

PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

CONSTRUCTION OF RIVER LANDING AT LIBUNGAN TORRETA, PIGCAWAYAN, SGA

Ministry of Transportation and Communications

**Public Bidding No. 24SDF0002
ABC: PhP 19,006,599.27**

**Sixth Edition
July 2020**

Preface

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

The PBDs are intended as a model for admeasurements (unit prices or unit rates in a bill of quantities) types of contracts, 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 River Landing at Libungan Torreta, Pigcawayan, SGA

1. The *Ministry of Transportation and Communications*, through the *Special Development Fund 2022* intends to apply the sum of *Nineteen Million Six Thousand Five Hundred Ninety-Nine and 27/100 Pesos (Php 19,006,599.27)* being the Approved Budget for the Contract (ABC) to payments under the contract for *Public Bidding No. 24SDF0002*. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The *Ministry of Transportation and Communications* now invites bids for the above Procurement Project. Completion of the Works is required *Two Hundred Eighty (280) Calendar Days*. 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 *Ministry of Transportation and Communications* and inspect the Bidding Documents at the address given below from *8:00 am to 5:00 pm*.
5. A complete set of Bidding Documents may be acquired by interested bidders on **February 28, 2024 – March 19, 2024** from given address and website/s below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of *Twenty-Five Thousand Pesos Only (Php 25,000.00)*. The Procuring Entity shall allow the bidder to present its proof of payment for the fees it will be presented in person, or through electronic means.
6. The *Ministry of Transportation and Communications* will hold a Pre-Bid Conference¹ on **March 7, 2024 at 9:00 AM** at BLTO Conference Room, BGC, Gov. Gutierrez Avenue, Rosary Heights 7, Cotabato City, and/or through video conferencing/webcasting *via Zoom* which shall be open to prospective bidders.
7. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below, on or before **March 19, 2024 at 9:00 AM**. Late bids shall not be accepted.

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.

8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 16.
9. Bid opening shall be on **March 19, 2024 at 9:00 AM** at the given address below BLTO Conference Room, NTC Bldg., BGC, Gov. Gutierrez Avenue, Rosary Heights 7, Cotabato City. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. The *Ministry of Transportation and Communications* 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:

Name of Officer : NASGUIB S. UMPAR, JD
Head, IBAC Secretariat
Name of Office : Ministry of Transportation and Communications – BARMM
Address : NTC Building, Bangsamoro Government Center,
Gov. Gutierrez Avenue, RH 7, Cotabato City
Telephone No. : (064) 552-0055
Email Address : [**motcbarmm.proc@gmail.com**](mailto:motcbarmm.proc@gmail.com)

12. You may visit the following websites:

For downloading of Bidding Documents: [**https://motc.bangsamoro.gov.ph**](https://motc.bangsamoro.gov.ph)

MUHAMMAD M. GALO
CHIEF TRANSPORTATION REGULATION OFFICER
Chairperson, Infrastructure Bids and Awards Committee (IBAC)

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, *Ministry of Transportation and Communications* invites Bids for Construction of River Landing at Libungan Torreta, Pigcawayan, SGA, with Project Identification Number **24SDF0002**.

2. Funding Information

2.1. The GOP through the source of funding as indicated below for 2022 in the amount of **P 19,006,599.27**

2.2. The source of funding is: Special Development Fund 2022

3. Bidding Requirements

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

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

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

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

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

5. Eligible Bidders

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

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

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

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

6. Origin of Associated Goods

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

7. Subcontracts

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

The Procuring Entity has prescribed that:

- a. Subcontracting is not allowed.

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 *{[insert if applicable]}* 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 Security

14.1. 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**.

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

15. Sealing and Marking of Bids

Each Bidder shall submit one (1) original copy of the first and second components of its Bid, and is requested to submit additional three (3) photocopies each.

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.

16. 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**.

17. Opening and Preliminary Examination of Bids

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

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

18. Detailed Evaluation and Comparison of Bids

18.1. 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.

18.2. 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 16 shall be submitted for each contract (lot) separately.

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.

19. 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**.

20. 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	<p>For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be:</p> <p>The bidder must have completed, five (5) years prior to December 2022 a single contract that is similar to the project at hand and whose value must be at least fifty percent (50%) of the ABC to be bid.</p> <p>Bidders shall include in their Bid a photocopy of Single Largest Completed Contract and the corresponding proof of completion, such as</p> <p>(i) Certificate of Final Acceptance or Completion from the bidder’s client; or (ii) Official Receipt issued by the bidder. (iii) Photos of the declared SLCC Project</p> <p>For this purpose, similar contracts shall refer to contracts which have the same major categories of work as “Construction of River Bank Protection or Rehabilitation and Construction of Ports”</p>		
7.1	<p><i>Portions of Works allowed to be subcontracted:</i></p> <p>Subcontracting is not allowed.</p>	<p><i>Maximum Percentage allowed to be Subcontracted:</i></p> <p>Subcontracting is not allowed.</p>	
10.4	<p>The key personnel must meet the required minimum years of experience and qualifications set below:</p> <p>Please attach justifications such as renewed PRC licenses, biodata, and certificate of trainings as applicable to the required personnel for the contract to be bid.</p>		
	Key Personnel	General Experience	Qualifications/Relevant Experience
	(1) Project Engineer	Five (5) years of experience in construction	With valid Professional and Regulation Commission License
	(1) Material Engineer	Five (5) years of experience in construction	DPWH Accredited Material Engineer

	(1) Safety Officer	Five (5) years of experience as safety officer in construction	With Safety Training Certificate from any training provider accredited by the Department of Labor and Employment (DOLE)																																							
	(1) Construction Foreman	Five (5) years of experience in construction																																								
	(7) Skilled Laborer	Two (2) years of experience in construction																																								
	(16) Unskilled Laborer	Two (2) years of experience in construction																																								
	(1) Structural Engineer	Five (5) years of experience as Structural Engineer in a construction project	PRC License Certification as Structural Engineer																																							
10.5	<p>Please submit proof of ownership, lease or rental and photos of the equipment required for this contract.</p> <p>Failure to submit a copy of the list of minimum major equipment required with proof of ownership/lease/rental or failure to prove the veracity of such shall be a ground for disqualification of the bidder for award.</p> <p>The minimum major equipment requirements are the following:</p> <table border="1"> <thead> <tr> <th>Equipment</th> <th>Capacity</th> <th>Number of Units</th> </tr> </thead> <tbody> <tr> <td>a) Dump Truck</td> <td>12 yd³. minimum</td> <td>2</td> </tr> <tr> <td>b) Payloader</td> <td>1.5 m³, minimum</td> <td>1</td> </tr> <tr> <td>c) Bulldozer</td> <td>167 hp. minimum</td> <td>1</td> </tr> <tr> <td>d) Backhoe</td> <td>0.80 m³, minimum</td> <td>1</td> </tr> <tr> <td>e) Truck mounted Crane</td> <td>5 hp, minimum</td> <td>1</td> </tr> <tr> <td>f) Plate Compactor</td> <td>5 hp, minimum</td> <td>1</td> </tr> <tr> <td>g) One Bagger Mixer</td> <td>4-6 ft³/min, minimum</td> <td>1</td> </tr> <tr> <td>h) Concrete Vibrator</td> <td>5 amp, minimum</td> <td>1</td> </tr> <tr> <td>i) Bar Cutter</td> <td></td> <td>1</td> </tr> <tr> <td>j) Bar Bender</td> <td></td> <td>1</td> </tr> <tr> <td>k) Welding Machine</td> <td>500 amp, minimum</td> <td>1</td> </tr> <tr> <td>l) Cutting Outfit</td> <td></td> <td>1</td> </tr> </tbody> </table>			Equipment	Capacity	Number of Units	a) Dump Truck	12 yd ³ . minimum	2	b) Payloader	1.5 m ³ , minimum	1	c) Bulldozer	167 hp. minimum	1	d) Backhoe	0.80 m ³ , minimum	1	e) Truck mounted Crane	5 hp, minimum	1	f) Plate Compactor	5 hp, minimum	1	g) One Bagger Mixer	4-6 ft ³ /min, minimum	1	h) Concrete Vibrator	5 amp, minimum	1	i) Bar Cutter		1	j) Bar Bender		1	k) Welding Machine	500 amp, minimum	1	l) Cutting Outfit		1
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k) Welding Machine	500 amp, minimum	1																																								
l) Cutting Outfit		1																																								
12	<p><i>Value Engineering Clause:</i></p> <p>Not allowed</p>																																									

15.1	<p>The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:</p> <ul style="list-style-type: none"> a. The amount of not less than Three Hundred Eighty Thousand One Hundred Thirty-One and 99/100 Pesos (P380,131.99), 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 Nine Hundred Fifty Thousand Three Hundred Twenty-Nine and 96/100 Pesos (P950,329.96), if bid security is in Surety Bond; or c. Any combination of the foregoing proportionate to the share of form with respect to total amount of security. <p>In lieu of a bid security mentioned above, the bidder may submit a Bid Securing Declaration that is an undertaking which states, among others, that the bidder shall enter in to contract with the procuring entity and furnish the required performance security within ten (10) calendar days, or less, as indicated in the Bidding Documents, from receipt of the Notice of Award, and committing to pay the corresponding fine and be suspended for a period of time from being qualified to participate in any government procurement activity in the event it violates any of the conditions stated therein as required in the guidelines issued by the GPPB.</p> <p>In no case shall bid security or Bid Securing Declaration be returned later than the expiration of the bid validity period indicated in the Bidding Documents, unless it has been extended in accordance with Section 28.2 of the IRR.</p> <p>The Bid Securing Declaration Form is in Section IX. Bidding Form.</p>
19.2	<p>Partial bids:</p> <p>Not allowed</p>
20	<p><i>Other appropriate licenses and permits required:</i></p> <p>None</p>
21	<p>Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.</p>

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

4.1. 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.

4.2. 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	Not Applicable
4.1	The Procuring Entity shall give possession of all parts of the site to the contractor upon commencement of the project.
6	The site investigation reports are: <i>Applicable</i> The contractor is required to conduct a site investigation and secure a Certificate of Appearance (CA) duly signed by the Barangay Chairman or Local official member as a proof. The Site Investigation Report/Certificate of Appearance should be attached in the bidding documents with attached picture.
7.2	<i>Permanent structures: Fifteen (15) years</i> Buildings of types 4 and 5 as classified under the National Building Code of the Philippines and other structures made of steel, iron, or concrete which comply with relevant structural codes (e.g., DPWH Standard Specifications), such as, but not limited to, steel/concrete bridges, flyovers, aircraft movement areas, ports, dams, tunnels, filtration and treatment plants, sewerage systems, power plants, transmission and communication towers, railway system, and other similar permanent structures.
10	Day works are applicable at the rate shown in the Contractor's original Bid.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative within ten (10) calendar days of delivery of the Notice of Award.
11.2	The amount to be withheld for late submission of an updated Program of Work is (1%) of the progress billing.
13	The amount of the advance payment is <i>15% of the contract amount.</i>
14	Applicable.
15.1	The date by which "as-built" drawings are required is 15 days after project completion.
15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is 5% of the contract amount.

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.

A. General Requirement

ARTICLE I – Summary of Work

1.1 CONTRACT DOCUMENTS

1.1.1 The contract documents shall consist of documents as stated in the general of the contract.

1.1.1 The intent of this document is to include all labor, materials, appliances and services of any kind necessary for the proper execution of the work.

1.1.2 The contract documents should be considered as one, and whatever is called for by any one of the documents shall be considered as one and whatever is called for by anyone of the documents shall be binding as if called by all.

1.2 WORKED COVERED BY THE CONTRACT DOCUMENT

1.2.1 The Contractor shall undertake the general construction work of the project specified in the contract, subject to all conditions and requirements thereof, and in accordance with the contract documents furnished by the MOTC, in so far as they relate to this project. The contractor shall deliver, furnish, install place and complete any and all necessary materials, plants, tools, appliances and labor to complete the work within the agreed period of time specified in the contract.

1.2.2 The General Contractor shall coordinate all roughing-in required by the mechanical, sanitary and the electrical plans and specification.

1.3 STANDARD OF WORK

1.3.1 All works shall be done to the highest standard of craftsmanship by workmen of their respective trades. All workmen shall be skilled in their trades.

1.4 WORK SEQUENCE

1.4.1 Verification: The contractor shall notify the MOTC Project Engineer if the drawings and specifications are at variance with each other.

1.4.2 Methods and Appliances: The Contractor shall use such methods and appliances for the performance of all the operations connected with the work embraced under the contract as will produce as satisfactory quality of work and rate progress which in the opinion of the engineers, will ensure the completion of work within the contract time.

If, at any time before the commencement during the progress of the work, such method or appliances appears to the engineers to be inefficient or inappropriate for producing the quality of work and rate of progress, the MOTC Project Engineer may order the contractor to increase

the rate of their efficiency, of to improve their system of operation. The contractor must comply such order. Failure however of the engineers to demand such increase of efficiency or improvement of character of methods and appliances shall not relieve the contractor from his obligation to turn out such quality of work and rate of progress as are called for in this contract.

1.4.3 Laying out of Work: the contractor shall lay-out the lines and the grades of the work as per condition set forth under sections which covers Field Engineering of general Requirements.

1.4.4 Inspection of Works: The MOTC Inspection Team shall at all times have access to the work whenever it is in the preparation of progress and the contractor shall provide proper facilities for such access and inspection.

1.4.5 Defective Works: Defective works may be condemned by the MOTC Project Engineer and Inspection Team at any time before the final acceptance of the work, and when such work has been condemned, it shall be taken out immediately by the contractor and rebuilt in accordance with the drawings and specifications.

1.4.6 Increase and Decrease in quantities of work: Adjustments of drawings to suit field conditions which cannot be foreseen at the time of calling for bids, may be necessary during construction. It is the essence of the contract to recognize such changes in the drawings as constituting a normal and expected margins of adjustments, and not involving nor permitting change of modification of contract prices, provided only that resulting overruns and under runs from the quantities in the proposal do not exceed five percent in the case of discrepancy, the matter shall submitted to the MOTC Engineering Division before the adjustments shall be made by the contractor, otherwise it shall be at his own risk and expense.

1.4.7 Certification of Completion of work: Upon due notice from the contractor that he has substantially completed the work, the MOTC Inspection Team shall make an inspection of the project. Substantial completion shall mean that the value of the work completed shall not less than ninety eight percent (98%) of the contract amount and the remaining unfurnished work shall be a minor nature only. As soon as, in the opinion of the MOTC Inspection Team the works shall have been substantially completed, it shall issue a certificate of substantial completion.

1.4.8 Making Good Known Defects and Faults: The contractor shall execute at his own expense all work necessary for making good of known defects, imperfection, or faults as a result of an inspection made by or behalf of the MOTC Inspection Team.

1.4.9 Cleaning Up at Completion of work refer to article 10.1 (cleaning)

1.5 CONTRACTOR USE OF PREMISES

1.5.1 Limitation of Use: The contractor shall confine his apparatus, storage of materials, and the operations of his workmen to limits indicated by law, ordinances, permits or direction of the MOTC Project Engineer and shall not unreasonably encumber the premises with his materials.

1.5.2 Safety of Workmen and engineers: The contractor shall prior to the start of the project secure all the necessary permits and clearances from authorities involved and every workmen shall wear his identification card and appropriate uniform. Likewise, after each day of the work, all materials and equipment shall be properly secured in a safe place.

1.5.3 Safeguard for Structure: The contractor shall not load or permit any parts of the structure to be loaded with the weight that will endanger its safety. The contractor shall enforce the MOTC Project Engineer's instruction regarding sign, advertisement, fires and smoking.

1.5.4 Cleaning: the contractor shall keep the premises free from the accumulation of waste materials and rubbish during the construction period.

ARTICLE 2 - SPECIAL PROJECT PROCEDURES

2.1 SPECIAL PROJECT PROCEDURES

2.1.1 Protection: all existing materials, finishes, structures, utilities, trees, plants, shrubs and the like which has been designated by the contract documents and the instructions of the MOTC Project Engineer to be retained, shall be protected from damage to the same shall be remolded, repaired or replaced by the contractor at no extra expense to the owner.

ARTICLE 3 - COORDINATION

3.1 PROJECTION COORDINATION

3.1.1 The MOTC Project Engineer and Inspection Team shall have the general supervision of the work. They have the authority to stop work necessary to insure its proper execution. They shall certify when payments under the contract are due and the amount to be paid. They shall make the decisions on all claims of the owner or the contractor, which are subjected to the arbitration.

ARTICLE 4 - FIELD ENGINEERING

4.1 GRADES, LINES AND LEVELS

4.1.1 Lot survey: the MOTC Engineering Division shall be responsible for the establishment of the lot lines, boundary lines, easement and benchmarks by a certified surveyor. The MOTC Engineering Division relegate this responsibility to the contractor, provided the procedures are included in the contract.

4.1.2 Verification: The contractor shall verify all grades, lines, level and dimensions as indicated in the drawings, he shall report any error or inconsistency to the MOTC Engineering Division before commencing work.

4.1.3 Laying Out of Work: All other grades, lines, levels, and benchmark necessary for the prosecution of the work shall be established and maintained by the contractor.

The contractor shall provide and maintain well-built batter boards at all corners, he shall establish benchmarks in not less than two widely separate place.

All stakes, benchmarks, etc., placed by the contractor in laying out work, approved by the MOTC Engineering shall be carefully guarded and preserved by the contractor.

ARTICLE 5 – REGULATORY REQUIREMENTS

5.1 BUILDING CODES

5.1.1 In general, the contractor shall comply with all the laws, city and municipal ordinance and all building codes, rules and regulation, in so far as they binding upon or affect the parties hereto, the work of those engages thereon. He shall also comply with the regulations of firms furnishing utilities such as water, gas, telephone, and electricity for the project.

If the contractor performs any works contrary to such laws, ordinances, rules and regulations, and without such notice to the MOTC engineers, he shall bear all the cost arising there from.

5.2 PERMITS AND TAXES

5.2.1 Permits and Licenses: The permits are secured and paid by the contractor, Expenses to the building permits are included in the contract sum.

5.2.2 Taxes: wherever the law of the place of the project requires a sales, consumer use or other similar tax related or pertinent only to the construction of the project, the contractor shall pay such tax.

ARTICLE 6 – PROJECT MEETINGS

6.1 PROGRESS MEETING

6.1.1 The MOTC Project Engineer and the Contractor or their representatives shall be present at the progress meeting at the project site, with frequently as agreed upon, once the construction has started.

6.1.2 Minute of Meeting: The contractor shall take the minutes of the meetings unless otherwise indicated. The minutes of the meetings shall be signed by the MOTC Project Engineer and the Contractor and shall form part of the construction documents.

6.2 JOBSITE ADMINISTRATION

6.2.1 The contractor shall keep in the project site during the work's progress as competent Project Engineer or Superintendent and any necessary assistants, all satisfactory to the MOTC.

The Project Engineers or Superintendent shall represent to the contractor in his absence and all directions given to him by the MOTC Project Engineer shall be as binding as if given to the contractor. He shall have the full authority to execute orders or directions of the MOTC Project Engineer without delay and promptly supply such materials, tools, plants, equipment and labor as be required.

ARTICLE 7 – SUBMITTALS

7.1 CONSTRUCTION SCHEDULE

7.1.1 The contractor shall furnish the MOTC Engineering with the construction schedule of the project. This schedule shall be updated regularly according to the actual schedule of work.

7.2 NETWORK ANALYSIS AND SCHEDULE

7.2.1 The contractor shall furnish MOTC Engineering with the network analysis schedule, clearly indicating the Critical Path. The Critical Path shall be updated regularly according to the actual schedule of work.

7.3 PROGRESS REPORT

7.3.1 The contractor shall furnish the MOTC Engineering with progress reports following a schedule of work.

7.4 SHOP DRAWING, PRODUCT DATA AND SAMPLES

7.4.1 Shop Drawings: Shop Drawings shall Provide for approval of all fabricated items specified.

7.4.2 Samples: The Contractor shall furnish for approval all samples as directed. The work shall be in accordance with the approved samples. Samples and product data shall be supplied to MOTC Engineering and of workmanship representing artistic techniques specified herein.

7.5 MOCK-UPS

7.5.1 The contractor shall provide mock-up within the project exhibiting final finishes for the approval of the MOTC Engineering before such finished shall be applied in the similar areas of the project.

7.6 LAY-OUT DATA

7.6.1 The contractor shall furnish the MOTC Engineering the actual construction stakes and reference mark lay-out for approval.

7.7 CONSTRUCTION PHOTOGRAPH

7.7.1 If required, the contractor shall furnish the MOTC Engineering with construction photographs.

ARTICLE 8 – CONSTRUCTION FACILITIES

8.1 CONSTRUCTION FACILITIES

8.1.1 Except as otherwise noted, the contractor shall provide and pay for all materials, labor, tools, water, electrical, sanitary facilities, first aid facilities, fire protection and items to complete the work. Rental charges, safety protection and maintenance of rented equipment shall be contractor's responsibility.

8.2 BARRIERS

8.2.1 Temporary fence: The contractor shall furnish and pull all temporary barricades and hoarding necessary for the protection, security, proper prosecution and completion of work.

8.2.2 Trees and other Plants: Existing trees, plants and shrub etc., which are to remain, shall be boxed and otherwise protected from damages.

8.3 SECURITY

8.3.1 The contractor shall provide reliable and competent watchmen to guard the site and premises, from the start of construction operation until project completion.

8.4 CONSTRUCTION SAFETY

8.4.1 These documents do not include the necessary components for construction safety. Safety care of adjacent properties during construction, compliance with the national and local regulation regarding safety shall be the contractor's responsibility.

8.4.2 The contractor shall adequately protect the work, the adjacent properties and the public, and shall be responsible for any damage or injury due to his act of neglect.

8.5 PROJECT IDENTIFICATION AND SIGNS

8.5.1 The contractor shall erect a 1.2 x 2.40-meter sign lettered by a professional painter, identifying the project, the owner, the engineers and the contractor. Location of which shall be on the direction of the MOTC Project Engineer.

8.5.2 All sign boards of contractors, subcontractors, jobbers, and dealers that shall be placed at the project site during the progress of the construction shall be approved by the MOTC Engineering as to size, design and content.

8.6 FIELD OFFICE AND SHEDS

8.6.1 Temporary facilities for protection of workers, materials, tools and equipment shall conform to local regulation and shall be the contractor's responsibility. All cement, lime and other materials affected by moisture shall be stored on platforms and protected from weather. Materials shall be so stored as to ensure preservation of their quality and fitness of the work.

8.7 INSURANCE

8.7.1 The contractor shall secure and maintain contractor's liability insurance and a fire insurance for the project.

ARTICLE 9 - MATERIALS AND EQUIPMENT

9.1 MATERIALS

9.1.1 Trade name materials: whenever items or class of materials is specified exclusively by trade name, by manufacturer's name or by catalogue reference, only such items will be used.

9.1.2 Quality of materials: unless otherwise specified, all materials shall be new. The quality of materials shall be of the best grade of their respective kinds for the purpose.

9.1.3 Defective materials: All materials not conforming to the requirements of these Specifications shall be considered defective and as such shall not be used unless approval is given.

9.2 SUBSTITUTION AND PRODUCTION OPTIONS

9.2.1 Changes or substitution of materials shall not be allowed, unless approval by the MOTC Project Engineer.

ARTICLE 10 – CONTRACT CLOSEOUT

10.1 CLEANING

10.1.1 At the completion of the work, the contractor shall remove from the premises all rubbish, implements and surplus materials and leave the building broom clean. All dirt stains, and the like on all finishing of floors, wall, and ceilings, decorative work, finishing hardware, and fixtures, shall be removed. All woodwork, finishing hardware and metal works shall be cleaned and polished. The exterior shall be hand raked, free of trash or debris.

10.2 PROJECT RECORD DOCUMENTS

10.2.1 As – Built drawings: the contractor shall furnish the MOTC Engineering Division with three copies of complete “as-Built” Drawings, which includes architectural, structural, electrical, sanitary and mechanical plans upon the completion of the project. “As –

Built” drawings are drawings showing the system and actual locations of outlets, fixtures, services and equipment that were installed.

10.2.2 Occupancy Permit: the contractor shall obtain the Certificate of final Building Occupancy for the owner.

10.2.3 Certificate of Final Inspection: the contractor shall obtain the certificate of final inspection of electrical, telephone, sanitary, mechanical, water, gas, safety, fire and other utilities for the owner.

10.2.4 Directory of Panel Boards. The contractor shall furnish the MOTC engineers three (3) copies of the directory panel boards and list of circuits.

10.3 WARRANTIES AND BONDS

10.3.1 The contractor shall remedy any defects due to faulty materials or workmanship that appear within a period of one year from the date of completion of the contract. The provisions of this article shall apply to work done by the subcontractors as well as to work done by direct employees of the contractor.

DIVISION 2 – SITE WORKS

2.1 SITE

2.1.1 The site shall be cleared in all directions outside of the building lines. Temporary barricades, guard lights, railings and signs shall be provided and maintained for the whole duration of the work.

2.1.2 Temporary buildings shall be constructed for the housing of the workers, sanitary convenience and material storage. Adequate water and lightning shall be installed.

2.1.3 Clear lines shall be maintained for the whole duration of the work.

2.2 EXCAVATION AND FILLING

2.2.1 All foundation shall be excavated to grades and dimensions indicated in the drawing.

2.2.2 If the required bearing capacity is not obtained at the excavation indicated of the drawings, the excavations shall be continued until such safe bearing power is obtained.

2.2.3 Footing shall not be placed on fill.

2.2.4 Excavations shall be protected from damage of rainwater, spring water and backing of drains. Drainages shall be built for this purpose. Shoring, bracing and sheathing shall be provided for the safety of necessary support for adjoining walls, soil, building and fences.

2.2.5 All excavations shall be backfilled presently as work permits after concrete walls and pipes have attained full design strength.

2.2.6 Materials for filling shall be free from waste and objectionable matters. Filled excavations shall be thoroughly tamped.

DIVISION 3 – CONCRETE AND MASONRY WORK:

3.1 PORTLAND CEMENT

3.1.1 Portland cement shall conform to the standard specifications for consignment numbers, dates of dispatch and delivery quantity and dates of use.

3.1.2 At time of use, all cements shall be free flowing and free of lumps. Lumpy or air set cement shall not be used unless the lumps can be crushed to power between fingers and thumb.

3.1.3 Cement delivered in bags shall be stored one well-ventilated waterproof sheds with suitable elevated wooden floors and shall be kept perfectly dry.

3.2 CONCRETE AGGREGATES

3.2.1 Aggregates used in concrete shall conform to the standard specifications for concrete aggregates.

3.2.2 Aggregate failing to meet those specifications but which have shown by approved laboratory tests to produce concrete of the required quality may be used.

3.2.3 Aggregates shall be quarried or washed on fresh water and shall contain not more than one percent silt by weight.

3.2.4 The coarse aggregate of different sizes shall be stored in a separate bunkers or piles in such manners as to prevent aggregation inclusion and contamination by dirt and other foreign materials.

3.3 WATER

3.3.1 Water used in concrete shall be clean, free from oils, alkalis or other matter detrimental to the quality or durability of concrete.

3.3.2 Water shall be stored in tanks and not be allowed or exposed to dust and falling leaves

3.4 REINFORCING STEEL BAR

Steel reinforcing bars shall be of the yield grade in the structural drawings and in the job specifications sheets and conforming to ASTM a615, “Specification for deformed billet. Steel bars for concrete reinforcements specified herein and/or the details on the drawings. Shop

drawings are required for all structural steel and shall be submitted to the engineers/ consultant for approval.

3.4.1 Unless otherwise indicated in the plans, reinforcing bars shall be deformed steel bars and shall conform to the requirements of the “specification for billet- Steel bars for concrete reinforcement”.

3.4.2 Reinforcing steel shall be transported and stored at the site in such a way as to prevent damage or deterioration of the steel for use in the reinforced concrete.

3.4.3 All reinforcing steel shall be free from mill scale, oil, grease, tar, paint, etc., and loose rust shall be removed before use.

3.4.4 Use G.I wire, gauge No. 16 for binding reinforcing steel bars.

3.4.5 Welded joints shall be done in accordance with the American Welding society.

3.4.6 All reinforcements shall be carefully cut and bent in accordance with the drawings and schedules.

3.5 CONCRETE PROPORTIONS AND CONSISTENCY

3.5.1 The proportions of aggregate to cement for any concrete shall be such as to produce a mixture that will work readily. Concrete proportions for footing shall be 1:2:3 for beams and Columns shall be 1:2:4 and shall produce a concrete strength of $f_c=20.7$ Mpa.

With the placement method used into corners and angles of forms around reinforcements, segregation of materials in the mixtures or collection of excess free water on the surface shall not be permitted. The slump of concrete shall be the minimum that is practicable. When vibrators are used to consolidate concrete, the slump shall not exceed 4 inches; otherwise, the slump shall not exceed 6 inches. Addition of water during hot weather to maintain the same slump must be compensated by adding more cement or retain the correct water-cement ratio.

3.5.2 The method of measuring concrete materials shall be such that proportions can be accurately controlled and easily checked at any time during the work. 28 days concrete strengths shall be tested and shall be proportioned according to the results of the test.

3.6 FORMWORKS

3.6.1 Woods forms shall be sound, smooth, properly seasoned, good quality lumber, free from large, loose knots and otherwise suitable to facilitate finishing exposed concrete surface.

3.6.2 Formworks shall be built to resist distortion or deflection, tight to prevent loss of liquid from the concrete.

3.6.3 Formworks shall be coated with form oil of an approved make and care shall be taken to avoid the spilling of oil on reinforcement.

3.7 MIXING AND POURING OF CONCRETE

3.7.1 Unless otherwise authorized by the supervising engineer, concrete shall be machine mixed at the site.

3.7.2 Concrete shall be thoroughly mixed in a batch mixer of an approved size and type which shall ensure a uniform distribution of the materials throughout the mass, so that the mixer is homogenous and uniform in color.

3.7.3 The first batch of concrete materials placed in the mixer shall contain a sufficient excess of cement, sand and water to cut the inside of the drain with- out reducing the required mortar content of the mix.

3.7.4 Hand mixing shall only be allowed in case of emergencies and only upon direct supervision of the engineer-in-charge. It must be done in water tight platform.

3.7.5 In preparation for the placing of concrete, all sawdust, chips and other construction debris and all extraneous matter will be removed from the interior of forms, struts and stays.

3.7.6 Temporary discontinuance of pouring shall be referred to the supervising.

3.8 CONCRETE HOLLOWBLOCKS

3.8.1 Materials blocks shall be laid in accordance with the manufacturer's specifications and recommendation. Strength of blocks shall be specified in the drawings or in the specific job requirement sheet.

All concrete hollow blocks to be used are stated in the plans and drawings.

Class B (1:2-1/2:5) Mixtures shall be used for all concrete hollow blocks and shall be reinforced with 12mm dia. RSB at .80 meters O.C vertical, and horizontal at every three layers.

Concrete hollow blocks shall be 700 psi minimum

3.8.2 Grouting

Grout shall be sufficiently fluid to ensure complete filling of all sections of the masonry requiring grout. Grout shall not contain more than 7-1/2 gallons of water per sack of cement. In case of honeycomb on structural members, use pressure - - injected epoxy grout, approved by the structural engineer or the engineer/consultants.

3.8.3 Joints

Unless otherwise specified or detailed on plans, horizontal and vertical mortar joints shall 3/8" or 10mm thick with full mortar coverage on the face shells and wed surrounding the cells to be filled. All joints shall be solidly filled. Furrowing will not be allowed.

3.8.4 MISCELANEOUS METAL WORKS

The work includes the fabrication, erection, painting, including the furnishing of all materials, labor, equipment, plant, and tools required to complete the following metal works.

3.8.4. a Main Gate, Steel Doors, Steel Window, Steel Stair,

The contractor shall be responsible for the accurate location of all steel works including all items used to attach materials to other parts of the work. Obtain measurements for all work required to be accurately fitted at the jobsite and not just from the drawing.

The contractor shall see to it that any and all items of work that are built into works of other trades are installed at the proper time. The contractor shall coordinate the work to other trades to prevent interference.

All steel members shall be joined by welding unless otherwise indicated in the plans and drawings. The welds shall be of size and type indicated and shall be made by competent operators. The above works shall be finished with two coat epoxy enamel after two coats of red oxide.

All materials shall be new and shall meet the requirement of the specification and shall be of their respective kind and approval from the engineer be sought.

Sample of any materials shall be submitted for approval by the engineer before purchasing of such materials and installation be made.

All work under this section shall be done neatly, with all joint, butted and welded. All welds shall be full weld completely filed to produce an even and smooth finish.

ARTICLE 4 – HARDWARE

All material shall be of good quality and well tested brands, any hardware equally good may be used as a substitute only in cases of extreme necessity and subjected to the approval of the supervising engineer and the owner's representative.

The contractor shall verify all dimension and conditions shown in the drawings and specification with those at the site. Any variation which requires physical change shall be brought to the attention of the MOTC Project Engineer. The contractors shall not be given extra payments for conditions which can be determined by examining the project site and contact document.

Other items of hardware, unless to be painted over, that are not to be removed before painting shall be properly masked or completely covered until final cost of the painter's finish has been applied.

ARTICLE 5 – CLEANING UP

Upon completion of the job, it is the duty of the contractor to remove all barricades, scaffoldings, braces, and everything that is not part of the building and stacked to the place designated by the owner or brought some place else outside the jobsite. All the surroundings shall be cleaned from paint spots, dirt, and other unsightly objects. All finished work shall be approved by the Project Engineer of the MOTC. Any position of the work found not satisfactory and not in conformity with standard building practice shall be removed and repaired at no extra cost to the owner before the final turn-over of the building to the owner.

Section VII. Drawings

Section VIII. Bill of Quantities

Notes on the Bill of Quantities

Objectives

The objectives of the Bill of Quantities are:

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

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

Daywork Schedule

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

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

Provisional Sums

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

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

Signature Box

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

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

MINISTRY OF TRANSPORTATION AND COMMUNICATIONS

BILL OF QUANTITIES

PROJECT TITLE: CONSTRUCTION OF RIVER LANDING AT LIBUNGAN TORRETA, PIGCAWAYAN, SGA

LOCATION: LIBUNGAN TORRETA, PIGCAWAYAN, SGA

ITEM NO.	ITEM OF WORK	QUANTITY	UNIT	UNIT BID COST	AMOUNT
PART A. OTHER GENERAL REQUIREMENTS					
A.1.1(3)	Construction of Field Office for the Engineering	1.00	L.s.		
B.3	Permits & Clearances	1.00	L.s.		
B.5	Project Billboard/Signboard	2.00	Each		
B.7(1)	Occupational Safety & Health Program	12.00	month		
B.9	Mobilization/Demobilization	1.00	L.s.		
PART B. EARTHWORKS					
104(5)	Boulder Fill	52.08	cu.m		
800(1)	Clearing & Grubbing	600.00	sq.m		
803(1)a	Structural Excavation (Common Soil)	201.75	cu.m		
804(1)b	Embankment from Common Borrow by Equipment	826.08	cu.m		
804(4)	Gravel Bedding	20.81	cu.m		
PART C. PLAIN & REINFORCED CONCRETE WORKS					
900(1)	Structural Concrete for Column, Beam, Suspended Slab (Class A, 28 Days)	81.97	cu.m.		
900(1)c2	Structural Concrete for, Footing, Grade Slab, and Stair	290.96	cu.m.		
901(1)	Lean Concrete (for manual mixing)	3.94	cu.m.		
902(1)	Reinforcing steel of Reinforced Structure for One Storey Building	35,103.66	kg		
903(2)	Formworks & Falseworks (For one Storey Building)	1,477.50	sq.m.		
1052(5)a	Precast, Prestressed Concrete Piles, furnished (400 mm x 400 mm).	60.00	m		
1052(14)a	Precast Concrete Piles, driven (soft strata)	60.00	m		
1052(6)	Structural Steel Sheet Piles, furnished	1,410.00	m		
1052(12)	Structural Steel Sheet Piles, driven	1,410.00	m		
PART D. ARCHITECTURAL WORKS					
1046	100mm CHB Non-Load Bearing/Load Bearing (Including Reinforcing Steel)	346.36	sq.m.		
1046a	150mm CHB Non-Load Bearing/Load Bearing (Including Reinforcing Steel)	192.36	sq.m.		
1027(1)	Cement Plaster Finish	1,170.21	sq.m.		
1027(3)	Decorative Stone	142.73	sq.m.		
1018(1)	Glazed Tiles and Trims	56.45	sq.m.		
1018	Unglazed Tiles	490.80	sq.m.		
1003(1)	4.5mm Fiber Cement Board on Metal Frame Ceiling	326.16	sq.m.		
1032(1)a	Painting Works (Masonry Painting)	1,496.37	sq.m.		
1032(1)b	Painting Works (Metal Painting)	214.00	sq.m.		
1008	Aluminum Glass Window (Sliding Type)	5.06	sq.m.		
1010(2)a	Hollow Core Flush Door	2.10	sq.m.		
1043(1)	PVC Doors and Frames	4.52	sq.m.		
1003(17)	Carpentry and Joinery (Panolong)	1.00	Ls		
1003(17)	Signage and Logo	1.00	L.s		
1051(1)	Railings	10.00	l.m		
1400(4)	Bollard	8.00	sets		
SPL-2	Passenger Terminal Waiting Chair	15.00	sets		
PART E. FENCING WORKS					
604(1)	Fencing Barbed Wire	90.00	l.m		
604(2)	Fencing Chain Link (Cyclone Wire)	90.00	l.m		
604(3)	Fencing Post (Steel Pipe)	50.00	each		
604(4)	Fencing Frames (Steel Pipe)	252.00	each		
1006	Fencing gate	6.30	sq.m		
PART F. ROOFING AND STRUCTURAL STEEL WORKS					
1013(2)	Fabricated Metal Roofing Accessories (Ridge Roll)	34.90	m		
1014	Pre-painted Metal Sheet Long Span	450.00	sq.m.		
1036(1)a	Polycarbonate	40.00	lm		
1047(2)b	Structural Steel Roof Trusses	1,526.61	kg		
1047(1)	Structural Steel Roof Framing (Canopy)	1.00	L.s		
1047(2)c	Structural Purlins	994.40	kg		
1047(3)b	Metal Structure Accessories (Sagrod)	20.00	pc		
1047(3)c	Metal Structure Accessories (Turnbucke)	56.00	pc		
1047(3)b	Metal Structure Accessories (Crossbracing)	27.00	pc		

PART G. PLUMBING WORKS				
1001(8)	Sewer Line Works	1.00	l.s	
1002(5)	Plumbing Fixtures	1.00	l.s	
1002(6)	Cold Waterline Pipes and Fittings	1.00	l.s	
1001(11)	Septic Vault (Concrete/CHB)	1.00	l.s	
PART H. ELECTRICAL WORKS				
1100(30)	Conduits, Boxes & Fittings, Conduit Works/Conduit	1.00	l.s	
1100(42)	Rough-in"	1.00	l.s	
1102	Wires and Wiring Devices	1.00	l.s	
1103(1)	Panel Board with Main Breaker/Branches	1.00		
1106(1)	Lighting Fixtures	1.00	l.s	
PART I. MECHANICAL WORKS				
1200	Air Conditioning & Refrigeration System	1.00	l.s	
TOTAL				

AMOUNT IN WORDS: _____

SUBMITTED BY: _____
 (Name of Firm)

Signing Authority: _____
 (Printed Name and Signature)

Designation: _____
 Date: _____

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

Technical Documents

- (f) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
- (g) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules;
and
- (h) Philippine Contractors Accreditation Board (PCAB) License;
or
Special PCAB License in case of Joint Ventures;
and registration for the type and cost of the contract to be bid; **and**
- (i) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;
or
Original copy of Notarized Bid Securing Declaration; **and**
- (j) Project Requirements, which shall include the following:
 - a. Organizational chart for the contract to be bid;
 - b. List of contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;
 - 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**
- (k) Original duly signed Omnibus Sworn Statement (OSS);

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

Financial Documents

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

Class "B" Documents

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

II. FINANCIAL COMPONENT ENVELOPE

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

Other documentary requirements under RA No. 9184

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

Bid Form for the Procurement of Infrastructure Projects

[shall be submitted with the Bid]

BID FORM

Date : _____
Project Identification No. : _____

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

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

- a. We have no reservation to the PBDs, including the Supplemental or Bid Bulletins, for the Procurement Project: *[insert name of contract]*;
- b. We offer to execute the Works for this Contract in accordance with the PBDs;
- c. The total price of our Bid in words and figures, excluding any discounts offered below is: *[insert information]*;
- d. The discounts offered and the methodology for their application are: *[insert information]*;
- e. The total bid price includes the cost of all taxes, such as, but not limited to: *[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties]*, which are itemized herein and reflected in the detailed estimates,
- f. Our Bid shall be valid within the a period stated in the PBDs, and it shall remain binding upon us at any time before the expiration of that period;
- g. If our Bid is accepted, we commit to obtain a Performance Security in the amount of *[insert percentage amount]* percent of the Contract Price for the due performance of the Contract, or a Performance Securing Declaration in lieu of the the allowable forms of Performance Security, subject to the terms and conditions of issued GPPB guidelines² for this purpose;
- h. We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;
- i. We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed; and
- j. We understand that you are not bound to accept the Lowest Calculated Bid or any other Bid that you may receive.

² currently based on GPPB Resolution No. 09-2020

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

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

Name: _____

Legal Capacity: _____

Signature: _____

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

Date: _____

Bid Securing Declaration Form

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

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

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

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

I/We, the undersigned, declare that:

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

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

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]

Affiant

Omnibus Sworn Statement (Revised)
[shall be submitted with the Bid]

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

AFFIDAVIT

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

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

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

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

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

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

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

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

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

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

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

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

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

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

7. *[Name of Bidder]* complies with existing labor laws and standards; and
8. *[Name of Bidder]* is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
 - 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

Statement of Availability of Key Personnel and Equipment

(Date of Issuance)

ATTY. PAISALIN P. TAGO, CPA

Minister

Ministry of Transportation and Communications RH7, Bangsamoro Government Compound
Cotabato City

Attention : The Chairman

Bids and Awards Committee

Dear Sir / Madame:

In compliance with the requirements of the (Name of the Procuring Entity) 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, civil engineers, architect, materials engineer and safety officer, 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)

List of Equipment Owned (please see Invitation to Bid), assigned to the Proposed Contract

Business Name _____

Business Address _____

Description	Model/Year	Capacity/ Performance/size	Plate No.	Motor no./ Body no.	Location	Condition	Proof of Ownership

List of minimum equipment required for the project:

Submitted by:

(Printed Name & Signature)

Designation:

Date: _

Qualification of Key Personnel Proposed to be Assigned to the Contract

Business Name : _____

Business Address : _____

	Project Engineer	Material Engineer	Safety Officer	Structural Engineer	Construction Foreman	Skilled Laborer	Unskilled Laborer
1 Name							
2 Address							
3 Date of Birth							
4 Employed Since							
5 Experience							
6 Previous Employment							
7 Education							
8 PRC License							

Minimum Requirements:

- : Project Engineer
- : Material Engineer
- : Safety Officer
- : Structural Engineer
- : Construction Foreman

- : Skilled Laborer
- : Unskilled Laborer

Note: Attached individual resume, PRC License of the (professional) personnel, Certificate of DPWH Accreditation, Certification as Structural Engineer and Certificate of Trainings from any training institutions recognized by the Department of Labor and Employment (DOLE) for Safety Officer.

Designation : _____

Date : _____

Statement of all Completed Government & Private Construction Contracts which are similar in nature

Business Name : _____
 Business Address : _____

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

- Note: This statement shall be supported with:
- 1 Contract
 - 2 CPES rating sheets and/or Certificate of Completion
 - 3 Certificate of Acceptance

Designation : _____
 Date : _____

Statement of all Ongoing Government & Private Construction Contracts including contracts awarded but not yet started

Business Name : _____ Business Address: _____

Name of Contract/Location Project Cost	a. Owner Name b. Address c. Telephone Nos.	Nature of Work	Contractor's Role		a. Date Awarded b. Date Started c. Date of Completion	% of Accomplishment		Value of Outstanding Works
			Description	%		Planned	Actual	
<u>Government</u>								
<u>Private</u>								
						Total Cost		

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 Project Engineer

Submitted by : _____
(Printed Name & Signature)

Designation : _____
Date : _____





Republic of the Philippines
MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
BARMM
COTABATO CITY



DETAILED ENGINEERING DESIGN FOR
**CONSTRUCTION OF
RIVER LANDING**
AT LIBUNGAN, TORRETA, PIGCAWAYYAN, SGA

CHECKED & SUBMITTED BY:


ENGR. NASRODIN B. MASAKAL
ENGINEER IV

RECOMMENDING APPROVAL BY:


ATTY. ROSLAINE L. MACAO-MANIRI
DIRECTOR GENERAL

APPROVAL BY:


ATTY. PAISALIN P. TAGO, CPA
MINISTER

ARCHITECTURAL

STANDARD HATCHES

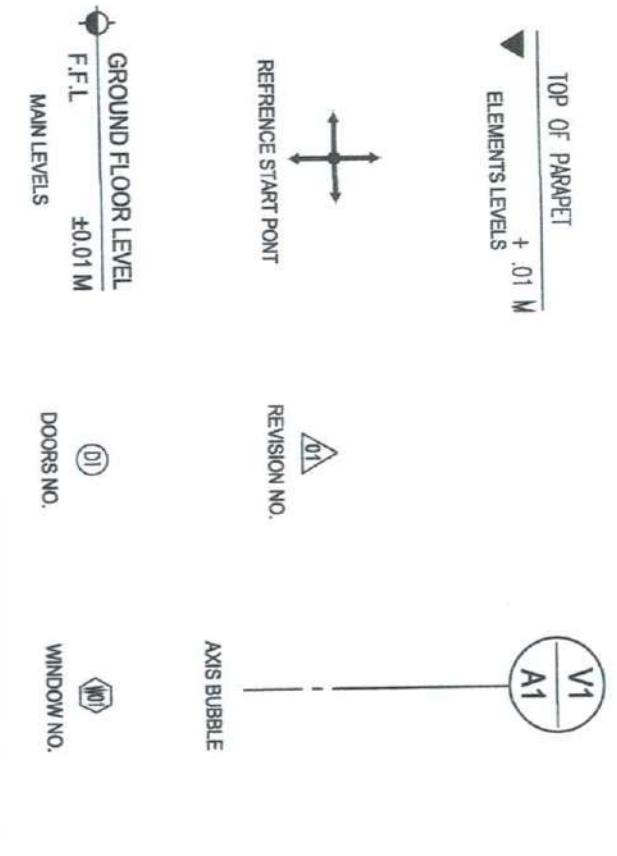
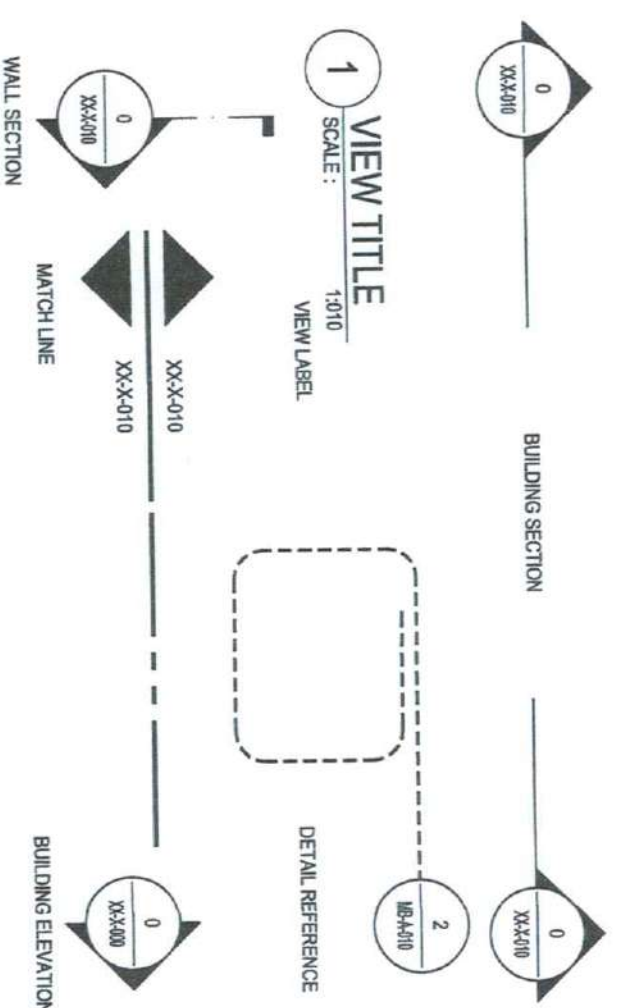
	PLAIN CONCRETE		PLASTER (SECTIONS)		INSULATION		LEATHER
	R. CONCRETE		COMPACTED SOIL		WATER		STONE (ELEVATIONS)
	MASONRY CMU		GRAVEL / PEBBLES		PLYWOOD		MOSAICS
	STONE (SECTION)		SPANISH TILES		WOOD (ELEVATION)		DEMOLISHMENT WALLS
	STEEL (SECTION)		GLASS (ELEVATIONS)		WOOD (ELEVATION)		EXISTING WALLS
	METAL (ELEVATION)		WAVY GLASS (ELEVATIONS)		HARD WOOD (SECTION)		PAINT (ELEVATIONS)
	SAND		GLASS (SECTIONS)		GRC / GPP		

ABBREVIATIONS:

F.F.L	FINISH FLOOR LEVEL	T.O.RL	TOP OF RAILING
T.O.P.	TOP OF PARAPET	T.O.SW.	TOP OF SIDEWALK
T.O.W.	TOP OF WALL	T.S.	TOP OF SAND
T.P.W.	TOP OF PLANTER WALL	FD	FLOOR DRAIN
T.O.S.	TOP OF STRUCTURE SLAB	R.W.O.	RAIN WATER OUTLET
T.O.L	TOP OF SOIL	O.T.S.	OPEN TO SKY
W.F.	WATER FEATURE		

CALL OUTS

ANNOTATIONS



Republic of the Philippines
MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 CDR. E. ASERRA
 CDR. E. ASERRA
 CDR. E. ASERRA

PROJECT & LOCATION
 CONSTRUCTION OF RIVER LANDING AT TUGAL
 SULTAN SA BARONGIS, MAGUINDANAO

SHEET CONTENT:
 NOTES & SYMBOL

REV. SYMBOL ABBREVIATIONS

DESIGNED BY:
 ARCHITECT I

CHECKED AND ENGINEERED BY:
 ENGINEER II

SCALE DRAWN BY:
 DRAWER II

SHEET NO.
AR-01
01

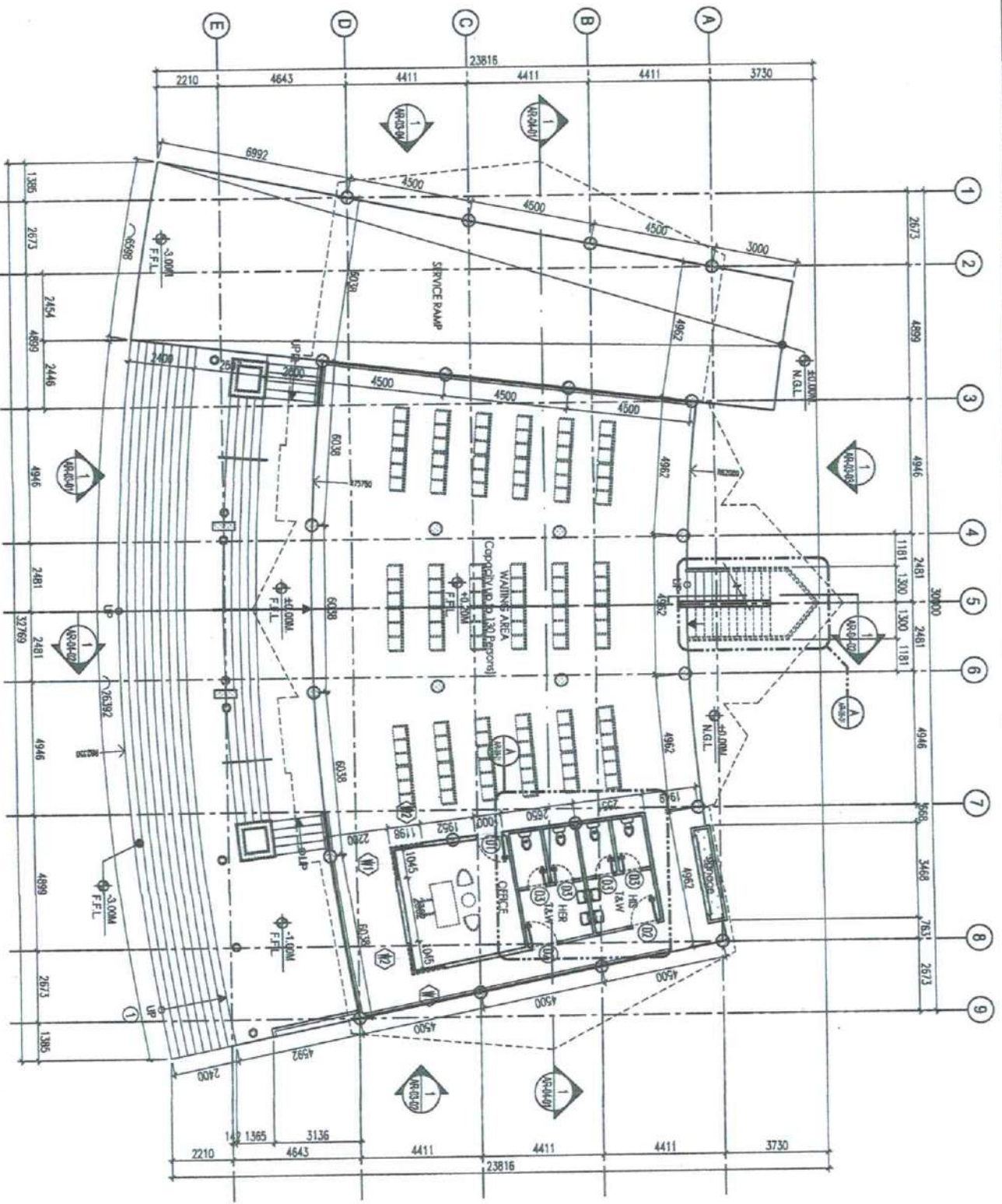


Department of Transportation & Communication
MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 BARCELONA
 COTABATO CITY

PROJECT & LOCATION
CONSTRUCTION OF RIVER LANDING AT
TUGAL, SULTAN SA BARONGIS,
MAGUINDANAO

SHEET CODE(S):
FLOOR PLAN

A
GROUND FLOOR PLAN
 SCALE: 1:150M



REVISIONS:
 1. Change the specifications and the Contract Documents to include the...
 2. Add the...
 3. Add the...
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 99. Add the...
 100. Add the...

DESIGNED BY:
 [Signature]
ARCHITECT

CHECKED AND APPROVED BY:
 [Signature]
ENGINEER

DESIGNED BY:
 [Signature]
ENGINEER

DATE:
 AR-02
 01



Department of the Philippines
 MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 BARANGAY COTRABAND CITY

PROJECT & LOCATION
 CONSTRUCTION OF RIVER LANDING AT
 TUGAL, SULTAN SA BARONGIS,
 MAGUINDANAO

SHEET CONTENT:
 FLOOR PLAN

REMARKS AND REVISIONS

1. Check and verify the accuracy of the data and information provided by the client and the contractor. 2. Verify the accuracy of the data and information provided by the client and the contractor. 3. Verify the accuracy of the data and information provided by the client and the contractor. 4. Verify the accuracy of the data and information provided by the client and the contractor. 5. Verify the accuracy of the data and information provided by the client and the contractor. 6. Verify the accuracy of the data and information provided by the client and the contractor. 7. Verify the accuracy of the data and information provided by the client and the contractor. 8. Verify the accuracy of the data and information provided by the client and the contractor. 9. Verify the accuracy of the data and information provided by the client and the contractor. 10. Verify the accuracy of the data and information provided by the client and the contractor.

DESIGNED AND DRAWN BY:

JULIE T. TORRES
 ARCHITECT

CHECKED AND REVIEWED BY:

EMER MASRICHIN B. MASAWAL
 ENGINEER

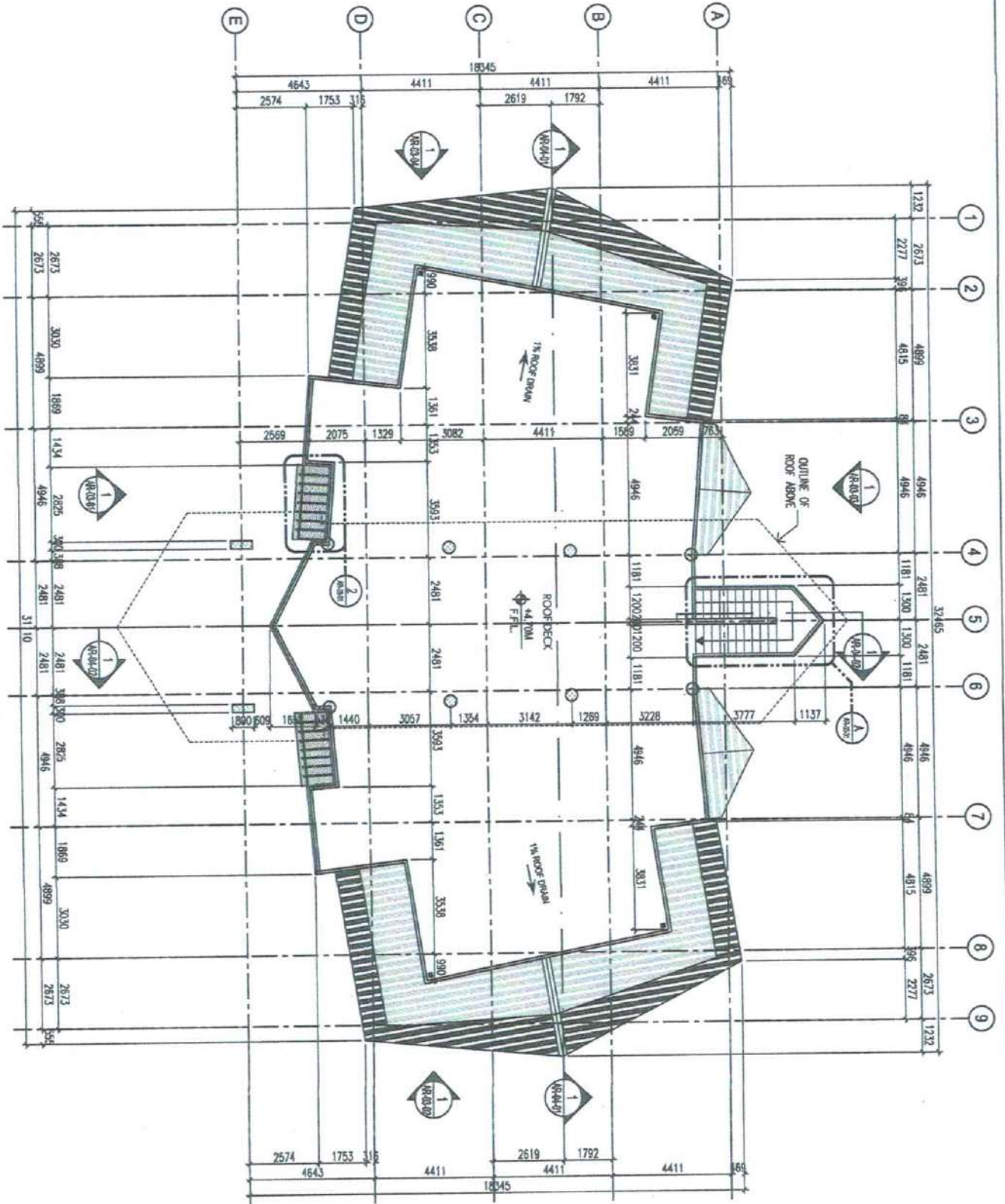
DATE:

EMER MASRICHIN B. MASAWAL
 ENGINEER

SHEET NO.

AR-02
 02

A
 ROOF DECK PLAN
 SCALE: 1:1500



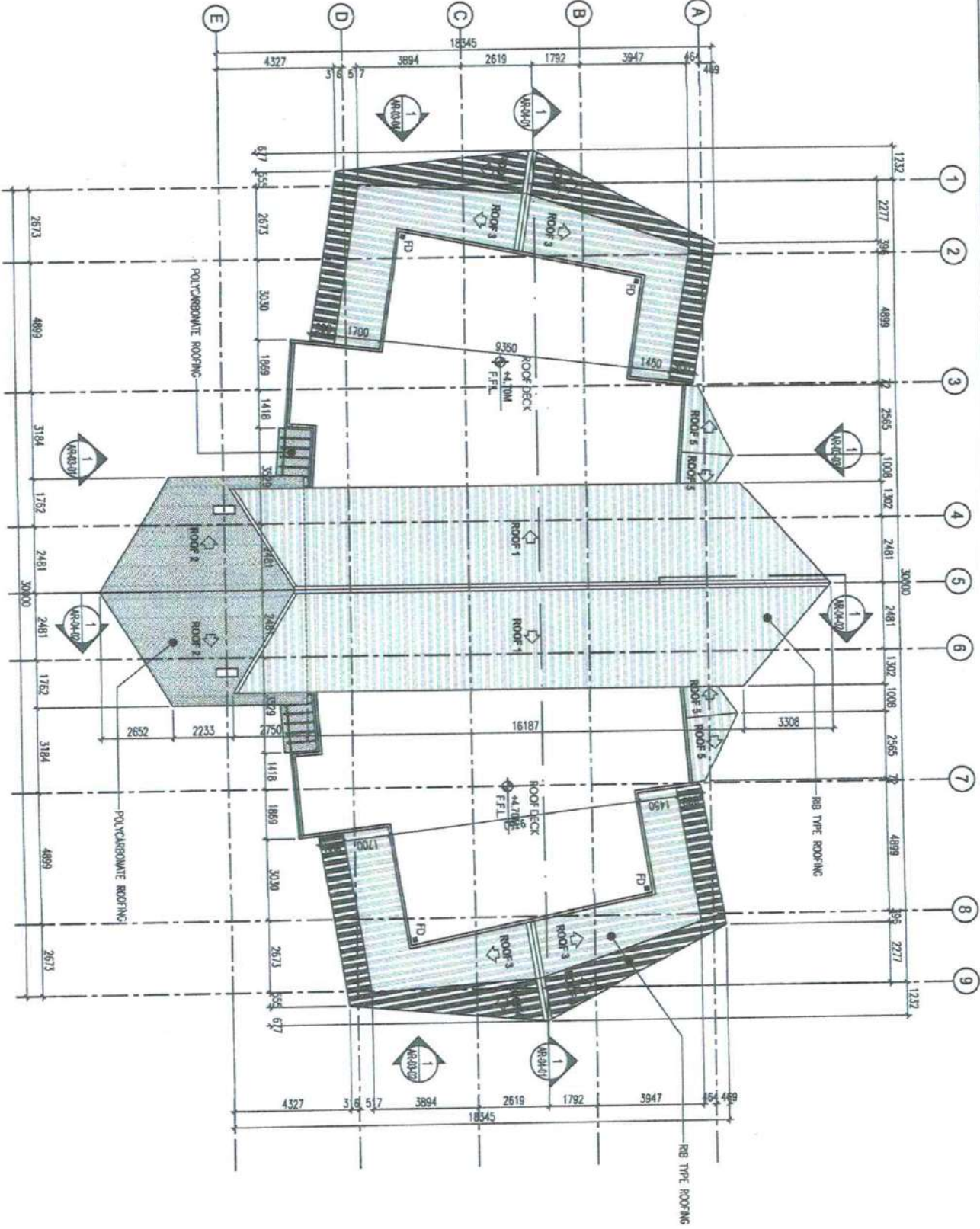


MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
BARCELONA
COTTABATO CITY

PROJECT & LOCATION
CONSTRUCTION OF RIVER LANDING AT
TUGAL, SULTAN SA BARONGSIS,
MAGUINDANAO

SHEET NO. 16

A ROOF PLAN
SCALE: 1:150M



ROOF AREA, VENTILATION, AND OTHER NOTES

Check and verify the roof area, ventilation, and other notes. The roof area should be checked against the floor plan and the roof area should be checked against the floor plan. The roof area should be checked against the floor plan.

REVIEWED BY:

DESIGNED AND DRAWN BY:

SCALE: 1:150M

AR-02
03

ARCHITECT

ENGINEER

INSPECTOR

INSPECTOR



Department of the Architect
 MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 DAVAO REGION
 COTABATO CITY

PROJECT & LOCATION
 CONSTRUCTION OF RIVER LANDING AT
 TUGAL, SULTAN SA BARONGIS,
 MAGUINDANAO

SHEET CONTENT:
 ELEVATION

NOTES, AMEND & REVISIONS

Drawings and Specifications under Contract Documents shall remain the property of the Architect. No part of these drawings shall be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the Architect. The Architect shall not be held responsible for any errors or omissions in the drawings or specifications, or for any consequences arising from the use of the drawings or specifications, or for any damages, whether material or otherwise, which may be incurred by the contractor or any other party.

DESIGNED BY

JACIE M. MARCHANT
 ARCHITECT

CHECKED AND REVIEWED BY

ENGR. ASHLEYA D. ALANGAR
 ENGINEER

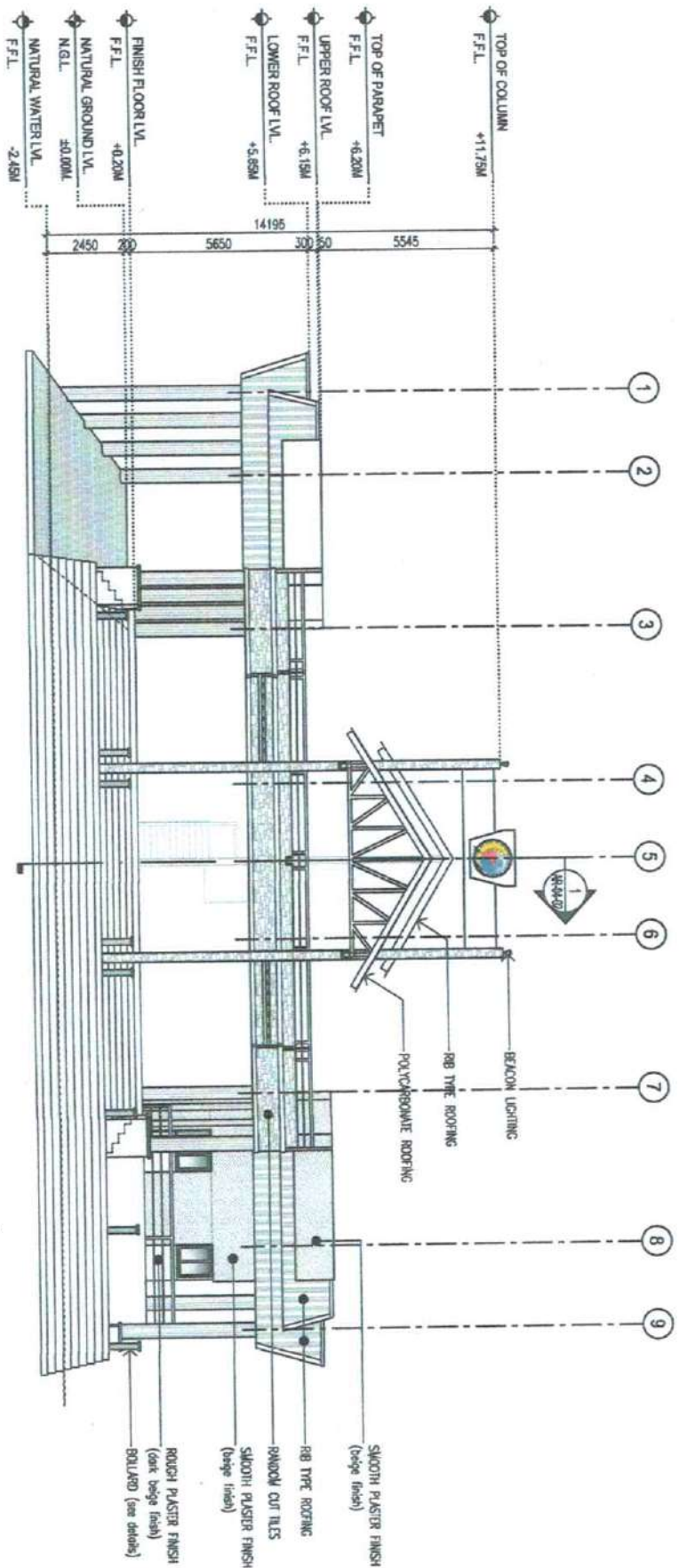
SKETCHED BY

ENGR. NASHODIN B. MASAYAL
 ENGINEER

SHEET NO.

AR-03
 01

1 FRONT ELEVATION
 SCALE: 1:150M





REPUBLIC OF THE PHILIPPINES
 DEPARTMENT OF TRANSPORTATION AND COMMUNICATION
OFFICE OF THE MINISTER
 BARON
 COTABATO CITY

PROJECT & LOCATION
**CONSTRUCTION OF RIVER LANDING AT
 TUGAL, SULTAN SA BARONGIS,
 MAGUINDANAO**

SHEET CONTENT
ELEVATION

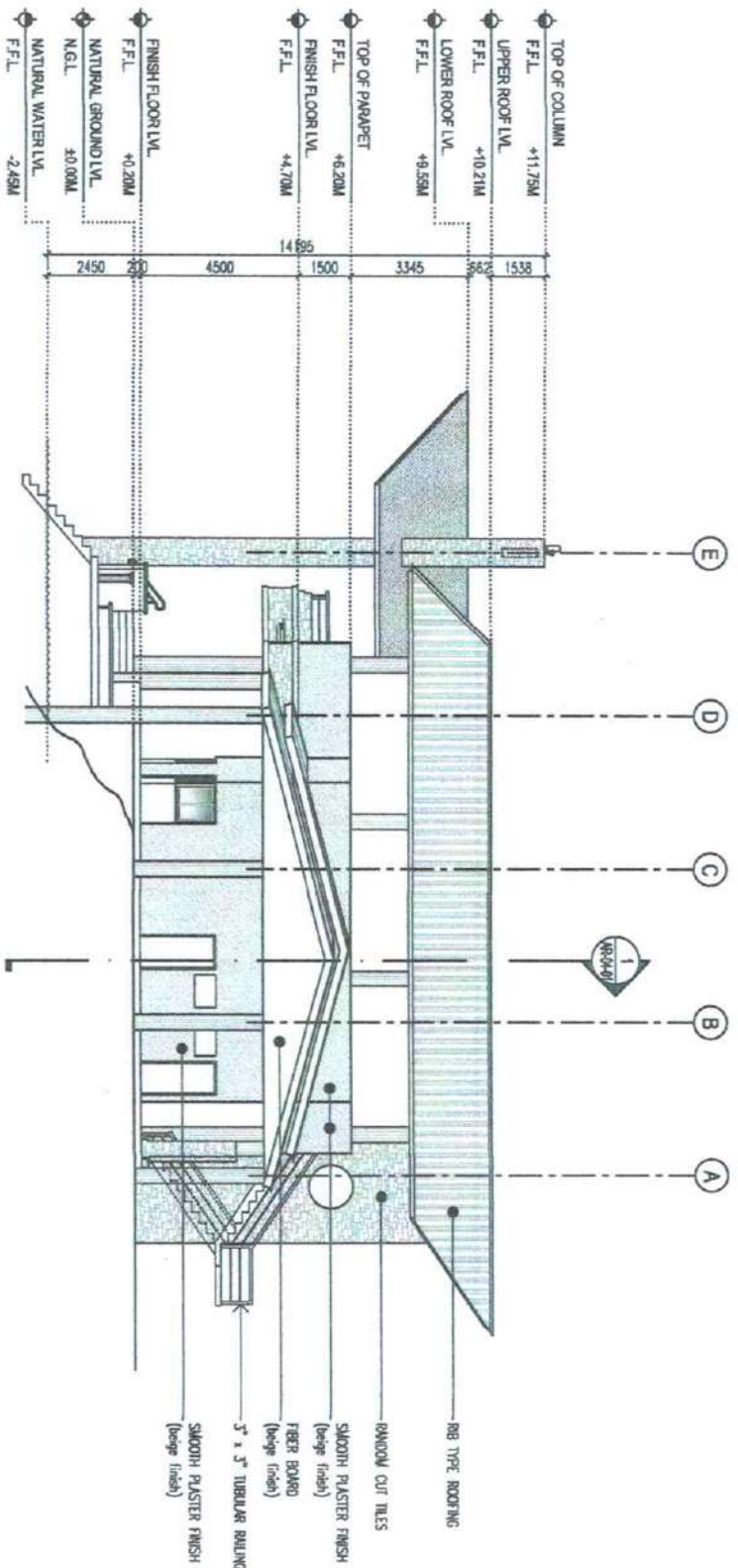
REMARKS AND INSTRUCTIONS
 Drawing and Specifications and/or Contract Documents shall be read in conjunction with the General Notes and the Terms of Reference, and the right to which they are attached. The Engineer shall be held responsible for any error or omission in the design and documents for use in the execution of the project. The Engineer shall be held responsible for any error or omission in the design and documents for use in the execution of the project.

DESIGNED BY:
 ARCHITECT

CHECKED AND REVIEWED BY:
 ENGINEER

DRAWN BY:
 ENGINEER

SHEET NO.
**AR-03
 02**



1
 RIGHT SIDE ELEVATION
 SCALE: 1:150M

- TOP OF COLUMN
F.F.L. +11.75M
- UPPER ROOF LVL.
F.F.L. +10.21M
- LOWER ROOF LVL.
F.F.L. +9.55M
- TOP OF PARAPET
F.F.L. +6.20M
- FINISH FLOOR LVL.
F.F.L. +4.70M
- FINISH FLOOR LVL.
F.F.L. +0.20M
- NATURAL GROUND LVL.
N.G.L. ±0.00M
- NATURAL WATER LVL.
F.F.L. -2.45M

- 1538
- 296
- 3345
- 1500
- 4500
- 2450

E
 D
 C
 B
 A





Department of the Philippines
MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 PASAY
 CORONA CITY

PROJECT & LOCATION
 CONSTRUCTION OF RIVER LANDING AT
 TUGAL, SULTAN SA BARONGIS,
 MAGUINDANAO

SHEET CONTENT:
 ELEVATION

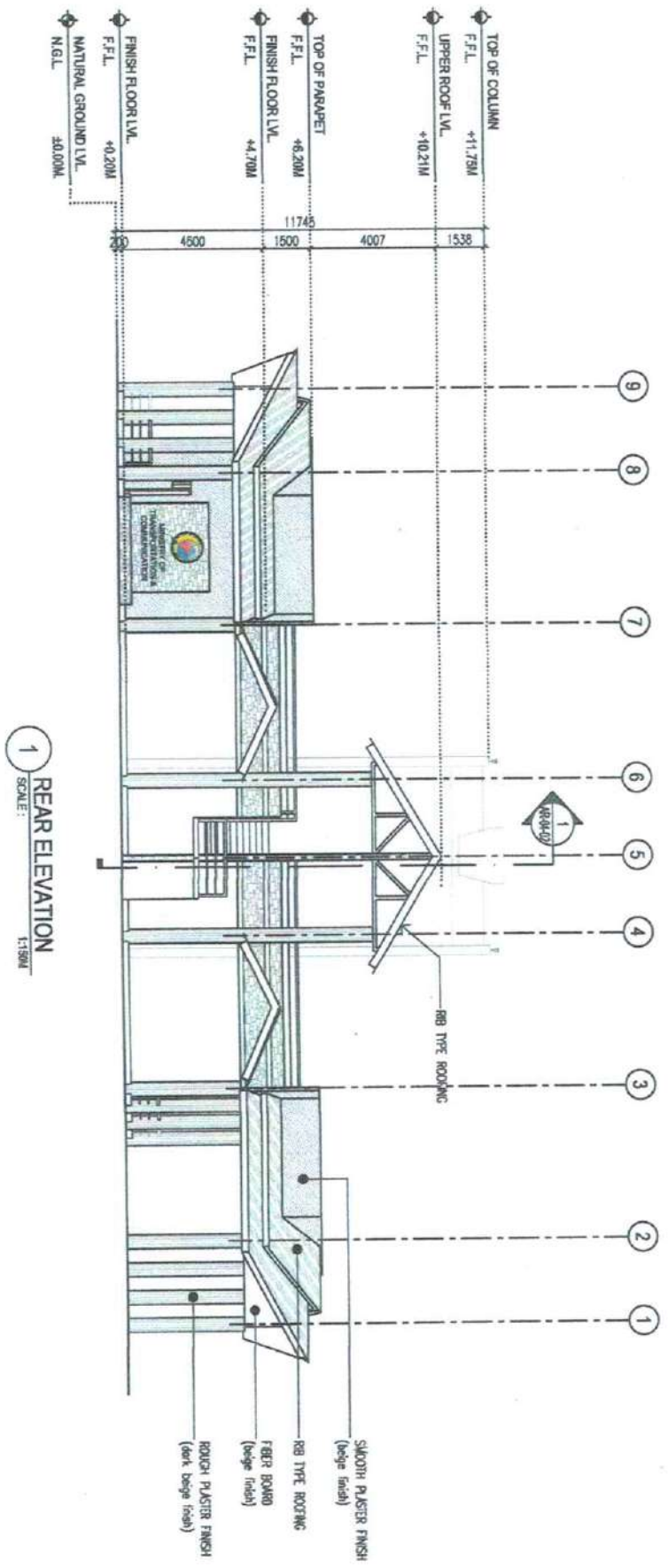
REVISIONS:
 Change of Foundation and Column Dimensions (11/11/2023)
 Change of wall to masonry blocks, and to include floor joist
 and beams of the upper stories to be added to the
 structure to be a wooden structure, given in the
 original set. Documents to be completed and the project
 of design, with enclosure or other, which for when given
 of the Architectural Board of Documents.

PREPARED BY:
 JUEL M. VALCABANO
 ARCHITECT

CHECKED AND REVIEWED BY:
 ENGR. ASHERA D. ALVARGAR
 ENGINEER

C. SMITH M.
 ENGR. RESORORONG, ENRIVAL
 ENGINEER

SHEET NO.
 AR-03
 03



1 REAR ELEVATION
 SCALE: 1:150M



Ministry of Transportation & Communication
OFFICE OF THE MINISTER
 BARCELONA
 CORONA CITY

PROJECT & LOCATION:
**CONSTRUCTION OF RIVER LANDING AT
 TUGAL, SULTAN SA BARONGIS,
 MAGUINDANAO**

SHEET CONTENT:
ELEVATION

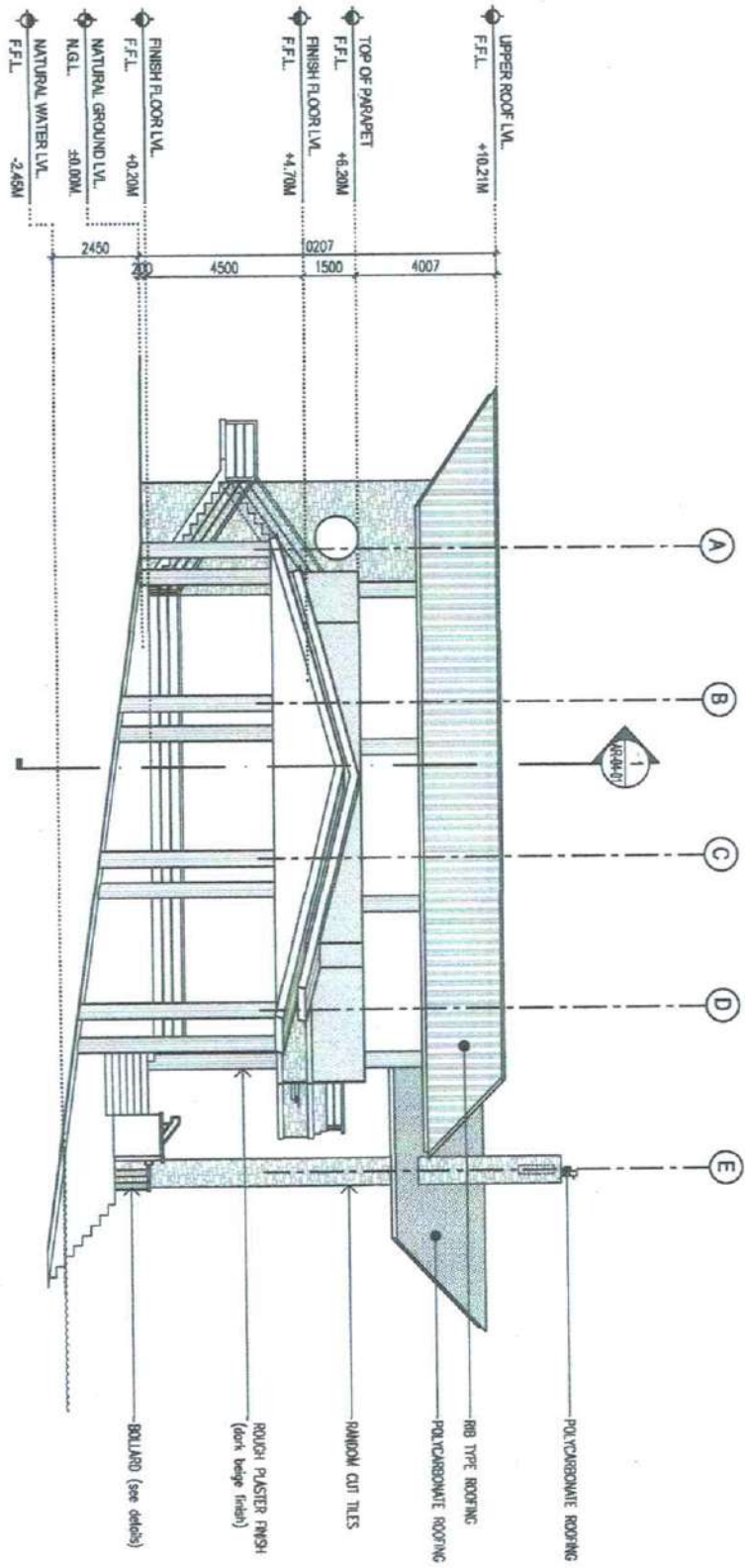
MAKING ANY ALTERATION TO THE DESIGN OR SPECIFICATIONS OR TO THE CONTRACT DOCUMENTS WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT IS PROHIBITED. THE ARCHITECT'S LIABILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE PROJECT AS SHOWN ON THE CONTRACT DOCUMENTS. THE ARCHITECT IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED BY OTHER PROFESSIONALS OR FOR THE CONSTRUCTION OF THE PROJECT.

DESIGNED BY:
JANET M. MALCOLMO
 ARCHITECT

CHECKED AND REVIEWED BY:
ENGR. ASHFINA D. JASGAR
 ENGINEER

SCALE DRAWN BY:
ENGR. TRANSCENDY B. RAMOSPORT
 ENGINEER

SHEET NO.
**AR-03
 04**



1 LEFT SIDE ELEVATION
 SCALE: 1:150M



Republic of the Philippines
 DEPARTMENT OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 BARCELONA
 CORRALA CITY

PROJECT & LOCATION:
**CONSTRUCTION OF RIVER LANDING AT
 TUGAL, SULTAN SA BARONGIS,
 MAGUINDANAO**

SHEET CONTINUED:
SECTION

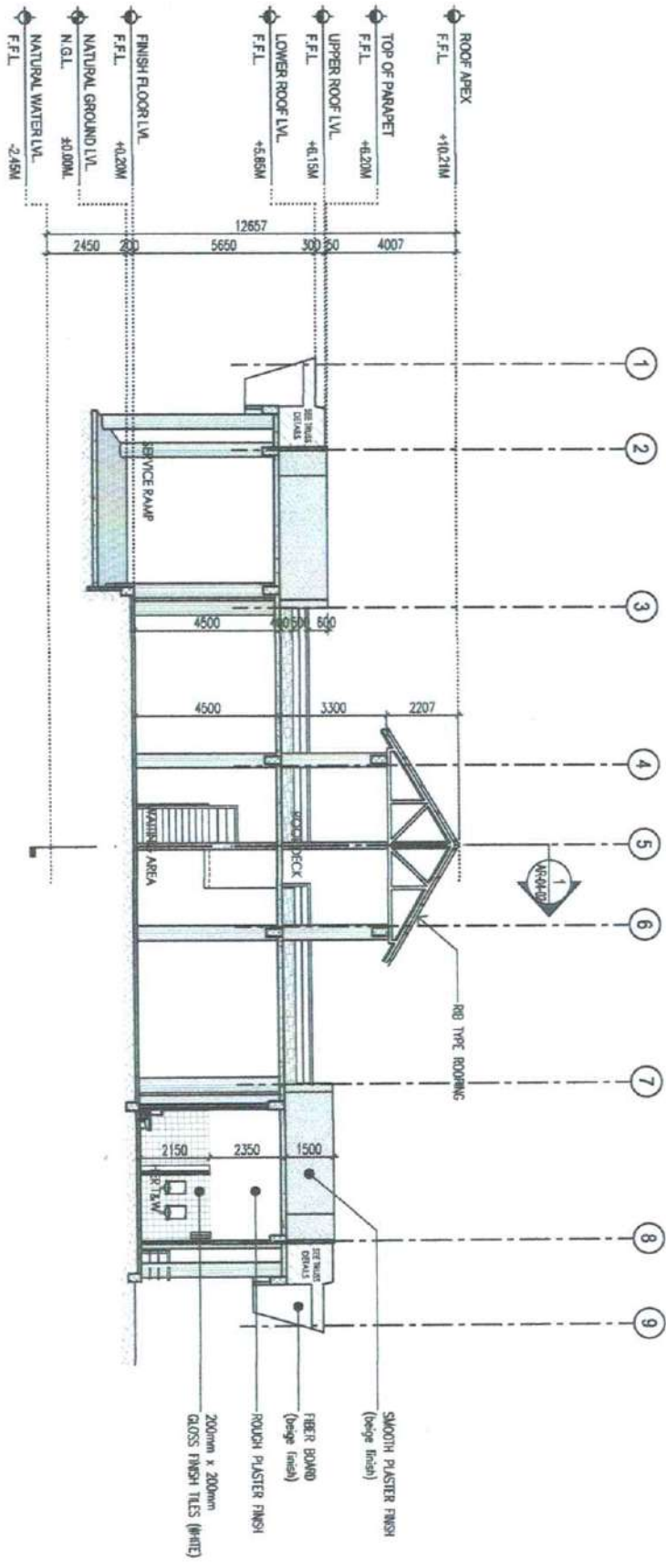
MAKING OFFICIAL REVISIONS
 Changes and Specifications to other Contract Documents, including drawings, shall be made in the form of a separate sheet, which shall be signed by the Architect and the Engineer. The original of the Architect's and the Engineer's signatures shall be submitted to the Department of Transportation and Communication, Office of the Minister, for approval.

DESIGNED BY:
 ARCHITECT: *[Signature]*

CHECKED AND REVIEWED BY:
 MANAGER: *[Signature]*

DRAWING BY:
 ENGINEER: *[Signature]*

SHEET NO.:
**AR-04
 01**



SECTION A
 SCALE: 1:150M



Republic of the Philippines
 MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 BARANGAY
 CORMANDO CITY

PROJECT & LOCATION
**CONSTRUCTION OF RIVER LANDING AT
 TUGAL, SULTAN SA BARONGIS,
 MAGUINDANAO**

SHEET CONTENT:
SECTION

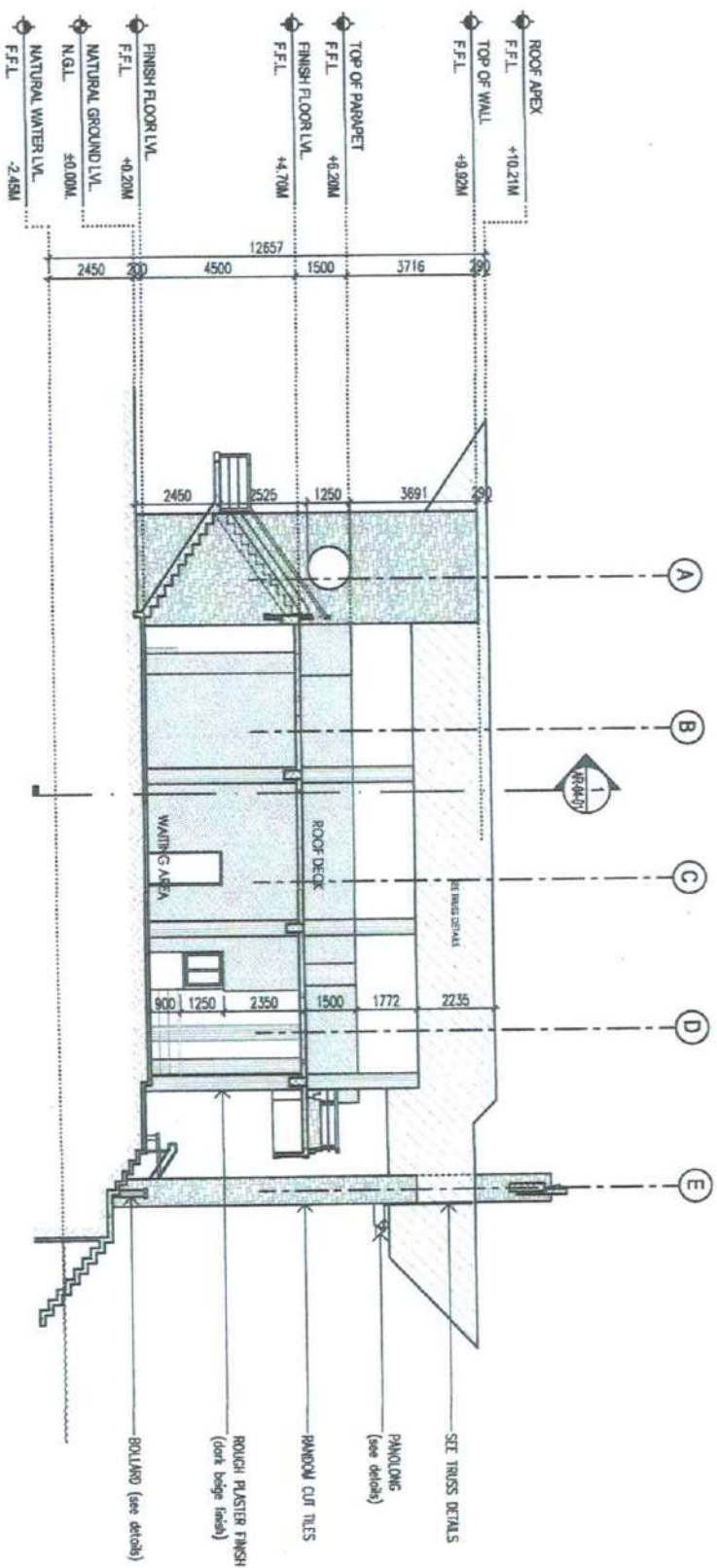
ALL WORK, MATERIALS AND METHODS
 shown on this drawing are subject to the
 approval of the Engineer-in-Charge. The
 Engineer-in-Charge is not responsible for
 any errors or omissions in this drawing
 or for any consequences arising therefrom
 without the written consent of the
 Engineer-in-Charge.

PREPARED BY:
 JALL M. MAQUALLO
 ARCHITECT

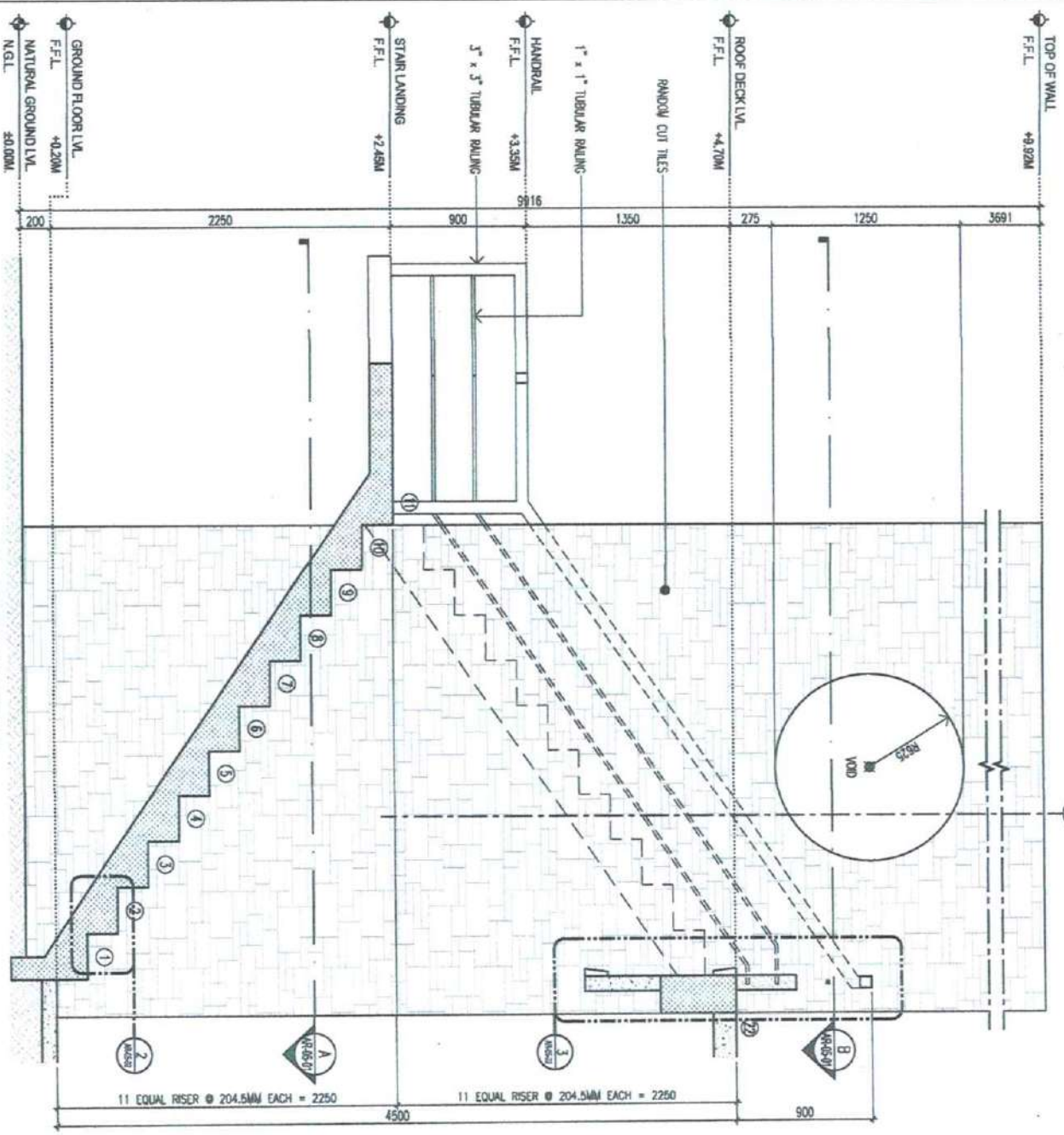
CHECKED AND REVISIONS BY:
 ENGR. ASHLEY D. LUGGAR
 ENGINEER

SUBMITTED BY:
 ENGR. NASHIRUDDIN B. MASAKAL
 ENGINEER

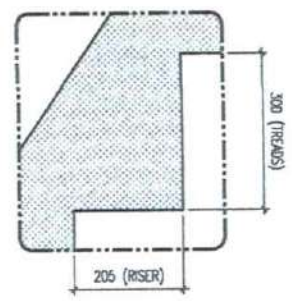
SHEET NO.
**AR-04
 02**



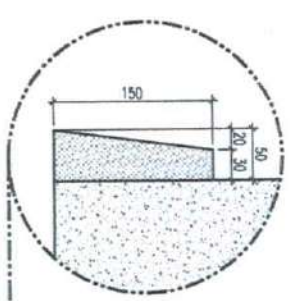
1 SECTION B
 SCALE: 1/150MM



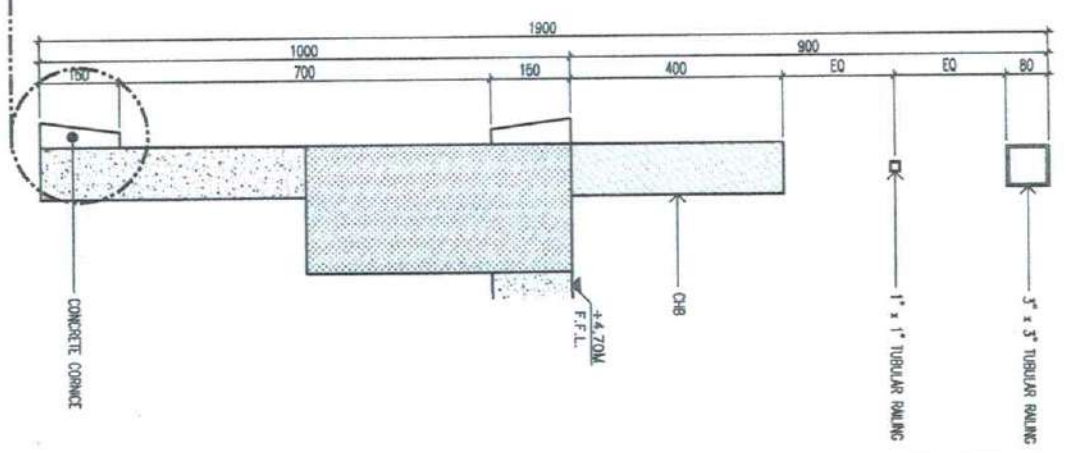
1 SECTION DETAILS
SCALE: 1:30M



2 SPOT DETAILS
SCALE: 1:10M



3 SPOT DETAILS
SCALE: 1:10M



Republic of Malaysia
MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 SABAH
 KOTAHARAU CITY

PROJECT LOCATION:
CONSTRUCTION OF RIVER LANDING AT
TUGAL, SULTAN SA BARONGIS,
MAGUINDANAO

SHEET CONT'N:
STAIR DETAILS

REVISIONS AND SPECIFICATIONS:
 Change and Specifications on the Contract Documents shall be made in writing and shall be signed by the Engineer and the Architect. No verbal orders shall be issued for any part of the work. All drawings shall be submitted to the Engineer for approval. The Architect shall be responsible for the design and construction of the works under his contract.

DESIGNED BY:
 ARCHITECT

CHECKED AND APPROVED BY:
 ENGINEER

SCALE: 1:10M
 DRAWN BY:
 CHECKED BY:

SHEET NO:
AR-05
02



Ministry of the Sarawak
 MINISTRY OF TRANSPORTATION & COMMUNICATION
 OFFICE OF THE MINISTER
 SARAWAK
 KOTA KANGAR CITY

PROJECT & LOCATION
 CONSTRUCTION OF RIVER LANDING AT
 TUGAL, SULTAN SA BARONGS,
 MAGUINDANAO

SHEET CONTENT
 TOILET DETAILS

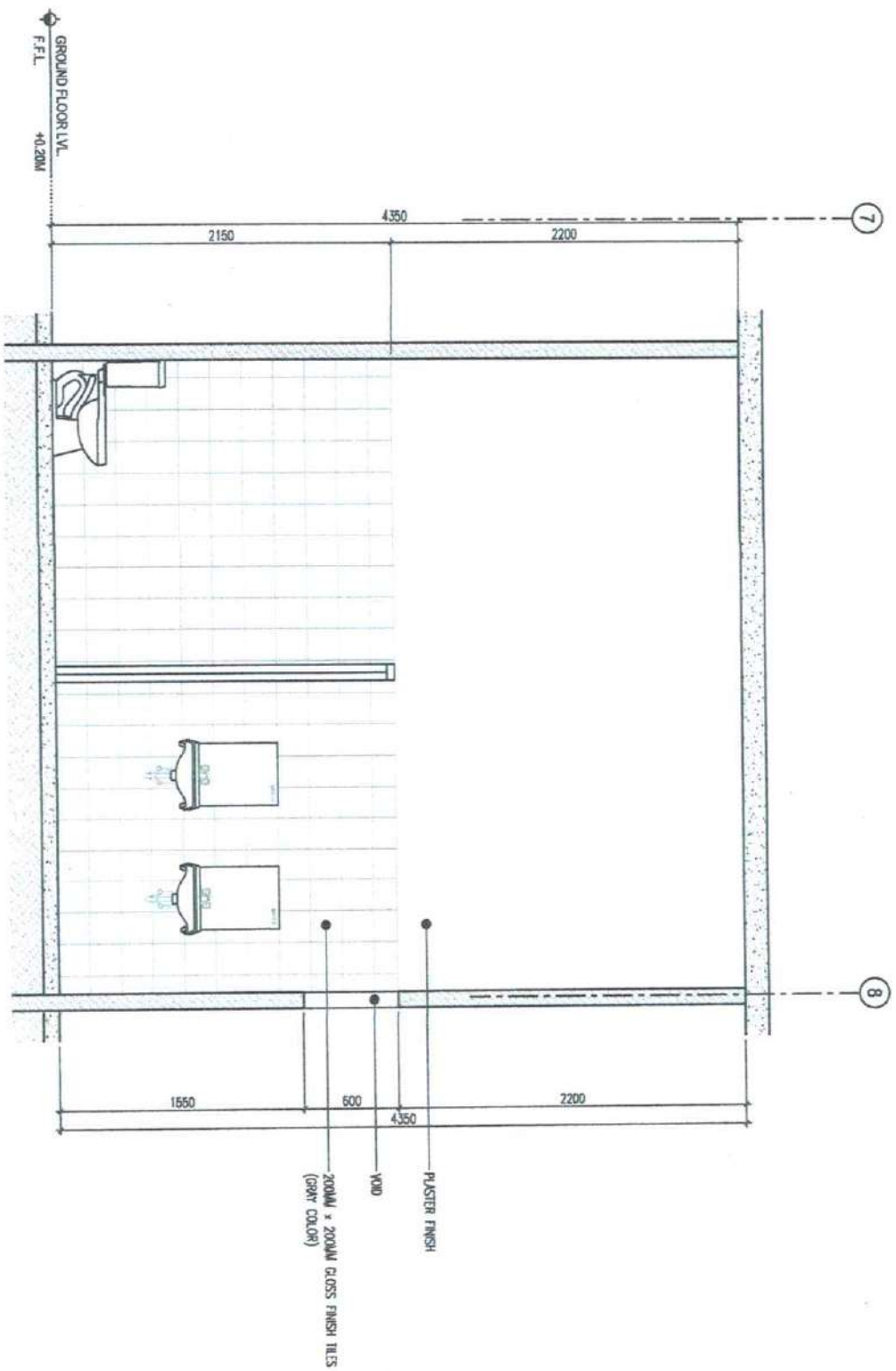
REVISIONS AND NOTES
 Changes and specifications are noted on this drawing in the margin. All changes shall be made in accordance with the approved design and drawings of the building, which shall be subject to the approval of the architect. The architect shall be responsible for the coordination of all building and site work. All work shall be done in accordance with the approved design and drawings of the building.

DESIGNED BY:
 JAILI M. MAJALLO
 ARCHITECT

CHECKED AND REVISIONS BY:
 ENGR. ASHFAHA D. ALMAGAR
 ARCHITECT

SKETCHED BY:
 ENGR. MASROOQI B. MASAKIL
 ARCHITECT

SHEET NO.
 AR-06
 02





REPUBLIC OF THE PHILIPPINES
 DEPARTMENT OF TRANSPORTATION & COMMUNICATION
 OFFICE OF THE MINISTER
 BARANGAY
 COTABATO CITY

PROJECT & LOCATION
 CONSTRUCTION OF RIVER LANDING AT
 TUGAL, SULTAN SA BARONGIS,
 MAGUINDANAO

SHEET CONTENTS
 TOILET DETAILS

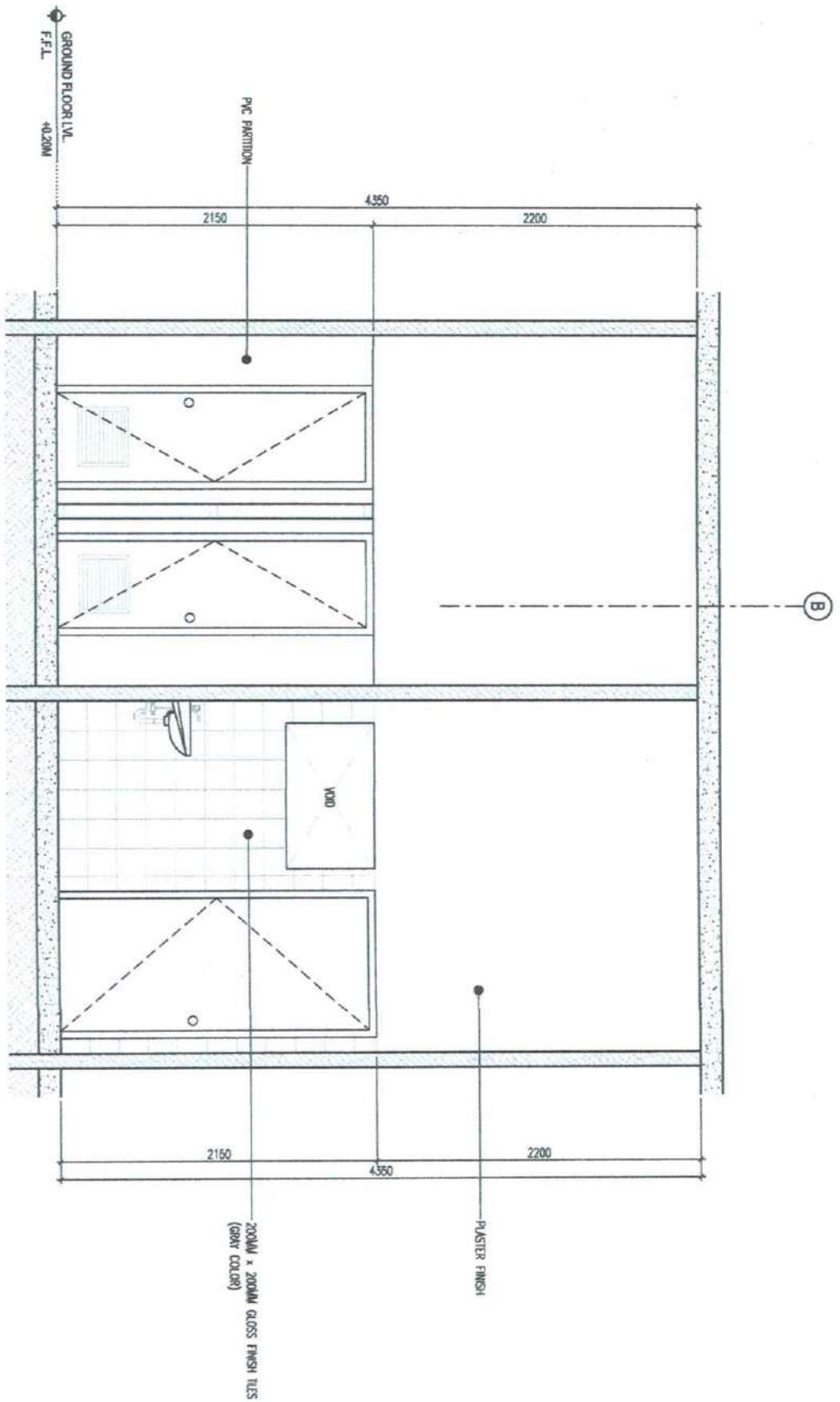
THIS DRAWING IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. THE ARCHITECT ASSUMES NO LIABILITY FOR THE ACCURACY OF THE INFORMATION PROVIDED BY THE CLIENT. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE WORK SHOWN ON THIS DRAWING. THE ARCHITECT DOES NOT WARRANT THE ACCURACY OF THE INFORMATION PROVIDED BY THE CLIENT. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE DESIGN AND CONSTRUCTION OF THE WORK SHOWN ON THIS DRAWING.

DESIGNED BY:
 JHILL-HE-TRACONULO
 ARCHITECT

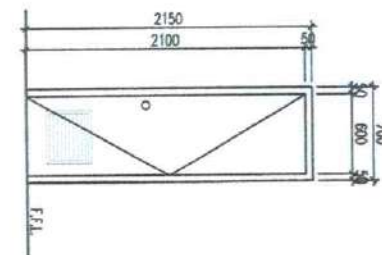
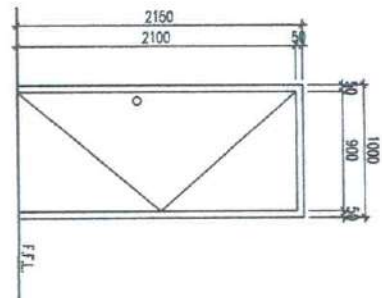
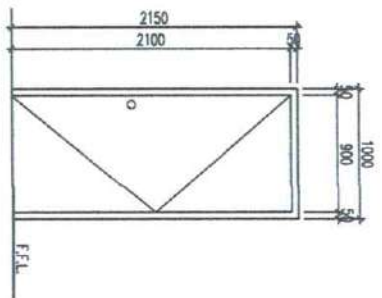
CHECKED AND REVIEWED BY:
 ENGR. ASHFAH D. ALJASGAR
 ENGINEER II

DRAWN BY:
 ENGR. MARCOBON T. TUGALVAL
 ENGINEER IV

SHEET NO.
 AR-06
 03



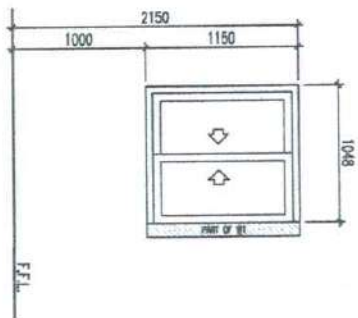
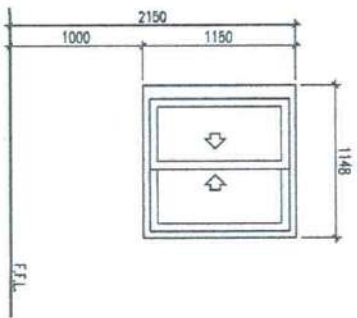
1 SECTION DETAILS
 SCALE: 1/32M



REQD. 1 SET	TYPE SOLID FLUSH DOOR (VARNISH FINISH)
LOCATION	OFFICE

REQD. 2 SETS	TYPE PRE-FABRICATED PVC DOOR
LOCATION	TOILET

REQD. 4 SETS	TYPE PRE-FABRICATED PVC DOOR
LOCATION	TOILET



REQD. 2 SETS	TYPE SLIDING WINDOW ON ALUMINUM FRAME BIRM, THICK GREEN REFLECTIVE GLASS
LOCATION	OFFICE

REQD. 2 SETS	TYPE SLIDING WINDOW ON ALUMINUM FRAME BIRM, THICK GREEN REFLECTIVE GLASS
LOCATION	OFFICE

Ministry of Transportation & Communication
OFFICE OF THE MINISTER
 BARABAI
 COTABATO CITY

PROJECT & LOCATION:
 CONSTRUCTION OF RIVER LANDING AT
 TUGAL, SULTAN SA BARONGIS,
 MAGUINDANAO

SHEET CONTENT:
 DOORS & WINDOWS
 SCHEDULES

DRAWING APPROVAL AND SIGNATURES:
 (Drawing and Specifications on other Contract Documents shall specify content or model, as the case may be, and the contractor shall be responsible for the accuracy of the information provided in the drawings and specifications. The contractor shall be responsible for the accuracy of the information provided in the drawings and specifications. The contractor shall be responsible for the accuracy of the information provided in the drawings and specifications.)

ARCHITECT: JANEL M. TULOMALO	CHECKED AND REVISIONS BY: ENGR. ASYA H. D. ALMAGAR	SUBMITTED BY: ENGR. NASROBIN B. MASWALA
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SHEET NO. **AR-07**
 01



Republic of the Philippines
MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 BARCELONA
 COTABATO CITY

PROJECT & LOCATION:
CONSTRUCTION OF RIVER LANDING AT
TUGAL, SULTAN SA BARONGIS,
MAGUINDANAO

SHEET CONTENT:
DETAILS

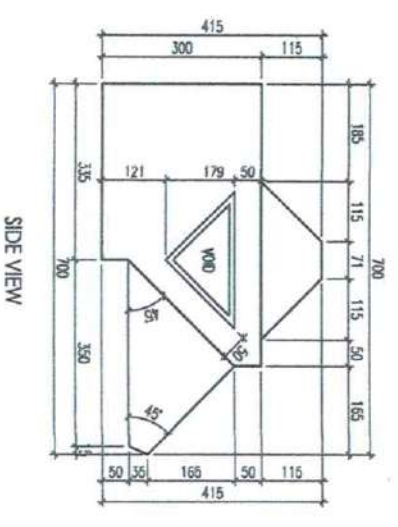
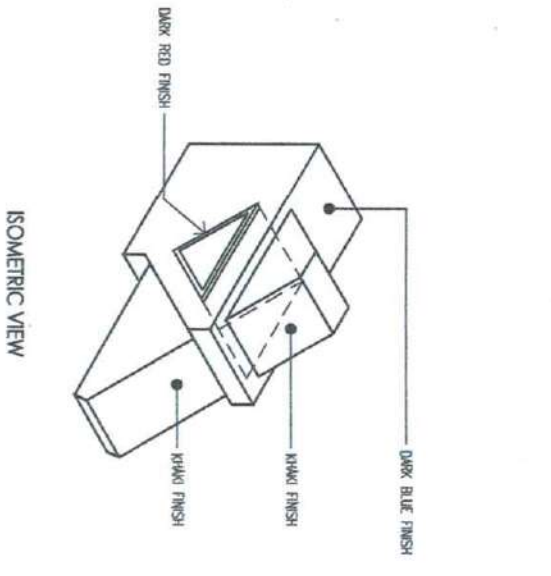
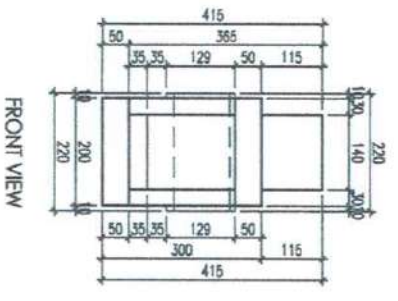
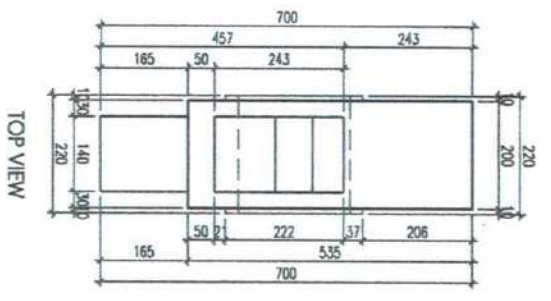
DRAWING APPROVAL INSTRUCTIONS:
 Change and Specification of any dimension, material, or
 component to meet a requirement shall be the sole and
 responsibility of the Architect, unless the Architect is
 notified in writing by the Engineer in Charge of the
 project. The Architect shall be responsible for the
 accuracy of all dimensions and materials specified
 in the drawings. The Architect shall be responsible
 for the accuracy of all dimensions and materials
 specified in the drawings.

PREPARED BY:
 JALIN M. MALCOLMO
 ARCHITECT I

CHECKED AND REVIEWED BY:
 ANGELO S. HADJI
 ENGINEER III

S. BARTOLOME:
 ENGINEER IV

SHEET NO.
AR-08
01

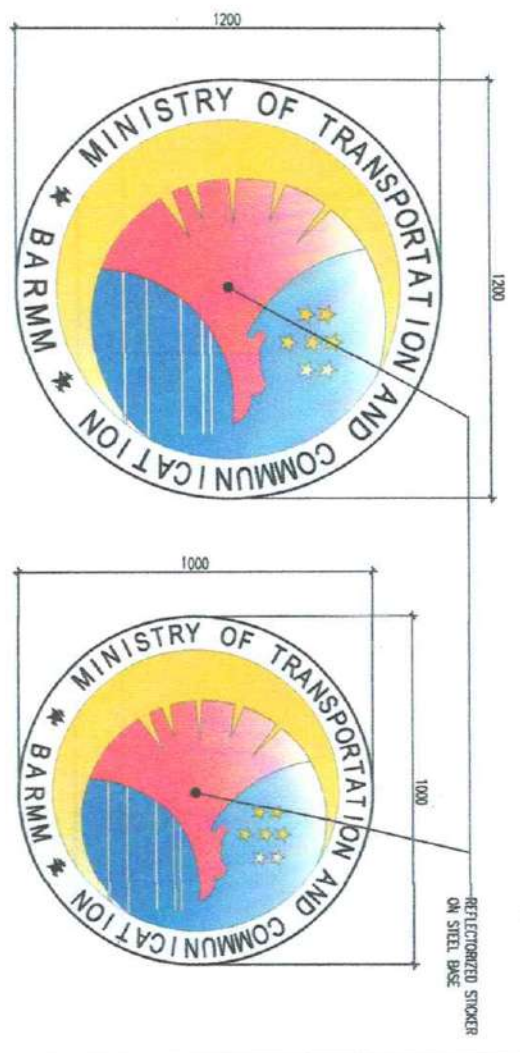


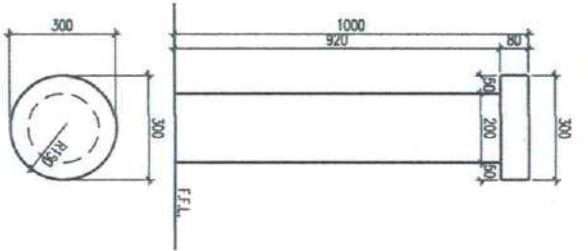
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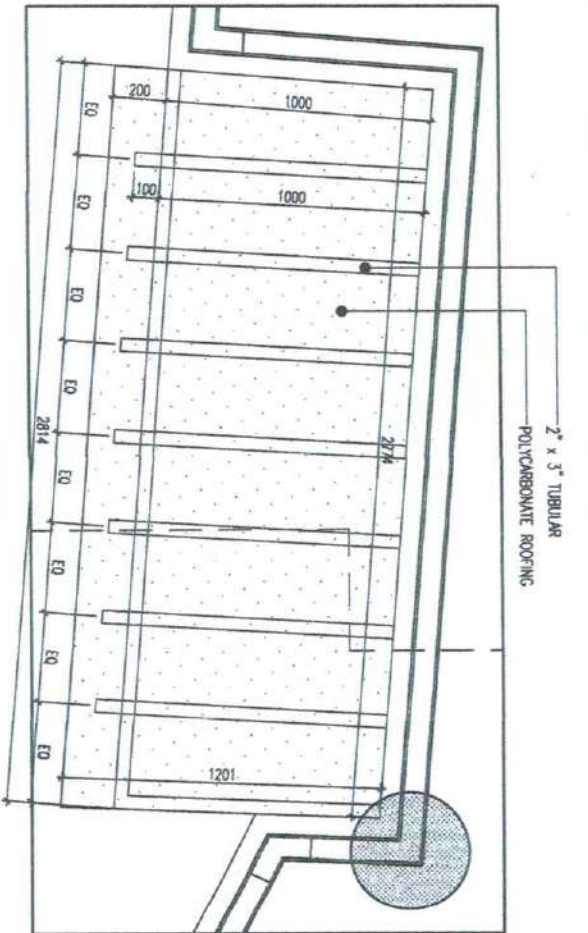
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LOGO DETAILS
 SCALE: 1:100

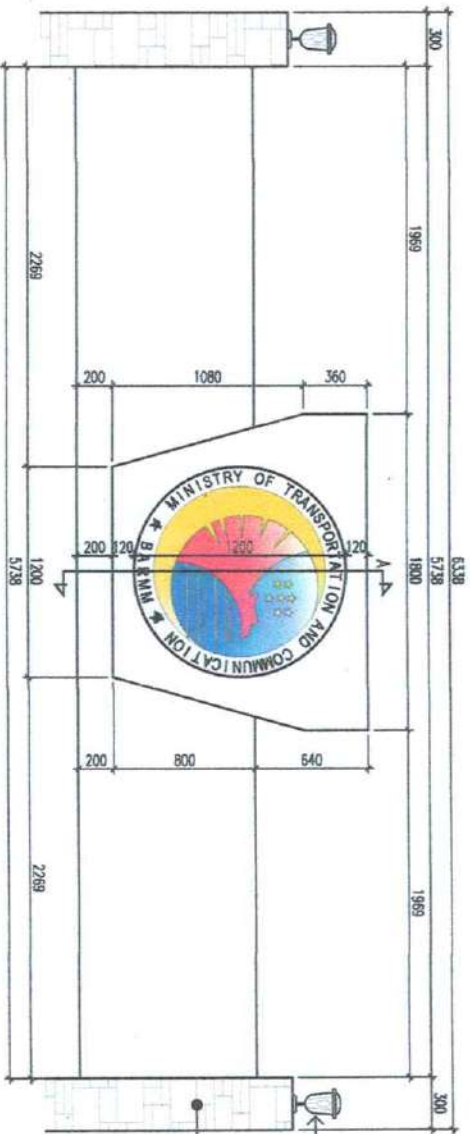




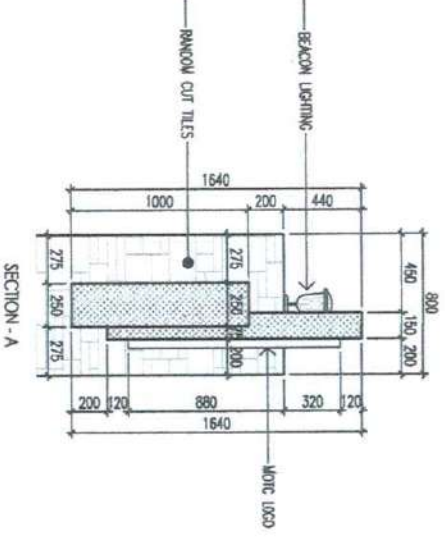
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2 PLAN DETAILS
SCALE: 1:20M



3 SPOT DETAILS
SCALE: 1:15M





REPUBLIC OF INDONESIA
 Kementerian Perhubungan
MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 BARUMAH
 COTABATO CITY

PROJECT & LOCATION:
 CONSTRUCTION OF RIVER LANDING AT
 TUGAL, SULTAN SA BARONGIS,
 MAGUINDANAO

SHEET CONTENT:
 DETAILS

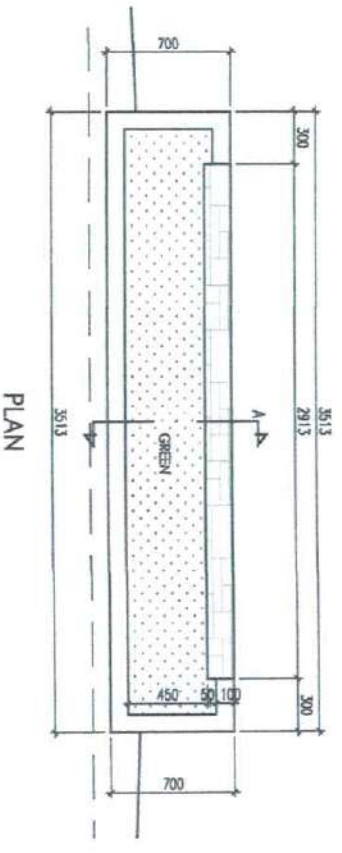
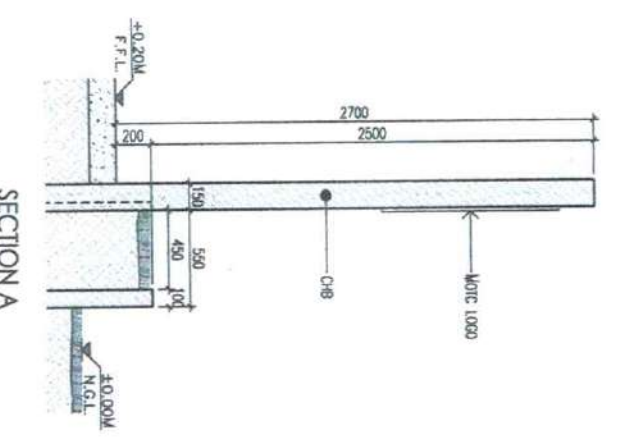
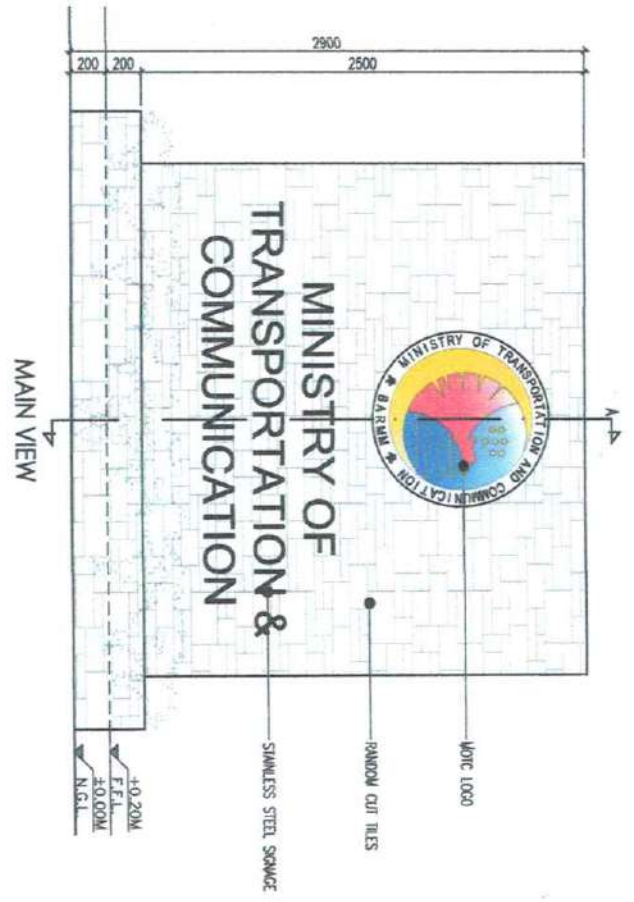
REVISIONS:
 1. Change and specifications of the Contract Documents, as applicable, to conform with the technical requirements of the contract documents, unless the design is modified by written instructions of the Engineer, which shall be issued to the contractor and the contractor shall be responsible for the modification and the contractor shall be responsible for the modification and the contractor shall be responsible for the modification.

DESIGNED BY:
 JAMES R. WALTONALLO
 ARCHITECT I

CHECKED AND REVIEWED BY:
 ENGR. ASHWIN D. MASAGAR
 ENGINEER III

SUBMITTED BY:
 ENGR. MARVIN T. MASAGAR
 ENGINEER

SHEET NO.:
 AR-08
 03



1 SIGNAGE DETAILS
 SCALE: 1:30M

STRUCTURAL

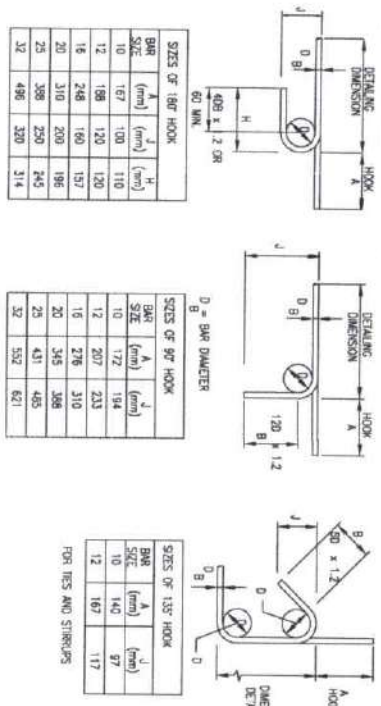
1. GENERAL NOTES, CONCRETE, REINFORCING
2. BENT / HOOK, SPLICE, NOTES, DOWEL EMBEDMENT LENGTH
 , AND REINFORCED CONCRETE/BLOCK MASONRY
3. STRUCTURAL SCHEDULE
4. STRUCTURAL DETAILS
5. COLUMN LAYOUT PLAN, COLUMN SCHEDULE
6. FOUNDATION LAYOUT PLAN
7. TIE BEAM LAYOUT PLAN
8. BOND BEAM LAYOUT PLAN
9. BEAM AND SLAB LAYOUT PLAN
10. ROOF BEAM LAYOUT PLAN
11. FIRST LEVEL ROOF PLAN
12. 2ND LEVEL ROOF PLAN
13. ROOF TRUSS SECTION
14. SECTION AND ISOMETRIC



PROJECT & LOCATION	C CONSTRUCTION OF PELER LANG AT TUGAL SULTAN SA BARONIS, MAGUINDAYAO
SHEET CONTENT	GENERAL NOTES -CONCRETE -REINFORCING
REVISION APPROVALS	
DRAWN BY	MUHAMMAD HAFIZ A. ALIYUQ ENGINEER
CHECKED AND REQUIRED BY	ENG. S. P. H. ALIYUQ ENGINEER
SUBMITTED BY	ENG. HASSAN B. MASHAL ENGINEER
SHEET NO.	S-1 14

II - CONCRETE :	<ol style="list-style-type: none"> DESIGN OF ALL REINFORCED CONCRETE STRUCTURE SHALL BE IN ACCORDANCE WITH THE ACI BUILDING CODE (ACI 318-02) STRENGTH METHOD CLASSES OF CONCRETE ARE AS FOLLOWS : <table border="1"> <thead> <tr> <th>CLASS</th> <th>MAXIMUM WATER CEMENT RATIO (BY WEIGHT)</th> <th>MINIMUM CONCRETE CONTENT (BY WEIGHT)</th> <th>MINIMUM COMPRESSIVE STRENGTH (MPa)</th> <th>MINIMUM 28 DAYS COMPRESSIVE STRENGTH (MPa)</th> </tr> </thead> <tbody> <tr> <td>LEAN CONCRETE</td> <td>0.90</td> <td>290</td> <td>421</td> <td>20</td> </tr> <tr> <td>REINFORCED CONC. & PRE-CAST WALL</td> <td>0.40</td> <td>350</td> <td>590</td> <td>30</td> </tr> <tr> <td>PRE STRESSED (REINFORCED CONC.)</td> <td>0.40</td> <td>375</td> <td>683</td> <td>35</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>500</td> </tr> </tbody> </table> ALL STRUCTURAL CONCRETE SHALL BE MADE WITH CEMENT AS PER MPM GUIDELINES SPECIFICATION BELOW. GROUND CONCRETE AND LEAN CONCRETE SHALL BE MADE WITH TYPE-I PORTLAND CEMENT RESISTANT PERM AND GEMT. ALL CONCRETE FOR ABOVE GROUND STRUCTURES AND GRADE SLABS SHALL BE MADE WITH TYPE-I ORDINARY PORTLAND CEMENT. ALL FOOTING EXCAVATIONS SHALL BE INSPECTED AND APPROVED BY THE MOTC ENGINEERING DIVISION REPRESENTATIVE PRIOR TO PLACING OF CONCRETE. EXCAVATION AND BACK FILLING SHALL BE DONE AS PER MPM GUIDELINE SPECIFICATION. EMBEDDED MATERIALS : <ol style="list-style-type: none"> BEFORE PLACING CONCRETE, CARE SHALL BE TAKEN THAT ALL EMBEDDED ITEMS AND EQUIPMENT ANCHORS ARE IN POSITION AND SECURELY FASTENED IN PLACE. NOT ALL EMBEDDED ITEMS ARE SHOWN IN THE CONCRETE OUTLINE DRAWINGS. REFER TO APPLICABLE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND VENDOR EQUIPMENT DRAWINGS FOR ADDITIONAL DETAILS ON LOCATION, SETTING AND ARRANGEMENT OF EMBEDDED ITEMS LISTED AS FOLLOWS, BUT NOT LIMITED TO : <ol style="list-style-type: none"> ANCHOR BOLTS AND ANCHORS; ELECTRICAL CONDUITS, APPARATUS AND GROUNDING CONDUCTORS; EMBEDDED STRUCTURAL STEEL FOR EQUIPMENT AND MISCELLANEOUS STEEL; PIPING, PIPE STEEVES, METAL INSERTS, FLOOR DRAWS, TRENCH DETAILS AND WEDGE INSERTS. ELECTRIC CONDUITS, PIPING AND ANY OTHER ITEMS TO BE EMBEDDED IN STRUCTURAL CONCRETE SHALL MEET THE APPLICABLE REQUIREMENTS OF THE ACI BUILDING CODE (ACI 318) FOR EMBEDDED ITEMS. THE MINIMUM COVER OF CONCRETE SHALL BE 50mm FOR ALL EMBEDDED ITEMS IN POSITION. ALL REINFORCING STEEL DOWNERS AND EMBEDDED ITEMS SHALL BE WELL SECURED IN POSITION. PRIOR TO PLACING CONCRETE, ALL EMBEDDED MATERIALS SHALL BE SHOWN IN SHOP DRAWINGS. WATER STOPS SHALL BE MADE CONTINUOUSLY BY CAREFULLY MADE FIELD CONNECTIONS. ALL PROJECTING WATER STOPS SHALL BE SUPPORTED AND PROTECTED FROM DAMAGE AND EXPOSURE DURING CONSTRUCTION. ALL ANCHOR BOLTS SHALL BE ASTM A-307 CLASS "A". ANCHOR BOLTS SHALL NOT BE IN CONTACT WITH REINFORCING STEEL. ALL ANCHOR BOLTS SHALL BE HOT-DIP GALVANIZED. SIZE AND DETAILS SHALL BE IN ACCORDANCE WITH APPLICABLE PROJECT DRAWINGS. JOINTS AND RECESSES : <ol style="list-style-type: none"> THE LOCATION AND ARRANGEMENT OF CONSTRUCTION, CONTROL, CONTRACTION AND EXPANSION JOINTS, NOT SHOWN ON DRAWINGS, SHALL BE AS APPROVED BY THE MOTC ENGINEERING DIVISION REPRESENTATIVE. LOCATE AND SHOW ALL JOINTS IN SHOP DRAWINGS AND OBTAIN MOTC ENGINEERING DIVISION APPROVAL PRIOR TO COMMENCEMENT OF WORK. JOINTS FOR SLABS ON GRADE SHALL BE IN ACCORDANCE WITH ACI 224-R. FOR ADDITIONAL RECESSES AND OTHER SMALL OPENINGS, WHICH MAY NOT BE SHOWN ON THE DRAWINGS, REFER TO THE APPLICABLE VENDORS EQUIPMENT DRAWINGS. CONSTRUCTION JOINTS SHALL BE TREATED IN ACCORDANCE WITH RC SPECIFICATIONS, PROPOSED BY VENDORS. REFER TO THE APPLICABLE VENDOR EQUIPMENT DRAWINGS FOR REPRESENTATIVE. UNLESS NOTED ON DRAWINGS, PROVIDE 12mm (1/2") DIAMETER EPOXY BEAMS, BEAMS, BEAMS, EQUIPMENT FOUNDATIONS, CMU WALLS, COLUMNS, RC & PRE-CAST WALLS ETC. LOCATION AND CLASSIFICATION OF FINISHES FOR FORMED AND UNFORMED SURFACES SHALL BE AS SHOWN ON THE ARCHITECTURAL DRAWINGS OR AS DIRECTED BY MOTC REPRESENTATIVE. EQUIPMENT INSTALLED ON CONCRETE FOUNDATIONS SHALL BE GIVEN FULL AND EVEN BEARING BY USING APPROPRIATE DEPRESSIONS IN SLABS. FOR FINISHES, MAINTAIN FULL SLAB THICKNESS BELOW THESE DEPRESSIONS AS INDICATED IN DRAWINGS. SEE ARCHITECTURAL INTERIOR MATERIAL SCHEDULES, FLOOR PLANS, AND DETAILS OF REQUIRED DEPRESSIONS. WATER USED FOR CURING SHALL COMPLY WITH STANDARD SPECIFICATIONS. LEAN CONCRETE 50mm THK. SHALL BE PROVIDED BELOW ALL CONCRETE FOUNDATIONS AND GRADE BEAMS POLYETHYLENE VAPOR BARRIER 200 MICRON SHALL BE PROVIDED BELOW THE REINFORCED CONCRETE SLAB ON-GRADE AND BELOW FOOTINGS AND ABOVE LEAN CONCRETE. ALL EXPOSED FACES OF CONCRETE FOUNDATIONS, GRADE BEAMS, WALLS AND ALL CONCRETE IN DIRECT CONTACT WITH EARTH SHALL BE COATED WITH TWO COATS OF BITUMINOUS COATINGS OR COAL-TAR EPOXY TO A DRY FILM THICKNESS OF 0.2mm EACH. CORROSION PROTECTION SHALL BE IN ACCORDANCE WITH MOTC ENGINEERING DIVISION DESIGN CRITERIA. ALL EXPOSED EDGES OF WALLS, COLUMNS, PILLARS, BEAMS, CURBS, EQUIPMENT PADS SHALL HAVE A CHAMFER OF 20mm. 	CLASS	MAXIMUM WATER CEMENT RATIO (BY WEIGHT)	MINIMUM CONCRETE CONTENT (BY WEIGHT)	MINIMUM COMPRESSIVE STRENGTH (MPa)	MINIMUM 28 DAYS COMPRESSIVE STRENGTH (MPa)	LEAN CONCRETE	0.90	290	421	20	REINFORCED CONC. & PRE-CAST WALL	0.40	350	590	30	PRE STRESSED (REINFORCED CONC.)	0.40	375	683	35					500
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				500																						
III - REINFORCING :	<p>(REFER TO RC SPECIFICATIONS SECTION 02305)</p> <ol style="list-style-type: none"> REINFORCING STEEL : <ol style="list-style-type: none"> ALL REINFORCING STEEL BARS SHALL BE HOT ROLLED MEDIUM TENSILE DEFORMED BILLET STEEL BARS CONFORMING TO S450 S54 2 OR ASTM A574M OR A706M, GRADE 60 (514 MPa). FUSION-BONDED EPOXY COATED REBARS CONFORMING TO ASTM A775M SHALL BE USED FOR ALL STRUCTURAL ELEMENTS BELOW GRADE. WELDED WIRE FABRIC FOR SLABS ON GRADE SHALL CONFORM TO S450 S54 224 OR ASTM A185 OR A497 (COLD DRAWN), WITH YIELD STRENGTH OF 240MPa (34.8 ksi) AND SHALL BE EITHER EPOXY COATED OR GALVANIZED AS PER ASTM A-707. WELDED WIRE FABRIC FOR PRECAST ELEMENTS AND TOPPING OF PRE-STRESSED PRECAST SLABS SHALL BE GRADE 60, 414MPa. DETAILING : <ol style="list-style-type: none"> DETAILING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF THE ACI BUILDING CODE (ACI-318-05), FOR REINFORCED CONCRETE, CHAPTER 7 AND ACI 315-92 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", AND RC GUIDELINE SPECIFICATION SECTION 02305. DIMENSIONS AND SPACING OF BARS ARE TO THE CENTRELINE OF THE BARS UNLESS OTHERWISE NOTED. PLACING OF REINFORCING BARS : <ol style="list-style-type: none"> ALL REINFORCING BARS SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 7 OF ACI BUILDING CODE (ACI-318-05). REPRESENTATIVE MAY BE MOVED WITH APPROVAL OF THE MOTC ENGINEERING DIVISION REPRESENTATIVE AS NECESSARY TO CLEAR THE PIPES, SEAL, RECESSES, EMBEDDED ITEMS, AND CONDUITS. EXCEPT IN AREAS WHERE REINFORCEMENT IS CONGESTED, IN THE LATER CASE, RELOCATION OF EMBEDDED MATERIALS MUST BE CONSIDERED. IN NO CASE, BARS SHALL BE BENT WITH A RADIUS LESS THAN THAT SPECIFIED FOR STANDARD HOOKS. THE USE OF BAR SUPPORTS SHALL CONFORM TO STANDARD SPECIFICATIONS FOR BAR SUPPORTS CONTAINED IN THE ACI 315-92, EXCEPT AS NOTED ON DRAWINGS. THE USE OF PRECAST CONCRETE BAR SUPPORTS SHALL BE IN ACCORDANCE WITH THE USE OF PRECAST CONCRETE BAR SUPPORTS SPECIFICATION AND PROVIDED AS FOLLOWS, UNLESS OTHERWISE NOTED : <ol style="list-style-type: none"> FOOTINGS OR BEAMS CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH/CONCRETE EXPOSED TO SEWAGE POTABLE AND TREATED WATER: INTERIOR OF UNDERGROUND <ul style="list-style-type: none"> 75MM 75MM FORMED SURFACES EXPOSED TO WEATHER OR EARTH <ul style="list-style-type: none"> 40MM 50MM BEAMS, GIRDOES, COLUMNS : <ul style="list-style-type: none"> 50MM 50MM CONCRETE SLAB OVER 50mm SUB-SLAB SIDE WALK <ul style="list-style-type: none"> 50MM 50MM EXPOSED TO WEATHER OR EARTH <ul style="list-style-type: none"> 30MM 30MM OTHER MEMBERS ALL SIZES <ul style="list-style-type: none"> 50MM 50MM NOT EXPOSED EARTH OR WEATHER <ul style="list-style-type: none"> 20MM 20MM BEAMS AND COLUMNS <ul style="list-style-type: none"> 20MM 20MM STRIPUPS OR TIES <ul style="list-style-type: none"> 20MM 30MM 																									

IV - BENT / HOOK : NOTE: DETAILS SHOWN BELOW ARE FOR EPOXY COATED BARS. 0



FOR NON-EPOXY COATED BARS, MULTIPLIER OF 1.2 SHALL BE REPLACED BY 1.0 AND FOR MINIMUM BEND DIAMETER, REFER TO ACI 318.

V - SPLICE :

- LOCATION OF SOME SPLICES ARE SHOWN ON DRAWINGS. SPLICES NOT SHOWN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF CONCRETE REINFORCING STEEL INSTITUTE (CRSI) - MANUAL OF STANDARD PRACTICE AND AS APPROVED BY RC REPRESENTATIVE.
- ALL SPLICES OF REINFORCING BARS SHALL BE DONE BY LAPPING UNLESS OTHERWISE APPROVED. BARS SPLICED BY LAP SHALL HAVE SPLICES IN FLEXURAL MEMBERS SHALL NOT BE SPACED TRANSVERSELY FARTHER APART THAN ONE-FIFTH THE REQUIRED SPLICE LENGTH NOT 150mm.
- ALL TENSION LAP SPLICES SHALL BE CLASS B AS DENIED IN ACI 318-05 SEC. 12.15.2. TENSION LAP SPLICE LENGTH SHALL BE 1.3d WHERE d IS THE TENSILE DEVELOPMENT LENGTH IN ACCORDANCE WITH ACI 318-05 SECTION 12.2 WITHOUT THE MODIFICATION FACTOR OF 1.2.2.5 OR MINIMUM OF 40 BAR DIAMETER WHICHEVER IS GREATER.
- COMPRESSION LAP SPLICE LENGTH (IN INCHES) SHALL BE 30d MIN. WHERE d IS THE DIAMETER OF BAR IN INCHES.
- ALL LAP SPLICES OF REINFORCEMENT SPLICES SHALL BE MADE SUCH THAT THE REQUIRED DISTANCES TO THE FILE, STAG, ALL STAGS OR REFERENCE LINES ARE MAINTAINED.
- SPLICES FOR ADJACENT REBARS SHALL BE STAGGED.

BAR SIZE	BOND DIAMETER (D)
6	64
10	80
12	96
16	128

BAR SIZE	BOND DIAMETER (D)
20	160
22	176
25	200
32	256

NOTES :

- FOR BARS SPACED LATERALLY AT LEAST 150mm ON CENTER AND AT LEAST 75mm FROM THE SIDE FACE OF MEMBER. USE 0.8 LD, BUT THE LAP SPLICE LENGTH SHALL NOT BE LESS THAN 300mm.
- TOP BARS ARE HORIZONTAL AND INCLINED REINFORCING BARS SO PLACED THAT MORE THAN 0.30 M OF CONCRETE IS CAST IN THE MEMBER BELOW THE BARS.
- ALL SPLICES NOT INCLUDED ON PLAN SHALL BE TENSION SPLICES.

BAR DIAMETER	SPICES OF DEFORMED BARS IN TENSION		SPICES OF DEFORMED BARS IN COMPRESSION	
	TOP BARS (mm)	BOTTOM BARS (mm)	TOP BARS (mm)	BOTTOM BARS (mm)
#4/10/12	550	400	350	350
#6	920	680	500	500
#8	1100	800	600	600
#10	1300	900	700	700
#12	1500	1000	800	800

VI - DOWEL EMBEDMENT LENGTH : (STANDARD HOOKS IN TENSION) LDH

- THE MINIMUM DOWEL DEVELOPMENT LENGTH (L_{dh}) SHALL BE AS FOLLOWS.

CONCRETE CLASS	BAR SIZE					
	10	12	16	20	25	32
4000 PSI	190	240	310	380	480	610
5000 PSI	170	215	280	340	430	550

- ALL BARS MARKED CONTINUOUS SHALL BE PROPERLY LAPPED AT SPLICES AND CORNERS AND HOOKED AT NON-CONTINUOUS ENDS.
- WELDING OF REINFORCING BARS WHERE PERMITTED SHALL BE PERFORMED IN ACCORDANCE WITH AWS D 1.4, STRUCTURAL WELDING CODE.

VII - REINFORCED CONCRETE - BLOCK MASONRY :

- CONCRETE MASONRY UNITS SHALL BE GRADE "N-1" UNITS CONFORMING TO ASTM C90, ASTM C129, SPECIFICATIONS 04220 AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 7.5 MPa BASED ON NET AREA AS FOLLOWS:
 - a) FOR LOAD BEARING CMU f_m=1500 psi
 - b) FOR NON LOAD BEARING CMU f_m=500 psi.
- REINFORCING BARS SHALL CONFORM TO 60242 GRADE 60 SHALL BE USED FOR ALL WALLS.
- PORTLAND CEMENT SHALL BE ASTM C150 TYPE-I, NON-STAINING OF NATURAL COLOR OR WHITE. MORTAR SHALL BE TYPE S AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1,800 PSI (12.4 MPa) AT 28 DAYS, IN ACCORDANCE WITH RC SPECIFICATIONS 04060.
- GROUT SHALL HAVE A FLUID CONSISTENCY FOR POURING WITHOUT SEGREGATION, AGGREGATE SHALL CONFORM TO ASTM C 404, THE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 2,000 PSI (14 MPa), IN ACCORDANCE WITH RC SPECIFICATIONS 04070.
- ALL NON-LOAD BEARING WALLS SHALL BE GROUTED ONLY AT LOCATION OF VERTICAL REINFORCEMENTS.

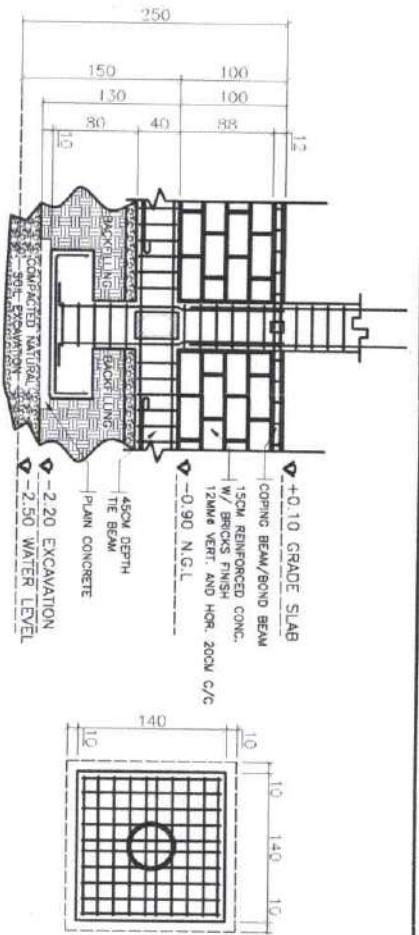
VIII - PRECAST CONSTRUCTION : (REFER TO RC SPECIFICATION 03430,03450)

- DESIGN AND CONSTRUCTION OF PRECAST ELEMENTS SHALL BE IN ACCORDANCE WITH ROYAL COMMISSION PROJECT SPECIFICATIONS SECTIONS 03430 AND 03450 AND THE PRECAST/PRESTRESSED DESIGN CRITERIA STRUCTURAL AND PRECAST INSTITUTE MANUALS.
- TENSILE STRENGTH OF PRESTRESSING STRAND SHALL BE 270Kd (1883 MPa) AND SHALL BE OF LOW RELAXATION TYPE CONFORMING TO ASTM A416 GRADE 270. IT SHALL BE IN ACCORDANCE WITH ROYAL COMMISSION PROJECT SPECIFICATIONS 03390.
- UNCOATED STRESS-RELIEVED STEEL WIRE SHALL CONFORM TO ASTM A421M.
- HIGH TENSILE STRENGTH ALLOY BARS SHALL CONFORM TO ASTM A722M WITH A MINIMUM STRENGTH OF 500MPa.
- ALL REINFORCEMENT DETAILS FOR HOLLOW CORE SHALL BE PROVIDED BY CONTRACTOR THROUGH PRECAST VENDOR TO BE APPROVED BY ROYAL COMMISSION.



Ministry of Transportation & Communication
Office of the Minister
Riyadh
11564

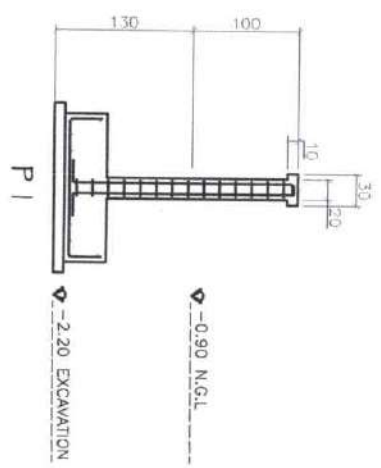
PROJECT & LOCATION	SHEET CONTENT	REVISIONS	DRAWN BY	CHECKED AND REVIEWED BY	SUBMITTED BY	SHEET NO.
CONSTRUCTION OF REVER LANG AT TUGAL SULTAN SA BARONIS, MAQUINDAWAD	BENT/HOOK SPLICE NOTES -DOWEL EMBEDMENT LENGTH -REINFORCED CONCRETE/BLOCK MASONRY	NO REVISIONS	MORSHAD A.S.F. K. ALIYAD	ENGR. SAIFUDDIN ALJASAR	ENGR. SAIFUDDIN ALJASAR	5-2 14



a FOUNDATION DETAILS
SCALE 1:50 MTS

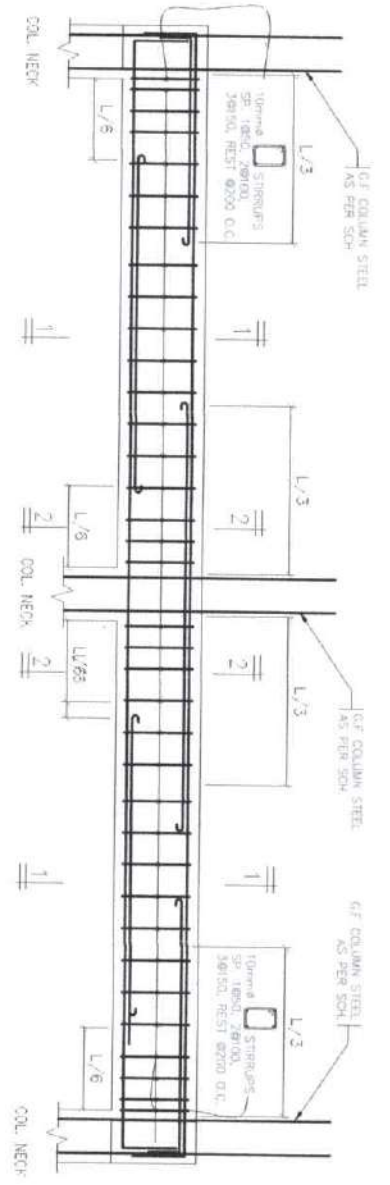
COLUMN	RING
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C2 10-16mm ϕ	3-10mm ϕ @15cm C/C
C3 26-16mm ϕ	2-10mm ϕ @15cm C/C 1 LONG=2 2 LONG=15 GROUND FLOOR
C4 6-16mm ϕ	2-10mm ϕ @15cm C/C 2ND FLOOR

COLUMN	RINGING
P1 20 130	4 16mm ϕ 10mm ϕ @ 15cm C/C
P2 120 130	22 16mm ϕ 10mm ϕ @ 15cm C/C



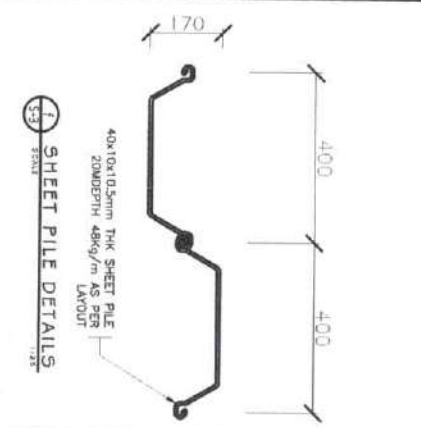
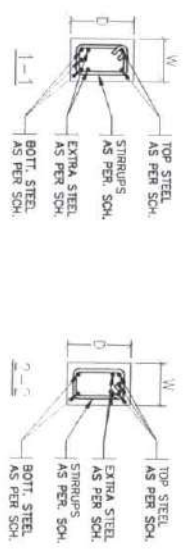
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b COLUMN DETAILS
SCALE 1:50 MTS

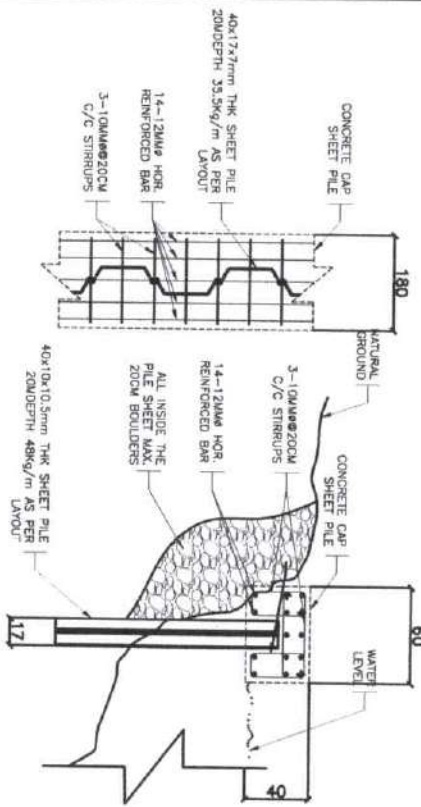


d TIE BEAM, BEAM, AND ROOF BEAM DETAILS
SCALE 1:400 MTS

e TYP. SECTION
SCALE 1:400 MTS



f SHEET PILE DETAILS
SCALE 1:50



g CAP SHEET PILE DETAILS
SCALE 1:50



Ministry of Transportation and Communication
OFFICE OF THE MINISTER
BRUNEI DARUSSALAM
SARAWAK CITY

PROJECT & LOCATION
CONSTRUCTION OF PEVER LANG AT
TIGAL SULTAN SA BARONGIS,
MAGINDANAO

SHEET CONTENT
STRUCTURAL DETAILS

RAJONG AND SPECIFICATIONS AND OTHER DOCUMENTS
FOR THE ARCHITECTURAL DRAWINGS AND DOCUMENTS OF THE
PROJECT, WHEN THE OBJECT IS NOT CLEARLY DEFINED BY
THE ARCHITECTURAL DRAWINGS AND DOCUMENTS OF THE
PROJECT, THE ARCHITECT'S INTENTION SHALL BE THE
GOVERNING FACTOR IN THE INTERPRETATION OF THE
DRAWINGS AND DOCUMENTS OF THE PROJECT.

DESIGNED BY
ENGR. L. ASYAD
ENGINEER

CHECKED AND REVIEWED BY
ENGR. ESTHA D. ALANSOP
ENGINEER

SUBMITTED BY
ENGR. MASHOUD S. MASOUD
ENGINEER

SHEET NO.
S-3
14

COLUMN

COLUMN MARK	SECTION		VERTICAL STEEL	STIRRUPS
	WIDTH "B" (Cm)	THICKNESS "T" (Cm)		
C1	45x		8x16	ø10@15
C2	30	80	10x16	3-ø10@15
C3	20	31x	26x16	SEE DET.
C4	20	30	6x16	2-ø10@15
P1	20x		4x16	ø10@15
P2	120	120	22x16	ø10@20

SLAB SCHEDULE

SLAB MARK	SECTION THICKNESS "T" (Cm)	BOT. REINF.			TOP. REINF.			REMARKS
		SHORT	LONG	ADDITIONAL	SHORT	LONG	ADDITIONAL	
S	12	ø12@15cm C/C	ø12@15cm C/C		ø10@15cm C/C	ø12@15cm C/C	ø12@20cm C/C	TWO WAY SLAB
RAMP	12	ø12@20cm C/C	ø16@15cm C/C		ø12@20cm C/C	ø16@15cm C/C	ø12@20cm C/C	SEE ATTACHED DETAILS

FOUNDATION SCHEDULE FOR SOIL BEARING CAPACITY OF 140 KPa AT 1M DEPTH (SEE NOTE 4)

FOOTING MARK	LENGTH "A" (Cm)	WIDTH "B" (Cm)	THICKNESS "T" (Cm)	BOT. REINF.		TOP. REINF.		REMARKS
				LONG BAR	SHORT BAR	LONG BAR	SHORT BAR	
F-1	140	140	40	ø12 @ 150cm/c	ø12 @ 150cm/c			
F-2	175	185	40	ø15 @ 200cm/c	ø16 @ 150cm/c			
F-3	355	395	40	ø16 @ 150cm/c	ø16 @ 150cm/c	ø12 @ 200cm/c	ø12 @ 200cm/c	AS SHOWN(PLAN)
F-4	180	160	30	ø16 @ 150cm/c	ø16 @ 150cm/c			

WALL FOOTING			
WF	VARIES	200	100
		ø12@ 20cm c/c	SHORT
		3-ø12 LONG	

TIE BEAM/BOND BEAM SCHEDULE

BEAM MARK	SECTION WIDTH "B" (Cm)	THICKNESS "T" (Cm)	BOT. REINF.		TOP. REINF.		SKIN RFT. STIRRUPS (BOTH FACE)
			STRAIGHT	ADDITIONAL	STRAIGHT	ADDITIONAL	
TB	25	45	3ø16	2ø16	3ø16	2ø16	ø10@10
BB	25	20	3ø16	-	3ø16	-	ø10@15

BEAM/ROOF BEAM SCHEDULE

BEAM MARK	SECTION WIDTH "B" (Cm)	THICKNESS "T" (Cm)	BOT. REINF.		TOP. REINF.		SKIN RFT. STIRRUPS (BOTH FACE)
			STRAIGHT	ADDITIONAL	STRAIGHT	ADDITIONAL	
B1	25	50	4ø16	3ø16	4ø16	3ø16	ø10@10
B2	25	35	2ø16	1ø16	2ø16	3ø16	ø10@10
RB1	25	40	3ø16	-	3ø16	-	ø10@15
RB2	25	100	4ø16	-	4ø16	-	ø10@15

SCHEDULE OF TRUSS / WEB TRUSS

ITEM	KING POST	WEB MEM	TOP CHORD	BOTTOM CHORD
TRUSS-A	SINGLE ANGLE BAR (2"x2"x5mm)	SINGLE ANGLE BAR (2"x2"x5mm)	SINGLE ANGLE BAR (2"x2"x5mm)	SINGLE ANGLE BAR (2"x2"x5mm)
TRUSS-B	SINGLE ANGLE BAR (2"x2"x5mm)	SINGLE ANGLE BAR (2"x2"x5mm)	SINGLE ANGLE BAR (2"x2"x5mm)	SINGLE ANGLE BAR (2"x2"x5mm)
TRUSS-C	SINGLE ANGLE BAR (2"x2"x5mm)	SINGLE ANGLE BAR (2"x2"x5mm)	SINGLE ANGLE BAR (2"x2"x5mm)	SINGLE ANGLE BAR (2"x2"x5mm)

PROJECT & LOCATION

Ministry of Transportation & Communication
OFFICE OF THE MINISTER

CONSTRUCTION OF REVEE LANG AT TUDAL SULTAN SA. BARONIS, MADJIDALAU

SHEET CONTENT:

STRUCTURAL SCHEDULE

REVISIONS

Stamp and signature and other documents and figures, figures or tables, as provided or approved by the architect or engineer, shall be provided or approved by the architect or engineer. It shall be used for the purpose of the project or any other project of the architect or engineer of said documents.

DRAWN BY:

MUHAMMAD ASHAF A. AYUBO ENGINEER

CHECKED AND REVISIONS BY:

ENGR. S. S. H. ALI ENGINEER

SUBMITTED BY:

ENGR. HERNY E. HASANAL ENGINEER

SHEET NO

S-4
14





Ministry of Transportation & Communication
 OFFICE OF THE MINISTER
 SABAH
 COHABITO CITY

PROJECT & LOCATION
 CONSTRUCTION OF REVER LANG AT
 TUAL, SULTAN SA BACHUIS,
 MASOHIMAU

SHEET CONTENT
 FOUNDATION LAYOUT PLAN

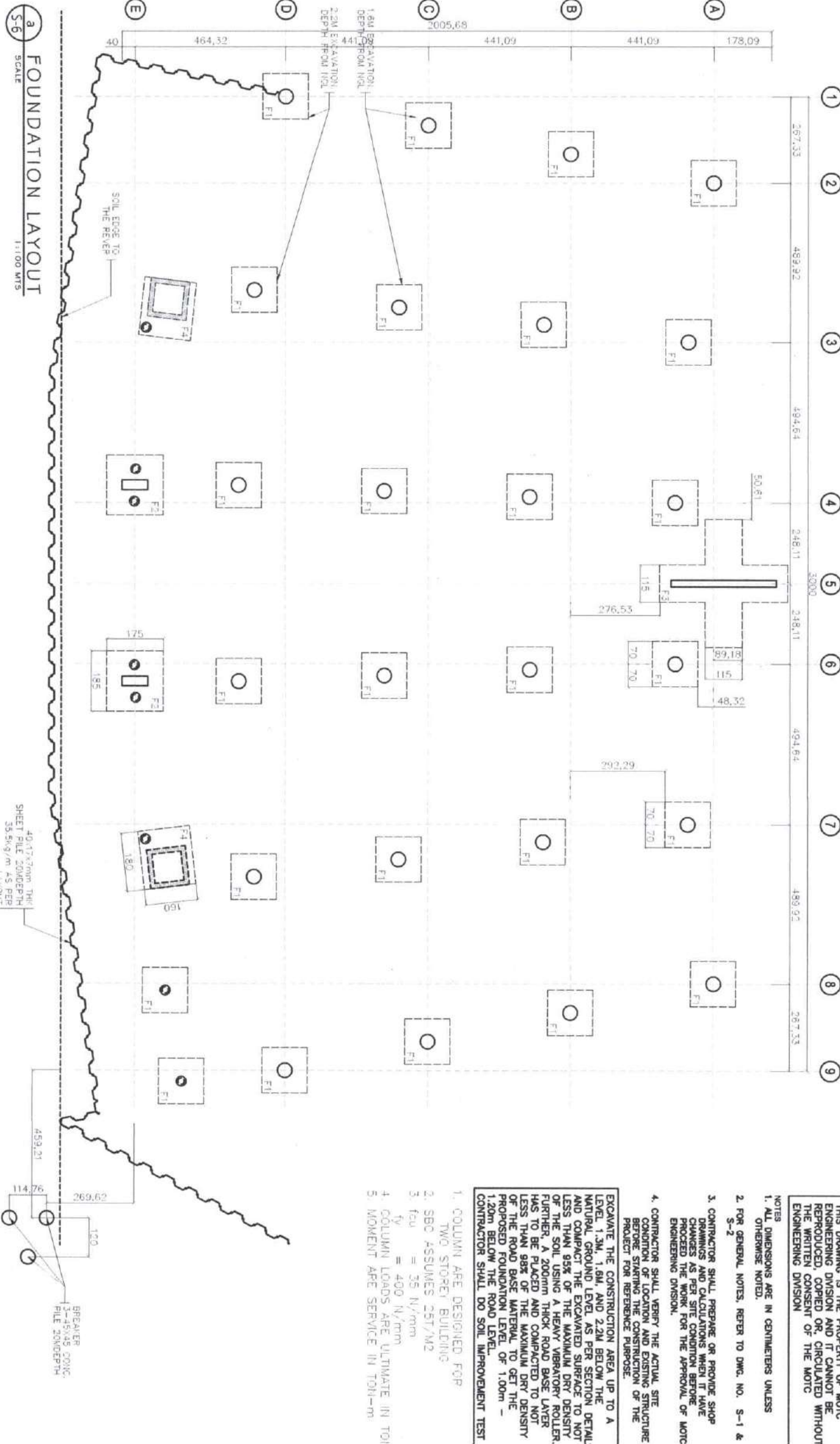
GENERAL NOTES
 Always read specifications and other contract documents and report together or separate as required of services provided when the object for which they are called is approved or not. It shall be the responsibility of the contractor to take care of any defects for use in the proposed work or to provide any other services as required of the architect or other professional.

DRAWN BY
 MOHAMMAD SBAF K. ASHAD
 ENGINEER

CHECKED AND REVIEWED BY
 ENGR. SUZUKA D. ALIUSAP
 ENGINEER

SUBMITTED BY
 ENGR. HENRIQUE B. MASAL
 ENGINEER

SHEET NO.
 S-6
 14



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NOTES
 1. ALL DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE NOTED.

2. FOR GENERAL NOTES, REFER TO DWG. NO. S-1 & S-2

3. CONTRACTOR SHALL PREPARE OR PROVIDE SHOP DRAWINGS AND CALCULATIONS WHEN IT HAVE CHANGES AS PER SITE CONDITION BEFORE PROCEED THE WORK FOR THE APPROVAL OF MOTC ENGINEERING DIVISION.

4. CONTRACTOR SHALL VERIFY THE ACTUAL SITE CONDITION OF LOCATION AND EXISTING STRUCTURE BEFORE STARTING THE CONSTRUCTION OF THE PROJECT FOR REFERENCE PURPOSE.

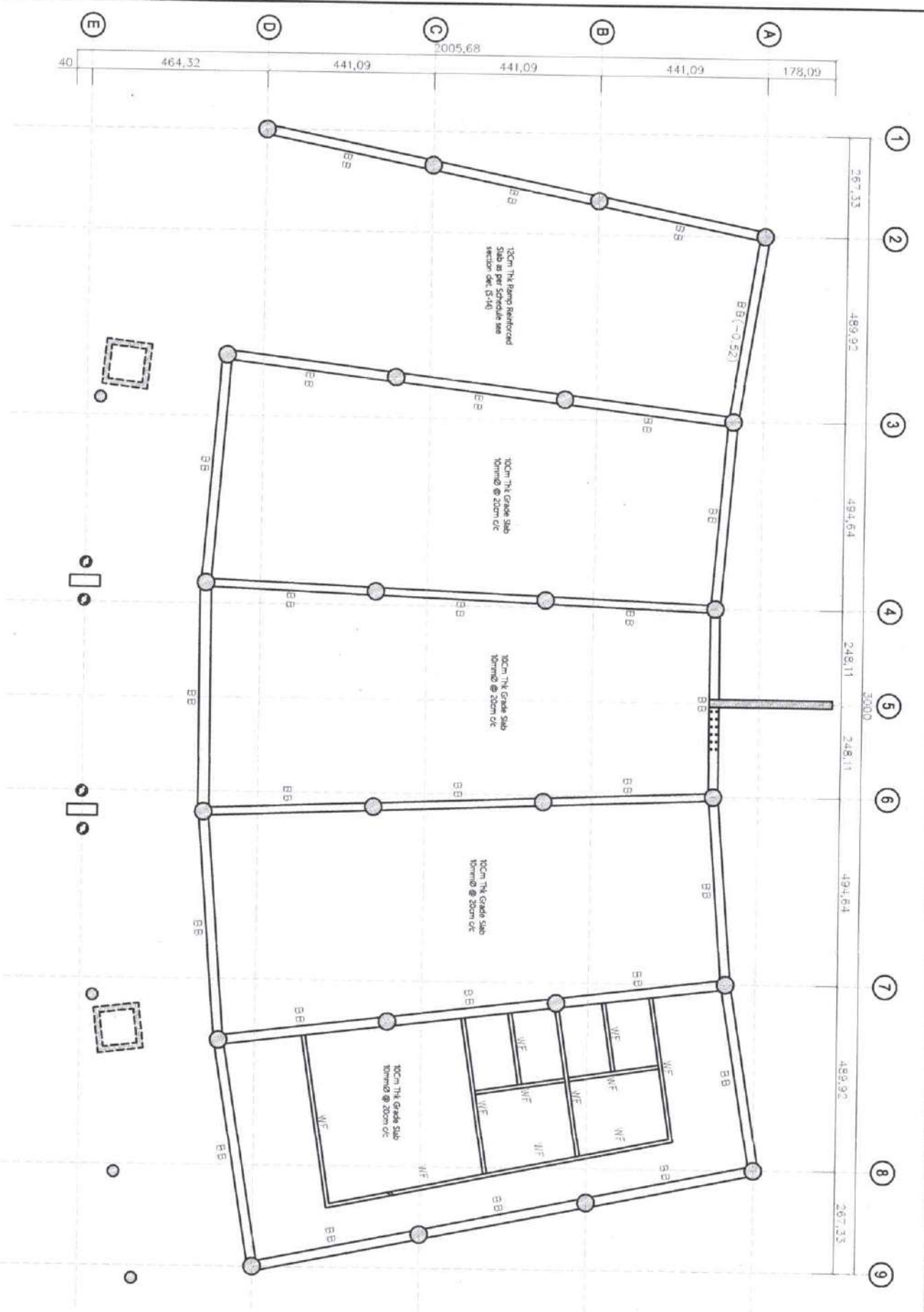
EXCAVATE THE CONSTRUCTION AREA UP TO A LEVEL 1.3M, 1.6M, AND 2.2M BELOW THE NATURAL GROUND LEVEL AS PER SECTION DETAILS AND COMPACT THE EXCAVATED SURFACE TO NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY OF THE SOIL USING A HEAVY VIBRATORY ROLLER. FURTHER, A 200MM THICK ROAD BASE LAYER HAS TO BE PLACED AND COMPACTED TO NOT LESS THAN 98% OF THE MAXIMUM DRY DENSITY OF THE ROAD BASE MATERIAL TO GET THE PROPOSED FOUNDATION LEVEL OF 1.00m - 1.20m BELOW THE ROAD LEVEL. CONTRACTOR SHALL DO SOIL IMPROVEMENT TEST

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NOTES

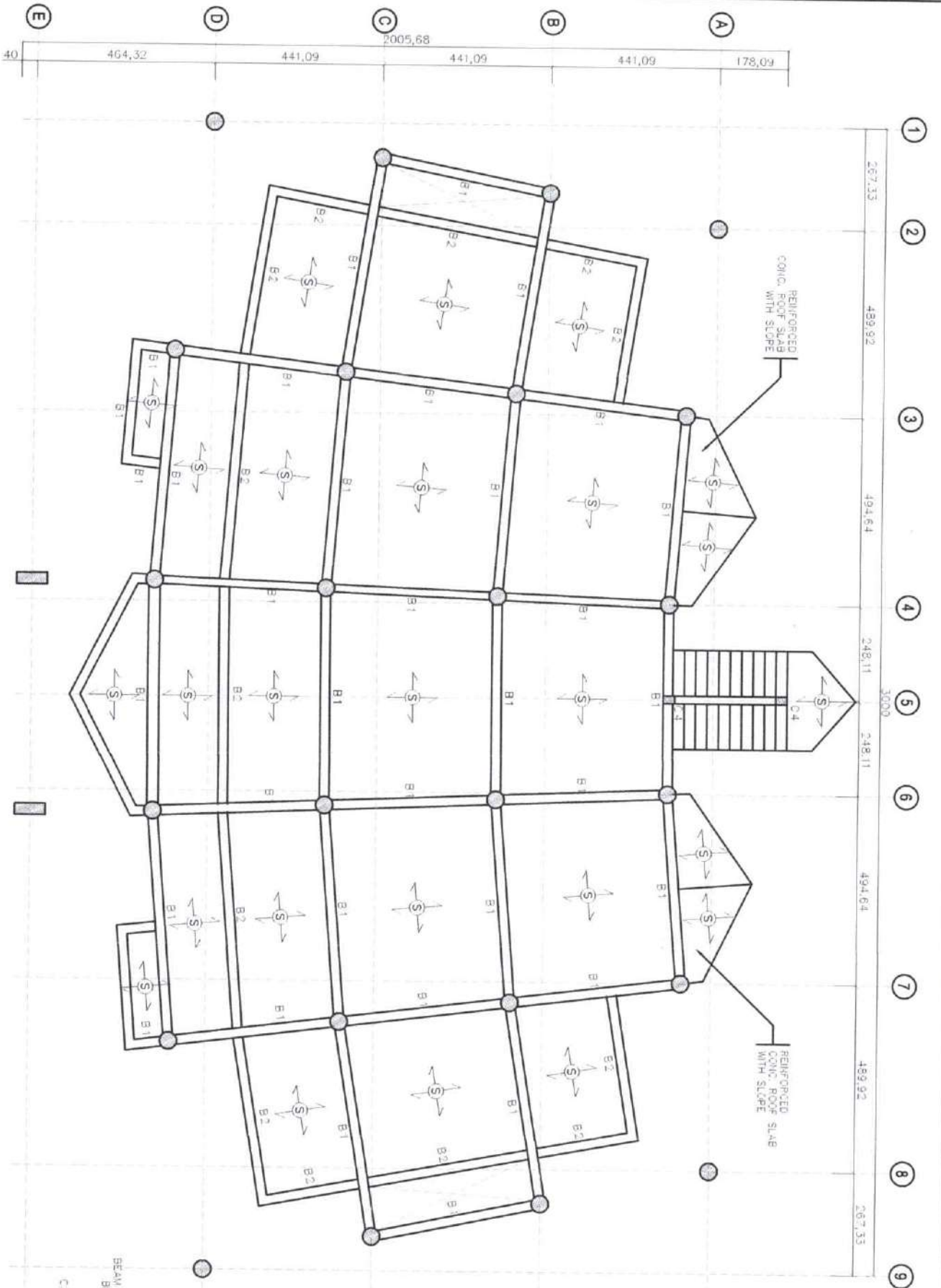
- * ALL BOND BEAMS TOP LEVEL SHALL BE +0.10 FROM REFERENCE LEVEL OR (1M FROM N.G.L) UNLESS OTHERWISE MENTION IN THE DRAWINGS AND CONFIRM AS PER SITE ACTUAL CONDITION DURING THE IMPLEMENTATION. SEE SECTION FOR REF.
- * PROVIDE WALL FOOTING FOR THE WALL WITHOUT BOND BEAM
- * $f_{cu}=40 \text{ N/mm}^2$
- * $f_y=400 \text{ N/mm}^2$
- * 10 CM THK GRADE SLAB WITH REINFORCEMENT $\phi 10 @ 20 \text{ cm}$ MESH BOTHWAYS.

1. ALL DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE NOTED.
2. FOR GENERAL NOTES, REFER TO DWG. NO. S-1 & S-2
3. CONTRACTOR SHALL PREPARE OR PROVIDE SHOP DRAWINGS AND CALCULATIONS WHEN IT HAVE PROCEED THE WORK FOR THE APPROVAL OF MOTC ENGINEERING DIVISION.
4. CONTRACTOR SHALL VERIFY THE ACTUAL SITE LOCATION OF LOCATION AND EXISTING STRUCTURE BEFORE STARTING THE CONSTRUCTION OF THE PROJECT FOR REFERENCE PURPOSE

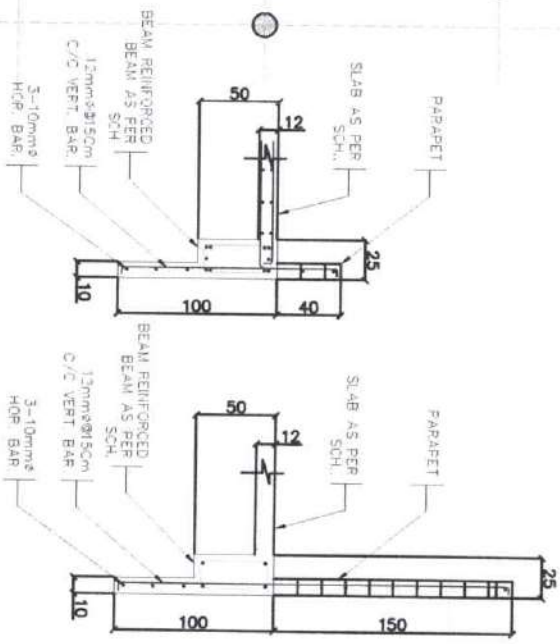


BOND BEAM LAYOUT
SCALE 1:100 MTS

<p>Ministry of Transportation & Communication Office of the Minister Cebu City</p>	PROJECT LOCATION	SHEET CONTENT	PHASE, AREA, & REVISIONS	DRAWN BY	CHECKED AND REVIEWED BY	SUBMITTED BY	SHEET NO.
	CONSTRUCTION OF PEYER LANG AT TUGAL SULTAN SA BARONGS, MANDINDAUA	BOND BEAM LAYOUT PLAN	PHASE, AREA, & REVISIONS	RICHARD ASST. I. AQUINO ENGINEER	ELICA SPT. HA. D. ALUSTOGAR ENGINEER	ENGR. MASROOQ B. MASAWAL ENGINEER	S-8 14



a BEAM LAYOUT
SCALE 1:1100 MTS



b PERIMETER BEAM DET.
SCALE 1:1100 MTS

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NOTES

- * ALL BEAMS TOP LEVEL SHALL BE REFER TO ARCHITECTURAL SECTION FROM REFERENCE UNLESS OTHERWISE MENTION IN THE DRAWINGS AND CONFORM AS PER SITE ACTUAL CONDITION DURING THE IMPLEMENTATION, SEE SECTION FOR REF.
- * PROVIDE DRAFT WALL FROM BEAM AS PER ARCHITECTURAL DRAWINGS
- * $f_{cu}=40 \text{ N/mm}^2$
- * $f_y=400 \text{ N/mm}^2$
- * 12 CM THK SLAB WITH REINFORCEMENT AS PER SCHEDULE
- 1. ALL DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE NOTED.
- 2. FOR GENERAL NOTES, REFER TO DWG. NO. S-1 & S-2
- 3. CONTRACTOR SHALL PREPARE OR PROVIDE SHOP DRAWINGS AND CALCULATIONS WHEN IT HAVE CHANGES AS PER SITE CONDITION BEFORE PROCEED THE WORK FOR THE APPROVAL OF MOTC ENGINEERING DIVISION.
- 4. CONTRACTOR SHALL VERIFY THE ACTUAL SITE CONDITION OF LOCATION AND EXISTING STRUCTURE BEFORE STARTING THE CONSTRUCTION OF THE PROJECT FOR REFERENCE PURPOSE



Ministry of Transportation & Communication
OFFICE OF THE MINISTER
JAPAN
COTABATO CITY

PROJECT & LOCATION
CONSTRUCTION OF PEYER LANE AT
TUJAL SULTAN SA BARONGSI,
MAQUINDANAO

SHEET CONTENT
BEAM & SLAB LAYOUT PLAN

PREPARED BY
ENGINEER

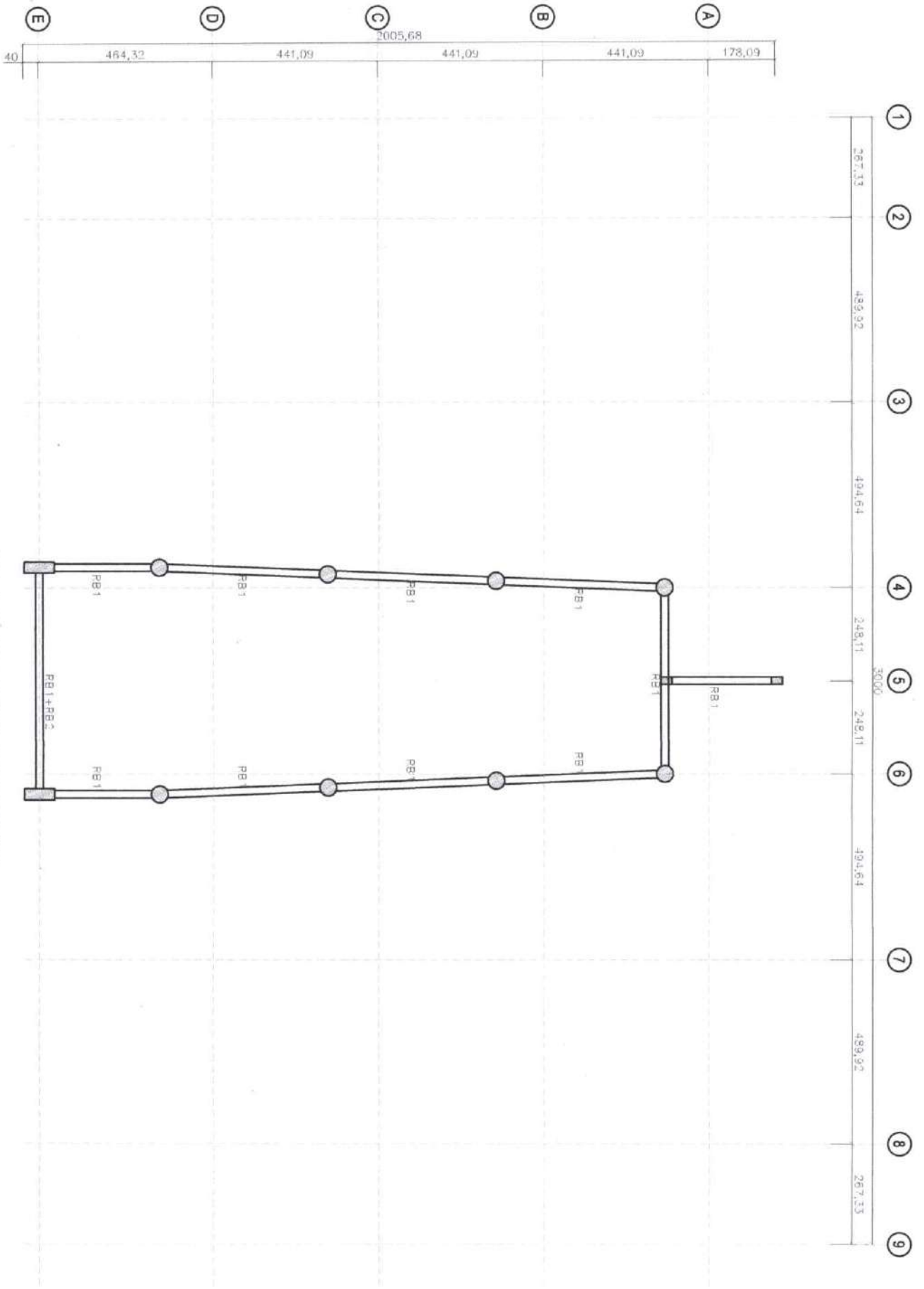
CHECKED AND REVISION BY
ENGINEER

SUBMITTED BY
ENGINEER

SHEET NO.
S-9
14



REPUBLIC OF MALAYSIA
 MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 SARIH
 67000 KUALA LUMPUR CITY



ROOF BEAM LAYOUT
 SCALE 1:1100 MTS

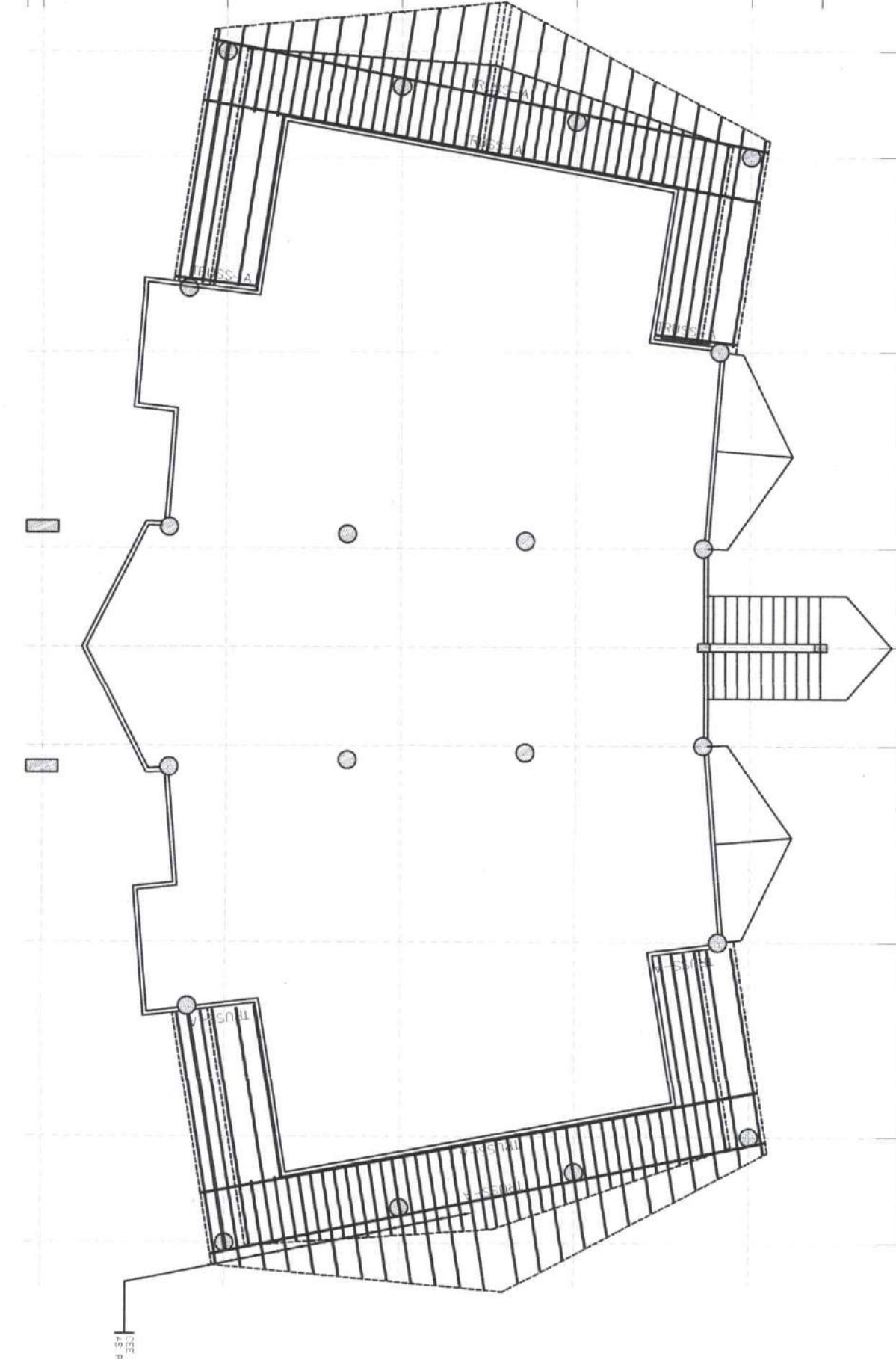
PROJECT & LOCATION CONSTRUCTION OF PEJEP LAMIS AT TUGAL SULTAN SA BARRONGS, MAGUINDANAO	SHEET CONTENT ROOF BEAM LAYOUT PLAN	INFORM APPROVAL/REVISIONS Change and Specifications and other contract documents shall refer to the drawings and specifications of the contract. Where the contract documents are not in accordance with the contract documents, the contract documents shall prevail. The contractor shall be responsible for the interpretation of the contract documents and for the preparation of the contract documents. The contractor shall be responsible for the interpretation of the contract documents and for the preparation of the contract documents.	DRAWN BY MOHAMMAD SAIFU K. AHMAD ENGINEER I	CHECKED AND REVIEWED BY ANG SETHA D. ALIASAB ENGINEER III	SUBMITTED BY ENGR. HESBOLD B. MASJUAL ENGINEER IV	SHEET NO. S-10 14
--	--	--	---	---	---	-------------------------

- NOTES**
- ALL ROOF BEAMS TOP LEVEL SHALL BE REFER TO ARCHITECTURAL SECTION FROM REFERENCE UNLESS OTHERWISE MENTION IN THE DRAWINGS AND CONTRIN AS PER SITE ACTUAL CONDITION DURING THE IMPLEMENTATION, SEE SECTION FOR REF.
 - $f_{cu}=40 \text{ N/mm}^2$
 - $f_{yk}=400 \text{ N/mm}^2$
 - 12 CM THK SLAB WITH REINFORCEMENT AS PER SCHEDULE
1. ALL DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE NOTED.
 2. FOR GENERAL NOTES, REFER TO DWG. NO. S-1 & S-2
 3. CONTRACTOR SHALL PREPARE OR PROVIDE SHOP DRAWINGS AND CALCULATIONS WHEN IT HAVE CHANGES AS PER SITE CONDITION BEFORE PROCEED THE WORK FOR THE APPROVAL OF MOTC ENGINEERING DIVISION.
 4. CONTRACTOR SHALL VERIFY THE ACTUAL SITE CONDITION OF LOCATION AND EXISTING STRUCTURE BEFORE STARTING THE CONSTRUCTION OF THE PROJECT FOR REFERENCE PURPOSE

THIS DRAWING IS THE PROPERTY OF MOTC ENGINEERING DIVISION AND IT CANNOT BE REPRODUCED, COPIED OR CIRCULATED WITHOUT THE WRITTEN CONSENT OF THE MOTC ENGINEERING DIVISION

1	2	3	4	5	6	7	8	9
267,33	489,92	494,64	248,11	248,11	494,64	489,92	267,33	
3000								

A	B	C	D	E
178,09	441,09	441,09	441,09	464,32
2005,68				



a FIRST LEVEL ROOF LAYOUT
 S-11 SCALE 1:100 MTS

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NOTES

- TRUSS MEASUREMENT SHOULD VERIFY AS PER SITE ACTUAL CONDITION BEFORE FABRICATION
- $f_{cu}=40 \text{ N/mm}^2$
- $f_y=400 \text{ N/mm}^2$
- 12 CM THK SLAB WITH REINFORCEMENT AS PER SCHEDULE
- 1. ALL DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE NOTED.
- 2. FOR GENERAL NOTES, REFER TO DWG. NO. S-1 & S-2
- 3. CONTRACTOR SHALL PREPARE OR PROVIDE SHOP DRAWINGS AND CALCULATIONS WHEN IT HAVE CHANGES AS PER SITE CONDITION BEFORE PROCEED THE WORK FOR THE APPROVAL OF MOTC ENGINEERING DIVISION.
- 4. CONTRACTOR SHALL VERIFY THE ACTUAL, SITE CONDITION OF LOCATION AND EXISTING STRUCTURE BEFORE STARTING THE CONSTRUCTION OF THE PROJECT FOR REFERENCE PURPOSE.

<p>Ministry of Transportation & Communication OFFICE OF THE MINISTER BRUNEI DARUSSALAM COBANGU CITY</p>	PROJECT & LOCATION CONSTRUCTION OF PEVER LANG AT TUGAL SULTAN SA BARONIS, MAQUINDANDU	SHEET CONTAIN FIRST LEVEL ROOF LAYOUT PLAN	NUMBER APPROVAL/REVISIONS Drawing and specifications and other documents may require changes or amendments. All approved drawings or specifications of this nature, including the sheet for which this revision is made, shall be marked for revision in the margin of the drawing or specification. The revision of set for other projects or drawings, consent of the architect or owner of the drawings.	DRAWN BY MOHAMMAD A.S.M. N. ALIYAD ENGINEER I	CHECKED AND REVIEW BY ENGR. ASYIFA D. ALIYASAR ENGINEER II	SUBMITTED BY ENGR. RASHIDU B. MASJUD ENGINEER IV	SHEET NO. S-11 14
	<p>BRUNEI DARUSSALAM</p>						



Ministry of Transportation & Communication
OFFICE OF THE MINISTER
 101, Jalan Sultan Abdul Halim
 62500, Putrajaya, Malaysia
 TEL: 63-6-9533 3000
 FAX: 63-6-9533 3001
 E-MAIL: MOT@MOTC.MY

PROJECT & LOCATION
 CONSTRUCTION OF PEKER LAINJ AT
 TUGAL SULTAN SA BRONGS,
 MAGUINDANAO

SHEET CONTENT
 2ND LEVEL ROOF LAYOUT PLAN

PERMISSION / APPROVAL / SIGNATURE
 I hereby certify that the design and construction of the structure shown on this drawing has been approved by me as the Engineer-in-Charge of the project and I am not aware of any other person who has been authorized to sign this drawing on my behalf. I am not responsible for any errors or omissions in this drawing or for any consequences arising therefrom.

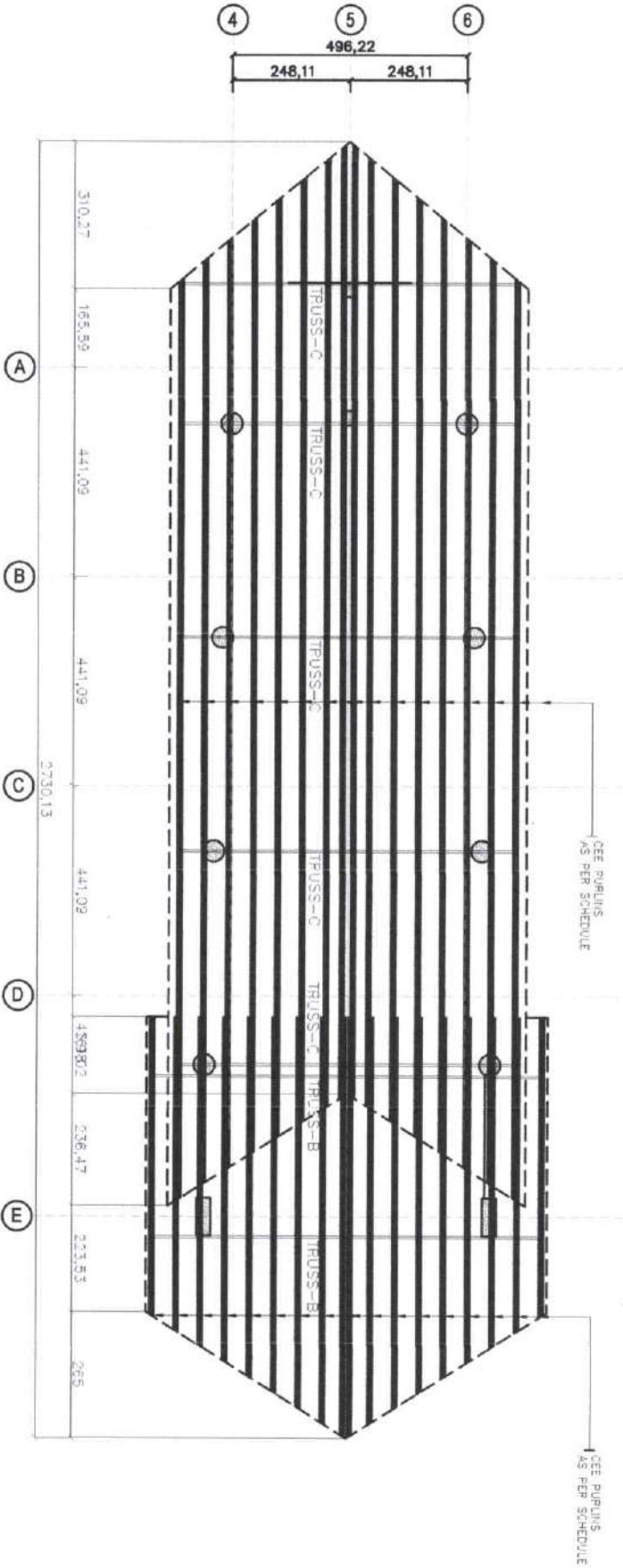
DRAWN BY
 WICHUAN ASME H. AHMAD
 ENGINEER I

CHECKED AND REVIEWED BY
 ENGR ASYUHA D. ALASGAR
 ENGINEER III

SUBMITTED BY
 ENGR HASRUL H. AL-ABDUL
 ENGINEER V

SHEET NO.
 S-12
 14

a
 S-12
 2ND LEVEL ROOF LAYOUT
 SCALE 1:100 MTS



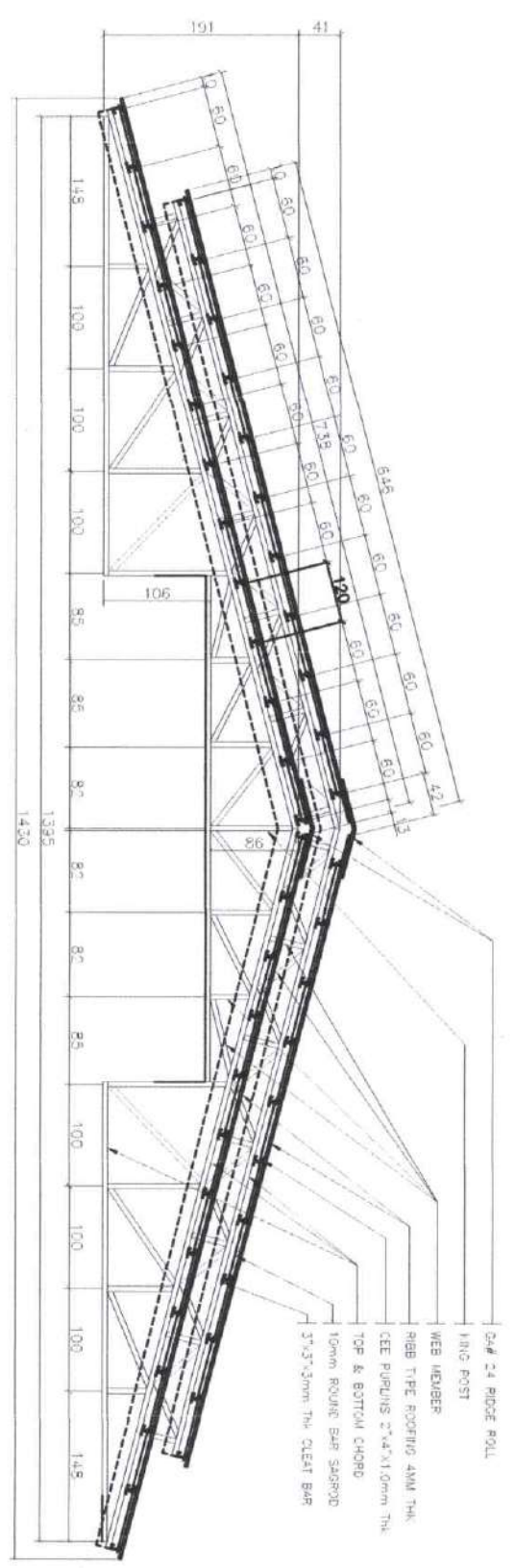
- NOTES**
- * TRUSS MEASUREMENT SHOULD VERIFY AS PER SITE ACTUAL CONDITION BEFORE FABRICATION
 - * $f_{ax}=40 \text{ N/mm}^2$
 - * $f_{yx}=400 \text{ N/mm}^2$
 - * 12 CM THK SLAB WITH REINFORCEMENT AS PER SCHEDULE
 - 1. ALL DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE NOTED.
 - 2. FOR GENERAL NOTES, REFER TO DWG. NO. S-1 & S-2
 - 3. CONTRACTOR SHALL PREPARE OR PROVIDE SHOP DRAWINGS AND CALCULATIONS WHEN IT HAVE CHANGES AS PER SITE CONDITION BEFORE PROCEED THE WORK FOR THE APPROVAL OF MOTC ENGINEERING DIVISION.
 - 4. CONTRACTOR SHALL VERIFY THE ACTUAL SITE CONDITION OF LOCATION AND EXISTING STRUCTURE BEFORE STARTING THE CONSTRUCTION OF THE PROJECT FOR REFERENCE PURPOSE

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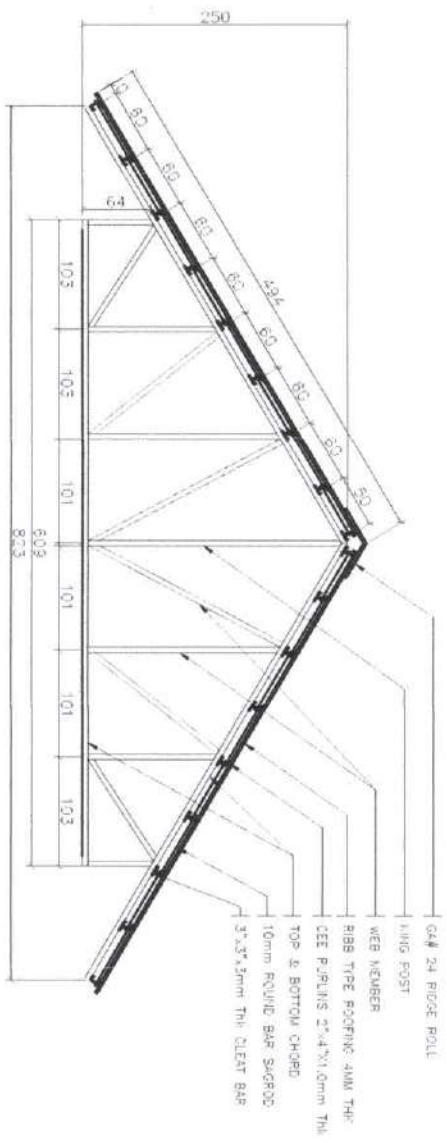
THIS DRAWING IS THE PROPERTY OF MOTC ENGINEERING DIVISION AND IT CANNOT BE REPRODUCED, COPIED OR CIRCULATED WITHOUT THE WRITTEN CONSENT OF THE MOTC ENGINEERING DIVISION

NOTES

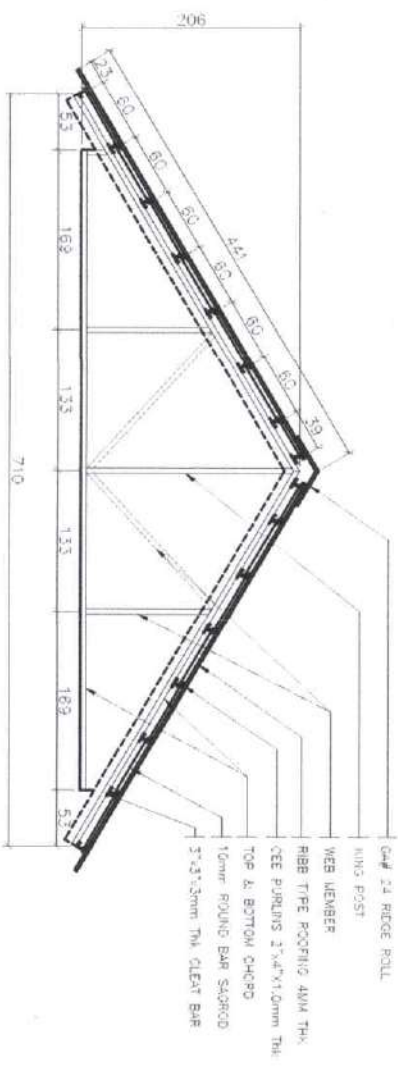
- TRUSS MEASUREMENT SHOULD VERIFY AS PER SITE ACTUAL CONDITION BEFORE FABRICATION
- $f_{cu} = 40 \text{ N/mm}^2$
- $f_y = 400 \text{ N/mm}^2$
- 12 CM THK SLAB WITH REINFORCEMENT AS PER SCHEDULE
- 1. ALL DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE NOTED.
- 2. FOR GENERAL NOTES, REFER TO DWG. NO. S-1 & S-2
- 3. CONTRACTOR SHALL PREPARE OR PROVIDE SHOP DRAWINGS AND CALCULATIONS WHEN IT HAVE CHANGES AS PER SITE CONDITION BEFORE PROCEED THE WORK FOR THE APPROVAL OF MOTC ENGINEERING DIVISION.
- 4. CONTRACTOR SHALL VERIFY THE ACTUAL, SITE CONDITION OF LOCATION AND EXISTING STRUCTURE BEFORE STARTING THE CONSTRUCTION OF THE PROJECT FOR REFERENCE PURPOSE



a ROOF TRUSS A
SCALE 1:1100 MTS






b ROOF TRUSS B
SCALE 1:1100 MTS



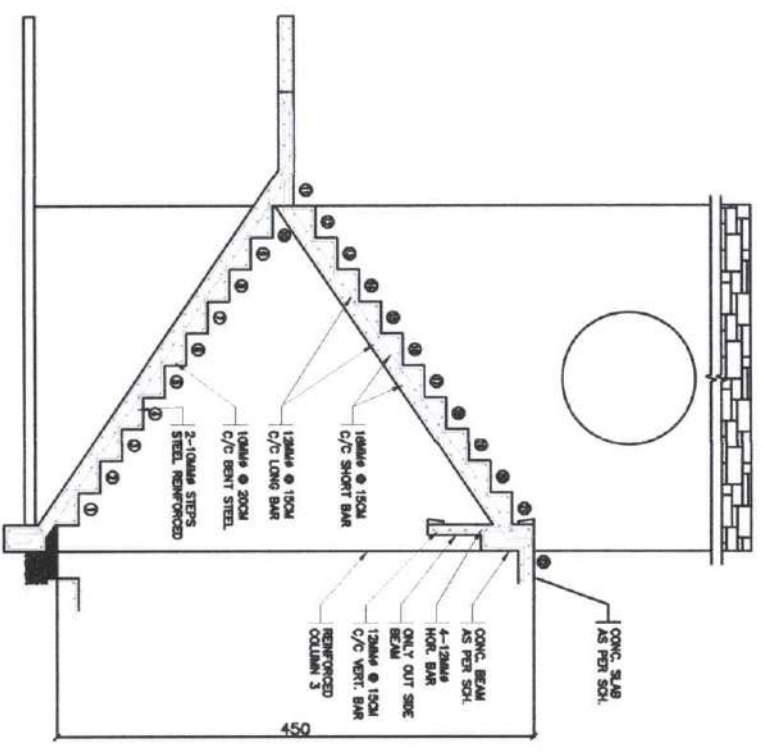
b ROOF TRUSS B
SCALE 1:1100 MTS



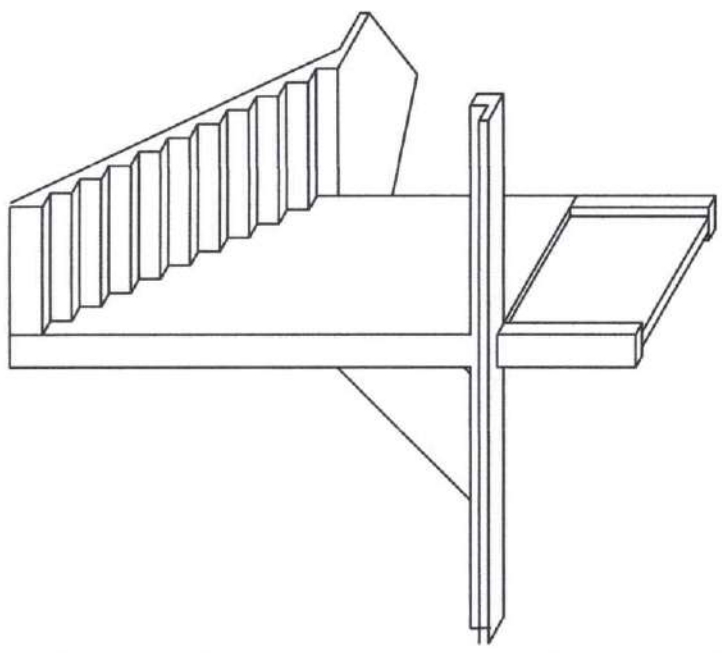
Ministry of Transportation & Communication
OFFICE OF THE MINISTER
Sabah
KOTA KINABALU CITY

PROJECT & LOCATION	CONSTRUCTION OF PEYER LANG AT TUSUL SULTAN SA BARONIS, MASJIDIMANAO	
SHEET CONTINUE	TRUSS DETAILS	
REVISION, APPROVAL & REVISIONS	DRAWN BY:  MOHAMAD YUSOFF K. ALIUD ENGINEER	
	CHECKED AND REVISION BY:  ELMER ASYAFUA D. ASSCAR ENGINEER	SUBMITTED BY:  ELMER ASYAFUA D. ASSCAR ENGINEER
		SHEET NO. S-13 / 14

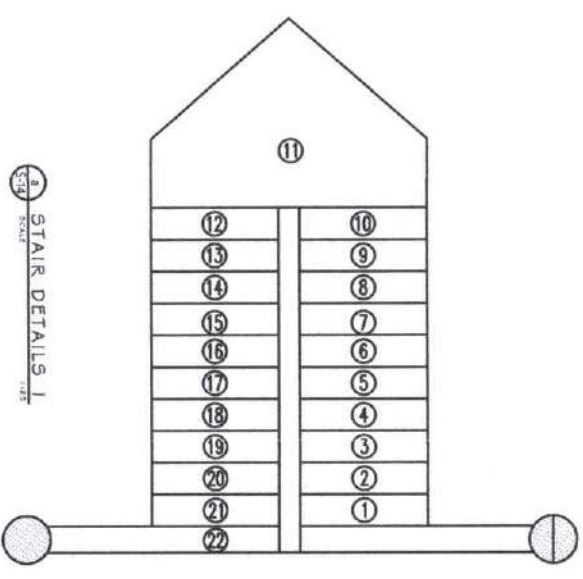
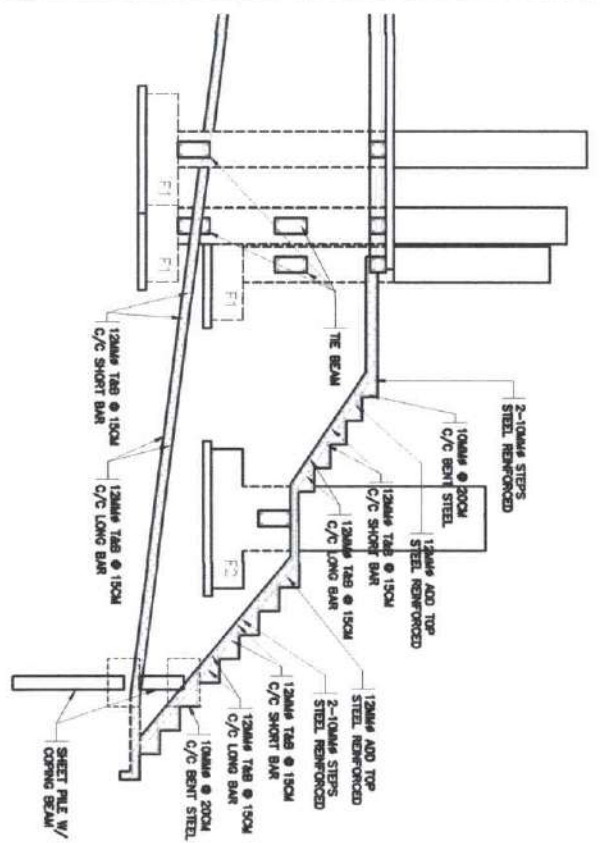
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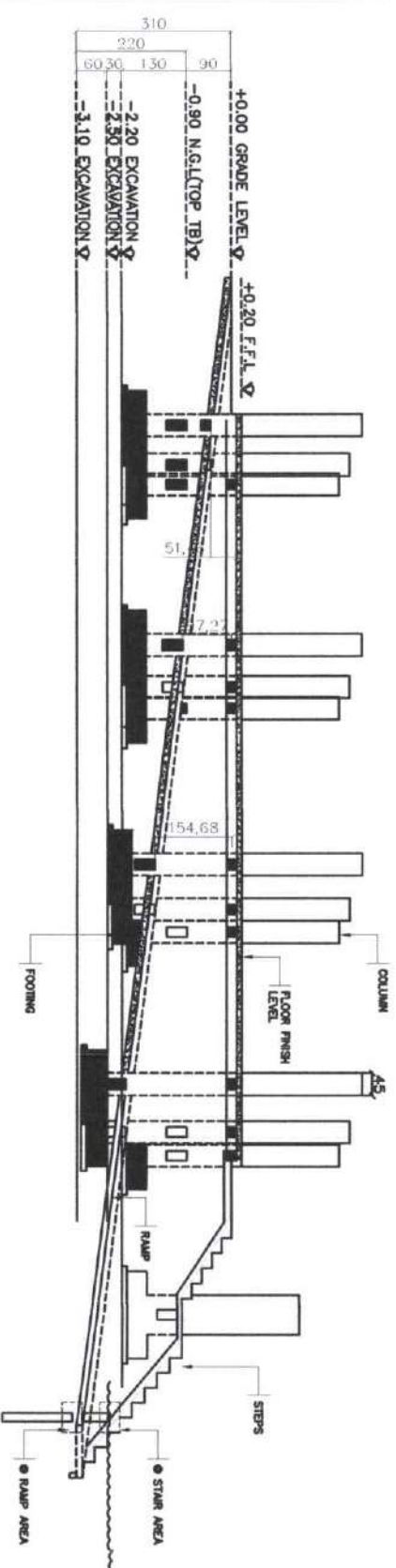
B ISOMETRIC STAIR
1:25 SCALE



A STAIR AND RAMP DETAILS 2
1:25 SCALE



A STAIR DETAILS 1
1:25 SCALE



C SECTION DETAILS
1:25 SCALE

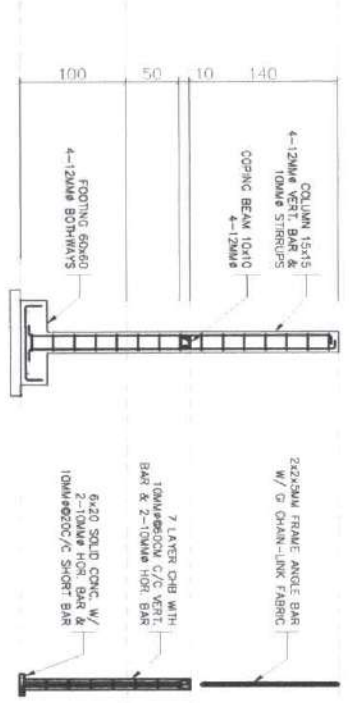
<p>Ministry of Transportation & Communication OFFICE OF THE MINISTER BRUNEI DARUSSALAM DIPONEGORO CITY</p>	PROJECT & LOCATION	SHEET CONTENT	DESIGN APPROVAL REVISIONS	DESIGN BY	CHECKED AND REVISIONS BY	SUBMITTED BY	SHEET NO.
	CONSTRUCTION OF PEJER LANG AT TUGAL, SULTAN SA BARRONIOS, MASJIDINDAU	SECTION AND ISOMETRIC	<p>1. Any work or modification to any part of the design shall be subject to the approval of the architect, engineer, or other professional responsible for the design. The design shall be subject to the approval of the architect, engineer, or other professional responsible for the design.</p> <p>2. The design shall be subject to the approval of the architect, engineer, or other professional responsible for the design. The design shall be subject to the approval of the architect, engineer, or other professional responsible for the design.</p>	MOHAMMAD FARAF K. ALIYUD ENGINEER	ENGR. SHAFIQ D. ALIYUD ENGINEER	ENGR. SHAFIQ D. ALIYUD ENGINEER	S-14 14



Ministry of Transportation & Communications
OFFICE OF THE MINISTER
 62510 KUALA LUMPUR
 60100 KUALA LUMPUR

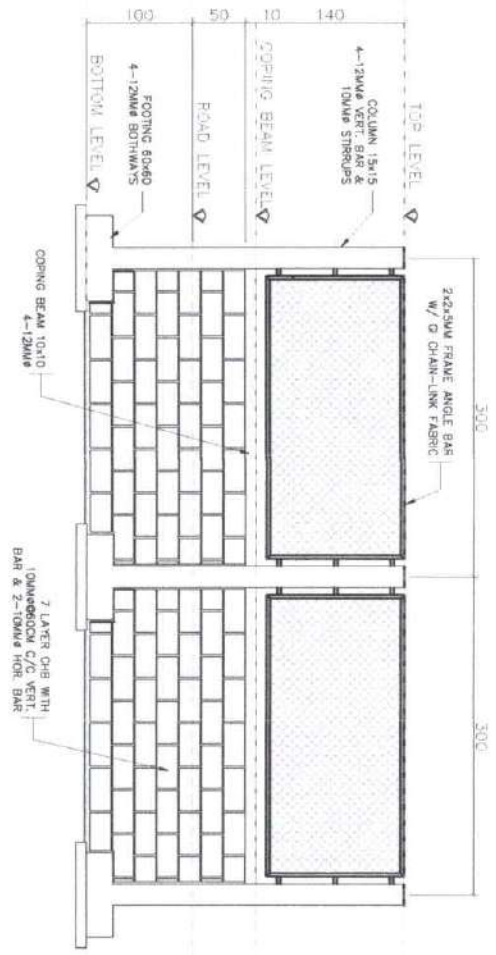
a
A-2

SECTION
 SCALE N.T.S



b
A-2

ELEVATION
 SCALE N.T.S



PROJECT & LOCATION

CONSTRUCTION OF PEVER LAJANG AT
 TUGAL SULTAN SA BARRONGS,
 MAGLINDANAO

SHEET CONTENT

FENCE DETAILS

REVISIONS

Drawings and Specifications and other Contract Documents may require changes or amendments to be made. Any such changes or amendments shall be indicated by a revision number and shall be approved by the Engineer. The Engineer shall be responsible for the accuracy of the drawings and specifications and shall be responsible for the coordination of the drawings and specifications with the other Contract Documents.

DRAWN BY

[Signature]
 ENGR. H. ADIARD
 ENGR. III

CHECKED AND REVIEWED BY

[Signature]
 ENGR. D. ALIFGAR
 ENGR. III

SUBMITTED BY

[Signature]
 ENGR. HASSANIL S. HASSANIL
 ENGR. IV

SHEET NO.

S-14B
 14

SANITARY / PLUMBING

1. DRAINAGE LAYOUT PLAN
2. WATER LAYOUT PLAN
3. WATER TANK LAYOUT PLAN
4. PIPING, AND SEPTIC TANK DET.
5. CONNECTION DETAILS

THIS DRAWING IS THE PROPERTY OF MOTC ENGINEERING DIVISION AND IT CANNOT BE REPRODUCED, COPIED OR CIRCULATED WITHOUT THE WRITTEN CONSENT OF THE MOTC ENGINEERING DIVISION

PLUMBING NOTES

ALL PLUMBING WORKS AND INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL PLUMBING CODE OF THE PHIL. AND THE LOCAL PLUMBING CODE REQUIRED.

PROVIDE 3/4" DIA. GATE VALVE FOR WATER SUPPLY FROM WATER SOURCE.

ALL PPR, PVC AND G.I. PIPE TO BE USED SHALL BE BRAND NEW AND HIGH QUALITY STANDARD AND APPROVED FOR BOTH LOCATION AND PURPOSES.

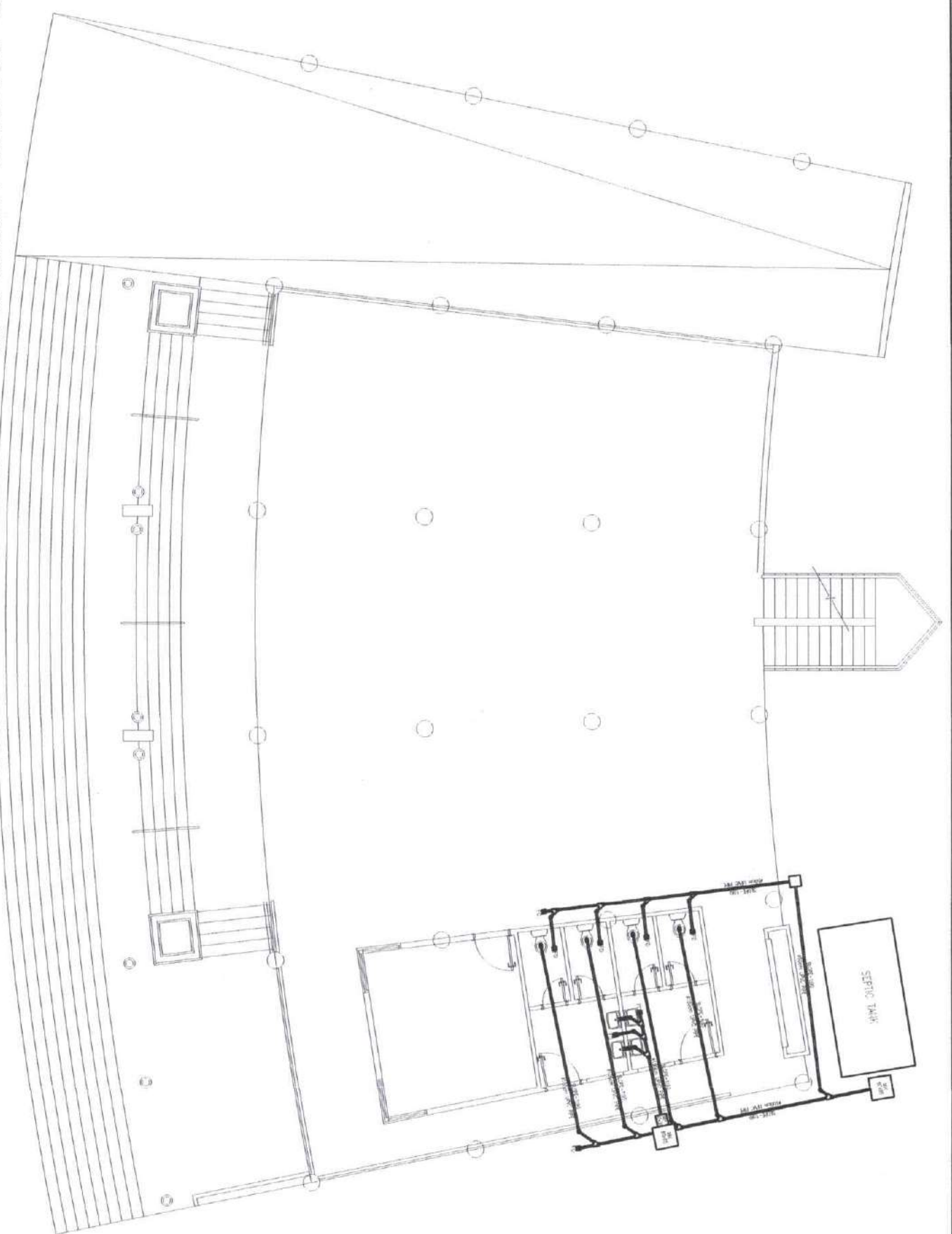
ALL CLEAN OUT SHALL BE FLUSHED MOUNTED ON FLOOR EXCEPT AT AREAS SUBJECT TO TRAFFIC WHICH SHALL BE FLUSHED TO WALL. PROVIDE COVER CAPS.

THE SLOPE OF SEWER LINE SHALL BE 2% FOR DRAIN LINE. IT SHALL BE 1%; THE INLET PIPE SHALL BE 2" HIGHER THAN SIPHON PIPE. PROVIDE VENT AS INDICATED.

ALL PLUMBING WORKS AND INSTALLATIONS SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A LICENSED MASTER PLUMBER.

LEGEND

	MANHOLE
	GULLY-TRAP/P-TRAP
	VENT THROUGH ROOF
	MANHOLE COVER
	WESTERN CLOSET
	LAVATORY
	SHOWER SET
	FLOOR DRAIN
	FLOOR CLEAN OUT
	CLEAN OUT



DRAINAGE LAYOUT PLAN
SCALE 1:100 MTS

 Ministry of Transportation & Communication OFFICE OF THE MINISTER EASTERN CEBUANND CITY	PROJECT & LOCATION CONSTRUCTION OF FEVER LANE AT TUGAL, SULTAN SA BARONIDES, MADRIDANAO	SHEET CONTENT DRAINAGE LAYOUT PLAN, FLOOR PLANGE DETAILS AND SEPTIC TANK DETAILS	BY ORDER, ARCHITECT & REGISTERED In witness whereof, I have signed and affixed my hand and seal, as required by law, at Cebu, Philippines, this 15th day of August, 2024.	DRAWN BY MOHAMMAD ASIF K. ALJAIID ENGINEER	CHECKED AND REVIEWED BY PRINCE SULTAN D. ALUSTOGAR ENGINEER II	SUBMITTED BY ELMER SISON ENGINEER	SHEET NO. P-1 5
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THIS DRAWING IS THE PROPERTY OF MOTC ENGINEERING DIVISION AND IT CANNOT BE REPRODUCED, COPIED OR CIRCULATED WITHOUT THE WRITTEN CONSENT OF THE MOTC ENGINEERING DIVISION

PLUMBING NOTES

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PROVIDE 3/4" DIA. GATE VALVE FOR WATER SUPPLY FROM WATER SOURCE.

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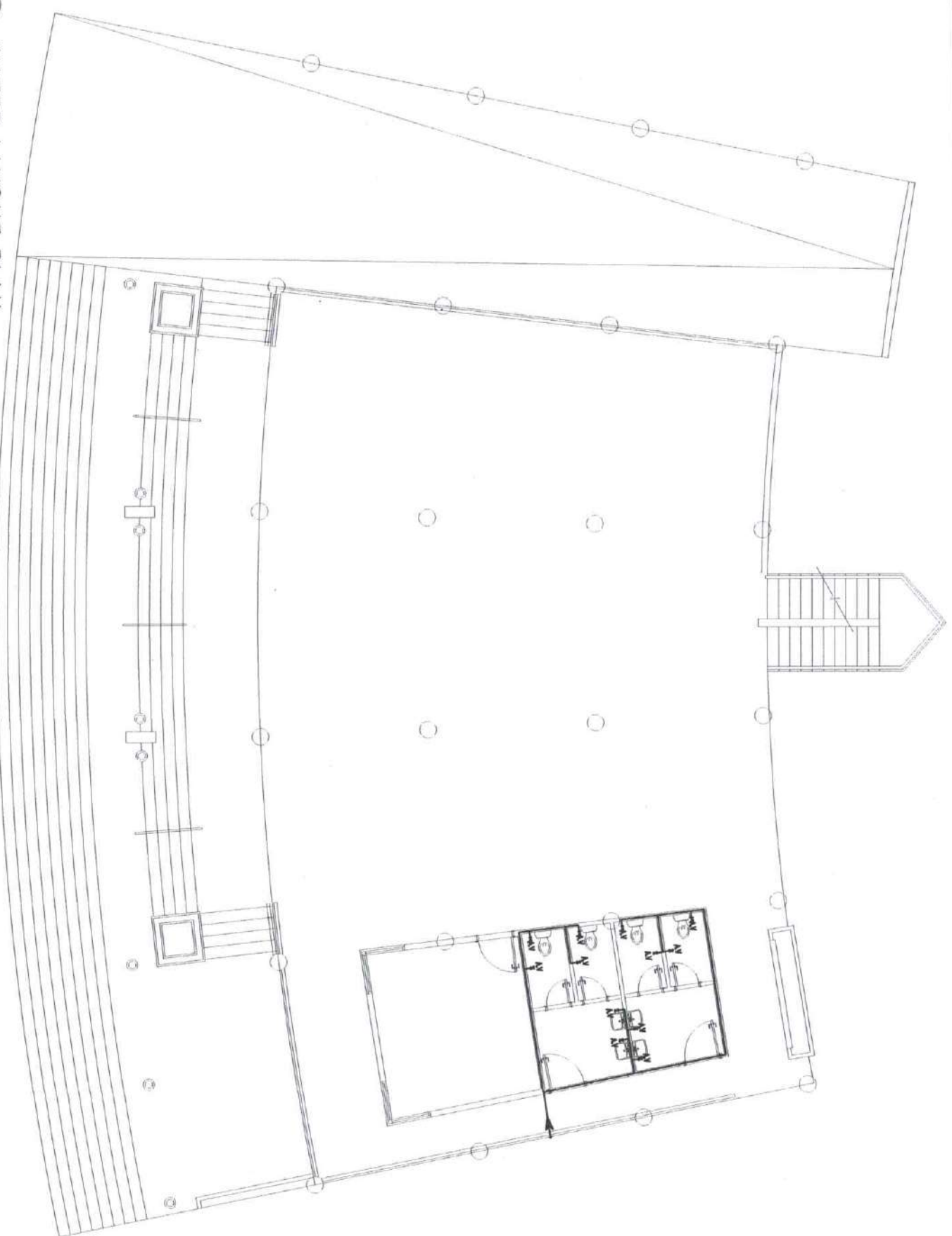
ALL CLEAN OUT SHALL BE FLUSHED MOUNTED ON FLOOR EXCEPT AT AREAS SUBJECTED TO TRAFFIC WHICH SHALL BE FLUSHED TO WALL. PROVIDE COVER CAPS.

THE SLOPE OF SEWER LINE SHALL BE 2% FOR DRAIN LINE. IT SHALL BE 1% THE INLET PIPE SHALL BE 2" HIGHER THAN SIPHON PIPE. PROVIDE VENT AS INDICATED.

ALL PLUMBING WORKS AND INSTALLATIONS SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A LICENSED MASTER PLUMBER.

LEGEND

	MANHOLE
	GULLY-TRAP/P-TRAP
	VENT THROUGH ROOF
	MANHOLE COVER
	WESTERN CLOSET
	LAVATORY
	SHOWER SET
	FLOOR DRAIN
	FLOOR CLEAN OUT
	CLEAN OUT



WATER LAYOUT PLAN
SCALE 1:100 MTS

<p>DEPARTMENT OF TRANSPORTATION & COMMUNICATION OFFICE OF THE MINISTER MANILA CITY</p>	<p>PROJECT & LOCATION CONSTRUCTION OF PEJER LANG AT TUGAL SULTAN SA BARONIOS, MAGUINDANAO</p>	<p>SHEET CONTENT: WATER LAYOUT PLAN</p>	<p>PLUMBING AMPLIFICATION SECTION 13 DRAWING AND INSTRUCTIONS FOR OTHER CONTRACT DOCUMENTS THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED IN THIS DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED IN THIS DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED IN THIS DRAWING.</p>	<p>DRAWN BY WICHARD A. PEARL, ANTONIO ENGINEER I</p>	<p>CHECKED AND FORWARDED BY ENGR. SURESA D. ALY-SAR ENGINEER III</p>	<p>SUBMITTED BY ENGR. TRANSCEND B. BARRERA ENGINEER IV</p>	<p>SHEET NO. P-2 5</p>
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PLUMBING NOTES

ALL PLUMBING WORKS AND INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL PLUMBING CODE OF THE PHIL AND THE LOCAL PLUMBING CODE REQUIRED

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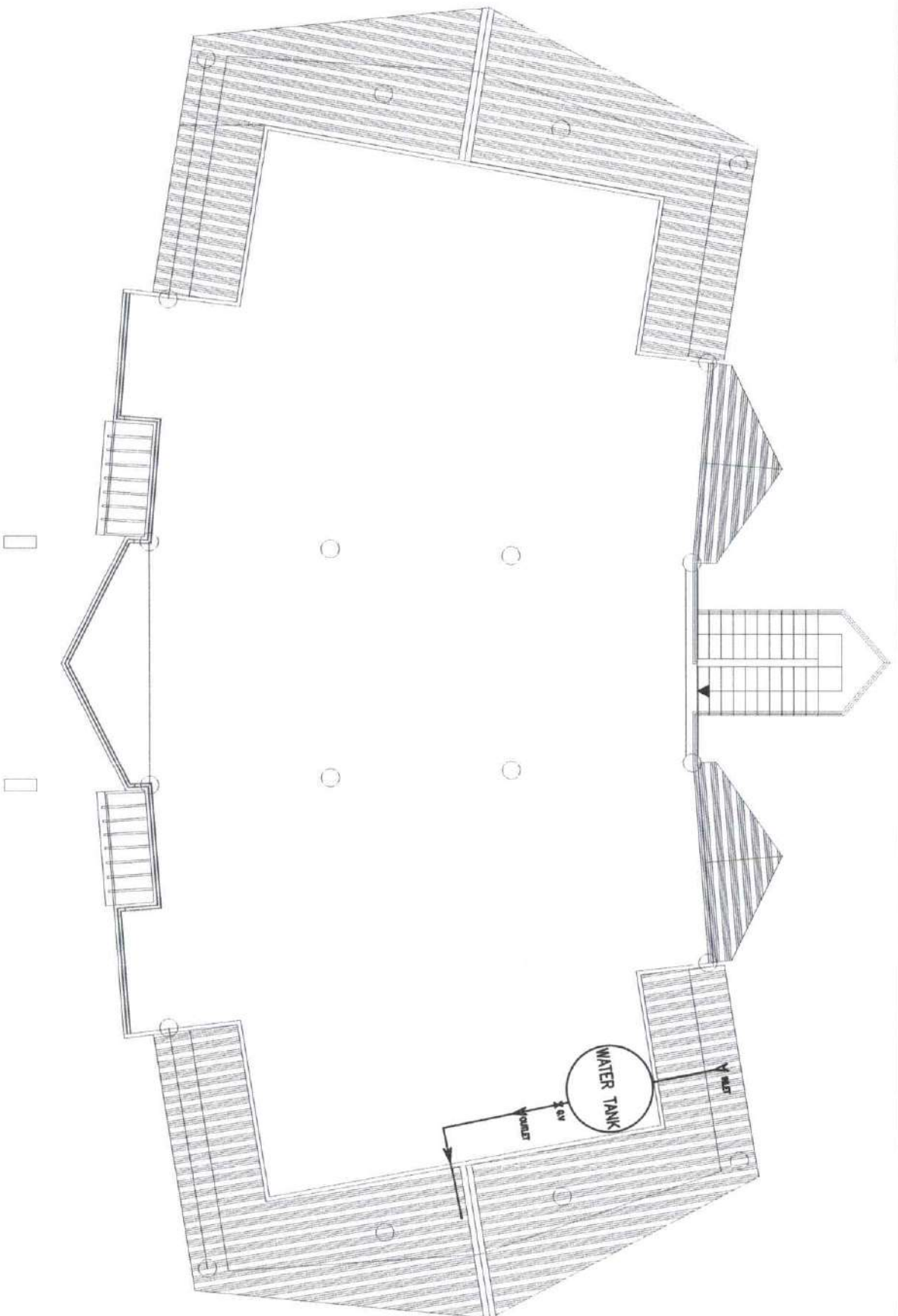
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ALL PLUMBING WORKS AND INSTALLATIONS SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A LICENSED MASTER PLUMBER

LEGEND

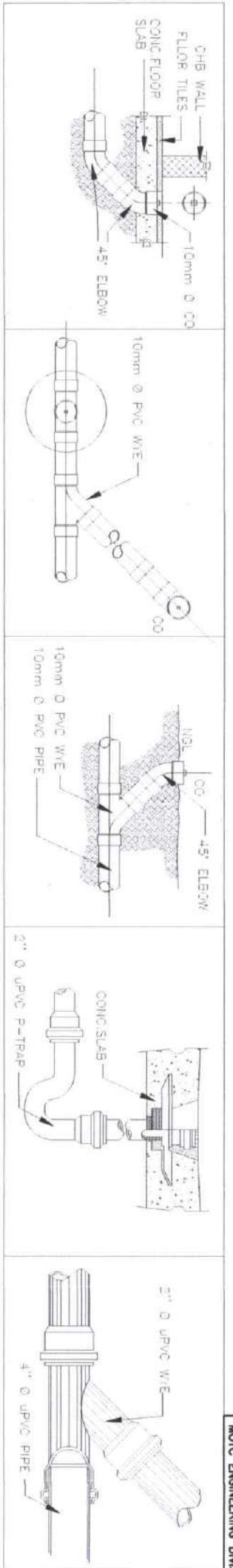
	MANHOLE
	GULLY-TRAP/P-TRAP
	VENT THROUGH ROOF
	MANHOLE COVER
	WESTERN CLOSET
	LAVATORY
	SHOWER SET
	FLOOR DRAIN
	FLOOR CLEAN OUT
	CLEAN OUT



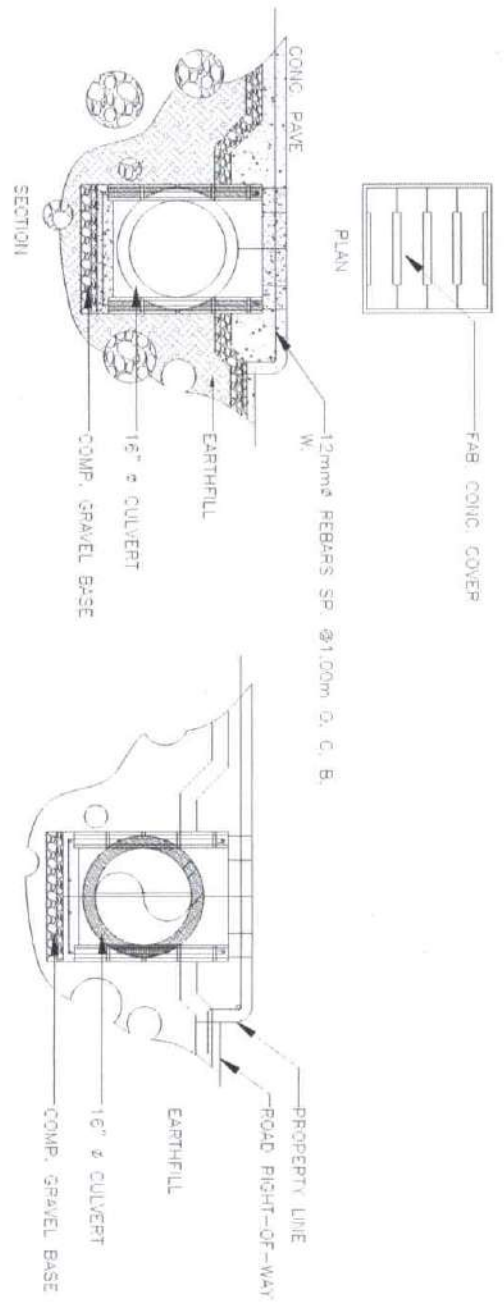
WATER TANK LAYOUT PLAN
SCALE 1:100 MTS

 Ministry of Public Works and Communications OFFICE OF THE MINISTER CONSTITUTION CITY	PROJECT & LOCATION CONSTRUCTION OF PEYER LANS AT TUGAL SULAIM SA BAROMIS, MAGUINDANAO	SHEET CONTENT WATER TANK LAYOUT PLAN	REVISIONS AND/OR REVISIONS Changes and specifications and other. Correct, omissions, add, delete, change or detail, as indicated by initials, number and date. The date for each revision shall be recorded when the sheet is approved for use. It shall be the responsibility of the drafter to indicate the location of the revision on the drawing.	DRAWN BY MOHAMMAD SAIF I. ALIAD ENGINEER	CHECKED AND REVIEWED BY FLOP SUFPA D. ALFARAB ENGINEER II	SUBMITTED BY ENGR. HUSSEIN D. HUSSEIN ENGINEER IV	SHEET NO. P-3 5
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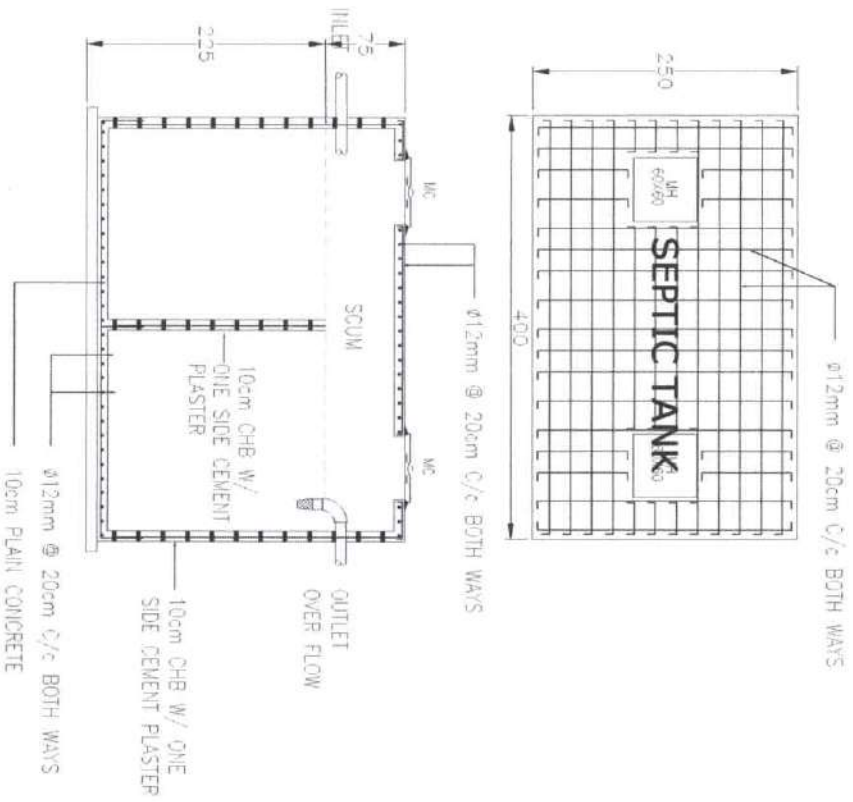
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a CONNECTION AND FITTINGS DETAILS
SCALE: P-4 NTS

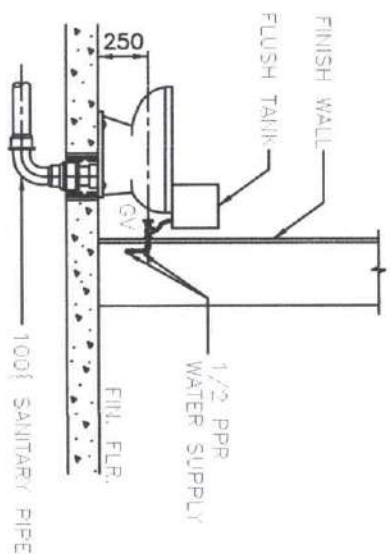


b DETAILS OF CATCH BASIN/MANHOLE
SCALE: P-4 NTS

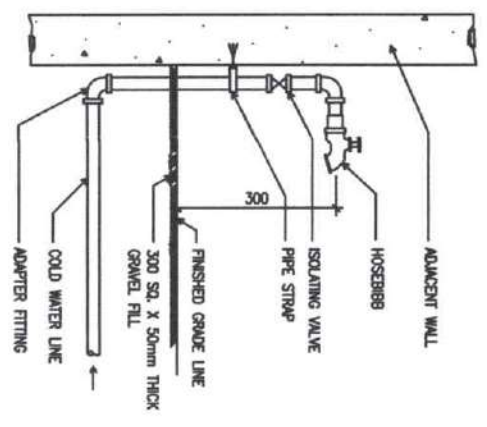


c STR. DETAILS OF SEPTIC TANK
SCALE: P-4 NTS

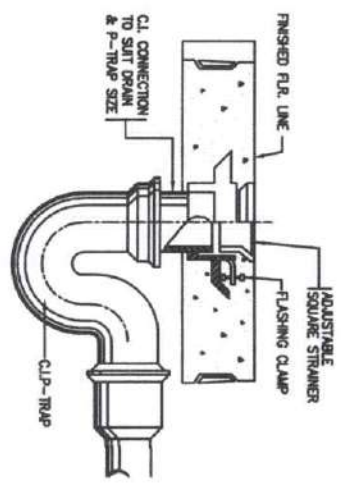
<p>Ministry of Public Works and Communication OFFICE OF THE MINISTER MASINDI DISTRICT OFFICE DAR ES SALAM CITY</p>	PROJECT & LOCATION	SHEET CONTENT	DATE	DESIGNED BY	CHECKED AND REVISIONS BY	SUBMITTED BY	SHEET NO.
	CONSTRUCTION OF PEWER LANE AT TUGAL, SOUTHERN DISTRICT, BAROTSI, MASINDI DISTRICT	PILING AND SEPTIC TANK DET.		MOHAMMAD SAIF I. ALIYAO (ENGINEER)	MOR LESUDA D. ALIYAO (ENGINEER)	ETIM MASHAOKI ST. MASHAOKI (ENGINEER)	P-4 5



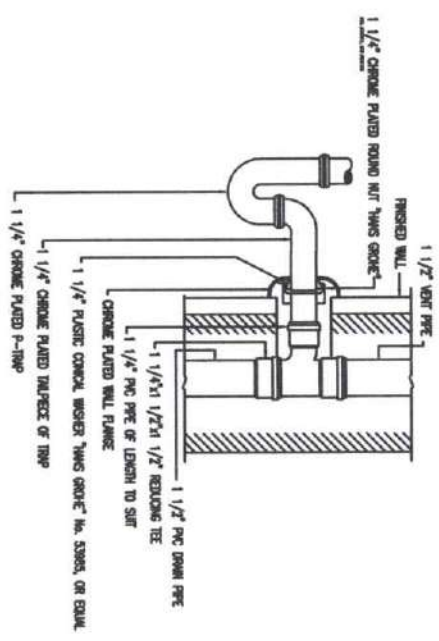
a WATER CLOSET INSTALLATION DETAILS
SCALE: P-5 NTS



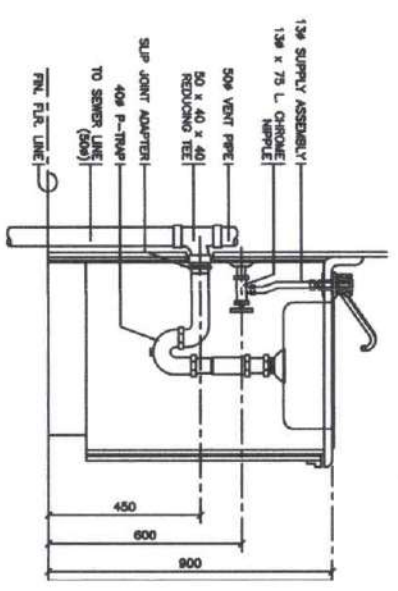
b HOSE BIB INSTALLATION DETAILS
SCALE: P-5 NTS



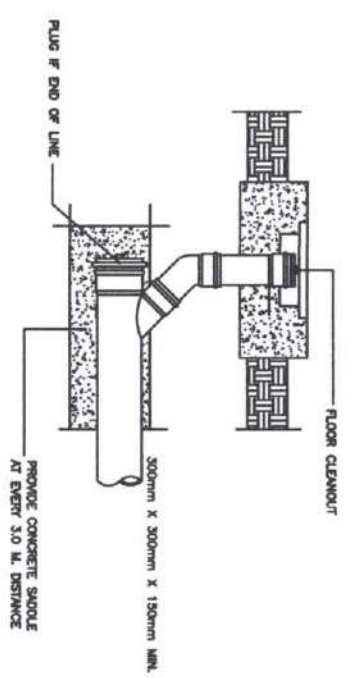
c FLOOR DRAIN DETAILS
SCALE: P-5 NTS



d LAV. OUTLET CONNECTION DET.
SCALE: P-5 NTS



e KITCHEN SINK INSTALLATION DETAILS
SCALE: P-5 NTS



f GRND. CLEANOUT DETAILS
SCALE: P-5 NTS

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Ministry of Transportation & Communication
OFFICE OF THE MINISTER
CORONA CITY

PROJECT & LOCATION
CONSTRUCTION OF BEVER LANG AT
TUGAL SULTAN St. BANDARASIS,
MAGUINDANAO

SHEET CONTINUE
CONNECTION DETAILS

REMARKS, ARTICLES & REFERENCES
Drawings are specifications and other documents
and any changes or amendments are to be
checked and approved by the client. The
contractor shall be responsible for the
accuracy of the drawings and specifications
and for the correct interpretation of the
same. The contractor shall be responsible
for the correct interpretation of the
contract of the architect or Agent of said
contract.

DRAWN BY:
MICHAEL SHERIF I. ALVAREZ
ENGINEER

CHECKED AND REVIEWED BY:
ENGR. ESMAEL D. LASCAR
ENGINEER

SUBMITTED BY:
ENGR. ESTERICO B. MASAYAL
ENGINEER

SHEET NO.
P-5
5

ELECTRICAL

SPECIFICATION:

GENERAL NOTE:

1. ALL ELECTRICAL WORKS SHALL COMPLY IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE APPLICABLE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE(PEC) THE RULES AND REGULATION OF THE LOCAL ENFORCING AUTHORITY AND THESE REQUIREMENTS OF THE LOCAL POWER COMPANY. ALL ELECTRICAL WORKS SHALL BE UNDER THE IMMEDIATE SUPERVISION OF A DUTY REGISTERED ELECTRICAL ENGINEER.

2. THE ELECTRICAL SERVICE POWER 1-PHASE, 2-WIRE, 230VOLTS AC, 60Hz.

3. WIRING METHOD SHALL BE AS FOLLOWS:

- A. FEEDERS AND RISER- REGID METALLIC CONDUIT PIPE(RMC)
- B. LIGHTING, POWER - POLYVINYL CHLORIDE CONDUIT PIPE(PVC)
- RECEPTACLE BRANCH CKT. & AUXILIARY

GENERAL NOTE:

4. ALL WIRE SHALL BE COPPER AND THERMOPLASTIC INSULATED TYPE THIN UNLESS OTHERWISE INDICATED IN THE PLAN. THE MINIMUM SIZE OF WIRE FOR POWER AND LIGHTING CIRCUIT HOMERUN SHALL BE 3.5MM SQUARE AND INSULATED FOR 600VOLTS. SMALLEST RACEWAY SHALL BE 15MM CONDUIT TRADE/NOMINAL SIZE.

5. ALL OUTLET BOXES SHALL BE GALVANIZE GAUGE NO. 16 DEEP WITH FACTORY KNOCKOUTS.

6. ALL MATERIALS TO BE USED SHALL BE BRAND NEW AND APPROVED TYPE FOR THE PARTICULAR LOCATION AND PURPOSE.

7. GROUNDING SYSTEM SHALL BE PROVIDED TO ALL LIGHTING AND POWER CIRCUIT AS PER PHILIPPINE ELECTRICAL CODE REQUIREMENT.

GENERAL NOTE:

- 8. MOUNTING HEIGHT OF WIRING DEVICES SHALL BE AS FOLLOWS:
 - A. LIGHT SWITCH -1.20M ABOVE THE FINISH FLOOR
 - B. CONVENIENCE OUTLET -0.3M ABOVE THE FINISH FLOOR
 - C. SAFETY SWITCH -1.80M ABOVE THE FINISH FLOOR
 - D. EVERY OVER 10M FROM THE SOURCE MUST ADD ONE STEP WIRE

LEGEND:

SYMBOL	DESCRIPTION
	CEILING LIGHT OUTLET
	4 FEET FLORESCENT LAMP
	ON/OFF SWITCH
	THREE WAY SWITCH
	CONVENIENCE OUTLET
	AIR CONDITIONING UNIT OUTLET
	LIGHTING PANEL BOARD
	POWER LOAD PANEL BOARD
	WALL LAMP
	RACEWAY CONDUIT CONCEALED IN CEILING
	RACEWAY CONDUIT CONCEALED UPPER FL
	ELECTRIC SERVICE METER KWH
	SERVICE ENTRANCE

LOAD SCHEDULE:

LIGHTING LOADS

BRANCH CIRCUIT	DESCRIPTION	NO. OF FIXTURES	WATTAGE PER FIXTURE	TOTAL WATTAGE	VA	FLUORESCENT	INCANDESCENT	CONVERTING FACTOR	LOAD
1	OFF LIGHTING	25	230	5750	5750	5750		1.00	5750
2	OFF LIGHTING	22	230	5060	5060	5060		1.00	5060
3	OFF LIGHTING	13	230	2990	2990	2990		1.00	2990
4	OFF LIGHTING	27	230	6210	6210	6210		1.00	6210

POWER LOADS

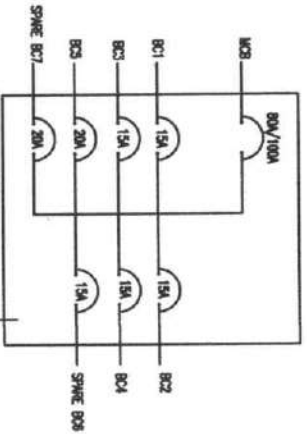
BRANCH CIRCUIT	DESCRIPTION	QUANTITY	WATTAGE PER UNIT	TOTAL WATTAGE	VA	FLUORESCENT	INCANDESCENT	CONVERTING FACTOR	LOAD
4	OFF LIGHTING	5	100	500	500	500		1.00	500
4	OFF LIGHTING	1	100	100	100	100		1.00	100
4	OFF LIGHTING	1	100	100	100	100		1.00	100
4	OFF LIGHTING	1	100	100	100	100		1.00	100
4	OFF LIGHTING	2	100	200	200	200		1.00	200
5	OFF LIGHTING	1	100	100	100	100		1.00	100
7	OFF LIGHTING	1	100	100	100	100		1.00	100

UNBALANCED LOADS:
TOTAL LOAD = 6210 WATT
TOTAL VA = 6210 VA

UNBALANCED CURRENT REQUIRED = 28.00A

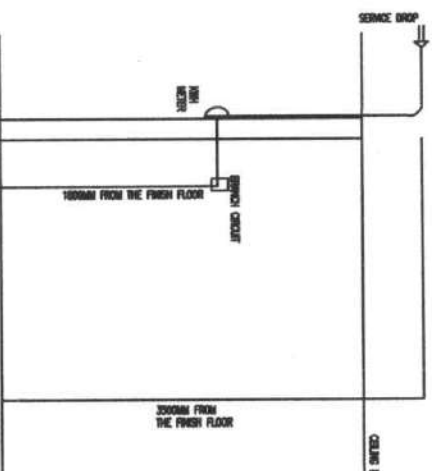
2000mm² CONDUCTOR
SERVICED BY SERVICE TRUNK

SAFETY SWITCH:



RISER DIAGRAM

1-15MMØ X 2400MM LENGTH
GROUNDING ROD COPPERWELD



Department of the Philippines
MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
BARANGAY
COTABATO CITY

PROJECT & LOCATION:
CONSTRUCTION OF RIVER LANDING
at Tugal Sultan sa Barangis, Maguindanao

SHEET CONTENT:
SPECIFICATION, LEGEND,
LOAD SCHEDULE, SAFETY
SWITCH, RISER DIAGRAM

REVISIONS:
Drawing and Specifications of other Contractors/Suppliers shall be subject to the approval of the Engineer-in-Charge. Any change or modification shall be made in writing and approved by the Engineer-in-Charge. The Engineer-in-Charge shall be responsible for the accuracy of the drawing and specifications.

DESIGNED BY:
ENGR. RYAN D. ALIBISAR
CHECKED BY:
ENGR. RYAN D. ALIBISAR

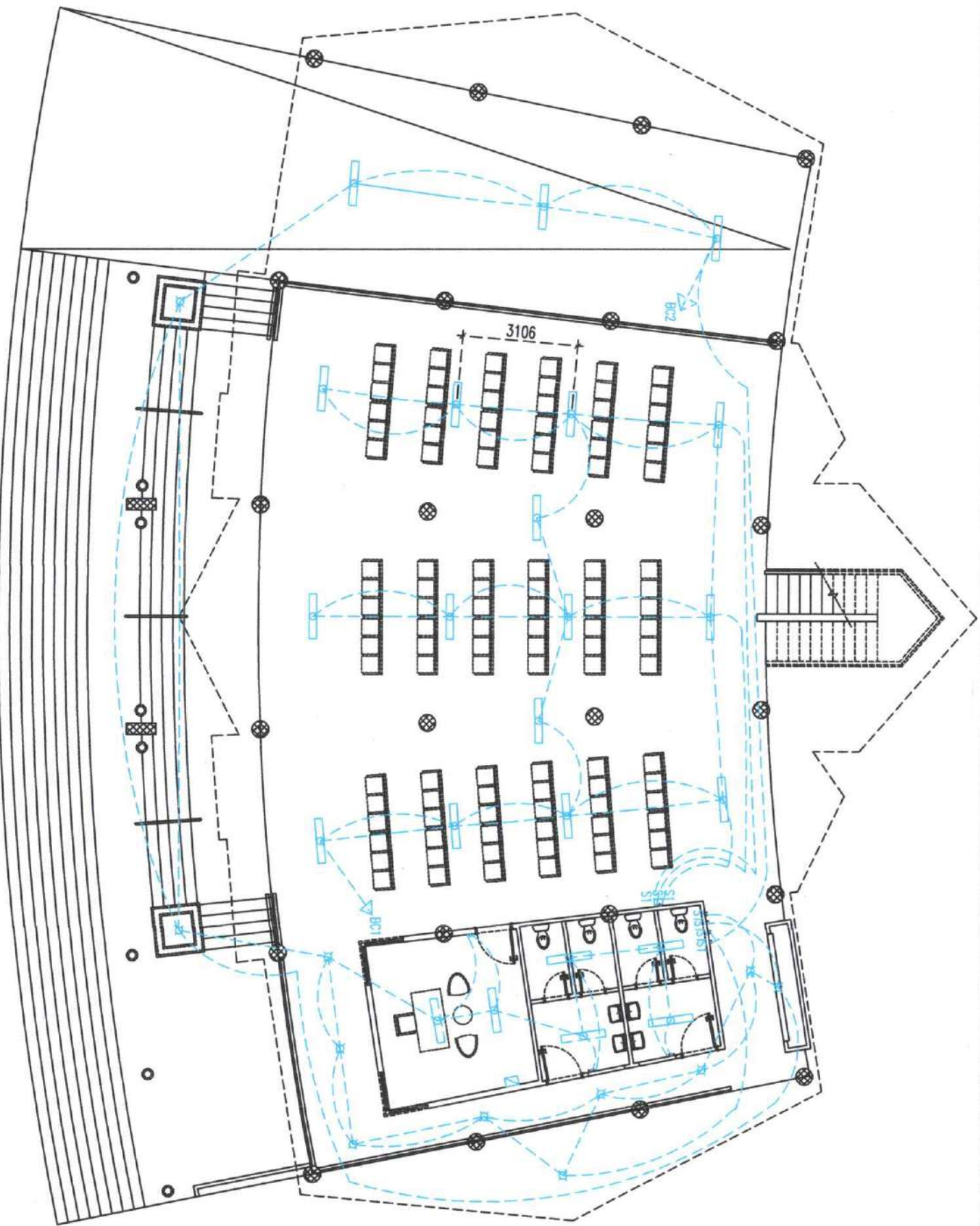
APPROVED BY:
ENGR. RYAN D. ALIBISAR
ENGR. RYAN D. ALIBISAR

DATE: 05/10/2024
PROJECT NO.: 05

SHEET NO.: E-01
OF 05



Republic of the Philippines
 MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 BAHAY
 CORTAJO CITY



PROJECT & LOCATION

CONSTRUCTION OF RIVER LANDING
 at Tugal Sultan sa Barongis, Maguindanao

SHEET CONTENT

ELECTRICAL LIGHTING FOR
 GROUND FLOOR

As seen, APPROVED & REVISIONS

Change and Specifications and other Contract Documents shall prevail over this set of drawings. The Engineer shall be responsible for the design and construction of the works shown on these drawings. The Engineer shall be responsible for the design and construction of the works shown on these drawings. The Engineer shall be responsible for the design and construction of the works shown on these drawings.

PREPARED BY

RANDI T. AMOR
 ELECTRICAL ENGINEER

CHECKED AND REVIEWED BY

ENGR. KENNETH D. ALIBISAR
 ENGINEER II

SUBMITTED BY

ENGR. NARSOD N. MASAYAL
 ENGINEER V

SHEET NO.

E-02
 05



Republic of the Philippines
 MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 PASAY
 CORRALTO CITY

PROJECT & LOCATION:
CONSTRUCTION OF RIVER LANDING
 at Tugal Sultan sa Barongis, Maguindanao

SHEET CONTENTS:
ELECTRICAL LIGHTING FOR
SECOND FLOOR

REVISIONS:
 Describe and specify location and date of each revision. Attach a separate sheet for each revision. The original drawing shall be marked with the revision number and date. The original drawing shall be marked with the revision number and date. The original drawing shall be marked with the revision number and date.

PREPARED BY:

 RANDI T. ANGELO
 ELECTRICAL ENGINEER

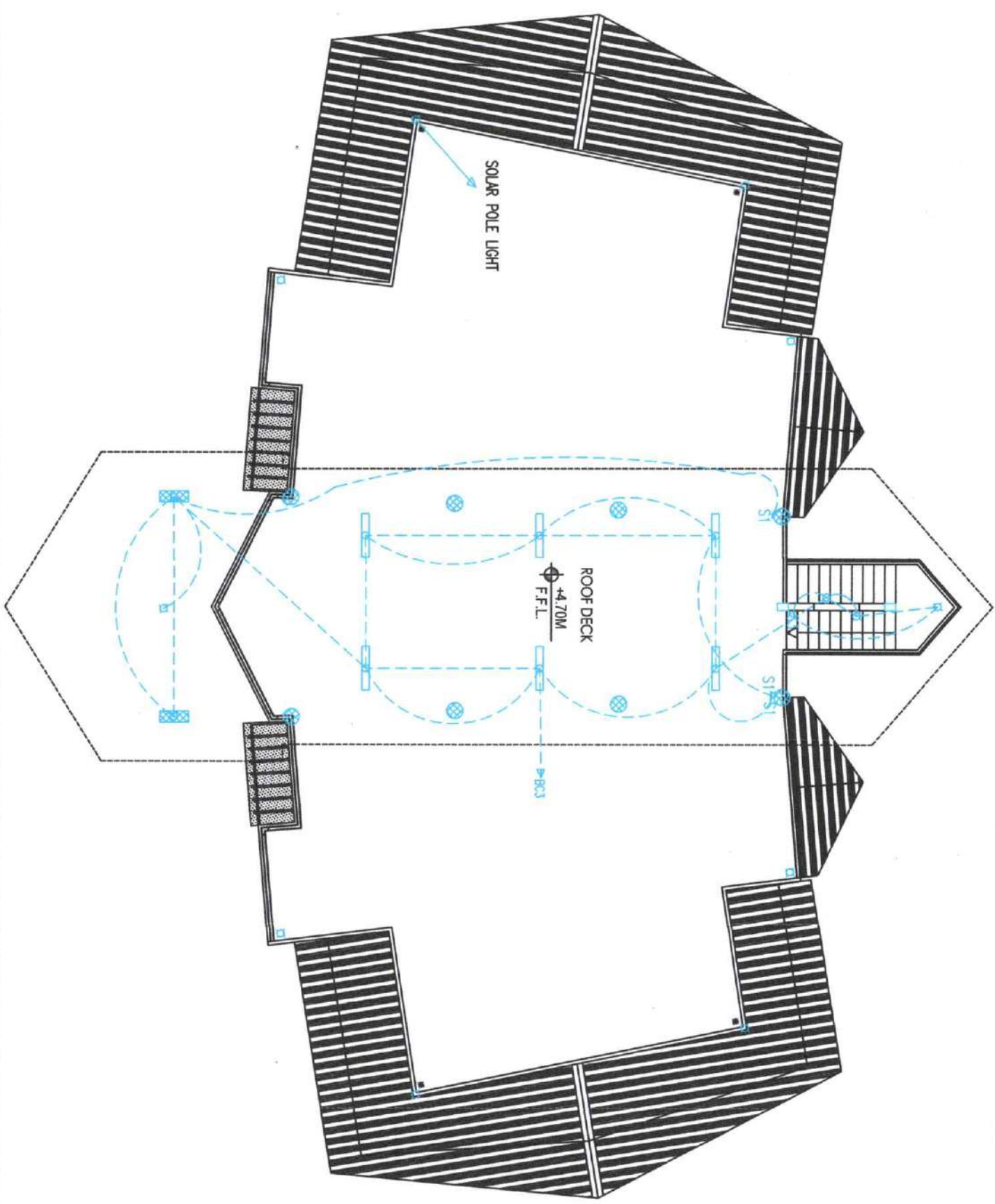
CHECKED AND APPROVED BY:

 ENGR. ASAFILHA D. ALJANGAR
 ENGINEER II

SUBMITTED BY:

 ENGR. MASTRODINO MANSAYOC
 ENGINEER IV

SHEET No.
 E-03
 05





Republic of the Philippines
 MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 BARANGALAY
 CORONA CITY

PROJECT & LOCATION

CONSTRUCTION OF RIVER LANDING
 at Tugai Sultan sa Barangis, Maguindanao

SHEET CONTENTS:

ELECTRICAL POWER OUTLET
 FOR GROUND FLOOR

REMARKS, ARTICLES AND SPECIFICATIONS

Design and Specifications set the Contract Documents shall apply
 in respect of work, in the absence of which, the last in date of any
 amendments of the contract, shall be taken to be the contract
 documents. It shall be the responsibility of the contractor to
 check the contract documents for any errors or omissions and
 to advise the Engineer in writing before the start of work.
 The contract documents shall be the basis for the execution
 of the work and shall be binding on the contractor.

PREPARED BY:

[Signature]
 RANDI T. ANGELO, ELECTRICAL ENGINEER

CHECKED AND REVIEWED BY:

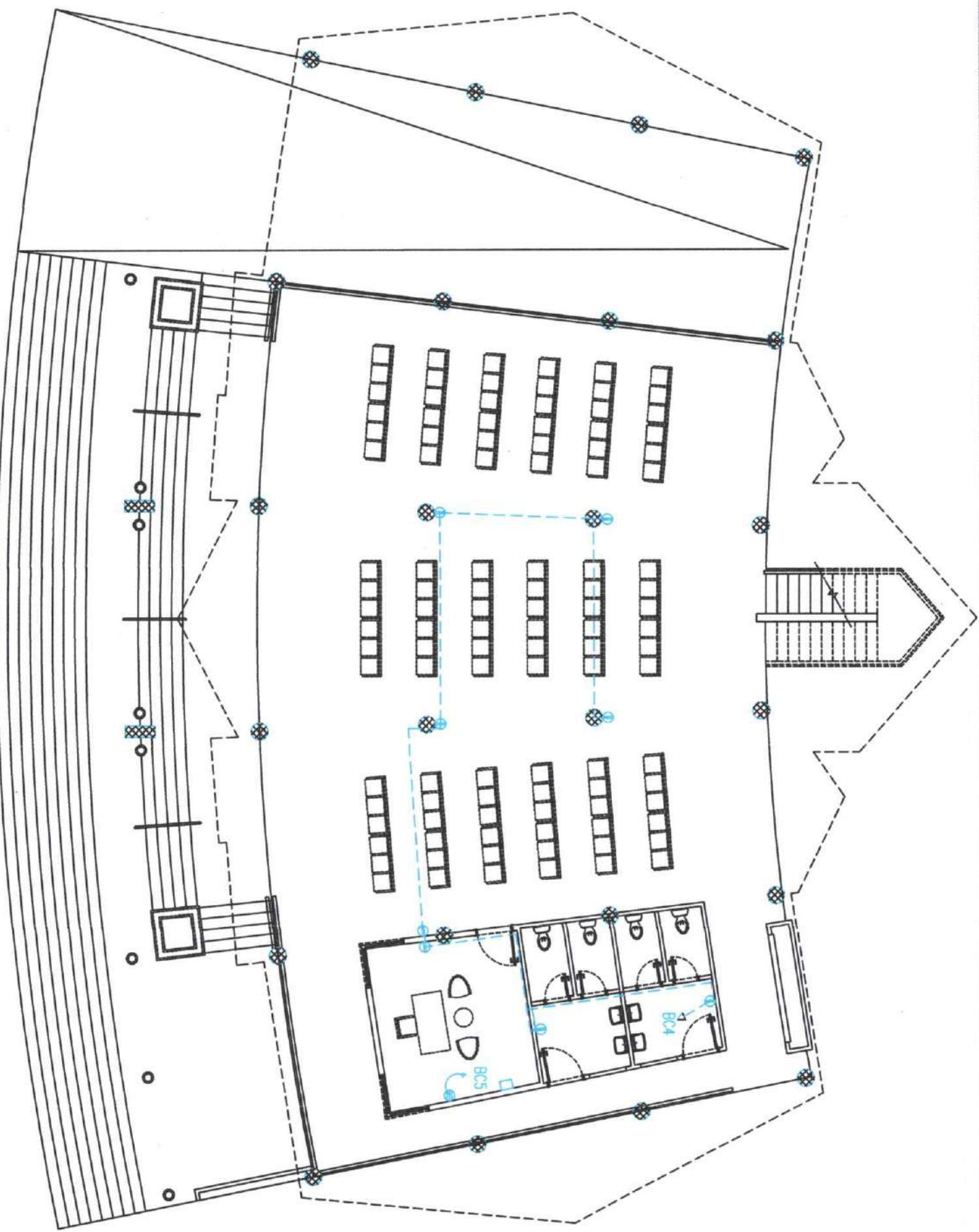
[Signature]
 ENGR. KATHY D. ALVARADO, ENGINEER III

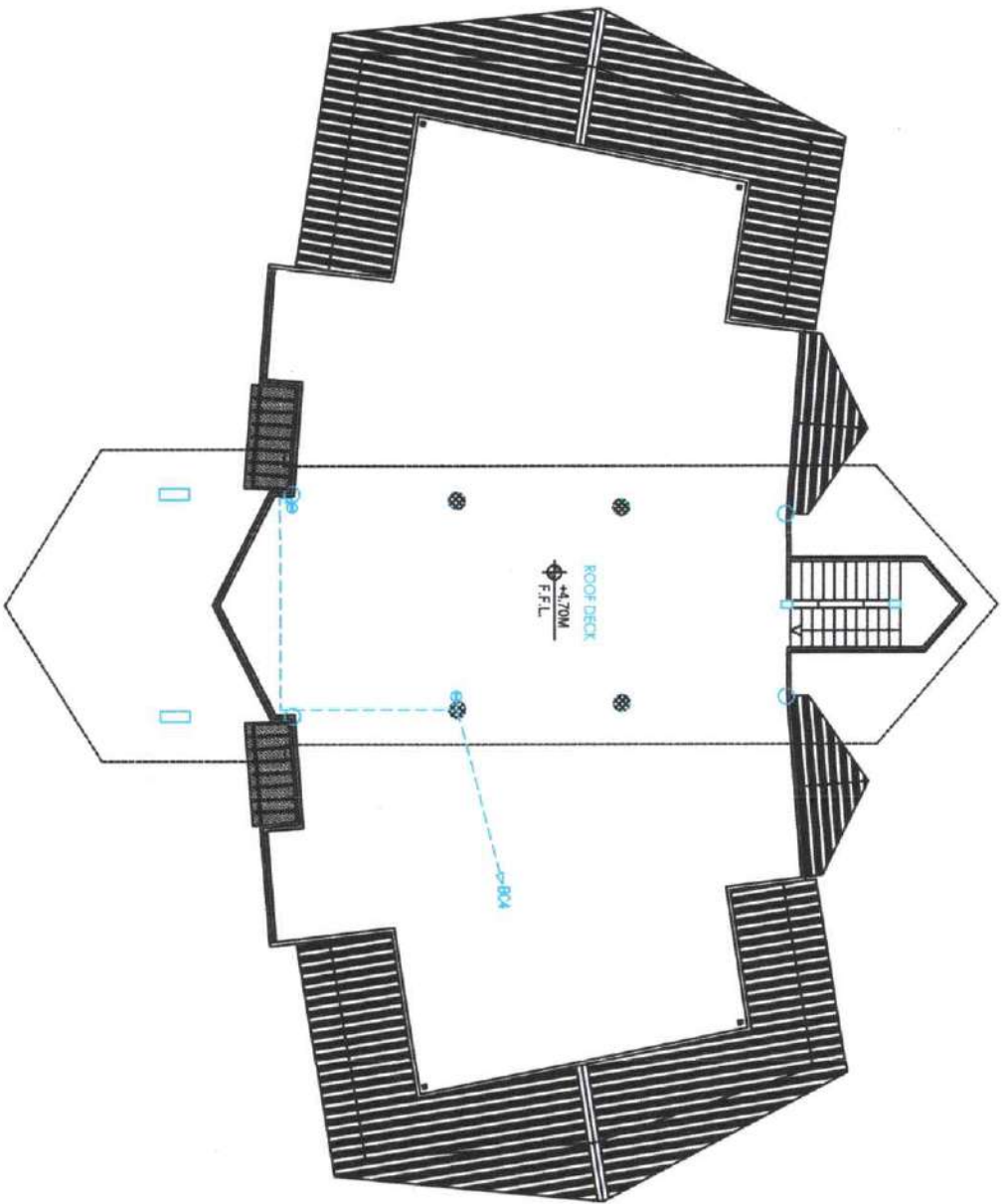
SUBMITTED BY:

[Signature]
 ENGR. NESTOR P. MARASAL, ENGINEER IV

SHEET No.

E-04
 05





Department of the Philippines
 MINISTRY OF TRANSPORTATION & COMMUNICATION
OFFICE OF THE MINISTER
 BARCEL
 COTABATO CITY

PROJECT LOCATION:
CONSTRUCTION OF RIVER LANDING
 at Tugal Sultan sa Baronigis, Maguindanao

SHEET CONTENTS:
ELECTRICAL POWER OUTLET
 FOR SECOND FLOOR

RAISON, APPROVE INSTRUCTIONS:
 Drawings and Specifications and other Contract Documents shall be read and interpreted in accordance with the General Conditions of Contract, the Particular Conditions of Contract, and the Bill of Materials. In the event of any conflict between the Contract Documents, the Particular Conditions shall prevail over the General Conditions, and the Bill of Materials shall prevail over the Particular Conditions.

PREPARED BY:

 RANDI T. AMOR, RSEE, SSM
 ELECTRICAL ENGINEER

CHECKED AND REVIEWED BY:

 ENGR. ASINHA D. ALJASAR
 ENGINEER II

SUBMITTED BY:

 ENGR. NESPOND B. HANAWOL
 ENGINEER IV

SHEET No.

 E-05
 05