PHILIPPINE BIDDING DOCUMENTS

Installation of Solar Street Lights at Cotabato Awang Airport

Ministry of Transportation and Communications

Public Bidding No. 24IGAAB0004 ABC: PhP 4,950,000.00

> Sixth Edition July 2020

Preface

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

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

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

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

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

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

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

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Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

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

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

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

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

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

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

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

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

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

GFI – Government Financial Institution.

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

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

GOP – Government of the Philippines.

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

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

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

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Section I. Invitation to Bid

Notes on the Invitation to Bid

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

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

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

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

Invitation to Installation Of Solar Street Lights at Cotabato Awang Airport

- The Ministry of Transportation and Communications, through the General Appropriations Act of the Bangsamoro 2024 intends to apply the sum of Four Million Nine Hundred Fifty thousand Pesos (4,950,000.00) being the Approved Budget for the Contract (ABC) to payments under the contract for Contract ID No. 24IGAAB0004. 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 *One Hundred days (100 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 nondiscretionary "*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 am.
- 5. A complete set of Bidding Documents may be acquired by interested bidders on April 6, 2024 April 29, 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 *Five Thousand Pesos Only (Php 5,000.00)*. 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 April 15, 2024 at 1:00 PM 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 **April 29, 2024 at 1:00 PM.** 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 April 29, 2024 at 1:00 PM 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, BAC 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	:	<u>motcbarmm.proc@gmail.com</u>

12. You may visit the following websites:

For downloading of Bidding Documents: https://motc.bangsamoro.gov.ph

MUHAMMAD M. GALO

Director I Infrastructure Bids and Awards Committee (IBAC)

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 the Installation of Solar Street Lights At Cotabato Awang Airport, with Project Identification Number **24IGAAB0004**.

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

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

2. Funding Information

- 2.1. The GOP through the source of funding as indicated below for 2023 in the amount of P 4,950,000.00
- 2.2. The source of funding is: The source of funding is: BARMM General Appropriations Act of the Bangsamoro of 2024.

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 special PCAB License in case of Joint Ventures, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.
- 10.4. A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.
- 10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

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

12. Alternative Bids

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

13. Bid Prices

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

14. Bid and Payment Currencies

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

15. Bid Security

- 15.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 15.2. The Bid and bid security shall be valid until *[indicate date]*. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

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

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

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

17. Deadline for Submission of Bids

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

18. Opening and Preliminary Examination of Bids

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

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

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

19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*" using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid Security as required by **ITB** Clause 15 shall be submitted for each contract (lot) separately.
- 19.3. In all cases, the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184 must be sufficient for the total of the ABCs for all the lots participated in by the prospective Bidder.

20. Post Qualification

Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR

Electronic Filing and Payment System (eFPS), and other appropriate licenses and permits required by law and stated in the **BDS**.

21. Signing of the Contract

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

Notes on the Bid Data Sheet (BDS)

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

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

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

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

Bid Data Sheet

ITB Clause			
5.2	For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be: General Requirements, Concrete Pedestal, Fabricated Steel Post and Solar Power Lights Installation		
7.1	Subcontracting is not allowed.		
10.3	For Joint Venture:		
	NOT APPLICABLE		
10.4	The key personnel must meet the required minimum years of experience set below:Key PersonnelGeneral ExperienceProject Engineer3 yearsMaterials Engineer2 yearsSafety Officer2 yearsProject Foreman3 years		
10.5	The minimum major equipment requirements are the following: Equipment Capacity Number of Units Boom Truck 1 Unit Minor Tools 1 Unit Buggy Mixer 1 Unit		
12	Value Engineering Clause:		
15.1	 Not allowed The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts: a. The amount of not less than 99,000.00 [two percent (2%) of ABC], 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 247,500.00 [five percent (5%) of ABC] if bid 		
19.2	security is in Surety Bond. Partial bids:		
	Not allowed		
20	Other appropriate licenses and permits required:		
	None		

21	Additional contract documents relevant to the Project that may be required by			
	existing laws and/or the Procuring Entity, such as construction schedule and S-			
	curve, manpower schedule, construction methods, equipment utilization			
	schedule, construction safety and health program approved by the DOLE, and			
	other acceptable tools of project scheduling.			

Notes on the General Conditions of Contract

The General Conditions of Contract (GCC) in this Section, read in conjunction with the Special Conditions of Contract in Section V and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

Matters governing performance of the Contractor, payments under the contract, or matters affecting the risks, rights, and obligations of the parties under the contract are included in the GCC and Special Conditions of Contract.

Any complementary information, which may be needed, shall be introduced only through the Special Conditions of Contract.

1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

2. Sectional Completion of Works

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

3. Possession of Site

- 3.1 The Procuring Entity shall give possession of all or parts of the Site to the Contractor based on the schedule of delivery indicated in the SCC, which corresponds to the execution of the Works. If the Contractor suffers delay or incurs cost from failure on the part of the Procuring Entity to give possession in accordance with the terms of this clause, the Procuring Entity's Representative shall give the Contractor a Contract Time Extension and certify such sum as fair to cover the cost incurred, which sum shall be paid by Procuring Entity.
 - 3.2 If possession of a portion is not given by the above date, the Procuring Entity will be deemed to have delayed the start of the relevant activities. The resulting adjustments in contract time to address such delay may be addressed through contract extension provided under Annex "E" of the 2016 revised IRR of RA No. 9184.

4. The Contractor's Obligations

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

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

5. **Performance Security**

- 5.1. Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR.
- 5.2. The Contractor, by entering into the Contract with the Procuring Entity, acknowledges the right of the Procuring Entity to institute action pursuant to RA No. 3688 against any subcontractor be they an individual, firm, partnership, corporation, or association supplying the Contractor with labor, materials and/or equipment for the performance of this Contract.

6. Site Investigation Reports

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

7. Warranty

- 7.1. In case the Contractor fails to undertake the repair works under Section 62.2.2 of the 2016 revised IRR, the Procuring Entity shall forfeit its performance security, subject its property(ies) to attachment or garnishment proceedings, and perpetually disqualify it from participating in any public bidding. All payables of the GOP in his favor shall be offset to recover the costs.
- 7.2. The warranty against Structural Defects/Failures, except that occasioned-on force majeure, shall cover the period from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity. Specific duration of the warranty is found in the **SCC**.

8. Liability of the Contractor

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

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

9. Termination for Other Causes

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

10. Dayworks

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

11. Program of Work

- 11.1. The Contractor shall submit to the Procuring Entity's Representative for approval the said Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works. The submissions of the Program of Work are indicated in the SCC.
- 11.2. The Contractor shall submit to the Procuring Entity's Representative for approval an updated Program of Work at intervals no longer than the period stated in the SCC. If the Contractor does not submit an updated Program of Work within this period, the Procuring Entity's Representative may withhold the amount stated in the SCC from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program of Work has been submitted.

12. Instructions, Inspections and Audits

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

13. Advance Payment

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

14. **Progress Payments**

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

15. Operating and Maintenance Manuals

- 15.1. If required, the Contractor will provide "as built" Drawings and/or operating and maintenance manuals as specified in the SCC.
- 15.2. If the Contractor does not provide the Drawings and/or manuals by the dates stated above, or they do not receive the Procuring Entity's Representative's approval, the Procuring Entity's Representative may withhold the amount stated in the **SCC** from payments due to the Contractor.

Section V. Special Conditions of Contract

Notes on the Special Conditions of Contract

Similar to the BDS, the clauses in this Section are intended to assist the Procuring Entity in providing contract-specific information in relation to corresponding clauses in the GCC found in Section IV.

The Special Conditions of Contract (SCC) complement the GCC, specifying contractual requirements linked to the special circumstances of the Procuring Entity, the Procuring Entity's country, the sector, and the Works procured. In preparing this Section, the following aspects should be checked:

- a. Information that complements provisions of the GCC must be incorporated.
- b. Amendments and/or supplements to provisions of the GCC as necessitated by the circumstances of the specific purchase, must also be incorporated.

However, no special condition which defeats or negates the general intent and purpose of the provisions of the GCC should be incorporated herein.

Special Conditions of Contract

GCC Clause	
2	Sectional completion:
	None
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:
	Applicable
7.2	
	[In case of permanent structures, such as buildings of types 4 and 5 as
	classified under the National Building Code of the Philippines and other
	structures made of steel, iron, or concrete which comply with relevant
	structural codes (e.g., DPWH Standard Specifications), such as, but not
	limited to, steel/concrete bridges, flyovers, aircraft movement areas,
	ports, dams, tunnels, filtration and treatment plants, sewerage systems,
	power plants, transmission and communication towers, railway system, and other similar permanent structures:/ Fifteen (15) years.
	and other similar permanent structures. J Theen (15) years.
10	
	No day works are applicable to the contract.
11.1	The Contractor shall submit the Program of Work to the Procuring
	Entity's Representative within 10 days of delivery of the Notice of
11.0	Award.
11.2	The amount to be withheld for late submission of an updated Program of W_{int} is (109()) of the new process hilling
12	Work is (10%) of the progress billing.
13	The amount of the advance payment is 15% of the contract amount .
14	Materials and equipment delivered on the site but not completely put in place shall be included for payment.
15.1	The date by which operating and maintenance manuals are required
13.1	is upon project completion.].
	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 10
	percent retention money.

Section VI. Specifications

Notes on Specifications

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

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

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

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

Sample Clause: Equivalency of Standards and Codes

Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished, and work performed or tested, the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national, or relate to a particular country or region, other authoritative standards that ensure a substantially equal or higher quality than the standards and codes specified will be accepted subject to the Procuring Entity's Representative's prior review and written consent. Differences between the standards specified and the proposed alternative standards shall be fully described in writing by the Contractor and submitted to the Procuring Entity's Representative at least twenty-eight (28) days prior to the date when the Contractor desires the Procuring Entity's Representative's consent. In the event the Procuring Entity's Representative determines that such proposed deviations do not ensure substantially equal or higher quality, the Contractor shall comply with the standards specified in the documents.

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

Section VII. Drawings

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

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.

Installation of Solar Street Lights at Colabato Awang Airport MINISTRY OF TRANSPORTATION AND COMMUNICATIONS BILL OF QUANTITIES

ltem	Description	Quantity	Unit	Unit Cost	Total Cost
	PART A. OTHER GENERAL REQUIREMENTS				
B3	Permits and Clearance	1.00	l.s		
SPL	Storage Facility	1.00	1.5		
B.5	Project Bilboard/Signboard	2.00	Each		-
B.7(1)	Occupational Safety & Health Program	30.00	Daily		
B.9	Mobilization/Demobilization	1.00	Ls		
	TOTAL COST FOR GENERAL REQUIREMENTS				
	PART B. EARTHWORKS				
800(1)a	Clearing and grubbing	760.00	sq.m		
803(1)a	Structural Excavation (Common Soil)	88.52	cu.m.		
804(1)a	Embankment from Common Borrow by Equipment	59.04	cu.m.		
	TOTAL COST FOR EARTHWORKS				
	PART C. PLAIN & REINFORCED CONCRETE WORKS		-		
903(2)	Formworks and False works	200.00	sq.m		
900(1)	Structural Concrete for footing tie Beam, suspended Slab,Column,Beam/girder (Class A,28 Days)	24.42	cu.m.		
902(1)	Reinforcing Steel of Reinforced Concrete Structure for 2 to 5-Storey	1,448.00	cu.m.		
SPL	Supply and install of Solar street lights	1,000.00	pcs		
	TOTAL COST FOR PLAIN & REINFORCED CONCRETE WORKS				
	TOTAL ESTIMATED COST				

Amount In Words:

Submitted By

(Name and Firm)

(Printed Name and Signature)

Signing Authority

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) in accordance with Section 8.5.2 of the IRR;
 - (b)

Technical Documents

- (b) 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**
- (c) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules; <u>and</u>
- (d) Special PCAB License in case of Joint Ventures <u>and</u> registration for the type and cost of the contract to be bid; <u>and</u>
- (e) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission <u>or</u> original copy of Notarized Bid Securing Declaration; <u>and</u>
 - (f) 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**
- (g) Original duly signed Omnibus Sworn Statement (OSS) <u>and</u> 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

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

Class "B" Documents

(i) 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 <u>or</u> 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

(j) Original of duly signed and accomplished Financial Bid Form; <u>and</u>

Other documentary requirements under RA No. 9184

- (k) Original of duly signed Bid Prices in the Bill of Quantities; and
- (l) Duly accomplished Detailed Estimates Form, including a summary shee indicating the unit prices of construction materials, labor rates, and equipmen rentals used in coming up with the Bid; **and**
- (m) Cash Flow by Quarter and monthly equipment schedule.





Republic of the Prophysics MINISTRY OF TRANSPORTATION & COMMUNICATION OFFICE OF THE MINISTER BARMM

COTABATO CITY

INSTALLATION OF SOLAR STREET LIGHT COTABATO AWANG AIRPORT



GENERAL NOTES & SPECIFICATIONS

GENERAL NOTES: ALL DIMENSIONS ARE IN METERS

DESIGN CRITERIA:

SPECIFICATIONS: AASHTO STANDARD SPECIFICATION

1. CONCRETE

INDICATED ON PLANS OR NOTED IN A PARTICULAR SHEET, THE MINIMUM 28 DAY CYLINDRICAL STRENGTH OF CONCRETE SHALL BE 20.70 Mpg (3000 psi) FOR FOOTINGS, COLUMNS, BEAMS, FLOOR SLABS (0.10mm THK), CONCRETE TOPPINGS AND OTHER RELATED STRUCTURES.

2. COARSE AGGREGATE SIZE: FOR 20.70 Mpa 25.00 mm MAXIMUM

3. REINFORCING STEEL

a. REINFORCING STEEL SHALL BE GRADE 40 WITH A MINIMUM YIELD fy = 2800 kg/cm² UNLESS OTHERWISE SPECIFIED

b. REINFORCING STEEL SHALL BE DEFORMED BILLET STEEL BARS CONFORMING TO AASHTO M-31 (ASTM A6150)
c. REINFORCING STEEL SHALL BE FREE FROM SCALES, OIL OR ANY SUBSTANCES WHICH WILL TEND TO WEAKEN THE BOND WITH CONCRETE

CONSTRUCTION

1. EXCAVATION

EXCAVATION FOR STRUCTURES WERE NEAT LINES AS SHOWN IN THE PLANS. THE NATURAL GROUND ADJACENT TO THE STRUCTURE SHALL NOT BE DISTURBED WITHOUT THE PERMISSION OF THE ENGINEER. BOULDERS, LOGS AND OTHER

OBJECTIONABLE MATERIALS ENCOUNTERED IN EXCAVATION WAS BE REMOVED. AFTER EACH EXCAVATION IS COMPLETED, THE CONTRACTOR NOTIFIED THE' ENGINEER TO THAT AFFECT AND NO FOOTING OR BEDDING MATERIAL SHALL BE PLACED UNTIL THE ENGINEER HAS APPROVED THE DEPTH OF EXCAVATION AND THE

CHARACTER OF FOUNDATION MATERIAL.

2. BACKFILLING

EXCAVATED AREAS AROUND STRUCTURES SHALL BE BACKFILLED WITH FREE DRAINING GRANULAR MATERIAL APPROVED BY THE ENGINEER AND PLACED IN HORIZONTAL LAYERS NOT OVER 150mm IN THICKNESS. EACH LAYER SHALL BE MOISTENED OR DRIED AS REQUIRED AND THOROUGHLY COMPACED WITH MECHANICAL/ELECTRICAL TAMPERS.

3. FALSEWORKS

- FALSEWORKS SHALL BE DESIGNED BY THE CONTRACTOR SUBJECTED TO THE APPROVAL OF THE ENGINEER 4 FORM WORKS
- FORM WORKS SHALL BE CONSTRUCTED SO THAT IT WILL NOT YIELD UNDER THE COMPLETED LOAD AND SHALL BE SUCH
- AS TO AVOID THE FORMATION OF FIRST AT INTERSECTION OF THE SURFACE. ALL CORNERS OF CONCRETE STRUCTURES SHALL
- BE CHAMFERED TO AT LEAST 20mm UNLESS OTHERWISE NOTED ON PLANS. STRIPPING OF FORMS AND SHORES SHALL BE DESIGNATED BY THE ENGINEER.

5. CONCRETE MIXES AND PLACING

- a. CONCRETE SHALL BE DEPOSITED, VIBRATED AND CURED IN ACCORDANCE WITH THE SPECIFICATIONS.
- b. FOR CONCRETE DEPOSITED AGAINST THE GROUND, LEAN CONCRETE WITH A MINIMUM THICKNESS OF 50mm SHALL BE LAID FIRST BEFORE PLACING THE REINFORCEMENT.
- c. POURING OF CONCRETE FOR ABUTMENT AND SLAB SHALL BE MONOLITHIC.

BAR BENDING, SPLICING AND PLACING

1. BAR BENDING INFORMATION GIVEN IN THE DRAWINGS IS FOR GUIDANCE ONLY. BAR BENDING LIST SHALL BE PREPARED BY THE CONTRACTOR SUBJECT TO THE APPROVAL OF THE ENGINEER.

- 2. BARS SHALL BE BENT COLD AND NO BAR PARTIALLY EMBEDDED IN CONCRETE UNLESS SHOWN ON DRAWINGS OR SPECIALLY PERMITTED BY THE ENGINEER.
- . BAR SPLICING NOT INDICATED ON THE DRAWING SHALL BE SUBJECTED TO THE APPROVAL OF THE ENGINEER.
- 4. NO SPLICING SHALL BE PERMITTED ON BEAMS OR GIRDERS WHERE CRITICAL BENDING OCCURS. SPLICE, IF SO PERMITTED SHALL HAVE A MINIMUM LAP SPLICE LENGTH EQUAL TO 24
- BAR DIAMETER FOR TENSION AND 20 BAR DIAMETER FOR COMPRESSION SPLICES.
- 5. WELDED SPLICES SHALL DEVELOP IN TENSION AT LEAST 125% OF SPECIFIED YIELD STRENGTH OF THE BAR. NOT MORE THAN 50%
- OF THE BARS AT ANY ONE SECTION SHALL BE PERMITTED TO BE SPLICED.
- 6. IF THERE ARE TWO OR MORE LAYERS OF BARS, USE SEPARATORS PLACED ABOUT 1000mm O.C. AND IN NO CASE SHALL BE LESS THAN TWO (2) SEPARATIONS.

FOR EMBANKMENT CONSTRUCTION AND OTHER RELATED WORKS

- 1. MATERIALS FOR EMBANKMENT SHALL BE TAKEN FROM DESIGNATED QUARRY SITE AS APPROVED BY THE ENGINEER. 2. MATERIALS FOR STRUCTURE SHALL BE TAKEN FROM STRUCTURE EXCAVATION IF FOUND TO BE SUITABLE AND APPROVED BY THE ENGINEER, WHEN EXCAVATED MATERIAL IS NOT SUITABLE.
- BACKFILL MATERIALS SHALL BE TAKEN FROM DESIGNATED QUARRY SITE AS APPROVED BY THE ENGINEER. 3. CONSTRUCTION MATERIALS SHALL BE IN ACCORDANCE WITH THE APPROVED STANDARD PROCEDURES FOR EMBANKMENT
- CONSTRUCTION AND COMPACTION AND FOR STRUCTURE BACKFILL. 4. PRIOR TO ACCEPTANCE OF WORK, STANDARD FIELD DENSITY TEST SHALL BE CONDUCTED BY THE AGENCY FOR EVERY LAYER (150mm TO Z00mm COMPACTED LAYER) AND SUCH FIELD
- TEST SHALL MEET 95% OF THE LABORATORY TEST RESULT FROM PROCTOR MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-698 OR ASTM D-1556.

FOR CONCRETE HOLLOW BLOCKS

UNLESS OTHERWISE INDICATED OR SPECIFIED, CONCRETE HOLLOW BLOCKS SHALL BE IN MODULAR DIMENSIONS. BLOCKS SHALL BE STANDARD MACHINE VIBRATED AND SHALL HAVE FINE, EVEN TEXTURE AND WELL DEFINED EDGES. THE LOAD BEARING CONCRETE HOLLOW BLOCKS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1000 psi (6.89 Mpa) COMPUTED FROM THE AVERAGE OF FIVE (5) UNITS BASED ON THE AVERAGE GROSS AREA, AND A MINIMUM OF 500 psi (3.45 Mpa) FOR THE INDIVIDUAL UNIT.

ROOFING WORKS

ALL MATERIALS SHALL BE WITH STANDARD CONFIGURATION APPROVED BY THE ENGINEER. 1. ROOF FRAMING SHALL BE PAINTED BEFORE INSTALLATION: A. CEE PURLINS SHALL BE 1.20MM THICK B. GI PIPES SHALL BE SCHEDULE 40 C. ANGLE BAR AND FLAT BAR SHALL BE 3/16° THICK UNLESS OTHERWISE STATED IN DRAWINGS D. SAGROD AND CROSS BRACING SHALL BE 10MMØ PLAIN ROUND BAR

2. ROOFING SHEETS SHALL BE AS FOLLOWS: A. 0.40MM THICK RIB TYPE LONGSPAN ROOF COVERING B. SMM THICK GREEN COATED POLYCARBONATE ROOFING FOR CANOPY

3. RIDGE ROLL AND FLASHING SHALL BE 0.40MM THICK PLAIN PRE-FABRICATED SHEET

4. GUTTER AS INDICATED SHALL BE 0.40MM THICK PRE-PAINTED SHEET

CARPENTRY AND JOINERY

ALL LUMBER SHALL BE OF APPROVED QUALITY OF EACH KIND REQUIRED FOR THE VARIOUS PART OF THE WORK, WELL SEASONED, THOROUGHLY DRY, AND FREE FROM LARGE, LOOSE, OR UNSOUND KNOTS, SAPS, SHAKES, AND OTHER IMPERFECTIONS IMPAIRING ITS STRENGTH, DURABILITY AND APPEARANCE. JAMBS, TRANSOMS, MULLIONS, HEADERS, SILLS, FRAMES AND WOOD BASE SHALL BE AIR DRIED AND WELL SEASONED FOR AT LEAST TWO (2) MONTHS BEFORE USE.

FINISHES

THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND NO ACTION SHALL BE MADE WITHOUT THE ENGINEER'S APPROVAL.

1. PLASTERING WORKS

ALL MASONRY UNIT WORK AND CONCRETE WORK EXPOSED TO VIEW SHALL BE CEMENT PLASTERED USING CLASS B AND 16mm THK. PLASTERED MATERIALS SHALL BE ACCURATELY MEASURED IN APPROVED CONTAINER TO INSURE THE SPECIFIED PROPORTIONS. SURFACE TO RECEIVE PLASTER MUST BE FREE FROM STRUCTURAL DEFEACTS AND SHALL BE THOROUGHLY DAMPENED PRIOR TO APPLICATION OF PLASTER.

2. PAINTING WORKS

THE PAINT SHALL BE FURNISHED FOR USE IN READY MIXED, PASTE OR POWDER FORM. ALL PAINT SHALL MEET THE FOLLOWING GENERAL REQUIREMENTS:

- a. THE PAINT SHALL NO EXCESS SETTING AND SHALL EASILY BE REDISPERSED WITH PADDLE TO A SMOOTH, HOMOGENOUS STATE THE PAINT SHALL NO CURDLING, LIVERING, CAKING OR COLOR SEPARATION AND SHALL BE FREE FROM LUMPS AND SKINS. b. THE PAINT AS RECEIVED SHALL BRUSH EASILY, POSESS GOOD LEVELING PROPERTIES AND SHALL SHOW NO RUNNING AND SAGGING WHEN APPLIED TO A SMOOTH VERTICAL SURFACES.
- SAGGING WHEN AFPLED TO A SMOOTH VENTION SUBJECTS. c. THE PAINT SHALL DRY TO A SMOOTH UNIFORM FINISHED, FREE FROM ROUGHNESS GRIT, UNEVEN AND OTHER IMPERFECTIONS. d. THE PAINT SHALL SHOW NO THICKENING, CURDLING, GELLING OR HARD CAKING AFTER SIX (6) MONTHS STORAGE IN FULL,
- d. THE PAINT SHALL SHOW NO THICKENING, CURDLING, GELLING OR HARD CAKING AFTER SIX (6) MONTHS STORAGE IN FULL, TIGHTLY COVERED CONTAINER AT THE TEMPERATURE OF 21°C (70°F).

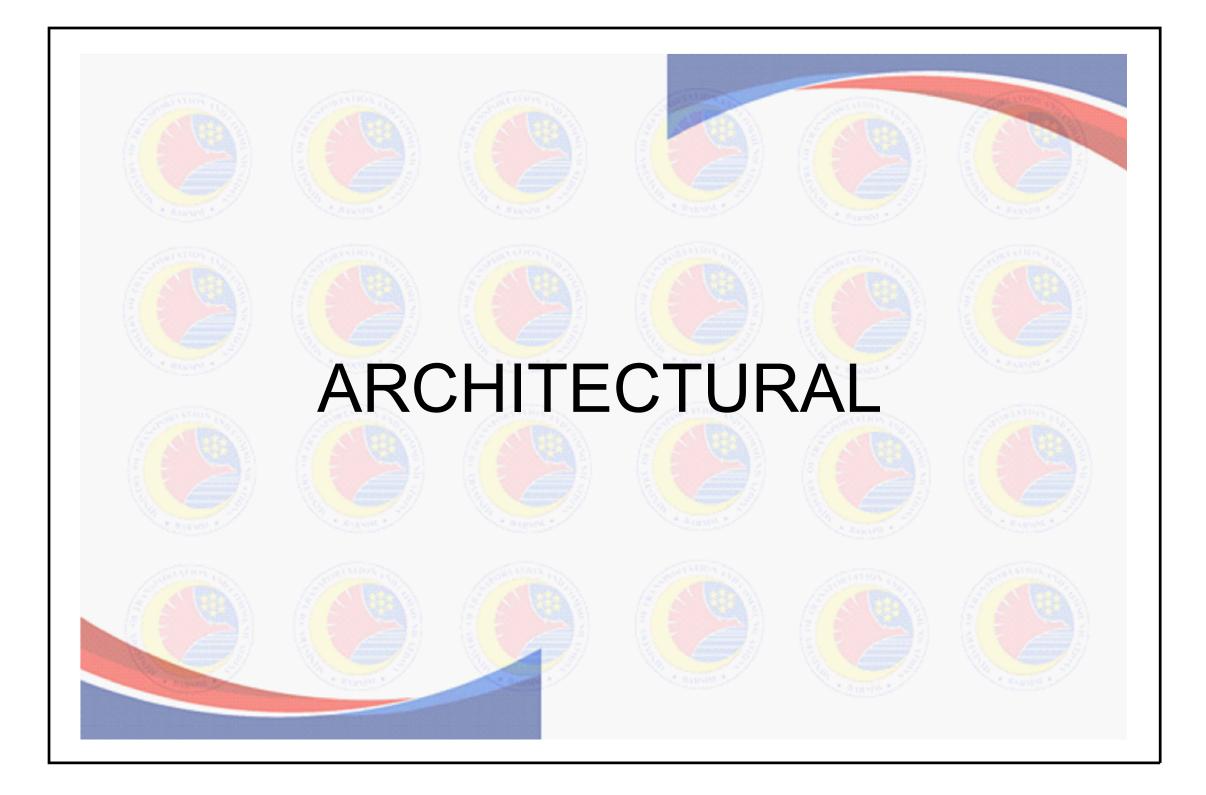
3. TILE WORKS

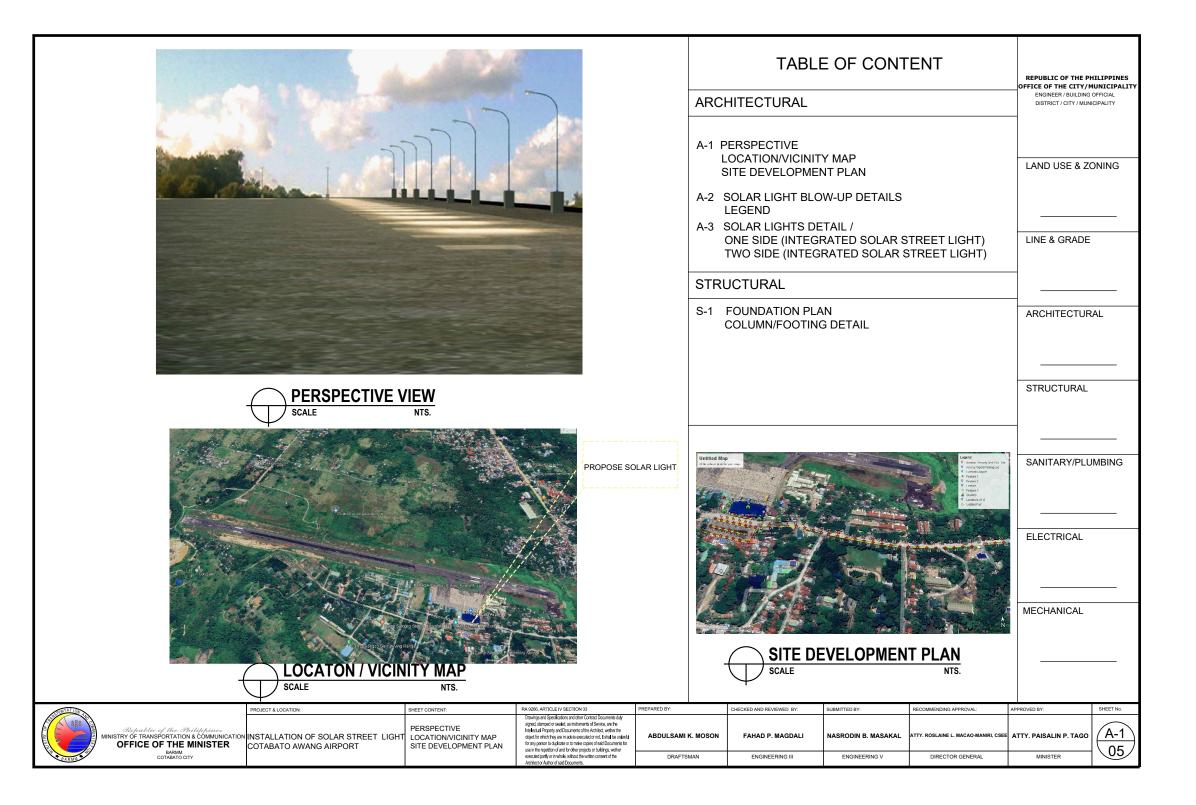
TILEWORK SHALL NOT BE STARTED UNTIL ROUGH-INS FOR PLUMBING AND ELECTRICAL WORK HAS BEEN COMPLETED AND TESTED. TILES SHALL BE STANDARD QUALITY APPROVED BY THE ENGINEER.

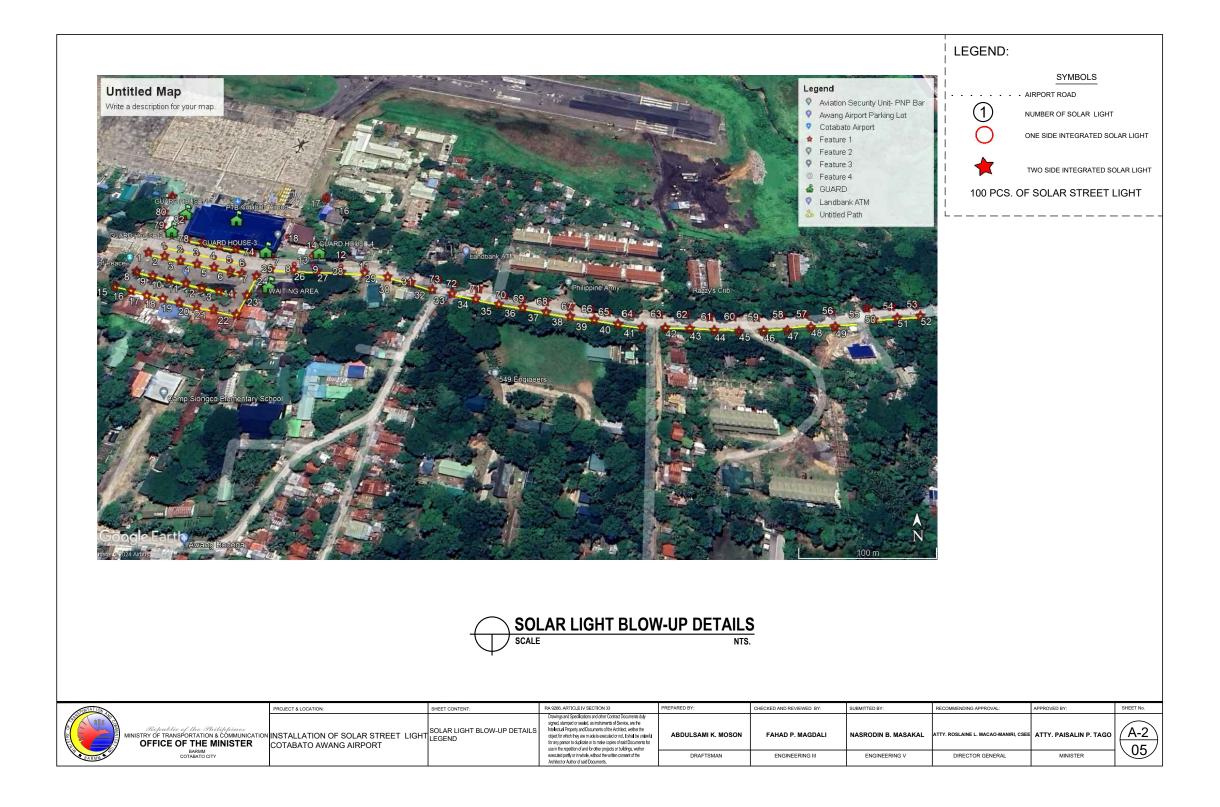






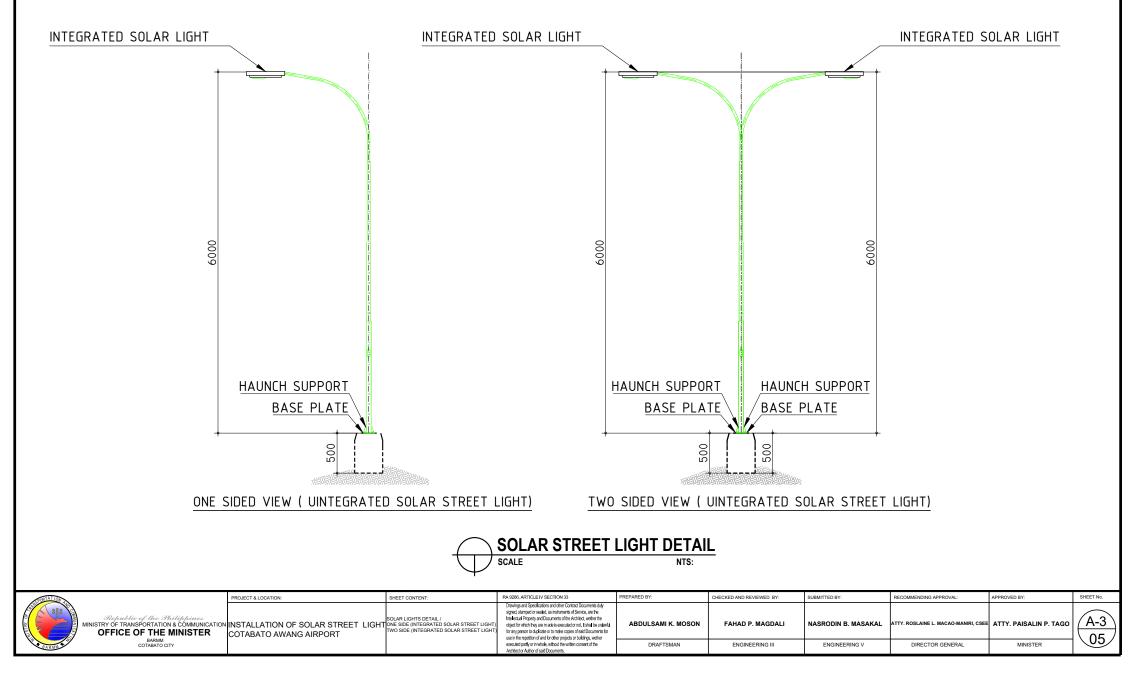


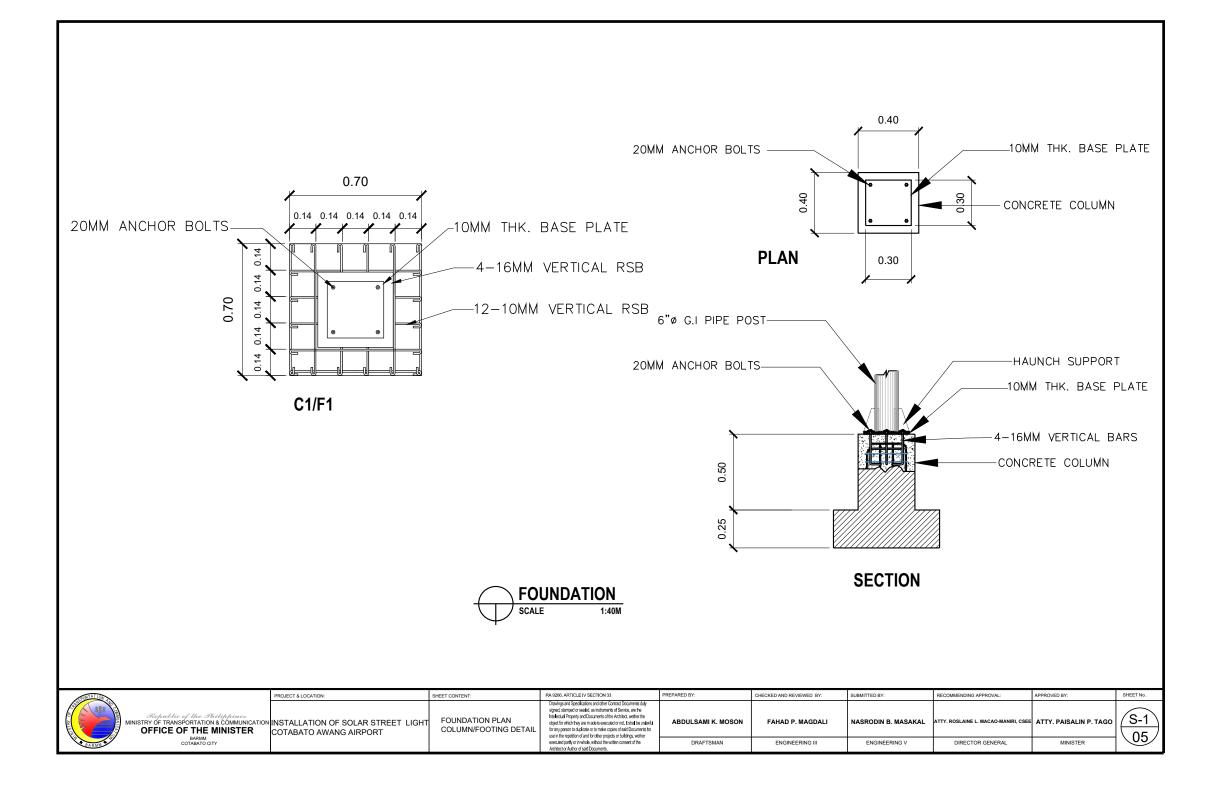






TWO SIDED INTEGRATED SOLAR STREET LIGHT 18 PCS. ONE SIDED INTEGRATED SOLAR STREET LIGHT 82 PCS. TOTAL OF 100 PCS. 150WATTS SPACE AT 20 METERS IN EVERY POST OF SOLAR LIGHTS.





Installation of Solar Street Lights at Cotabato Awang Airport

MINISTRY OF TRANSPORTATION AND COMMUNICATIONS

BILL OF QUANTITIES

ltem	Description	Quantity	Unit	Unit Cost	Total Cost
	PART A. OTHER GENERAL REQUIREMENTS				
B3	Permits and Clearance	1.00	l.s		
SPL	Storage Facility	1.00	l.s		
B.5	Project Billboard/Signboard	2.00	Each		
B.7(1)	Occupational Safety & Health Program	30.00	Daily		
B.9	Mobilization/Demobilization	1.00	L.s		
	TOTAL COST FOR GENERAL REQUIREMENTS				
	PART B. EARTHWORKS				
800(1)a	Clearing and grubbing	760.00	sg.m		
803(1)a	Structural Excavation (Common Soil)	88.52	cu.m.		
804(1)a	Embankment from Common Borrow by Equipment	59.04	cu.m.		
	TOTAL COST FOR EARTHWORKS				
	PART C. PLAIN & REINFORCED CONCRETE WORKS				
903(2)	Formworks and False works	200.00	sq.m		
900(1)	Structural Concrete for footing tie Beam, suspended Slab,Column,Beam/girder (Class A,28 Days)	24.42	cu.m.		
902(1)	Reinforcing Steel of Reinforced Concrete Structure for 2 to 5-Storey	1,448.00	cu.m.		
SPL	Supply and install of Solar street lights	1,000.00	pcs		
	TOTAL COST FOR PLAIN & REINFORCED CONCRETE WORKS				-
	TOTAL ESTIMATED COST				

Amount In Words: ____

Submitted By	·
	(Name and Firm)
Signing Authority	:
	(Printed Name and Signature)
Designation	·
Date	: