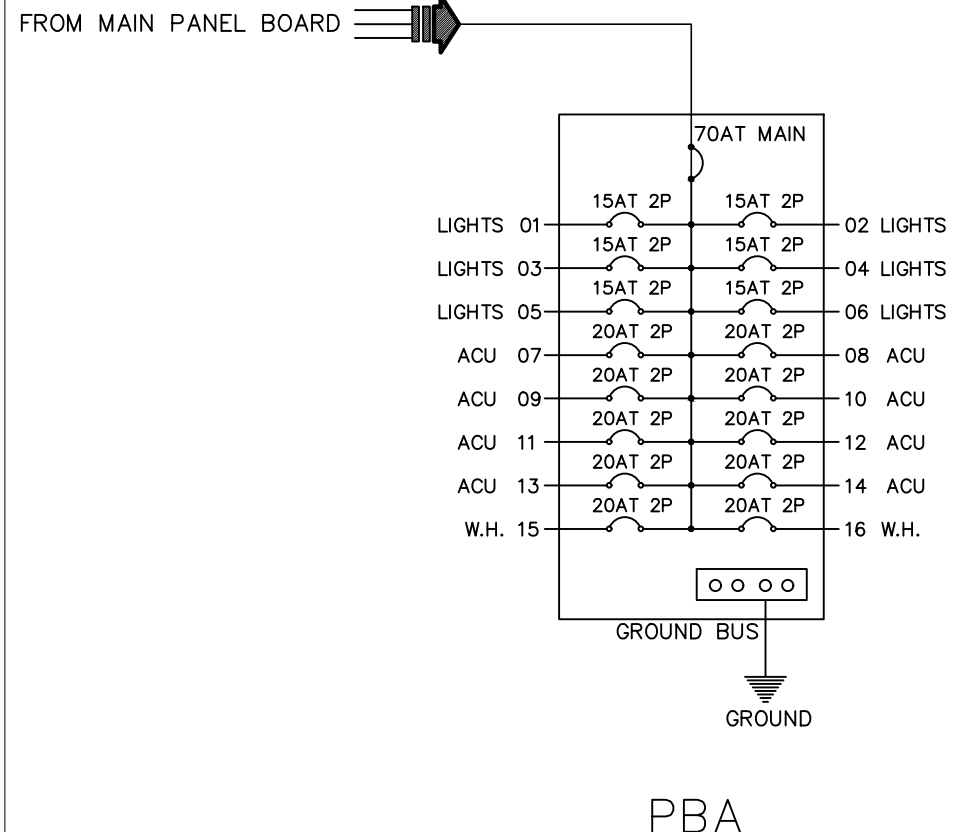
SERVICE ENTRANCE ELEVATION



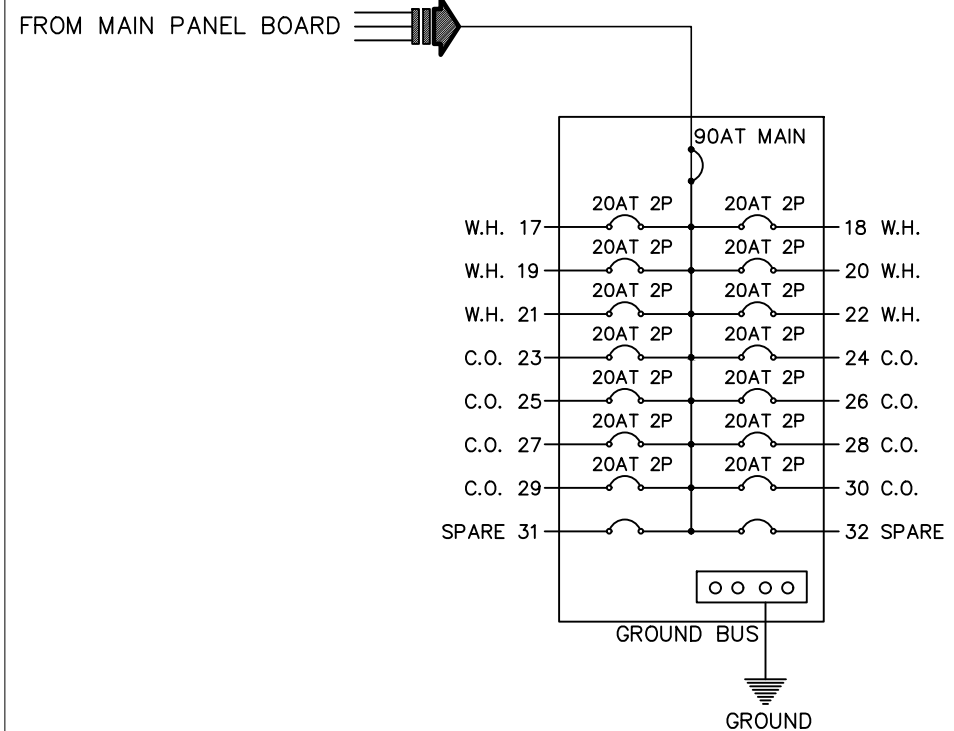
SINGLE LINE DIAGRAM



MAIN PB



PBA



PBB

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DATE	DESCRIPTION/REMARKS	BY



SCHEDULE OF LOADS AND CALCULATION

CIRCUIT NO.	LOAD DESCRIPTION	NO. OF		VOLTS AMPS.	VOLTS	AMPERE LOAD	CB RATING		NO. & SIZE OF WIRE THHN	SIZE OF CONDUIT
		L.O.	C.O.				AT	POLE		
LP 01	LIGHTING	11 -DL		330	230	1.44	15	2	2 - 3.5mm ² THHN	15mmØ
LP 02	LIGHTING	11 -DL		330	230	1.44	15	2	2 - 3.5mm ² THHN	15mmØ
LP 03	LIGHTING	10 -DL		300	230	1.31	15	2	2 - 3.5mm ² THHN	15mmØ
LP 04	LIGHTING	10 -DL		300						
		2 -EF		240	230	2.35	15	2	2 - 3.5mm ² THHN	15mmØ
LP 05	LIGHTING	15 -DL		450						
		3 -EF		360	230	3.53	15	2	2 - 3.5mm ² THHN	15mmØ
LP 06	LIGHTING	15 -DL		450						
		3 -EF		360	230	3.53	15	2	2 - 3.5mm ² THHN	15mmØ
PP 07	ACU OUTLET		1	750	230	3.27	20	2	2 - 5.5mm ² THHN	20mmØ
PP 08	ACU OUTLET		1	750	230	3.27	20	2	2 - 5.5mm ² THHN	20mmØ
PP 09	ACU OUTLET		1	750	230	3.27	20	2	2 - 5.5mm ² THHN	20mmØ
PP 10	ACU OUTLET		1	750	230	3.27	20	2	2 - 5.5mm ² THHN	20mmØ
PP 11	ACU OUTLET		1	750	230	3.27	20	2	2 - 5.5mm ² THHN	20mmØ
PP 12	ACU OUTLET		1	750	230	3.27	20	2	2 - 5.5mm ² THHN	20mmØ
PP 13	ACU OUTLET		1	750	230	3.27	20	2	2 - 5.5mm ² THHN	20mmØ
PP 14	ACU OUTLET		1	750	230	3.27	20	2	2 - 5.5mm ² THHN	20mmØ
PP 15	WATER HEATER		1	3000	230	13.05	20	2	2 - 5.5mm ² THHN	20mmØ
PP 16	WATER HEATER		1	3000	230	13.05	20	2	2 - 5.5mm ² THHN	20mmØ

LOAD COMPUTATION	USE:
FL= (LOAD /230) x (80% DEMAND FACTOR)	70 A 70A MAIN BREAKER
FL= 65.74 x (80% DEMAND FACTOR)	2 - 22mm ² THHN
FL= 52.60 A	25mmØ conduit

SCHEDULE OF LOADS AND CALCULATION

CIRCUIT NO.	LOAD DESCRIPTION	NO. OF		VOLTS AMPS.	VOLTS	AMPERE LOAD	CB RATING		NO. & SIZE OF WIRE THHN	SIZE OF CONDUIT
		L.O.	C.O.				AT	POLE		
PP 17	WATER HEATER		1	3000	230	13.05	20	2	2 - 5.5mm ² THHN	20mmØ
PP 18	WATER HEATER		1	3000	230	13.05	20	2	2 - 5.5mm ² THHN	20mmØ
PP 19	WATER HEATER		1	3000	230	13.05	20	2	2 - 5.5mm ² THHN	20mmØ
PP 20	WATER HEATER		1	3000	230	13.05	20	2	2 - 5.5mm ² THHN	20mmØ
PP 21	WATER HEATER		1	3000	230	13.05	20	2	2 - 5.5mm ² THHN	20mmØ
PP 22	WATER HEATER		1	3000	230	13.05	20	2	2 - 5.5mm ² THHN	20mmØ
PP 23	CONVENIENCE OUTLET		3	540	230	2.35	20	2	2 - 3.5mm ² THHN	15mmØ
PP 24	CONVENIENCE OUTLET		3	540	230	2.35	20	2	2 - 3.5mm ² THHN	15mmØ
PP 25	CONVENIENCE OUTLET		3	540	230	2.35	20	2	2 - 3.5mm ² THHN	15mmØ
PP 26	CONVENIENCE OUTLET		3	540	230	2.35	20	2	2 - 3.5mm ² THHN	15mmØ
PP 27	CONVENIENCE OUTLET		3	540	230	2.35	20	2	2 - 3.5mm ² THHN	15mmØ
PP 28	CONVENIENCE OUTLET		3	540	230	2.35	20	2	2 - 3.5mm ² THHN	15mmØ
PP 29	CONVENIENCE OUTLET		3	540	230	2.35	20	2	2 - 3.5mm ² THHN	15mmØ
PP 30	CONVENIENCE OUTLET		3	540	230	2.35	20	2	2 - 3.5mm ² THHN	15mmØ

LOAD COMPUTATION	USE:
FL= (LOAD /230) x (80% DEMAND FACTOR)	90 A 90A MAIN BREAKER
FL= 97.01 x (80% DEMAND FACTOR)	2 - 30mm ² THHN
FL= 77.64 A	32mmØ conduit

SCHEDULE OF LOADS AND CALCULATION

CIRCUIT NO.	LOAD DESCRIPTION	NO. OF		VOLTS AMPS.	VOLTS	AMPERE LOAD (80%)	CB RATING		NO. & SIZE OF WIRE THHN	SIZE OF CONDUIT
		L.O.	C.O.				AT	POLE		
PBA	PANEL BOARD A		1	15120	230	52.59	70	2	2 - 22mm ² THHN	25mmØ
PBB	PANEL BOARD B		1	22320	230	77.63	90	2	2 - 30mm ² THHN	32mmØ

LOAD COMPUTATION	USE:
FL= (LOAD /230) x (80% DEMAND FACTOR)	150A MAIN BREAKER
FL= 162.80 x (80% DEMAND FACTOR)	2 - 50mm ² FEEDER LINE THHN
FL= 130.23 A	

PROJECT NAME :

CONSTRUCTION OF ISOLATION FACILITY

LOCATION :

WANGAL-MOTORPOOL ROAD,
LA TRINIDAD, BENGUET

SHEET CONTENT :

AS SHOWN

APPROVED BY

LEO L. QUINTILLA

OIC - Regional Director

CONFORMED BY

ENRIQUE H. GASCON JR.

OIC-Assistant Regional Director for Administration

CHECKED BY

RINA CLAIRE L. REYES

OIC Chief, Administrative Division

PREPARED BY

BERNARD L. ANGAYON

AO I, AS-BGMS

PROJECT/TA No:

DATE SUBMITTED:

DRAWING STATUS

DATE	DESCRIPTION/REMARKS	BY

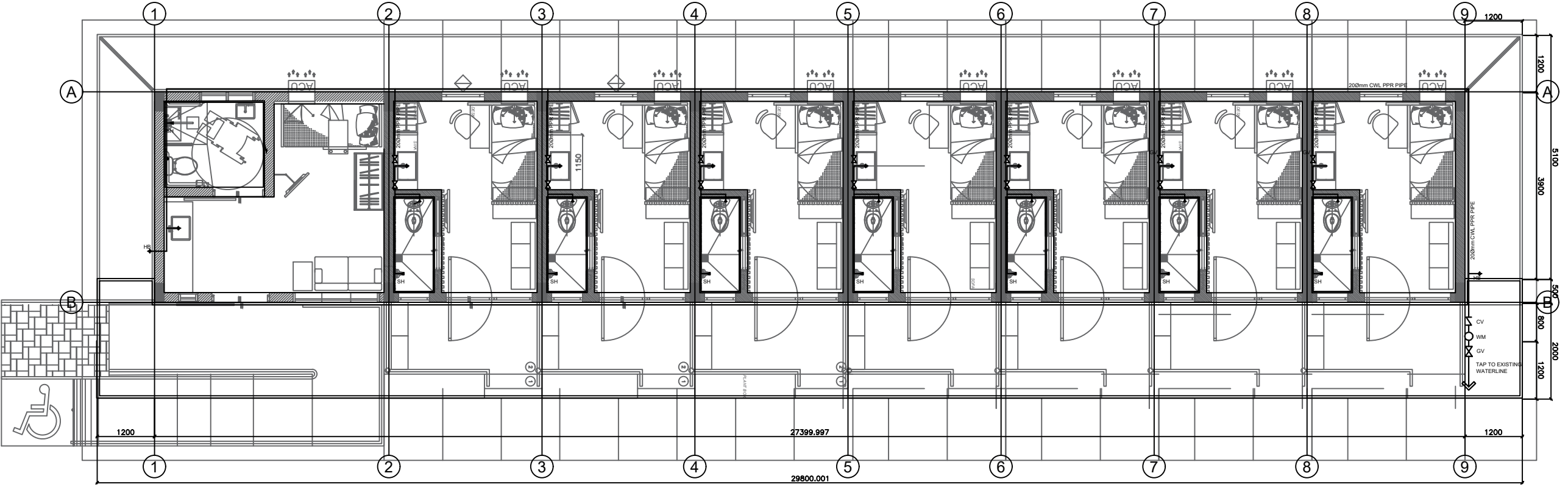
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E 4 / 4

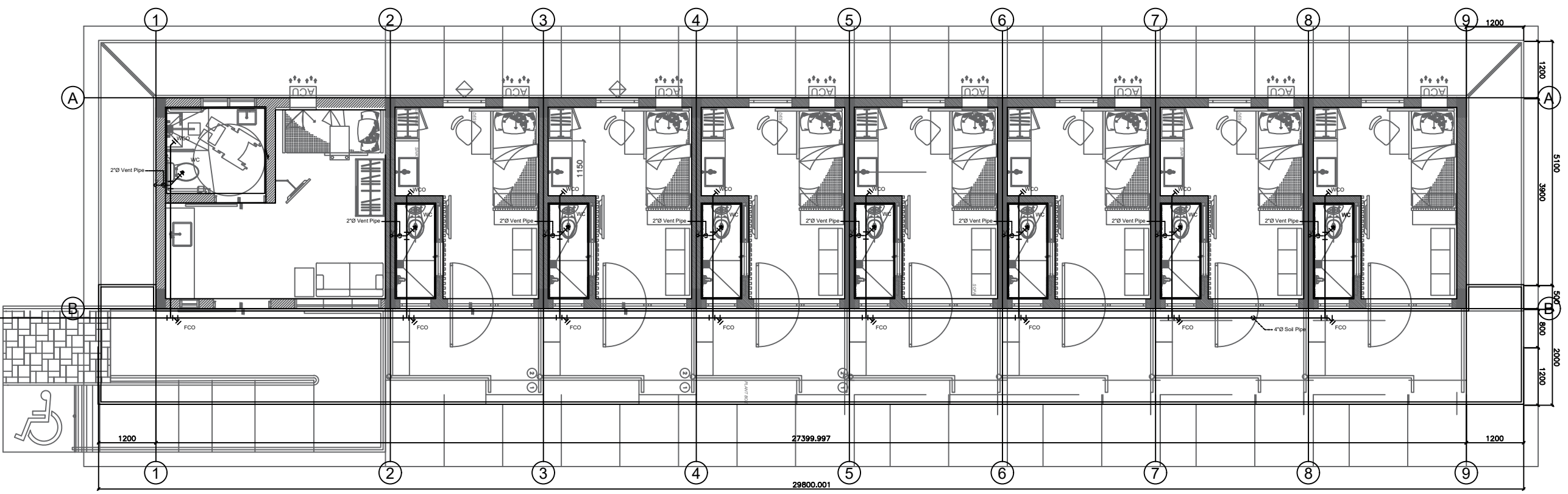
A3
SIZE



DATE	DESCRIPTION/REMARKS	BY



1 PROPOSED WATERLINE LAYOUT
P-1 SCALE: 1:100 MTS



2 PROPOSED SOIL PIPE LAYOUT
P-1 SCALE: 1:100 MTS



PROJECT NAME :

CONSTRUCTION OF ISOLATION FACILITY

LOCATION :

WANGAL-MOTORPOOL ROAD,
LA TRINIDAD, BENGUET

SHEET CONTENT :

AS SHOWN

APPROVED BY

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OIC - Regional Director

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OIC Chief, Administrative Division

PREPARED BY

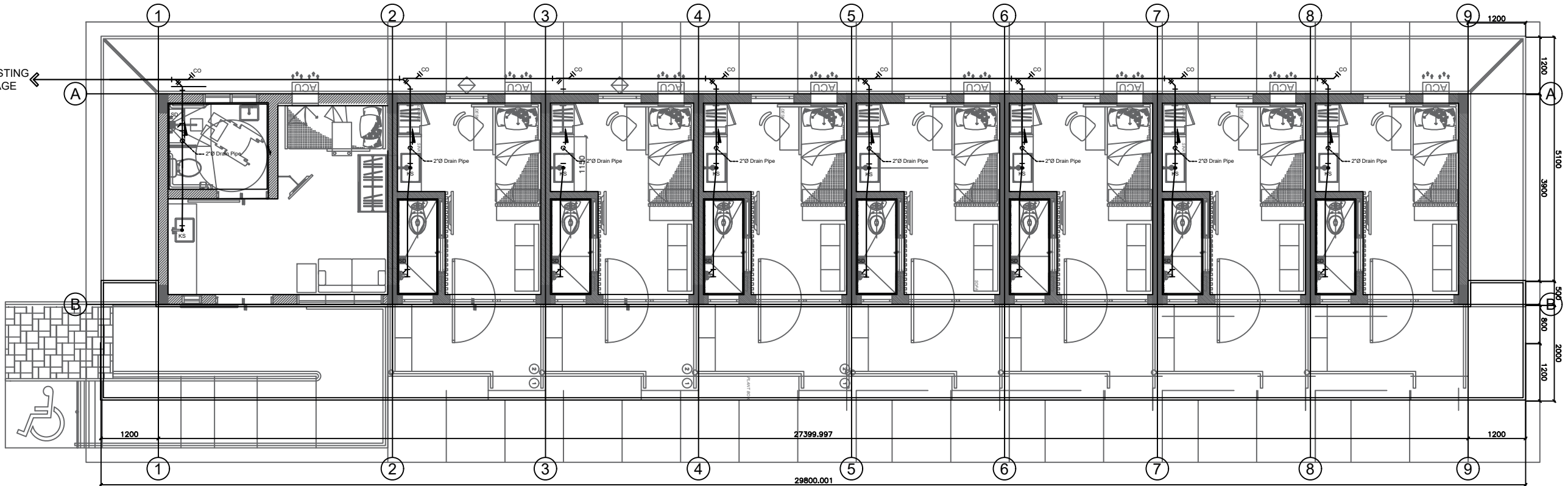
BERNARD L. ANGAYON
AO I, AS-BGMS

PROJECT/TA No:

DATE SUBMITTED:

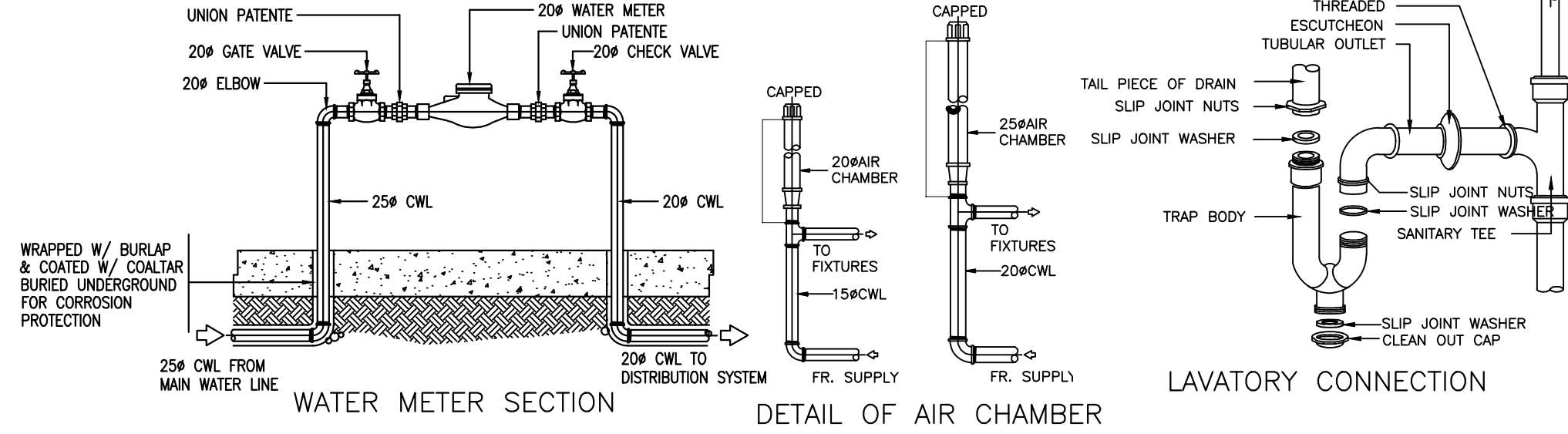
DRAWING STATUS

DATE	DESCRIPTION/REMARKS	BY



PROPOSED **1 WASTEPIPE LAYOUT**

P-2 SCALE: 1:100 MTS



PROPOSED **2 WASTEPIPE LAYOUT**

P-2 SCALE: 1:100 MTS



PROJECT NAME :

CONSTRUCTION OF ISOLATION FACILITY

LOCATION :

WANGAL-MOTORPOOL ROAD,
LA TRINIDAD, BENGUET

SHEET CONTENT :

AS SHOWN

APPROVED BY

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AO I, AS-BGMS

PROJECT/TA No.:

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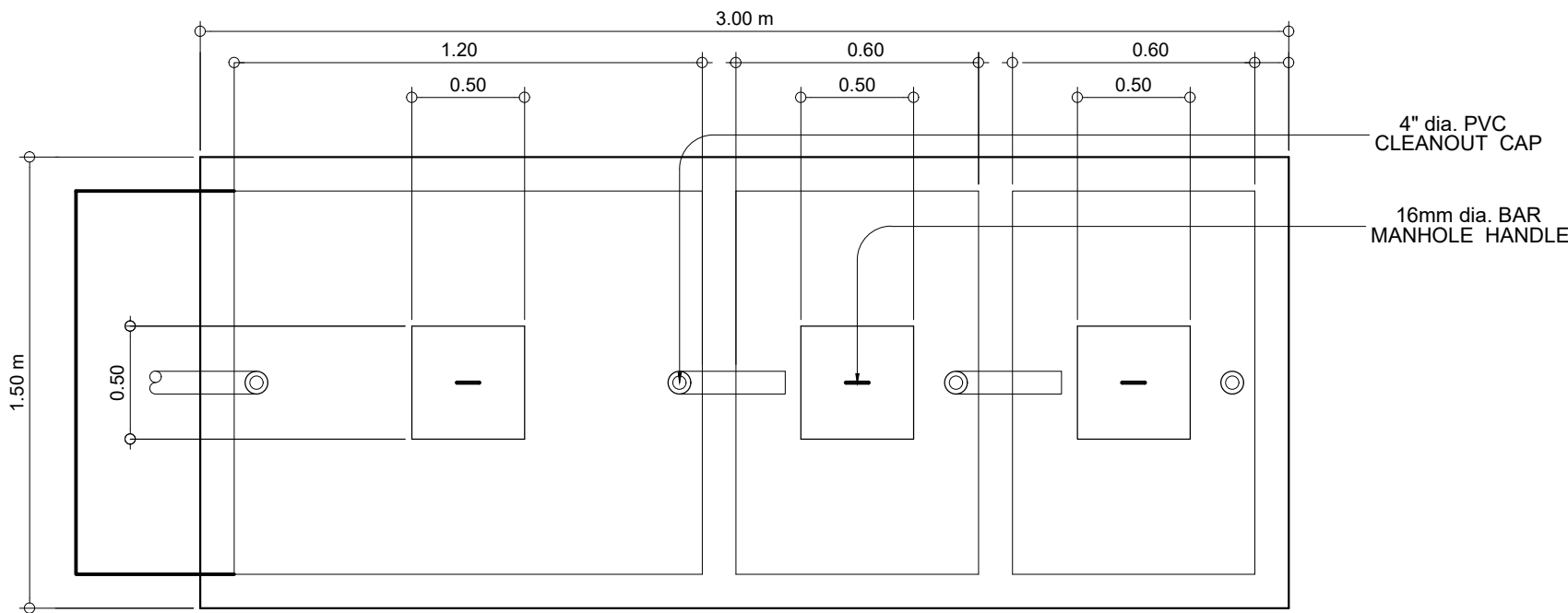
DRAWING STATUS

DATE	DESCRIPTION/REMARKS	BY

SHEET NUMBER

P 4 / 4

A3
SIZE



PLAN

SEPTIC TANK VOLUME COMPUTATION

Data:

- a. Maximum no. of occupants of the building = 10 persons
- b. Per Capita Sewage Consumption (PCSC) = 25 gal / day-person
- c. Detention period (T_D) for main digestion tank = 1 day or 24 hrs
- d. Detention period (T_D) for 2nd and 3rd digestion tank = 1/2 day
- e. Water Depth (D) = 1.00 m
- f. Width (W) = 1.2 m
- g. Bottom Slope of 2%

Computation:

Dimension of the the Main Digestion Tank:

$$\text{Liquid Waste Volume (V)} = \text{PCSC} \times \text{Occupants} \times \text{Day}$$

$$V = 25 \frac{\text{gal}}{\text{person-day}} \times \frac{3.785 \text{ L}}{1 \text{ gal}} \times \frac{1 \text{ m}^3}{1000 \text{ L}} \times 10 \text{ persons} \times 1 \text{ day}$$

$$V = 0.95 \text{ m}^3$$

$$L = \frac{\text{Volume}}{W \times D} = \frac{0.95 \text{ m}^3}{1.2 \text{ m} \times 1.00 \text{ m}} = 0.79 \text{ m}$$

Say : L = 1.20 m

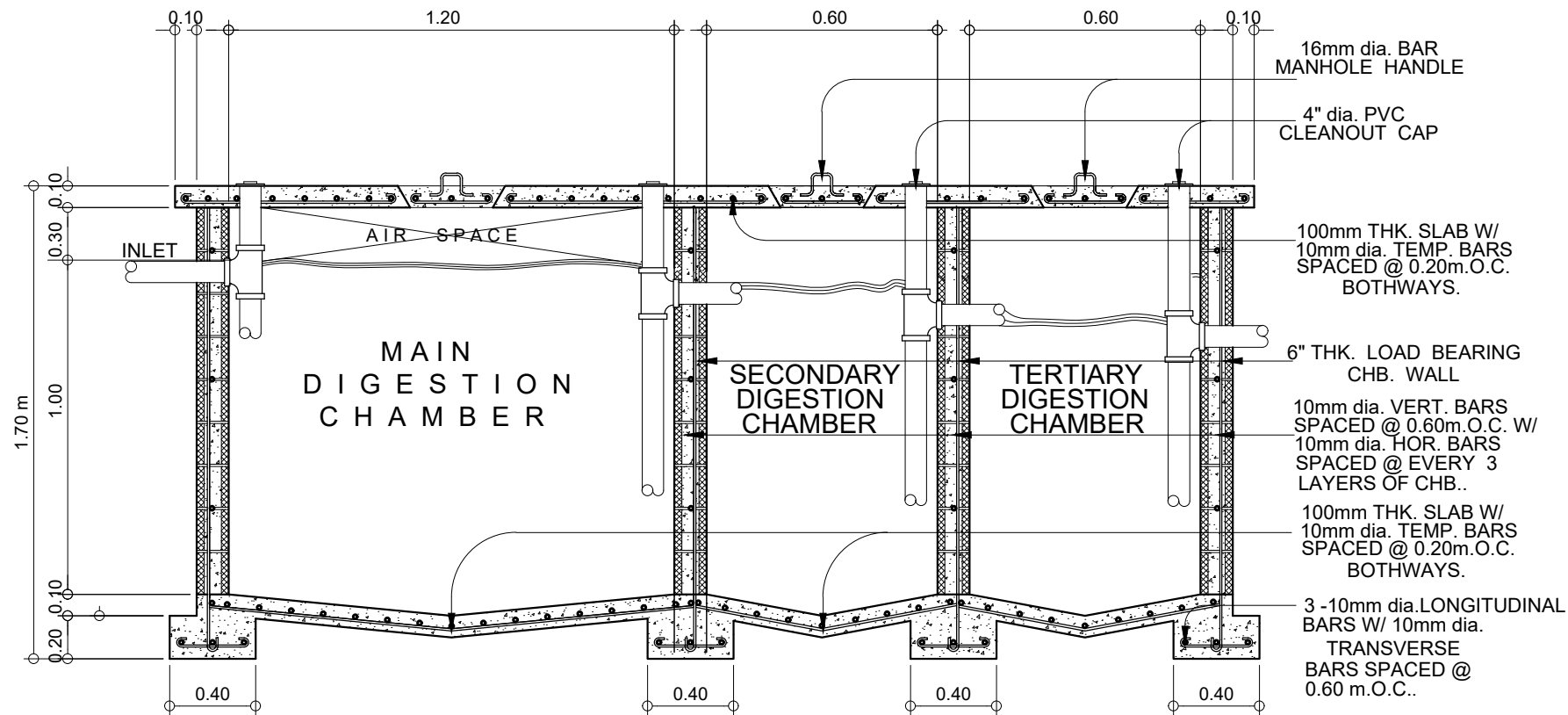
$$\text{Liquid Waste Volume (V)} = \text{PCSC} \times \text{Occupants} \times \text{Day}$$

$$V = 25 \frac{\text{gal}}{\text{person-day}} \times \frac{3.785 \text{ L}}{1 \text{ gal}} \times \frac{1 \text{ m}^3}{1000 \text{ L}} \times 10 \text{ persons} \times 1/2 \text{ day}$$

$$V = 0.475 \text{ m}^3$$

$$L = \frac{\text{Volume}}{W \times D} = \frac{0.475 \text{ m}^3}{1.2 \text{ m} \times 1.00 \text{ m}} = 0.40 \text{ m}$$

Say : L = 0.60 m



SECTION



PROJECT NAME :

CONSTRUCTION OF ISOLATION FACILITY

LOCATION :

WANGAL-MOTORPOOL ROAD, LA TRINIDAD, BENGUET

SHEET CONTENT :

AS SHOWN

APPROVED BY

LEO L. QUINTILLA
OIC - Regional Director

CONFORMED BY

ENRIQUE H. GASCON JR.
OIC-Assistant Regional Director for Administration

CHECKED BY

RINA CLAIRE L. REYES
OIC Chief, Administrative Division

PREPARED BY

BERNARD L. ANGAYON
AO I, AS-BGMS

PROJECT/TA No:

DATE SUBMITTED:

DRAWING STATUS

DATE	DESCRIPTION/REMARKS	BY

SHEET NUMBER

S 1/5 A3 SIZE

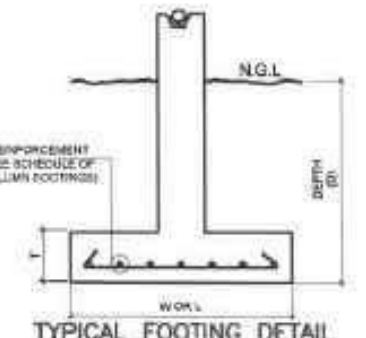
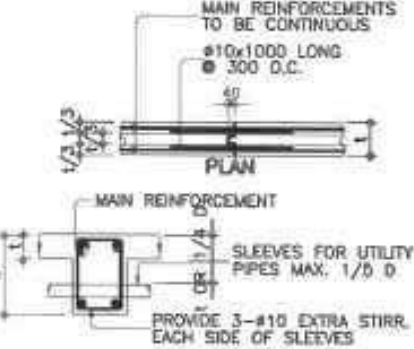
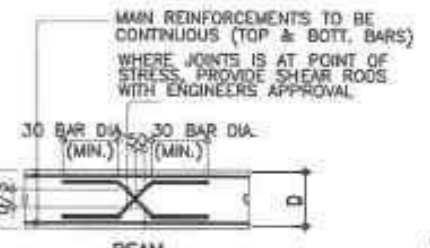
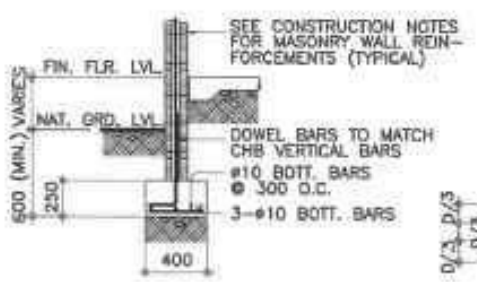
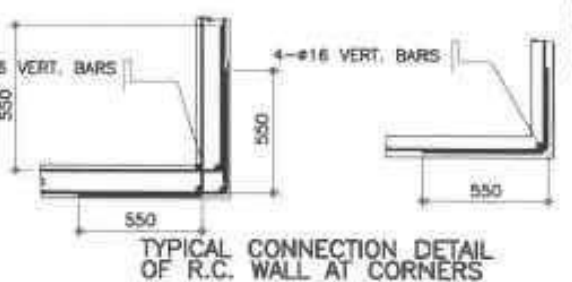
TABLE OF LAP SPLICE & ANCHORAGE LENGTH

BAR SIZES (MM)	LAP SPLICES LENGTH		ANCHORAGE LENGTH (M)
	TYPE "A"	TYPE "B"	
#10	0.40	0.30	0.60
#12	0.45	0.35	0.60
#16	0.61	0.40	0.60
#20	0.76	0.56	0.60
#25	1.10	0.90	0.68
#29	1.40	1.20	0.88
#32	1.90	1.40	1.12
#36	2.41	1.84	1.43

NOTES:
1. TYPE "A" BUNDLED BARS
TYPE "B" INDIVIDUAL BARS
2. NOT MORE THAN 33% OF THE BARS SHALL BE SPLICED WITHIN THE REQUIRED LAP LENGTH

NOTES:

1. YIELD STRESS OF HOOPS = 40 KSI
2. D = USE MAXIMUM COLUMN DIMENSION, 1/8 CLEAR HEIGHT OR 18" (450mm) WHICHEVER IS GREATER.
3. NUMBER OF HOOP TIES SAME AS PER COLUMN TIES SCHEDULE.
4. ALL CONCRETE REINFORCEMENT DETAIL SHOULD BE DONE IN ACCORDANCE WITH ACI DETAILING MANUAL 1980 PUB SP-56

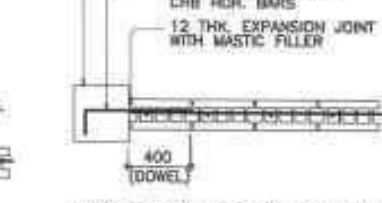
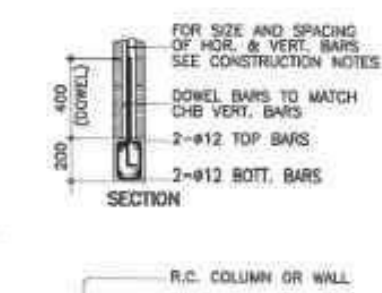
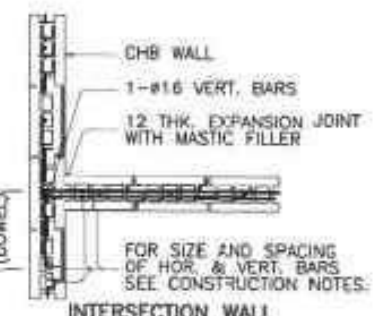
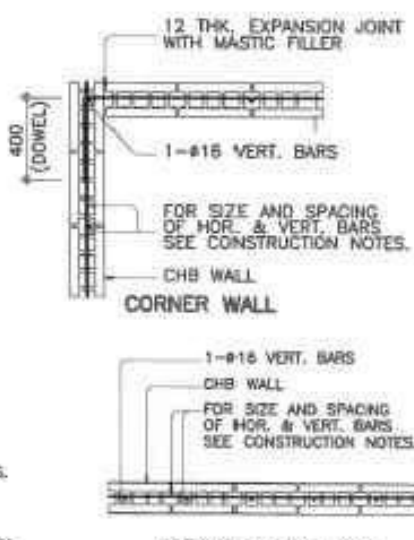
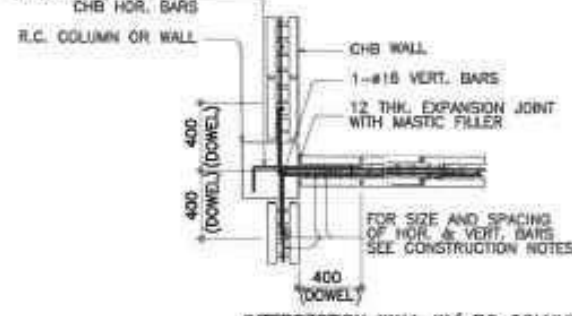
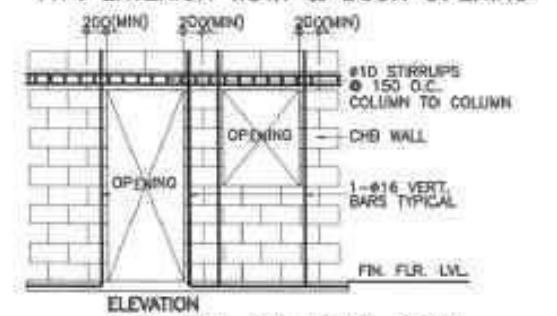
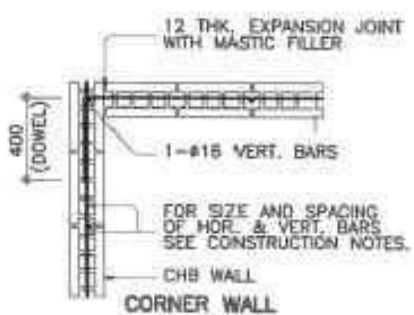
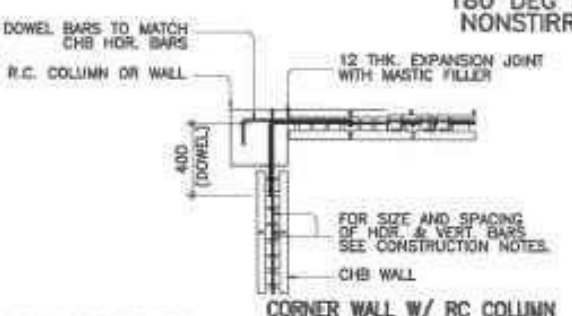
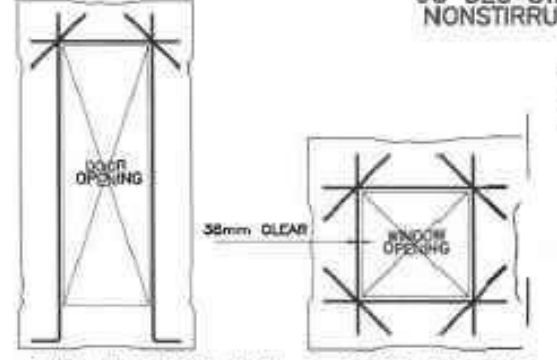


BAR DIAMETER Dbar	MINIMUM BEND RADIUS R	EXTENSION LE
10# TO 25#	30bar	120bar
28# TO 36#	40bar	120bar

90 DEG STANDARD HOOK FOR NONSTIRRUP REINFORCEMENT

BAR DIAMETER Dbar	MINIMUM BEND DIAMETER D	EXTENSION LE
10# TO 25#	80bar	40bar ≥ 80
28# TO 36#	80bar	40bar ≥ 80

180 DEG STANDARD HOOK FOR NONSTIRRUP REINFORCEMENT



A. GENERAL CONSTRUCTION NOTES

1. CONSTRUCTION NOTES AND TYPICAL DETAILS APPLY TO ALL DRAWINGS UNLESS OTHERWISE SHOWN OR NOTED MODIFY TYPICAL DETAILS AS DIRECTED TO MEET SPECIAL CONDITIONS.
2. SHOP DRAWINGS WITH ERECTION AND PLACING DIAGRAMS OF ALL STRUCTURAL STEELS, MISCELLANEOUS IRON, PRE-CAST CONCRETE ETC. SHALL BE SUBMITTED FOR ENGINEERS APPROVAL BEFORE FABRICATION.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ALL WORK IS TO BEGIN CHECK WITH MECHANICAL AND ELECTRICAL CONTRACTORS FOR CONDUITS PIPE SLEEVES, ETC., TO BE EMBEDDED IN CONCRETE.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SHORING & BRACINGS OF THE STRUCTURE FOR ALL LOADS THAT MAYBE IMPOSED DURING CONSTRUCTION.

B. CONCRETE & REINFORCEMENT

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH THE LATEST BUILDING CODE OF AMERICAN CONCRETE INSTITUTE (ACI-318).
 2. ALL CONCRETE SHALL DEVELOP A MIN. COMPRESSIVE STRENGTH AT THE END OF TWENTY EIGHT (28) DAYS W/ CORRESPONDING MAXIMUM SIZE AGGREGATE & SLUMPS AS FOLLOWS.
- | LOCATION | 28 DAYS STRENGTH | MAX. SIZE AGGREGATE | MAX. SLUMP |
|--|------------------|---------------------|----------------|
| ALL OTHERS, INCLUDING SUSPENDED SLABS, | 4000 PSI | 3/4 IN. (19 MM) | 4 IN. (100 MM) |
| COLUMNS | 4000 PSI | 3/4 IN. (19 MM) | 4 IN. (100 MM) |
| BEAMS, SLABS | 4000 PSI | 3/4 IN. (19 MM) | 4 IN. (100 MM) |
| SLAB ON GRADE | 2500 PSI | 3/4 IN. (19 MM) | 4 IN. (100 MM) |
3. ALL REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 40 FOR DIAMETER 18 & SMALLER BARS AND GRADE 40 FOR DIA. 20 AND LARGER BARS.
 4. IN GENERAL THE LATEST EDITION OF ACI-315, MANUAL OF STANDARD PRACTICE DETAILING REINFORCED CONCRETE STRUCTURES SHALL BE ADHERED TO UNLESS OTHERWISE SHOWN OR NOTED.
 5. MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS.
- | | |
|--|--------------------------------|
| SLAB ON GRADE | 1 1/2 IN. (38 MM) |
| WALLS ABOVE GRADE | 1 IN. (25 MM) |
| BEAM STIRRUPS AND COLUMN TIES WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS WHERE CONCRETE IS DEPOSITED DIRECTLY AGAINST EARTH | 2 IN. (50 MM)
3 IN. (75 MM) |

6. SPLICES SHALL BE SECURELY WIRDED TOGETHER & SHALL LAP OR EXTEND IN ACCORDANCE W/ TABLE 1 (TABLE OF LAP SPLICE & ANCHORAGE LENGTH) UNLESS OTHERWISE SHOWN ON DRAWINGS. SPLICES SHALL BE STAGGERED WHENEVER POSSIBLE.
 7. ALL ANCHOR BOLTS, DOWELS, AND OTHER INSERTS, SHALL BE PROPERLY POSITIONED & SECURED IN PLACE PRIOR TO PLACING OF CONCRETE.
 8. CONTRACTOR SHALL NOTE AND PROVIDE ALL MISCELLANEOUS CURBS, SILLS, STOOLS, EQUIPMENT'S AND MECHANICAL BASES THAT ARE REQUIRED BY THE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS.
 9. ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF SEVEN CONSECUTIVE DAYS IMMEDIATELY AFTER POURING BY THE USE OF WET BURLAP FOG SPRAYING, CURING COMPOUNDS OR OTHER APPROVED METHODS.
 10. STRIPPING OF FORMS AND SHORES:
- | | |
|---|---------|
| FOUNDATION | 24 HRS. |
| SUSPENDED SLAB EXCEPT WHEN ADDITIONAL LOADS ARE IMPOSED | 8 DAYS |
| WALLS | 18 HRS. |
| BEAMS | 14 DAYS |

C. MASONRY AND CONCRETE BLOCKS

1. ALL NON-LOAD BEARING TYPE CONCRETE BLOCKS SHALL HAVE A UNIT WEIGHT NOT TO EXCEED 80 PCF. FOR LOAD BEARING TYPE, TYPE CONCRETE BLOCKS, A MINIMUM COMPRESSIVE STRENGTH OF 6.50 MPa SHALL BE DEVELOPED.
 2. PROVIDE 1-#16 VERTICAL BARS AT CORNERS, INTERSECTIONS, END OF WALLS AND EACH SIDE OF OPENINGS.
 3. LINTEL BEAMS SHALL BEAR AT LEAST 8 INCHES (200 MM) ON EACH SIDE OF MASONRY WALL OPENING.
 4. WALL REINFORCEMENTS SHALL BE AS FOLLOWS.
- | WALL THICKNESS | VERTICAL REINFORCEMENT | HORIZONTAL REINFORCEMENT |
|----------------|------------------------|--------------------------|
| 8 IN. (200 MM) | #12 @ 400 MM | #10 @ 600 MM |
| 6 IN. (150 MM) | #10 @ 400 MM | #10 @ 600 MM |
| 4 IN. (100 MM) | #10 @ 400 MM | #10 @ 600 MM |
5. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 30 BAR DIAMETERS WHERE SPLICE DOWELS FROM FOOTING OR SLABS SHALL EXTEND INTO THE BLOCK WALL A MINIMUM OF 30 BAR DIAMETERS, AND DOWELS TO MATCH.
 6. ALL CELLS CONTAINING REINFORCING BARS OR INSERTS SHALL BE SOLIDLY FILLED WITH CONCRETE GROUT (REFER TO SPECIFICATIONS).

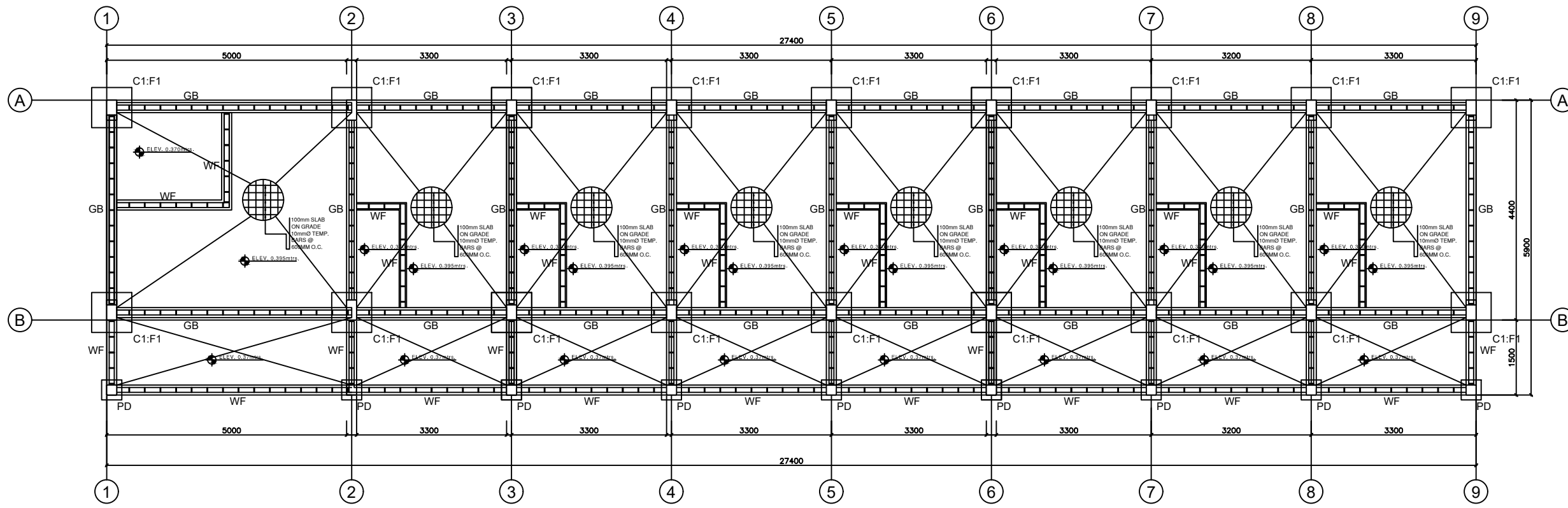
D. FOUNDATION

1. FOUNDATION DESIGN WAS BASED ON ASSUMED 3000 PSF.

1 GENERAL NOTES
S-1 SCALE:

DRAWING STATUS

DATE	DESCRIPTION/REMARKS	BY

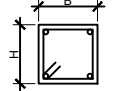


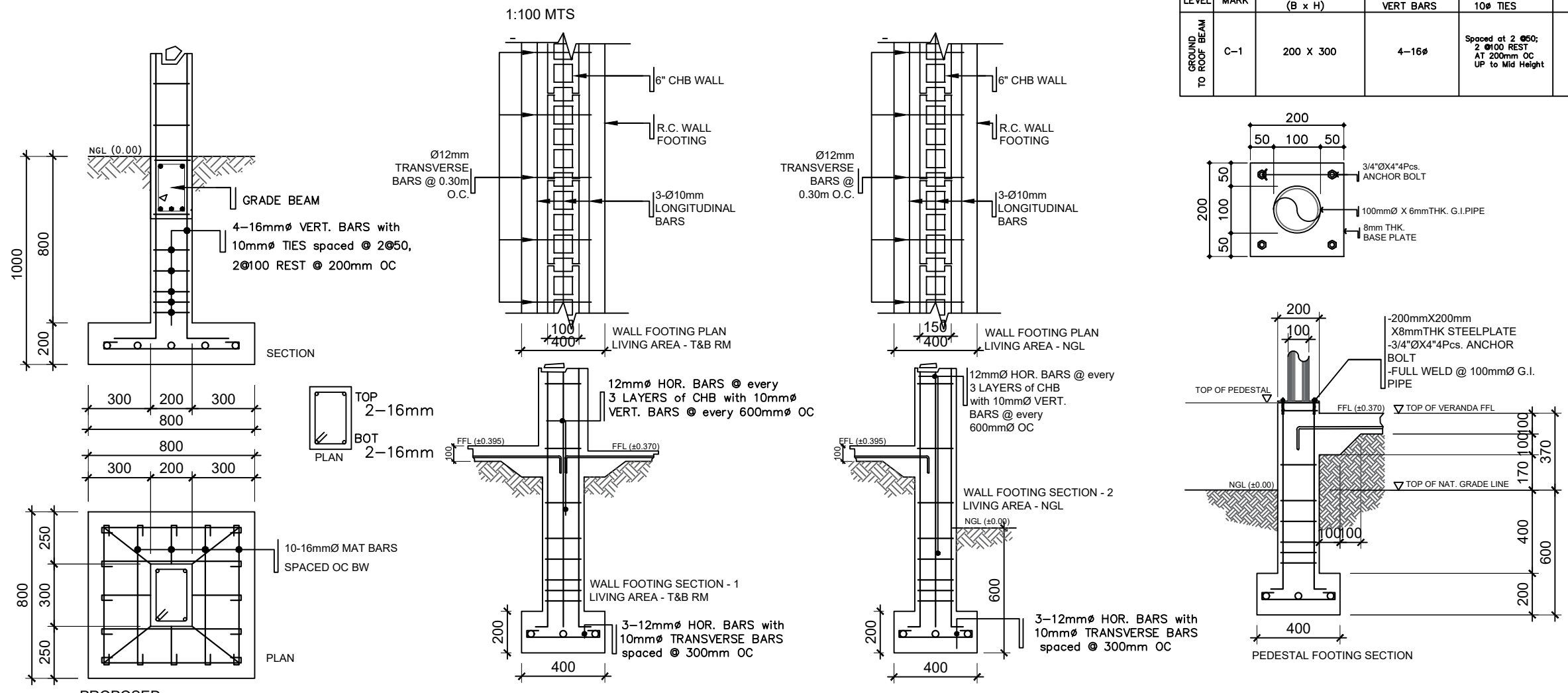
1 PROPOSED FOUNDATION PLAN
SCALE: _____

SCHEDULE OF COLUMN FOOTINGS

MARK	SIZE (MM) (L x W x T)	DEPTH (MM) (D)	REINFORCEMENT	
			TRANSVERSE	LONGITUDINAL
F-1	800 X 800 X 200	1000	5-16ø	5-16ø

SCHEDULE OF COLUMNS

LEVEL	MARK	SIZE (MM) (B x H)	REINFORCEMENT		SECTION
			VERT BARS	10ø TIES	
GROUND TO ROOF BEAM	C-1	200 X 300	4-16ø	Spaced at 2 @50; 2 @100 REST AT 200mm OC UP to Mid Height	

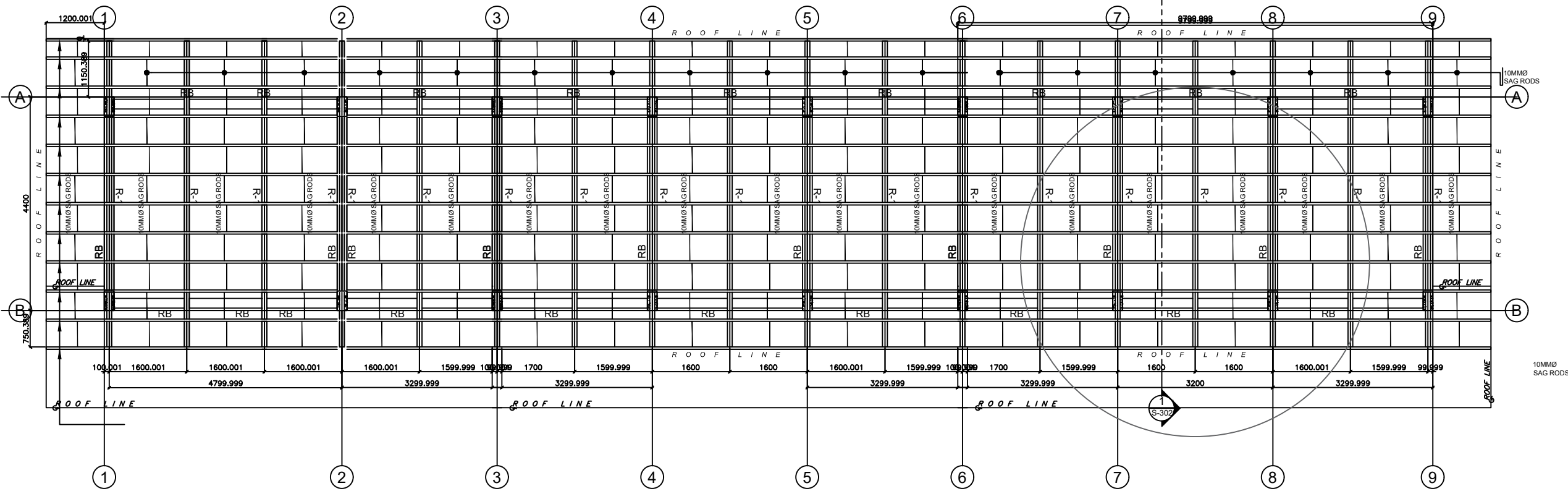


2 PROPOSED COLUMN DETAILS
SCALE: _____

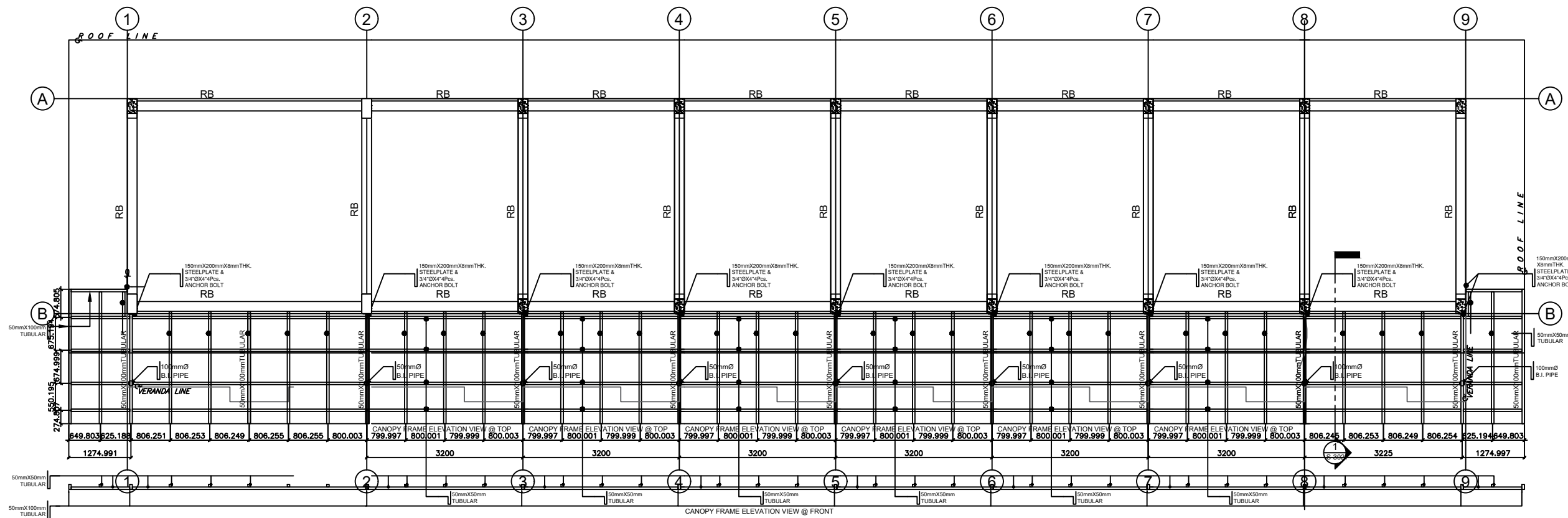
1:25 MTS



DATE	DESCRIPTION/REMARKS	BY



1 PROPOSED ROOF FRAMING PLAN 1
SCALE: 1:100 MTS



2 PROPOSED CANOPY FRAMING PLAN
SCALE: 1:100 MTS



PROJECT NAME :

CONSTRUCTION OF ISOLATION FACILITY

LOCATION :

WANGAL-MOTORPOOL ROAD,
LA TRINIDAD, BENGUET

SHEET CONTENT :

AS SHOWN

APPROVED BY

LEO L. QUINTILLA
OIC - Regional Director

CONFORMED BY

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CHECKED BY

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OIC Chief, Administrative Division

PREPARED BY

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AO I, AS-BGMS

PROJECT/TA No:

DATE SUBMITTED:

DRAWING STATUS

DATE	DESCRIPTION/REMARKS	BY

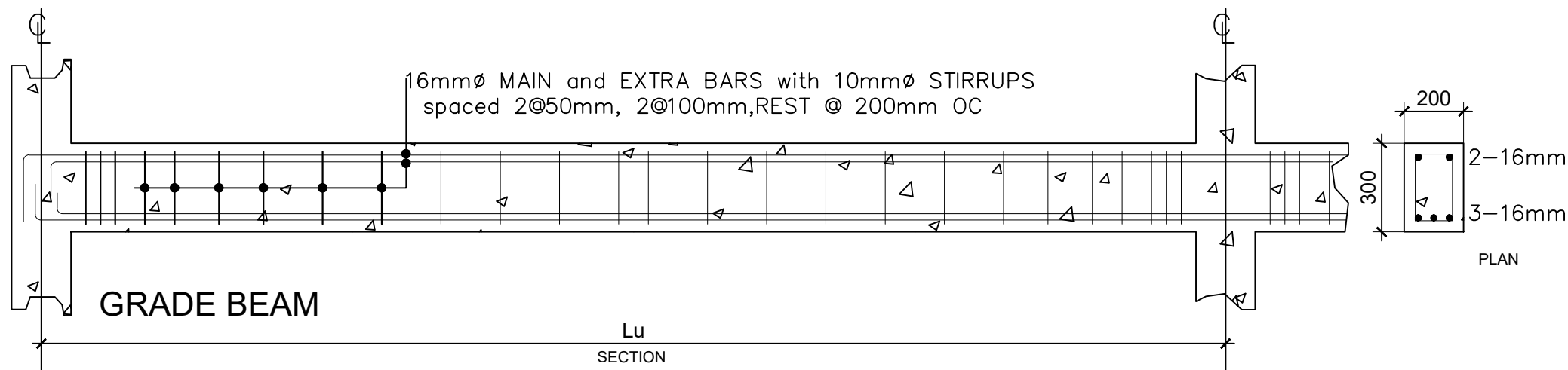
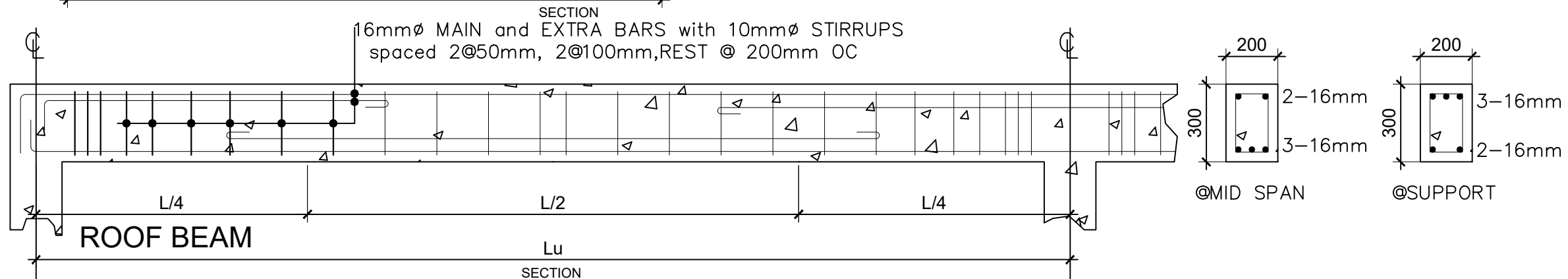
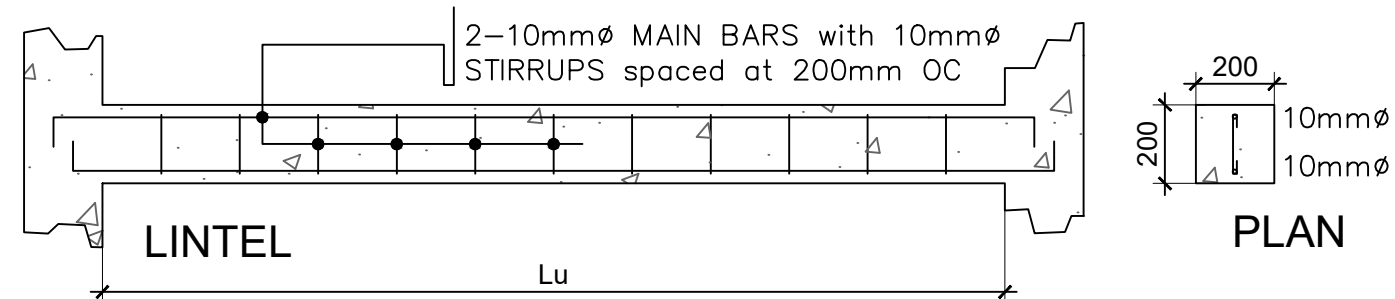
SHEET NUMBER

S 5 / 5

A3
SIZE

SCHEDULE OF BEAMS

MARK	SIZE (MM) (b x d)	REINFORCEMENT						10 ϕ STIRRUPS 2 @ 50, 2 @ 100, REST @ 200
		SUPPORT		MID-SPAN		CANTILEVER		
		TOP	BOT	TOP	BOT	TOP	BOT	
RB	200 X 300	SEE BEAM DETAILS						
GB	200 X 300	SEE BEAM DETAILS						



PROPOSED
1 BEAM DETAILS
S-5 SCALE: NTS

Contract Reference Number: _____

Name of Project: **CONSTRUCTION OF ISOLATION FACILITY**

Location of the Project: **Wangal Motorpool Road, La Trinidad, Benguet**

Standard Form Number SF-INFR-55

Revised on: August 11, 2004

BILL OF QUANTITIES

Columns 1, 2, 3, & 4 are to be filled up by the Procuring Entity				Columns 5 & 6 are to be filled by the bidders	
ITEM NO.	ITEM DESCRIPTION 2	UNIT 3	QTY. 4	UNIT PRICE (PESOS) 5	AMOUNT (PESOS) 6
1	GENERAL REQUIREMENTS	lot	1.00		
	Project Billboard & Safety Signages				
	Mobilization / Demobilization				
2	EARTHWORK	lot	1.00		
	Clearing and Grubbing				
	Structure Excavation				
	Backfill				
3	FORMWORKS AND SCAFFOLDINGS	sq.m.	183.84		
	Fabrication & Installation				
	Removal				
4	STRUCTURAL STEEL WORKS	lot	1.00		
	Roof Framing				
5	REINFORCING STEEL BARS	kgs	4,021.75		
	Fabrication & Installation				
6	STRUCTURAL CONCRETE	cu.m.	40.21		
7	MASONRY WORKS	sq.m.	380.45		
	Exterior Walls				
	Interior Walls				
8	ARCHITECTURAL WORKS	lot	1.00		
	Pipe and Tube Railings				
	Thermal and Moisture Protection				
	Roofing and Acc.				
	Doors and Windows w/ complete acc.				
	Finishes				
9	SANITARY WORKS	lot	1.00		
	Drainage System				
	Sewer System				
	Water Supply				
	Plumbing Fixtures and Accessories				
	Plumbing Tanks				
10	ELECTRICAL WORKS	lot	1.00		
	Wires and Cables				
	Conduits				
	Lighting Fixtures and Switches				
	Device, Plates and Utilities				
	Inverter Type Aircon, 1HP				
	Panel Boards				
11	CONSTRUCTION SAFETY AND HEALTH	lot	1.00		
TOTAL BID PRICE:					
TOTAL AMT. IN WORDS: (in words)					

Omnibus Sworn Statement (Revised)

[shall be submitted with the Bid]

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

AFFIDAVIT

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

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

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

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

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

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

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

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

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

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

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

[If a sole proprietorship:] The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical

Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

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

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

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

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

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]

Affiant

[Jurat]

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

Performance Securing Declaration (Revised)

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

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

PERFORMANCE SECURING DECLARATION

Invitation to Bid: [Insert Reference Number indicated in the Bidding Documents]

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

I/We, the undersigned, declare that:

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

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

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

[Insert signatory's legal capacity]

Affiant

[Jurat]

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

FINANCIAL DOCUMENTS FOR ELIGIBILITY CHECK

- A. Summary of the Applicant Firm's/Contractor's assets and liabilities on the basis of the attached Internal Revenue or BIR authorized collecting agent, for the immediately preceding year and a certified copy of Schedule of Fixed Assets particularly the list of construction equipment. income tax return and audited financial statement, stamped "RECEIVED" by the Bureau of Internal Revenue:

		Year 20__
1.	Total Assets	
2.	Current Assets	
3.	Total Liabilities	
4.	Current Liabilities	
5.	Total Net Worth (1-3)	
6.	Current Net Worth or Net Working Capital (2-4)	

- B. The Net Financial Contracting Capacity (NFCC) based on the above data is computed as follows:

NFCC = NFCC = [(Current assets minus current liabilities) (15)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started coinciding with the contract for this Project.

NFCC = P _____

Herewith attached are certified true copies of the income tax return and audited financial statement: stamped "RECEIVED" by the BIR or BIR authorized collecting agent for the immediately preceding year and the cash deposit certificate or certificate of commitment from a licensed bank to extend a credit line.

Submitted by:

Name of Firm / Contractor

Signature of Authorized Representative
Date : _____

NOTE:

1. If Partnership or Joint Venture, each Partner or Member Firm of Joint Venture shall submit the above requirements.

Contractor's Organizational Chart for the Firm

Submit Copy of the Organizational Chart of the firm. Indicate in the chart the names of the Project Manager, Project Engineer, Bridge Engineer, Structural Engineer, Materials and Quality Control Engineer, Foreman and other Key Engineering Personnel.

Attach the required Proposed Organizational Chart for the Contract as stated above

(Name of Representative)
(Position)
(Name of Bidder)

Standard Form Number: SF-INFR-47

Revised on: August 11, 2004

**KEY PERSONNEL
(FORMAT OF BIO-DATA)**

Give the detailed information of the following personnel who are scheduled to be assigned as full-time field staff for the project. Fill up a form for each person.

- Authorized Managing Officer / Representative
- Sustained Technical Employee

1. Name : _____
2. Date of Birth : _____
3. Nationality : _____
4. Education and Degrees : _____
5. Specialty : _____
6. Registration : _____
7. Length of Service with the Firm : _____ Year from _____ (months) _____ (year)
To _____ (months) _____ (year)
8. Years of Experience : _____
9. If Item 7 is less than ten (10) years, give name and length of service with previous employers for a ten (10)-year period (attached additional sheet/s), if necessary:

Name and Address of Employer

Length of Service

_____	_____ year(s) from _____ to _____
_____	_____ year(s) from _____ to _____
_____	_____ year(s) from _____ to _____

10. Experience:

This should cover the past ten (10) years of experience. (Attached as many pages as necessary to show involvement of personnel in projects using the format below).

1. Name : _____
2. Name and Address of Owner : _____
3. Name and Address of the
Owner's Engineer : _____
(Consultant)
4. Indicate the Features of Project
(particulars of the project
components and any other particular
interest connected with the project): _____
5. Contract Amount Expressed in
Philippine Currency : _____
6. Position : _____
7. Structures for which the employee
was responsible : _____
8. Assignment Period : from _____ (months) _____ (years)
to _____ (months) _____ (years)

Name and Signature of Employee

It is hereby certified that the above personnel can be assigned to this project, if the contract is awarded to our company.

(Place and Date)

(The Authorized Representative)

Qualification of Key Personnel

Business Name : _____
 Business Address : _____

	(For Ex.) Project Manager / Engineer				
1 Name					
2 Address					
3 Date of Birth					
4 Employed Since					
5 Experience					
6 Previous Employment					
7 Education					
8 PRC License					

Minimum Requirements :
 :
 :
 :

Submitted by : _____
 (Printed Name & Signature)

Designation : _____
 Date : _____

List of Equipment, Owned or Leased and/or under Purchase Agreements

Business Name : _____
 Business Address : _____

Description	Owned/ Leased/Under Purchase Agreement	Model/ Year	Capacity / Performance / Size	Plate No.	Motor No. / Body No.	Location	Condition	Proof of Ownership / Lessor or Vendor
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								

Submitted by : _____
 (Printed Name & Signature)
 Designation : _____
 Date : _____

Print as many pages as necessary.

STATEMENT OF ALL ON-GOING GOVERNMENT AND PRIVATE CONSTRUCTION CONTRACT, INCLUDING CONTRACTS AWARDED BUT NOT YET STARTED, WHETHER SIMILAR OR NOT SIMILAR IN NATURE

Name of the Contract or Title of the Project 1)	Owner's Name and Address	Nature / Scope of Work 2)	Contractor's Role (in percentage) 3)	Total Contract Value At			Date of Award 5)	Value of Outstanding Works	Estimated Time of Completion	% of Accomplishment		Contract Duration 5]	
				Award	To	Escalated Value to Present Prices 4]				Planned	Actual	Start	Completed
A) Government Contracts i. On-going ii. Awarded but not yet started A) Private Contracts i. On-going ii. Awarded but not yet started													

Note: This statement shall be supported with: 1
 Notice of Award and/or Contract
 2 Notice to Proceed issued by the owner
 3 Certificate of Accomplishments signed by the owner or authorized representative

 Name of Firm / Applicant

 Authorized Signing Official

 Date

Standard Form Number: SF-INFR-18

Revised on: July 29, 2004

Statement of Availability of Key Personnel and Equipment

(Date)

MR. ARNEL B. GARCIA, CESO II

Regional Director

DSWD-CAR

#40 North Drive Baguio City

Attention : The Chairperson
Bids and Awards Committee

Dear Sir:

In compliance with the requirements of the DSWD-CAR BAC for the bidding of the (Name of the Contract), we certify that (Name of the Bidder) has in its employ key personnel, such as project managers, project engineers, materials engineers and foremen, who may be engaged for the construction of the said contract.

Further, we likewise certify the availability of equipment that (Name of the Bidder) owns, has under lease, and/or has under purchase agreements, that may be used for the construction contracts.

Very truly yours,

(Name of Representative)

(Position)

(Name of Bidder)

Statement of Single Largest Similar Completed Contract

Business Name:

Business Address:

Name of the Contract or Title of the Project	a. Owner Name b. Address c. Telephone Nos.	Nature / Scope of Work	Contractor's Role		Amount at Award Amount at a. Completion b. Duration c.	Date of Awarded Contract Effectivity Date completed
			Description	%		
<u>Government</u>						
<u>Private</u>						

Note: This statement shall be supported with:

1. Contract/Purchase Order

2. Certificate of Completion/Acceptance or Inspection and Acceptance Report, or Official Receipts

Name of Firm / Applicant

Authorized Signing Official

Date

MARKING AND SEALING OF ENVELOPE:

