BIDDING DOCUMENTS

FOR THE

CONSTRUCTION OF DRAINAGE CANAL AND SEWERAGE TREATMENT FACILITY AT LINGAYEN PUBLIC MARKET, BARANGAY POBLACION, LINGAYEN, PANGASINAN

MUNICIPALITY OF LINGAYEN

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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

Republic of the Philippines
Province of Pangasinan
Municipality of Lingayen

Invitation to Bid for *the CONSTRUCTION OF DRAINAGE CANAL AND SEWERAGE TREATMENT FACILITY AT LINGAYEN PUBLIC MARKET, BARANGAY POBLACION, LINGAYEN, PANGASINAN*

The ***Local Government Unit (LGU) of Lingayen*** through the General Fund- Capital outlay intends to apply the sum of ***Two Million Pesos (P2,000,000.00)*** being the Approved Budget for the Contract (ABC) to payments under the contract for *the* ***CONSTRUCTION OF DRAINAGE CANAL AND SEWERAGE TREATMENT FACILITY AT LINGAYEN PUBLIC MARKET, BARANGAY POBLACION, LINGAYEN, PANGASINAN with Purchase Request no. 200-22-07-205.*** Bids received in excess of the ABC shall be automatically rejected at bid opening.

The ***Local Government Unit (LGU) of Lingayen*** now invites bids for the above Procurement Project. Completion of the Works is required *ONE HUNDRED TWENTY (120) 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).

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.

Interested bidders may obtain further information from *BAC Office, Municipal Hall Building, Lingayen, Pangasinan* from 7*:00 in the morning to 6:00 in the afternoon, Mondays to Thursdays except holidays.*

A complete set of Bidding Documents may be acquired by interested bidders starting ***September 8, 2022 – October 6, 2022 from*** the BAC Office, Municipal Hall Building, Lingayen, Pangasinan *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 (P5,000.00) Only.*** The Bidder or authorize representative shall present its proof of payment for the fees personally to the BAC Office before Bidding Documents will be released.

The ***Local Government Unit of Lingayen*** will hold a Pre-Bid Conference on *September 22, 2022, 11:00 in the morning* at *Municipal Conference Room, Municipal Hall, Building, Lingayen, Pangasinan* which may be attended by prospective bidders.

Bids must be duly received by the BAC Secretariat through manual submission at the office of Bids and Awards Committee, Local Government Unit of Lingayen, Municipal Hall, Lingayen, Pangasinan 2401 on or before 11:00 in the morning October 6, 2022. Late bids shall not be accepted.

All bids must be accompanied by a Bid Security in any of the acceptable forms and in the amount stated in **ITB** Clause 15.

Bid opening shall be at the Municipal Conference Hall, 2nd Floor, Municipal Hall Building, Lingayen, Pangasinan on **October 6, 2022**, *after the closing time of the submission of bids*. Bids will be opened in the presence of the bidders' representatives and observers who choose to attend the activity.

The ***Local Government Unit of Lingayen*** 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.

For further information, please refer to:

ARNULFO S. BERNARDO
Head BAC Secretariat
LGU Lingayen
Barangay Poblacion
Lingayen, Pangasinan

You may visit the following websites:

For downloading of Bidding Documents:*www.lingayen.gov.ph*

September 22, 2022
Date of Issue

JOAN JUDE R. LOPEZ, LLB, MBM
BAC Chairperson

Section II. Instructions to Bidders (ITB)

1. Scope of Bid

The Procuring Entity, *the Local Government Unit of Lingayen* invites Bids for **the *Construction of Drainage Canal and Sewerage Treatment Facility at Lingayen Public Market, Barangay Poblacion, Lingayen, Pangasinan with Purchase* Request No. 200-22-07-205.**

The Procurement Project (referred to herein as "Project") is for the *Drainage Canal and Sewerage*, as described in Section VI (Specifications).

2. Funding Information

2.1. The GOP through the source of funding as indicated below for *CY 2022* in the amount of *Two Million Pesos (P2,000,000.00) Only*.

2.2. The source of funding is: LGU's Supplemental Budget #1- Capital Outlay

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. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Bidder's Responsibilities

6.1 The Bidder is responsible for the following:

(a) Having acknowledged all conditions, local or otherwise, affecting the implementation of the contract;

(b) Having complied with its responsibility to inquire or secure Supplemental/Bid Bulletin(s).

(c) Ensuring that it is not "blacklisted" or barred from bidding by the GOP or any of its agencies, offices, corporations, or LGUs, including foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the GPPB;

(d) Ensuring that 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;

(e) Ensuring that the signatory is the duly authorized representative of the Bidder, and granted full power and authority to do, execute and perform any and all acts necessary and/or to represent the Bidder in the bidding, with the duly notarized Secretary's Certificate attesting to such fact, if the Bidder is a corporation, partnership, cooperative, or joint venture;

(f) Complying with the disclosure provision under Section 47 of RA 9184 and its IRR in relation to other provisions of RA 3019;

6.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents.

6.3 The Procuring Entity shall not assume any responsibility regarding erroneous interpretations or conclusions by the prospective or eligible bidder out of the data furnished by the procuring entity.

6.4 Before submitting their bids, the Bidder is deemed to have become familiar with all existing laws, decrees, ordinances, acts and regulations of the Philippines which may affect this Project in any way.

6.5 The Bidder should note that the Procuring Entity will accept bids only from those that have paid the applicable fees for the Bidding Documents at the office indicated in the Invitation to Bid.

7. 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.

8. Subcontracts

The Procuring Entity has prescribed that:

a. Subcontracting is not allowed.

9. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference is on ***September 22, 2022, 11:00*** in the morning at Municipal Conference Room, Municipal Hall Building, Lingayen, Pangasinan**.**

10. 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.

11. Documents Comprising the Bid: Eligibility and Technical Components

11.1 The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.

11.2 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.

11.3A 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**.

11.4.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**.

11.5A 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**.

12. Documents Comprising the Bid: Financial Component

12.1The second bid envelope shall contain the financial documents for the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.

12.2Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.

13. 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.

14. 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.

15. Bid and Payment Currencies

15.1Bid 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.

15.2Payment of the contract price shall be made in:

a. Philippine Pesos.

16. Bid Security

16.1 The Bidder shall submit any of the following form of Bid Security in the amount indicated in the **Bid Data Sheet (BDS)**, which shall be not less than the percentage of the ABC in accordance with the following schedule.

Form of Bid Security	Amount of Bid Security (Not Less than the Percentage of the ABC)
a. Cash or cashier's/manager's check issued by a Universal or Commercial Bank. *For biddings conducted by LGUs, the Cashier's/Manager's Check may be issued by other banks certified by the BSP as authorized to issue such financial instrument.*	Two percent (2%)
b. Bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank. *For biddings conducted by LGUs, Bank Draft/Guarantee, or Irrevocable Letter of Credit may be issued by other banks certified by the BSP as authorized to issue such financial instrument.*	
c. Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.	Five percent (5%)

16.2 The Bid and bid security shall be valid until ***one hundred twenty days upon the date of opening of bids.*** Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

17. Sealing and Marking of Bids

Each Bidder shall submit one original copy and additional copy of the technical and financial components of its bid.

Bidders shall enclose the original copy of their technical documents in one long brown envelope marked "ORIGINAL – TECHNICAL DOCUMENTS", and shall do the same to the original copy of the financial components of their bid; marked "ORIGINAL – FINANCIAL DOCUMENTS" on a long brown envelope as well. These two brown envelopes shall be sealed in a long brown envelope marked "**ORIGINAL BID**".

The other copy of the Technical and Financial Documents shall be similarly sealed on a long brown envelope duly marked as "COPY – TECHNICAL DOCUMENT" and "COPY – FINANCIAL DOCUMENT" enclosed in a long brown envelope marked "**COPY BID**".

The checklist of Technical and Financial Documents shall be attached on the back side (under the seal flap) of each long brown envelope.

All of the documents (original copy and the other copy) shall bear the signature or initials of the authorized representative on every page as proof of its authenticity.

These two long brown envelopes (ORIGINAL BID and COPY BID) shall now be enclosed in one final expanding envelope sealed with two-inch tape (any kind) with the signature of the bidder affixed atop the packaging tape as cognizance of its seal.

All envelopes (long brown and expanding) shall:

a.) contain the name of the contract to be bid in capital letters;

b.) bear the name and address of the bidder in capital letters;

c.) be addressed to the Procuring Entity's BAC as follows;

BIDS AND AWARDS COMMITTEE
LOCAL GOVERNMENT UNIT OF LINGAYEN
MUNICIPAL HALL, LINGAYEN, PANGASINAN 2401

d.) bear a warning "DO NOT OPEN BEFORE…" the date and time of the Opening of Bids written at the front side of each envelope.

18. Deadline for Submission of Bids

The deadline of submission of Bids is on October 6, 2022 at exactly 11:00 in the morning. Only manual submission of Bids is allowed.

19. Opening and Preliminary Examination of Bids

19.1 The BAC shall open the Bids in public on ***October 6, 2022, after the closing time of the submission of bids at Municipal Conference Hall, 2nd Floor, Municipal Hall Building, Lingayen, Pangasinan***. The Bidders' authorize representatives who are present must present their Special Power of Attorney (SPA) and shall sign a register evidencing their attendance.

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.

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

20. Detailed Evaluation and Comparison of Bids

20.1 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.

20.2 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.

20.3 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.

21. 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**.

22. 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 (BDS)

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Bid Data Sheet

<table>
<tr><th>ITB Clause</th><th></th></tr>
<tr><td>5.2</td><td>For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be consist of:

OTHER GENERAL REQUIREMENTS
I. Project Billboards
II. Construction Health and Safety
CIVIL WORKS
I. Excavation
II. Concrete Works
III. Reinforcing Steel & Wire Rope
IV. Forms & Falseworks
V. Steel Works
VI. Sanitary Works</td></tr>
<tr><td>&</td><td>Sub-contracting is not allowed</td></tr>
<tr><td>10.3</td><td>PCAB, DTI, Mayor’s Permit</td></tr>
<tr><td>10.4</td><td>The contractor shall employ the following Key Personnel
Key Personnel — General Experience — Relevant Experience
Project Engineer — 5 years — Horizontal Project/ Construction
Construction Foreman — 5 years — Horizontal Project/ Construction]
Skilled Laborer
Unskilled Laborer
Partime Safety Practitioner
First Aider</td></tr>
<tr><td>10.5</td><td>The minimum major equipment requirements are the following:
<table>
<tr><th>Equipment</th><th>Capacity</th><th>No. of units</th></tr>
<tr><td>Backhoe</td><td>Wheel Type 0.28 cu.m.</td><td>one (1)</td></tr>
<tr><td>Water Pump</td><td>N/A</td><td>one (1)</td></tr>
<tr><td>One Bagger Mixer</td><td>N/A</td><td>one (1)</td></tr>
<tr><td>Bar Cutter</td><td>N/A</td><td>one (1)</td></tr>
<tr><td>Bar Bender</td><td>N/A</td><td>one (1)</td></tr>
<tr><td>Welding Machine</td><td>N/A</td><td>one (1)</td></tr>
</table></td></tr>
<tr><td>12</td><td>Value Engineering clause not included. Alternative bids shall not be included.</td></tr>
<tr><td>15.1</td><td>The bid security shall be in the form of any of the following forms and amounts:
a. The amount of not less than Forty Thousand Pesos (P40,000.00) Only two percent (2%) of ABC], if bid security is in cash, cashier’s/manager’s check, bank draft/guarantee or irrevocable letter of credit;</td></tr>
</table>

	b. The amount of not less than ***One Hundred Thousand Pesos (P 100,000.00) Only*** *five percent (5%) of ABC]* if bid security is in Surety Bond.
19.2	Partial bids is not allowed .
20	*Pertinent documents to be submitted by the winning supplier to the BAC Office before the issuance of Notice of Award* *1. Philgeps Certificate* *2. Mayor's Permit* *3. Latest Income and Business Tax Return* *4. Tax Clearance*
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.

Section IV. General 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**.

7.3. Retention Money: Progress payments are subject to retention of ten percent (10%) referred to as the retention money. Such retention shall be based on the total amount due to the contractor prior to any deduction and shall be retained from every progress payment. The total retention money shall be due for release upon final acceptance of the works

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

Special Conditions of Contract

GCC Clause	
2	*The Intended Completion Date is* ***one hundred twenty (120)*** *calendar days*
4.1	*The Local Government Unit of Lingayen shall give possession of all parts of the site to the contractor upon signing of the Contract.*
6	The site investigation reports are: *None*
7.2	*In case of semi-permanent structures, such as buildings of types 1, 2, and 3 as classified under the National Building Code of the Philippines, concrete/asphalt roads, concrete river control, drainage, irrigation lined canals, river landing, deep wells, rock causeway, pedestrian overpass, and other similar semi-permanent structures:] Five (5) years.*
10	Dayworks 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 ***ten percent (10%) of the contract amount***..
13	The amount of the advance payment is ***fifteen (15%) percent of the contract amount***
14	*Materials and equipment delivered on the site but not completely put in place shall be included for payment* ***Not Applicable***
15.1	The date by which "as built" drawings are required is *before final payment*
15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is *one (1) percent(1%) of the contract amount*.

Section VI. Specifications

Project : Construction of Drainage Canal and Sewerage Treatment Facility

Location: Lingayen Public Market, Brgy. Poblacion, Lingayen, Pangasinan

APPROVED TECHNICAL SPECIFICATION

EXCAVATION

102.1 Description

This Item shall consist of roadway drainage and borrow excavation, and the disposal of material in accordance with this Specification and in conformity with the lines, grades and dimensions shown on the Plans or established by the Engineer.

102.1.1 Roadway Excavation

Roadway excavation will include excavation and grading for roadways, parking areas, intersections, approaches, slope rounding, benching, waterways and ditches; removal of unsuitable material from the roadbed and beneath embankment areas; and excavating selected material found in the roadway as ordered by the Engineer for specific use in the improvement. Roadway excavation will be classified as "unclassified excavation", "rock excavation", "common excavation", or "muck excavation" as indicated in the Bill of Quantities and hereinafter described.

(1) Unclassified Excavation. Unclassified excavation shall consist of the excavation and disposal of all materials regardless of its nature, not classified and included in the Bill of Quantities under other pay items.
(2) Rock Excavation. Rock excavation shall consist of excavation of igneous, sedimentary and metamorphic rocks which cannot be excavated without blasting or the use of rippers, and all boulders or other detached stones each having a volume of 1 cubic meter or more as determined by physical measurements or visually by the Engineer.
(3) Common Excavation. Common excavations shall consist of all excavation not included in the Bill of Quantities under "rock excavation" or other pay items
(4) Common Excavation. Common excavations shall consist of all excavation not included in the Bill of Quantities under "rock excavation" or other pay items.
(5) Muck Excavation. Muck excavation shall consist of the removal and disposal of deposits of saturated or unsaturated mixtures of soils and organic matter not suitable for foundation materials regardless of moisture content.

102.1.2 Borrow Excavation

Borrow excavation shall consist of the excavation and utilization of approved materials required for the construction of embankments or for other portions of the work, and shall be obtained from approved sources, in accordance with Clause 61, Standard Specifications for Public Works and Highways, Volume I and the following:

(1) Borrow, Case 1

Borrow Case 1 will consist of material obtained from sources designated on the Plans or in the Special Provisions.

(2) Borrow, Case 2

Borrow Case 2 will consist of material obtained from sources provided by the Contractor.

The material shall meet the quality requirements determined by the Engineer unless otherwise provided in the Contract.

102.2 Construction Requirements

102.2.1 General

When there is evidence of discrepancies on the actual elevations and that shown on the Plans, a pre-construction survey referred to the datum plane used in the approved Plan shall be undertaken by the Contractor under the control of the Engineer to serve as basis for the computation of the actual volume of the excavated materials.

All excavations shall be finished to reasonably smooth and uniform surfaces. No materials shall be wasted without authority of the Engineer. Excavation operations shall be conducted so that material outside of the limits of slopes will not be disturbed. Prior to excavation, all necessary clearing and grubbing in that area shall have been performed in accordance with Item 100, Clearing and Grubbing.

102.2.2 Conservation of Topsoil

Where provided for on the Plans or in the Special Provisions, suitable topsoil encountered in excavation and on areas where embankment is to be placed shall be removed to such extent and to such depth as the Engineer may direct. The removed topsoil shall be transported and deposited in storage piles at locations approved by the Engineer. The topsoil shall be completely removed to the required depth from any designated area prior to the beginning of regular excavation or embankment work in the area and shall be kept separate from other excavated materials for later use.

102.2.3 Utilization of Excavated Materials

All suitable materials removed from the excavation shall be used in the formation of the embankment, subgrade, shoulders, slopes, bedding, and backfill for structures, and for other purposes shown on the Plans or as directed.

The Engineer will designate as unsuitable those soils that cannot be properly compacted in embankments. All unsuitable materials shall be disposed off as shown on the Plans or as

directed without delay to the Contractor.Only approved materials shall be used in the construction of embankments and backfills.

All excess materials, including rock and boulders that cannot be used in embankments shall be disposed off as directed.

Materials encountered in the excavation and determined by the Engineer as suitable for topping, road finishing, slope protection, or other purposes shall be conserved and utilized as directed by the Engineer.

Borrow materials shall not be placed until after the readily accessible materials from roadway excavation has been placed in the fill, unless otherwise permitted or directed by the Engineer. If the Contractor places moré borrow than is required and thereby causes a waste of excavation, the amount of such waste will be deducted from the borrow volume .

DEMOLITION WORKS

1.2.1 Demolition

All taking down and demolition is to be carried out without damage to the remaining structures or the adjoining property.

1.2.2 Obstruction of Public Road

The Contractor shall not obstruct the Public Thoroughfares or Private Rights of Way without the approval of the Local authority and shall pay all their charges and conform to all instructions issued by them.

1.2.3 Prevention of Dust and Fans

The Contractor shall thoroughly water the work during all demolition to prevent any nuisance from dust, dirt, etc., and is to provide all necessary protecting fans, barricades, dust sheets, tarpaulins etc to protect the new and existing work, the public, the occupants and the workmen.

1.2.4 Removal of Rubbish

All items of taking down etc., shall be included for removing, basketting, getting out and

clearing away from site all debris and rubbish whether specifically mentioned or not from the relevant floor levels.

1.2.5 Disposal of Rubbish

The Contractor shall make his own arrangements for a shoot or spoil heap for disposal of all materials arising from demolition works and he is to pay all charges in connection therewith

1.2.6 Dustproof Screens

The Contractor shall allow for providing and fixing temporary waterproof and dustproof screens, coverings, etc. to all sections of the existing building, which may be exposed by reason of the pulling down and shall efficiently keep the premises watertight and dust free whilst building work is in progress.

PROTECTION:

A. Perform demolition in such manner as to eliminate hazards to persons and property; to minimize interference with use of adjacent areas, utilities and structures or interruption of use of such utilities; and to provide free passage to and from such adjacent areas of structures. Comply with requirements of GENERAL CONDITIONS Article, ACCIDENT PREVENTION.

B. Provide safeguards, including warning signs, barricades, temporary fences, warning lights, and other similar items that are required for protection of all personnel during demolition and removal operations.

C. Maintain fences, barricades, lights, and other similar items around exposed excavations until such excavations have been completely filled.

D. Provide enclosed dust chutes with control gates from each floor to carry debris to truck beds and govern flow of material into truck. Provide overhead bridges of tight board or prefabricated metal construction at dust chutes to protect persons and property from falling debris.

E. Prevent spread of flying particles and dust. Sprinkle rubbish and debris with water to keep dust to a minimum. Do not use water if it results in hazardous or objectionable condition such as, but not limited to; ice, flooding, or pollution. Vacuum and dust the work area daily.

CONCRETE WORKS

407.1 Description

This Item shall consist of the general description of the materials, equipment, workmanship and construction requirements of concrete structures and the concrete portions of composite structures conforming to the alignment, grades, design, dimensions and details shown on the Plans and in accordance with the Specifications for piles, reinforcing steel, structural steel, structural concrete and other items which constitute the completed structure. The class of concrete to be used in the structure or part of the structure shall be as specified in Item 405, Structural Concrete.

407.2 Material Requirements

1. Concrete and Concrete Ingredients

Concrete and concrete materials shall conform to the requirements in Item 405, Structural Concrete. Unless otherwise shown on the Plans or specified in Special Provisions, concrete shall be of Class A.

2. Reinforcing Steel

Reinforcing steel shall conform to the requirements in Item 404, Reinforcing Steel.

3. Structural Steel

Structural steel shall conform to the requirements of corresponding materials in Item 403, Metal Structures.

4. Bridge Bearing (Elastomeric Bearing Pad)

Elastomeric bearing pads shall conform to Item 412, Elastomeric Bearing Pads.

5. Paints

Paints shall conform to the requirements in Item 411, Paint.

6. Waterproofing and Dampproofing

Unless otherwise shown on the Plans or indicated in Special Provisions, materials for waterproofing and dampproofing shall conform to the requirements of the following specifications:

a. AASHTO M 115 Asphalt for dampproofing and waterproofing.
b. AASHTO M 116 Primer for the use with Asphalt in dampproofing and waterproofing.
c. AASHTO M 117 Woven cotton fabrics saturated with bituminous substances for use in waterproofing.
d. AASHTO M 118 Coal-Tar pitch for roofing, dampproofing and waterproofing.
e. AASHTO M 121 Creosote for priming coat with coal-tar pitch dampproofing and waterproofing.

f. AASHTO M 159 Woven burlap fabric saturated with bituminous substances for use in waterproofing.
g. AASHTO M 166 Numbered cotton duck and array duck.
h. AASHTO M 239 Asphalt for use in waterproofing membrane construction.

7. Concrete Curing

Compound Curing compound shall conform to the requirements of AASHTO M 148 Liquid membrane-forming compounds for curing concrete.

8. Joint Filler

Unless otherwise shown on the Plans or in Special Provisions, materials for expansion joint filler shall conform to the requirements of the following specifications:

a. AASHTO M 33 Preformed expansion joint filler for concrete.
b. AASHTO M 153 Preformed sponge rubber and cork expansion joint fillers for concrete paving and structural construction.
c. AASHTO M 173 Concrete joint sealer hot poured elastic type.
d. AASHTO M 213 Preformed expansion joint filler for concrete paving and structural construction-non-extruding and resilient bituminous types.
e. AASHTO M 220 Preformed elastomeric compression joint seals for concrete

407.2.1 Proportioning and Strength of Structural Concrete

This shall be in accordance with Item 405, Structural Concrete.

407.2.2 Sampling and Testing

This shall be in accordance with Item 405, Structural Concrete.

407.3 Construction and Requirements

407.3.1 Handling and Placing Concrete: General

Concrete shall not be placed until forms and reinforcing steel have been checked and approved by the Engineer.

If lean concrete is required in the Plan or as directed by the Engineer prior to placing of reinforcing steel bar, the lean concrete should have a minimum compressive strength of 13.8 MPa.

In preparation for the placing of concrete all sawdust, chips and other construction debris and extraneous matter shall be removed from inside the formwork. Struts, stays and braces, serving temporarily to hold the forms in correct shape and alignment, pending the placing of concrete at their locations, shall be removed when the concrete placing has reached an elevation rendering their service unnecessary. These temporary members shall be entirely removed from the forms and not buried in the concrete.

No concrete shall be used which does not reach its final position in the forms within the time stipulated under “Time of Hauling and Placing Mixed Concrete”.

Concrete shall be placed so as to avoid segregation of the materials and the displacement of the reinforcement. The use of long troughs, chutes, and pipes for conveying concrete to the forms shall be permitted only on written authorization of the Engineer. The Engineer shall reject the use of the equipment for concrete transportation that will allow segregation, loss of fine materials, or in any other way will have a deteriorating effect on the concrete quality.

Open troughs and chutes shall be of metal lined; where steep slopes are required, the chutes shall be equipped with baffles or be in short lengths that reverse the direction of movement to avoid segregation.

All chutes, troughs and pipes shall be kept clean and free from coatings of hardened concrete by thoroughly flushing with water after each run. Water used for flushing shall be discharged clear of the structure.When placing operations would involve dropping the concrete more than 1.5 m, concrete shall be conveyed through sheet metal or approved pipes. As far as practicable, the pipes shall be kept full of concrete during placing and their lower end shall be kept buried in the newly placed concrete. After initial set of the concrete, the forms shall not be jarred and no strain shall be placed on the ends of projecting reinforcement bars.

The concrete shall be placed as nearly as possible to its final position and the use of vibrators for moving of the mass of fresh 4

407.3.1.1 Placing Concrete by Pneumatic Means

Pneumatic placing of concrete will be permitted only if specified in the Special Provisions or authorized by the Engineer. The equipment shall be so arranged that vibration will not damage freshly placed concrete.

Where concrete is conveyed and placed by pneumatic means, the equipment shall be suitable in kind and adequate in capacity for the work. The machine shall be located as close as practicable to the work. The discharge lines shall be horizontal or inclined upwards from the machine. The discharge end of the line shall not be more than 3 m from the point of deposit.

At the conclusion of placing the concrete, the entire equipment shall be thoroughly cleaned.

407.3.1.2 Placing of Concrete by Pumping

The placing of concrete by pumping will be permitted only if specified or if authorized by the Engineer. The equipment shall be so arranged that vibration will not damage freshly placed concrete.

Where concrete is conveyed and placed by mechanically applied pressure the equipment shall be suitable in kind and adequate in capacity for the work. The operation of the pump shall be such that a continuous stream of concrete without air pockets is produced. When pumping is completed, the concrete remaining in the pipeline, if it is to be used, shall be ejected

in such a manner that there will be no contamination of the concrete or separation of the ingredients. After this operation, the entire equipment shall be thoroughly cleaned.

407.3.1.3 Placing Concrete in Water

Concrete shall not be placed in water except with approval of the Engineer and under his immediate supervision. In this case the method of placing shall be hereinafter specified.

Concrete deposited in water shall be Class A concrete with a minimum cement content of 400 kg/m3 of concrete. The slump of the concrete shall be maintained between 10 and 20 cm. To prevent segregation, concrete shall be carefully placed in a compact mass, in its final position, by means of a tremie, a bottom-dump bucket, or other approved means, and shall not be disturbed after being placed.

A tremie shall consist of a tube having a diameter of not less than 250 mm constructed in sections having flanged couplings fitted with gaskets with a hopper at the top. The tremie shall be supported so as to permit free movement of the discharge and over the entire top surface of the work and so as to permit rapid lowering when necessary to retard or stop the flow of concrete. The discharge end shall be closed at the start of work so as to prevent water entering the tube and shall be completely submerged in concrete at all times. The tremie tube shall be kept full to the bottom of the hopper. When a batch is dumped into the hopper, the flow of concrete shall be induced by lightly raising the discharge end, but always keeping it in the placed concrete. The flow shall be continuous until the work is completed.

When the concrete is placed with a bottom-dump bucket, the top of the bucket shall be open. The bottom doors shall open freely downward and outward when tripped. The buckets shall be completely filled and slowly lowered to avoid backwash. It shall not be dumped until it rests on the surface upon which the concrete is to be deposited and when discharged shall be withdrawn slowly until well above the concrete.

407.3.2 Compaction of Concrete

Concrete during and immediately after placing shall be thoroughly compacted. The concrete in walls, beams, columns and the like shall be placed in horizontal layers not more than 30 cm thick except as hereinafter provided. When less than a complete layer is placed in one operation, it shall be terminated in a vertical bulkhead. Each layer shall be placed and compacted before the preceding layer has taken initial set to prevent injury to the green concrete and avoid surfaces of separation between the layers. Each layer shall be compacted so as to avoid the formation of a construction joint with a preceding layer.

REINFORCING STEEL & WIRE ROPE

404.1 Description

This Item shall consist of furnishing, bending, fabricating and placing of steel reinforcement of the type, size, shape and grade required in accordance with this Specification and in conformity with the requirements shown on the Plans or as directed by the Engineer.

404.2 Material Requirements

Reinforcing steel shall meet the requirements of Item 710, Reinforcing Steel and Wire Rope.

404.3 Construction Requirements

404.3.1 Order Lists

Before materials are ordered, all order lists and bending diagrams shall be furnished by the Contractor, for approval of the Engineer. The approval of order lists and bending diagrams by the Engineer shall in no way relieve the Contractor of responsibility for the correctness of such lists and diagrams. Any expense incident to the revisions of materials furnished in accordance with such lists and diagrams to make them comply with the Plans shall be borne by the Contractor.

404.3.3 Bending

All reinforcing bars requiring bending shall be cold-bent to the shapes shown on the Plans or as required by the Engineer. Bars shall be bent around a circular pin having the following diameters (D) in relation to the nominal diameter of the bar (d):

404.3.4 Placing and Fastening

All steel reinforcement shall be accurately placed in the position shown on the Plans or as required by the Engineer and firmly held there during the placing and setting of the concrete. Bars shall be tied at all intersections except where spacing is less than 300 mm in each directions, in which case, alternate intersections shall be tied. Ties shall be fastened on the inside.

404.3.5 Splicing

All reinforcement shall be furnished in the full lengths indicated on the Plans. Splicing of bars, except where shown on the Plans, will not be permitted without the written approval of the Engineer. Splices shall be staggered as far as possible and with a minimum separation of not less than 40 bar diameters. Not more than one-third of the bars may be spliced in the same cross-section, except where shown on the Plans.

Unless otherwise shown on the Plans, bars shall be lapped a minimum distance of:

710.1 Reinforcing Steel

Reinforcing steel shall conform to the requirements of the following Specifications:

Deformed Billet-Steel Bars for Concrete Reinforcement	AASHTO M 31 (ASTM A 615/PNS 49)
Deformed Steel Wire for Concrete Reinforcement	AASHTO M 225 (ASTM A 496)
Welded Steel Wire Fabric for Concrete Reinforcement	AASHTO M 55 (ASTM A 185)
Cold-Drawn Steel Wire for Concrete Reinforcement	AASHTO M 32 (ASTM A 82)
Fabricated Steel Bar or Rod Mats for Concrete Reinforcement	AASHTO M 54 (ASTM A 184)
Welded Deformed Steel Wire Fabric of Concrete Reinforcement	AASHTO M 221 (ASTM A 497)
Plastic Coated Dowel Bars	AASHTO M 254 Type A
Low Alloy Steel Deformed Bars for Concrete Reinforcement	ASTM A 206

Bar reinforcement for concrete structures, except No. 2 bars shall be deformed in accordance with AASHTO M 42, M 31 and M 53 for Nos. 3 to 11.

Dowel and tie bars shall conform to the requirements of AASHTO M 31 (ASTM A 615/PNS 49) or AASHTO M 42 except that rail steel shall not be used for tie bars that are to be bent and restraightened during construction. Tie bars shall be deformed bars. Dowel bars shall be plain round bars. They shall be free from burring or other deformation restricting slippage in the concrete. Before delivery to the site of the work, a minimum of one half (1/2) the length of each dowel bar shall be painted with one coat of approved lead or tar paint.

The sleeves for dowel bars shall be metal of an approved design to cover 50 mm, plus or minus 6.3 mm of the dowel, with a closed end, and with a suitable stop to hold the end of the sleeve at least 25 mm from the end of the dowel bar. Sleeves shall be of such design that they do not collapse during construction.

Plastic coated dowel bar conforming to AASHTO M 254 may be used.

710.2 Wire Rope or Wire Cable

The wire rope or wire cable shall conform to the requirements of AASHTO M 30 for the specified diameter and strength class.

710.3 Prestressing Reinforcing Steel

Prestressing reinforcing steel shall conform to the requirements of the following Specifications:

High-tensile wire	AASHTO M 204 (ASTM A 421)

High-tensile wire strand or rope AASHTO M 203 (ASTM A 416)

High-tensile alloy bars as follows:

High-tensile-strength alloy bars shall be cold stretched to a minimum of 895.7 MPa. The resultant physical properties shall be as follows:

Minimum ultimate tensile strength	1000 MPa followed by stress relieving
Minimum yield strength, measured by the 0.7 percent extension under load method shall not be less than	895.7 MPa
Minimum modulus of elasticity	25,000,000
Minimum elongation in 20 bar diameters after rupture	4 percent
Diameters tolerance	+0.762 mm – 0.254 mm

If shown on the Plans, type 270 k strand shall be used, conforming to AASHTO M 203.

FORMS AND FALSEWORKS

414.1 Description

This Item shall consist of designing, constructing and removing forms and falsework to temporarily support concrete, girders and other structural elements until the structure is completed to the point it can support itself.

414.2 Material Requirements

414.2.1 Formwork

The materials used for smooth form finish shall be plywood, tempered concrete-form-grade hardboard, metal, plastic, paper or other acceptable materials capable of producing the desired finish for form-facing materials. Form facing materials shall produce a smooth, uniform texture on the concrete. Form facing materials with raised grain, torn surfaces, worn edges, patches, dents, or other defects that will impair the texture of concrete surfaces shall not be permitted. No form-facing material shall be specified for rough form finish.

414.2.1.1 Formwork Accessories

Formwork accessories that are partially or wholly embedded in concrete, including ties and hangers shall be commercially manufactured. The use of non fabricated wire form ties shall not be permitted. Where indicated in the Contract, use form ties with integral water barrier plates in walls.

414.2.1.2 Formwork Release Agents

Commercially manufactured formwork release agents shall be used to prevent formwork absorption of moisture, prevent bond with concrete, and not stain the concrete surfaces.

414.2.2 Falsework

The materials to be used in the falsework construction shall be of the quantity and quality necessary to withstand the stresses imposed; it may be timber or steel or a combination of both. The workmanship shall be of such quality that the falsework will support the loads imposed on it without excessive settlement or take-up beyond as shown on the falsework drawings.

414.3. Construction Requirements

414.3.1 Design

Falsework and Formworks design and drawings shall be in accordance, with Item 407, Concrete Structures, Subsection 407.3.9 and 407.3.12, respectively.

STEEL WORKS

409.1 Description

This work shall consist of the joining of structural steel members with welds of the type, dimensions, and design shown on the Plans and in accordance with the Specifications.

It is the intent of this Specification to provide for work of a quality comparable to that required under the Standard Specifications for Welded Highway and Railway Bridges of the American Welding Society. In case of dispute or for situations not adequately provided for in this Specification, those designated Standard Specifications shall be considered as the final authority and shall govern except as amended by the Special Provisions.

Welding of Structural Steel shall be done only when shown on the Plans or authorized in writing by the Engineer.

409.2 Materials Requirements

Steel base metal to be welded shall be open-hearth or electric furnace steel conforming to AASHTO M 183.

All arc-welding electrodes shall conform to the requirements of American Welding Society Specifications. Electrodes shall be of classification numbers E7016, E7018 or E7028 as required for the positions, type of current and polarity, and other conditions of intended use, and to conform to any special requirements indicated on the Plans.

Filler material to be used in the repair or strengthening of old structures or for joining new parts to existing steel members, shall be adopted to the material to be welded and may depart from the foregoing requirements only if agreed by the Engineer.

409.3 Construction Requirements

409.3.1 Equipment

409.3.1.1 General

All items of equipment for welding and gas cutting shall be so designed and manufactured and in such condition as to enable qualified welders to follow the procedures and attain the results prescribed in this Specification.

409.3.1.2 Arc-Welding Equipment

Welding generators and transformers shall be designed expressly for welding. They shall be capable of delivering steady currents adjustable through a range ample for the work requirements. They shall respond automatically and quickly to changes in power requirements due to variations in arc length and shall deliver full current promptly on striking an arc.

Welding cable shall have sufficient conductivity to avoid overheating and inadequate current at the arc and shall be effectively insulated against welding circuit voltage. Earth or ground connections and circuits shall be secured and adequate to carry the welding currents.

Electrode holders shall grip the electrode firmly and with good electrical contact.

Approved automatic welding heads may be used, with suitable auxiliary handling equipment to provide automatic instead of manual control of electrode and welding arc.

409.3.1.3 Gas-Cutting Equipment

Torches and tips shall be of proper size and type of the work at hand. Suitable regulators shall afford the welder complete control over the pressure and rate of flow of each gas.

409.3.1.4 Protective Equipment

All personnel protective equipment shall conform to the American Standard Association Code for such equipment.

The Contractor shall enforce the use of approved accessories necessary for the protection and convenience of the welders and for the proper and efficient execution of the work.

Suitable protection against the light of the arc shall be maintained by the Contractor when arc-welding operation might be viewed within harmful range by persons other than the actual welders and inspectors.

409.3.2 Welding

409.3.2.1 General

Welding shall be performed by the metal-arc process, using the electrodes specified with either direct or alternating current.

Surfaces to be welded shall be smooth, uniform and free from fins, tears, and other defects which would adversely affect the quality of the weld. Edges of material shall be trimmed by machining, chipping, grinding, or machine gas-cutting to produce a satisfactory welding edge wherever such edge is thicker than: 13 mm for sheared edge of material; 16 mm for toes of angles or rolled shapes (other than wide flange sections); 25 mm for universal mill plate or edges of flange sections.

Surfaces to be welded shall be free from loose scale, slag, rust, grease or other material that will prevent proper welding. Mill scale that withstands vigorous wire brushing or a light film of drying oil or rust inhibitive coating may remain. Surfaces within 50 mm of any weld location shall be free of any paint or other material that would prevent proper welding or produce objectionable fumes while welding.

No operation or actual welding or gas-cutting shall be performed on a member while it is carrying live load stress or while subject to shock and vibration and from moving loads. Welding and gas-cutting shall cease in advance of the application of such loads.

409.3.2.2 Welders

All welding shall be done by approved competent and experienced and fully qualified welders.

409.3.2.3 Preparation of Materials for Welding

Dimensional tolerance, straightness and flatness of the structural shapes and plates shall be within the limits prescribed in this Specification.

Structural steel which is to be welded shall preferably not be painted until all welding is completed.

Preparation of edges by gas-cutting shall, wherever practicable, be done by machine gas-cutting. Machine gas-cutting edges shall be substantially as smooth and regular as those produced by edge planing and shall be left free of slag. Manual gas cutting shall be permitted only where machine gas-cutting is not practicable and with the approval of the Engineer. The edge resulting from manual gas-cutting shall be inspected and smoothed with special care. All reentrant corners shall be filleted to a radius at least 19 mm. The cut lines shall not extend beyond the fillet and all cutting shall follow closely the line prescribed.

409.3.2.4 Assembly

The parts to be joined by fillet welds shall be brought into a close contact as practicable, and no event shall be separated more than 5 mm. If the separation is 1.5 mm or greater, the leg of the fillet weld shall be increased by the amount of separation. The separation between faying surfaces of lap joints and of butt joints landing on a backing structure shall not exceed 1.5 mm. The fit of joints which are not sealed by welds throughout their length shall be sufficiently close to exclude water after painting. Where irregularities in rolled shape or plates, after straightening, do not permit contact within the above limits, the procedure necessary to bring the material within these limits shall be subject to the approval of the Engineer.

Cutting parts to be joined by butt welds shall be carefully aligned. Where the parts are effectively restrained against bending due to eccentricity or alignment, a maximum offset of 10 percent of the thickness or the thinner part joined, but in no case more than 3 mm, may be permitted as a departure from the theoretical alignment. In connecting alignment in such cases, the parts shall not be drawn into a greater slope than two degrees (1 in 30). Measurement of offset shall be between centerline of parts unless otherwise shown on the Plans.

Members to be welded shall be brought into correct alignment and held in position by bolts, clamps, wedges, guy lines, struts, other suitable devices or tack welds until welding has been completed. The use of jigs and fixtures is recommended where practicable. Such fastening devices as may be used shall be adequate to insure safety.

The minimum center spacing of plug welds shall be four times the diameter of the hole.

Members or component parts of structures shall be assembled and matchmarked prior to erection to insure accurate assembly and adjustment of position on final erection. Painted assembly marks shall be removed from any surface to be welded.

409.3.2.5 Control of Distortion and Shrinkage Stresses

In assembling and joining parts of a structure or a built-up member and in welding reinforcing parts to existing members, the procedure and sequence of welding shall be such as will avoid distortion and minimize shrinkage stresses.

As far as practicable, long parallel lines of welding on a part or member shall be executed concurrently, and all welds shall be deposited in a sequence that will balance the applied heat of welding on various sides as much as possible while the welding progresses.

Where part or member is to be welded on both ends into a rigid structure or assembly, the connection at which the greatest shrinkage will occur in the direction of the length of the part or member, shall be made while the part or member is free to move in the direction of the shrinkage; and the connection involving the least shrinkage shall be made last.A weld designed to sustain tensile stress shall be made in such a way that their welding is being performed at any point, all parts that would offer restraint against shrinkage can shrink, deform or move enough to preclude serious shrinkage stresses.

In welding of built-up members of heavy sections, particularly those T or Hshapes where the flanges are considerably heavier than the stems or webs, and in any case where the component parts are 38 mm or greater in thickness, special care shall be exercised during welding to avoid weld cracking. In the welding of members of such heavy section, the temperature of contiguous areas about a welding operation shall be equal, and not less than 55oC. If necessary, the lighter parts shall be heated while the weld is cooling, to keep the temperature of contiguous parts substantially equal.

Welding shall not be done when surfaces are wet from condensation or rain which is falling on the surfaces to be welded; nor during periods of high winds unless the welding operator and the work are properly protected.

409.3.2.6 Technique of Arch-Welding

The welding current shall conform with respect to voltage and current (and polarity, of direct current is used) to the recommendations of the manufacturer of the electrode being used, as indicated in the instructions that are included with each container of electrodes.

Arc lengths and electrical potential and current shall be suited to the thickness of material, type of groove and other circumstances attendant to the work.

The maximum size of electrode permitted shall be 5 mm with the following exceptions:

1. The maximum size for flat position welding of all passes except the root pass shall be 8 mm.
2. The maximum size for horizontal fillet welds shall be 6 mm.

The electrode for the single pass fillet weld and for the root passes of all multiple layer welds in all cases shall be of the proper size to insure thorough fusion and penetration with freedom from slag inclusions.

A single layer of the weld metal, whether deposited in one pass or made up of several parallel beads, shall not exceed 3 mm in thickness except that the bead at the root may be 6 mm in thickness if the position of welding and the viscosity of the weld metal permit control of the latter so that it does not over flow upon unfused base metal.

The electrode manipulation during welding shall insure that:

1. Complete fusion between the base metal and the deposited weld metal is obtained.
2. The melted base metal is replaced by weld metal so that no undercut remains along the edges of the finished weld.
3. The molten weld metal floats all slag, oxide and gases to the surface behind the advancing arc.

Each time the arc is started, either to begin a weld or to continue partly completed weld, the arch shall be manipulated to obtain complete fusion of the deposited weld metal with the base metal and with any previously deposited weld metal, before any progression of the arc along the joint.

At the completion of a pass or weld, the arc shall be manipulated so as to fill the crater with sound metal.

In making plug welds the following techniques shall be used:

1. For flat welds, the arc shall be carried around the root of the joint and then weaved along a spiral path to the center of the hole, fusing and depositing a layer of weld metal in the root and bottom of the joint. The arc shall then be carried to the periphery of the hole, and the procedure repeated, fusing and depositing successive layers to fill the hole to the depth required. The slag covering the weld metal shall be kept molten, or nearly so, until the weld is finished. If the arc is broken, except briefly for changing electrodes, the slag must be allowed to cool and shall be completely removed before restarting the weld.

2. For vertical welds, the arc shall be started at the root of the joint, at the lower side of the hole and carried upward on the zigzag path, depositing a layer about 5 mm thick on the exposed face at the thinner plate and fused to it and to the side of the hole.

After cleaning the slag from the weld, other layers shall be similarly deposited to fill the hole to the required depth.

3. For overhead welds, the procedure shall be the same as for flat welds except that the slag shall be allowed to cool and shall be completely removed after depositing each successive layer until the hole is filled to the required depth.

Slot welds shall be made with a technique similar to that specified above for plug welds, except that if the length of the slot exceeds three times the width, or if the slot extends to the edges of the part of the technique specified above for making plug welds shall be followed for the type of flat position welds.

409.3.2.7 Details of Welds

The following tabulation shows that the relation between weld size and the maximum thickness of material on which various sizes of fillet welds may be used:

Size of Fillet Weld	Maximum Thickness of Part
5 mm	13 mm
6 mm	19 mm
8 mm	32 mm
10 mm	51 mm
13 mm	152 mm
16 mm over	152 mm

The maximum size of fillet weld that may be used along the edge of material 6 mm or more in thickness shall be 1.5 mm less than the thickness of the material.

The minimum effective length of fillet weld shall be four times its size and in no case less than 38 mm.

Fillet welds terminating at the corners of parts or members shall, wherever practicable, be turned continuously full size around the corners for a distance not less than twice the nominal size of the weld.

Spacing of intermittent fillet welds shall be measured between the center of the weld segments. The spacing shall conform to the following requirements unless calculated stresses between the parts require closer spacing:

1. At the end of members, there shall preferably be continuous longitudinal fillet welds at least as long as the width of the element or member being connected.
2. The clear spacing in the direction of stress of stitch welds that connect plates to other plates or to shapes shall not exceed:
   a. For compression members ….10 times the thickness of the thinner part but not more than 300 mm.

b. For tension members ….. 14 times the thickness of the thinner part but not more than 300 mm.

The spacing transverse to the direction of stress shall not exceed 24 times the thickness of the thinner part connected.

3. For members composed of two or more rolled shapes in contact with one another, the longitudinal spacing of stitch welds shall not exceed 600 mm.

409.3.2.8 Quality of Welds

Weld metal shall be solid throughout except that very small gas pockets and small inclusions of oxide or slag may be accepted if well dispersed and if none exceeds 1.5 mm in greatest dimension, and if the sum of the greatest dimensions of all such defects of weld metal area does not exceed 15 mm in an area of 10 cm2 .

There shall be complete fusion between the weld metal and the base metal and between successive passes throughout the joint. Welds shall be free from overlap and the base metal free from undercutting. All craters shall be filled to the full cross-section of the welds.

409.3.2.9 Correction

In lieu of rejection of an entire piece of member containing welding which is unsatisfactory or indicates inferior workmanship, the following corrective measures may be permitted by the Engineer whose specific approval shall be obtained for making each correction:

1. Removal of part or all of the welds shall be effected by chipping, grinding or gas-gouging.
2. Defective or unsound welds shall be corrected either by removing and replacing the welds, or as follows:

a. Excessive convexity – Reduce to size by removal of excess weld metal.
b. Shrinkage crack in base metal, craters and excessive porosity – Remove defective portion of base and weld metal down to sound metal and deposit additional weld metal.
c. Undercutting, undersize and excessive concavity – Clean and deposit additional weld metal.
d. Overlapping and lack of fusion – Remove and replace the defective length of weld.
e. Slag inclusion – Remove those parts of the weld containing slag and fill with weld metal.
f. Removal of adjacent base metal during welding – Clean and form full size by depositing additional weld metal.

3. Where corrections require the depositing of additional weld metal, the electrode used shall be smaller than the electrode used in making the original weld.
4. A cracked weld shall be removed throughout its length, unless by the use of acid etching, magnetic inspection or other equally positive means, the extent of the crack

can be ascertained to be limited, in which case sound metal 50 mm or more beyond each end of the crack need not be removed.

5. In removing defective parts of a weld, the gas-gouging, chipping or grinding shall not extend into the base metal any substantial amount beyond the depth of the web penetration unless cracks or other defects exist in the base metal.
6. Where the work performed subsequent to the making of a deficient weld has rendered the weld inaccessible or has caused new conditions which would make the correction of the deficiency dangerous or ineffectual, the original condition shall be restored by renewal of welds or members, or both before making the necessary corrections, or else the deficiency shall be compensated by additional work according to a revised design approved by the Engineer.
7. Caulking of welds shall not be done.
8. Before adding weld metal or rewelding, the surfaces shall be cleaned thoroughly. Where incomplete fusion is disclosed by chipping, grinding or gas gouging, to correct defects, that part of the weld shall be removed and rewelded.

409.3.2.10 Stress Relieving

Peening to reduce residual stress of multi-layer welds may be used only if authorized and ordered by the Engineer. Care shall be exercised to prevent overpeening which may cause overlapping, scaling, flecking or excessive cold working of weld and base metal.

409.3.2.11 Cleaning and Protective Coatings

Painting shall not be done until the work has been accepted and shall be in accordance with the Specification. The surface to be painted shall be cleaned of spatter, rust, loose scale, oil and dirt. Slag shall be cleaned from all welds.

Welds that are to be galvanized shall be treated to remove every particle of slag.

409.3.2.12 Identification

The operator shall place his identification mark with crayon, or paint, near the welds made by him.

409.3.2.13 Inspection

On completion of the welding work, inspection shall be carried out by an Inspector appointed by the Engineer.

The size and contour of welds shall be measured with suitable gauges. The Inspector shall identify with a distinguishing mark all welds that he has inspected and accepted.

The Contractor shall remove and replace, or correct as instructed, all welds found defective or deficient. He shall also replace all methods found to produce inferior results, with methods which will produce satisfactory work.

In the event that fault welding or the removal for rewelding of faulty welding shall damage the base metal, the Contractor shall remove and replace the damaged material.

PLUMBING / SANITARY WORKS

ALL PLUMBING WORKS INCLUDED HEREIN SHALL BE EXECUTED ACCORDING TO THE PROVISIONS OF THE PLUMBING CODE OF THE PHILIPPINES.THE NATIONAL BUILDING CODE AND RULES & REGULATION OF MUNICIPALITY OF LINGAYEN, PANGASINAN

COORDINATE THE DRAWINGS WITH OTHER RELATED DRAWINGS AND SPECIFICATIONS. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY FOUND HEREIN. ALL PIPES SHALL BE INSTALLED AS INDICATED ON PLANS. ANY RELOCATIONS REQUIRED FOR PROPER EXECUTION

OF OTHER TRADES SHALL BE WITH PRIOR APPROVAL OF THE ARCHTECT OR ENGINEER. PROPOSED SANITARY UTILITIES SHALL CONFORM TO THE ACTUAL LOCATION, DEPTH AND INVERT ELEVATION OF ALL

EXISTING PIPES AND STRUCTURES AS VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AT SITE AND COORDINATE

THE WORKS WITH THE SEWER

LINE EFFLUENT OR DISPOSAL POINT AND WATER LINE SERVICE CONNECTING POINT. ALL PIPES ARE IN MILLIMETERS NOMINAL INSIDE DIAMETER AND ALL DIMENSIONS ARE IN METER UNLESS OTHERWISE SPECIFIED

Grades of horizontal pipings:

Run all horizontal pipings in perfect alignment and at a form grade of not less than two percent 2%

Change in direction:

All change in direction shall be made by appropriate use of Fourty Five degrees (45°) wyes, longsweep quarter bend, six-eight or sixteenth bends, when the change of flow is from horizontal to vertical or sixteenth bends. when the change of flow is from horizontal to vertical

1/8 bend combination maybe used on vertical stacks and short quarter bends maybe used on wasteline.

Tee and crosses maybe used in vent pipes.

Prohibited Fittings:

No double hub or tee branch shall be used on horizontal wastes lines.The drillings and tappings of house drains, waste or vent pipes and used of saddle hub and bend are prohibited

Sleeves

Provide pipe sleeves at walls, columns or slabs one size bigger than the actual size passing through the walls, columns or under slab to protect pipe from breakage

Pipe Cleanouts

Pipe Cleanouts are required under following conditions:

A. Every change in horizontal directions exceeding twenty-two and one-half degrees (22-1/2°)

B. One and one-half meters (1.50m) inside the property line before the house drainage connection

C. Every fifteen meters (15m) in horizontal run of pipes

D. At the end of any horizontal pipe lines

PROJECT BILLBOARD

2.2.3 For infrastructure projects, a tarpaulin signboard must be suitably framed for outdoor display at the project location, and shall be posted as soon as the award has been made. The design and format of the tarpaulin, as shown in Annex "A," shall have the following specifications:

Tarpaulin, white, 8 ft x 8 ft	Tarpaulin, white, 4 ft x 8 ft
Resolution: 70 dpi	Resolution: 70 dpi
Font : Helvetica	Font : Helvetica
Font Size: Main Information – 3"	Font Size: Main Information – 3"
Sub-Information -1"	Sub-Information -1"
Font Color: Black	Font Color: Black

CONSTRUCTION SAFETY & HEALTH PROGRAM

B.2 MEDICAL ROOM AND FIRST AID FACILITIES

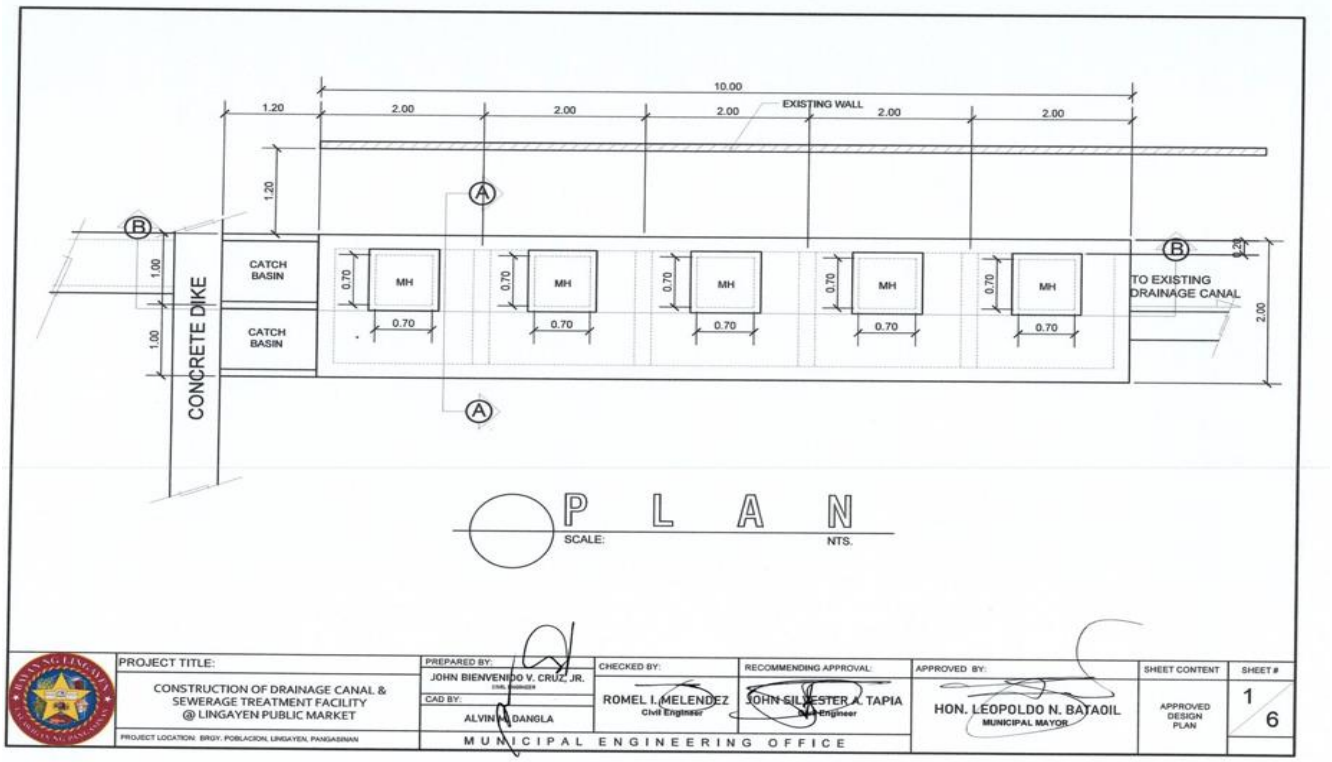
1. The Contractor shall provide and maintain throughout the duration of the Contract a medical room together with all necessary supplies to be sited in the Contractor's main area. The medical room shall be waterproof; it could be a building or room designated and used exclusively for the purpose. It shall have a floor area of at least 15 square meters and a glazed window area of at least 2 square meters.

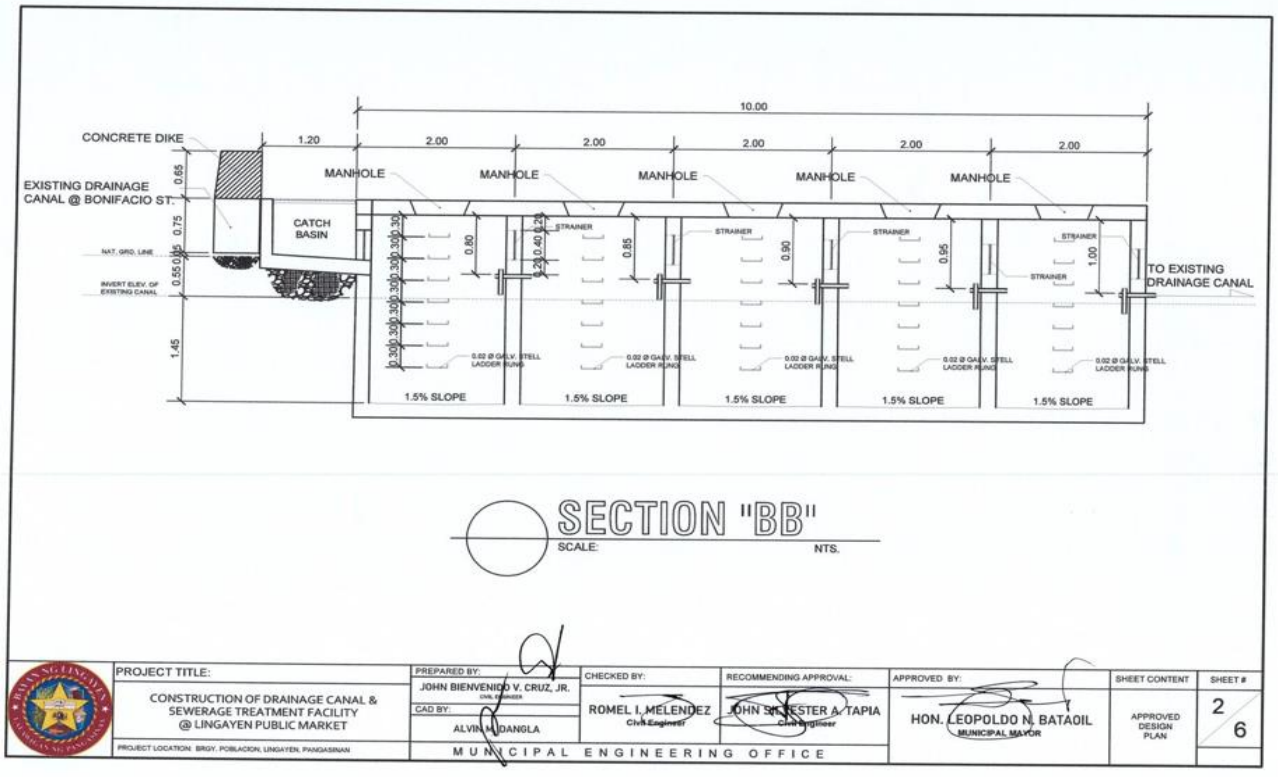
2. The Contractor shall employ permanently on the site a fully trained Medical Aide, who shall be engaged solely on medical duties.

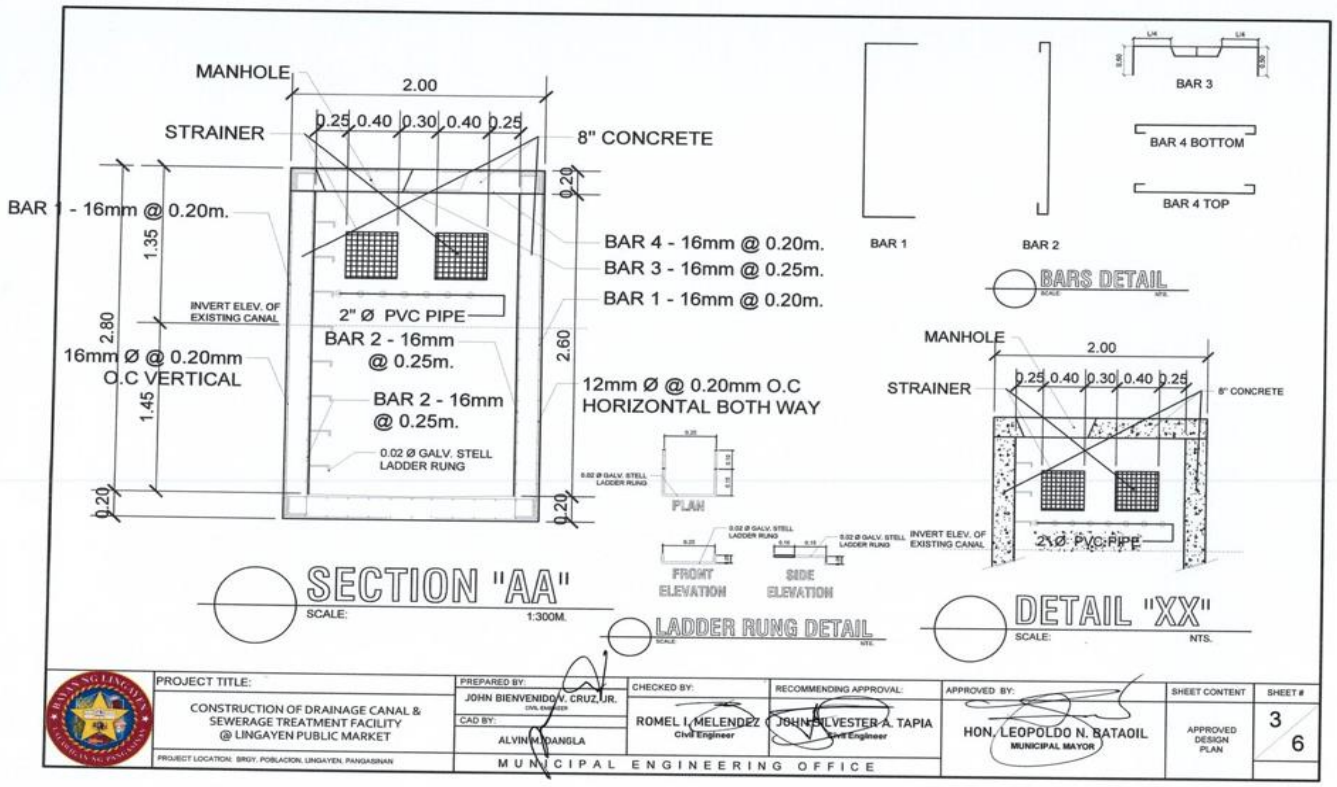
3. The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations suitable notices in the Site.

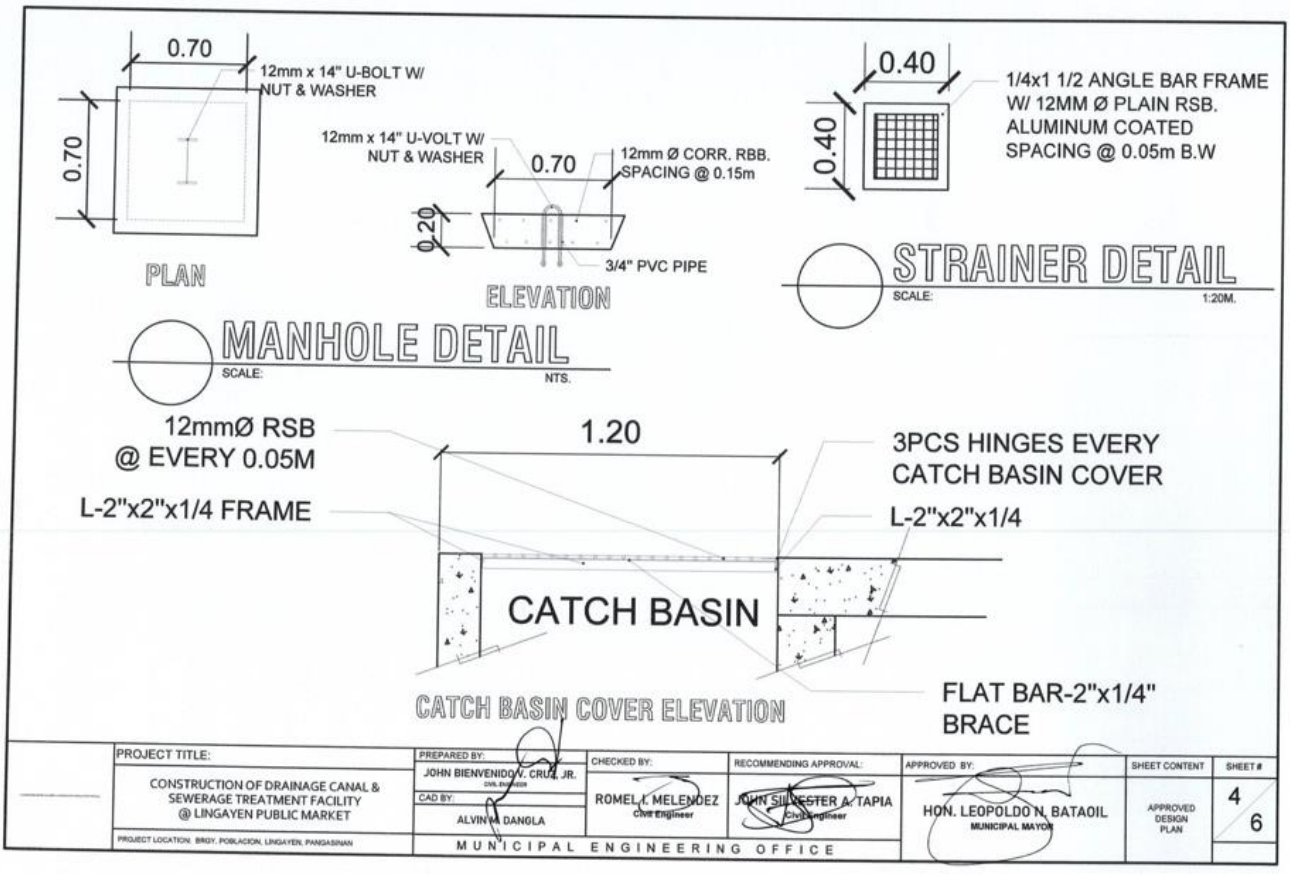
4. The Contractor's arrangement to comply with this Section shall be subject to the approval of the Engineer and also to the approval of any qualified Medical Officer designated by the Government to supervise medical arrangements on the Site.

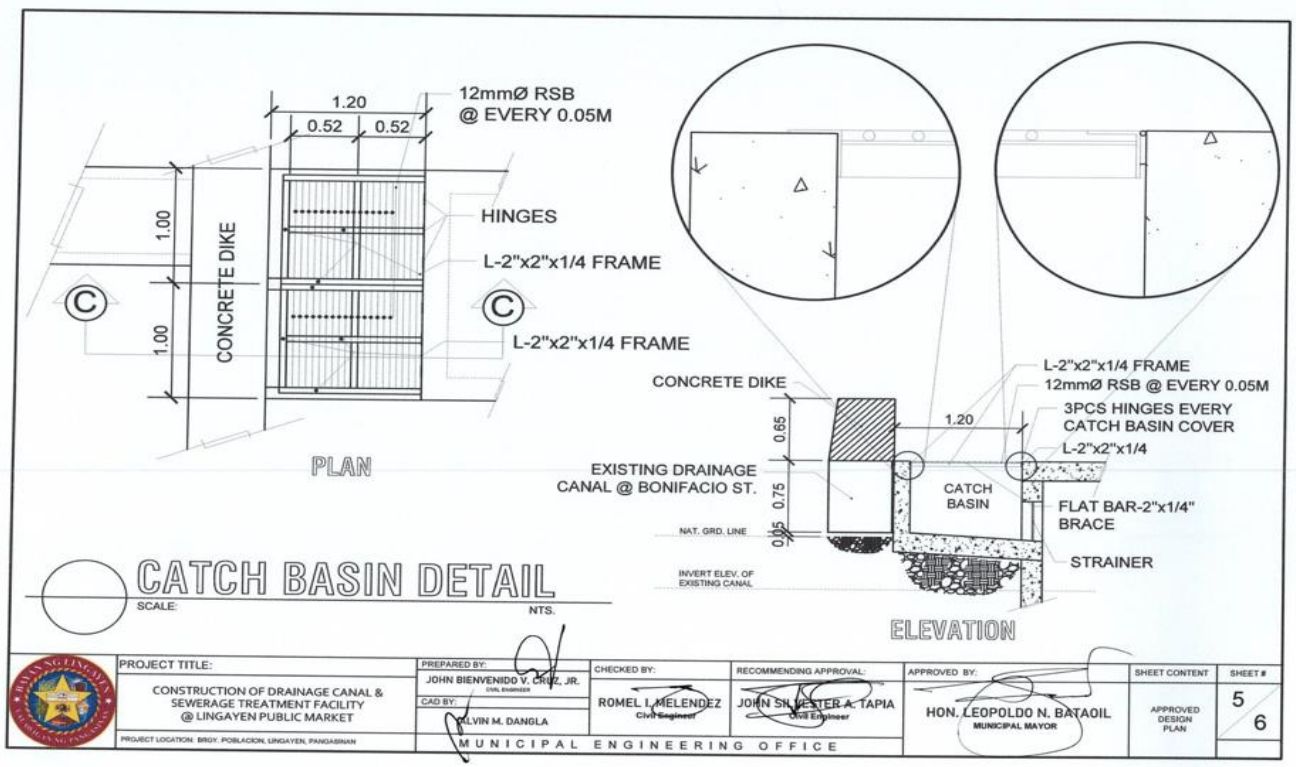
Section VII. Drawings

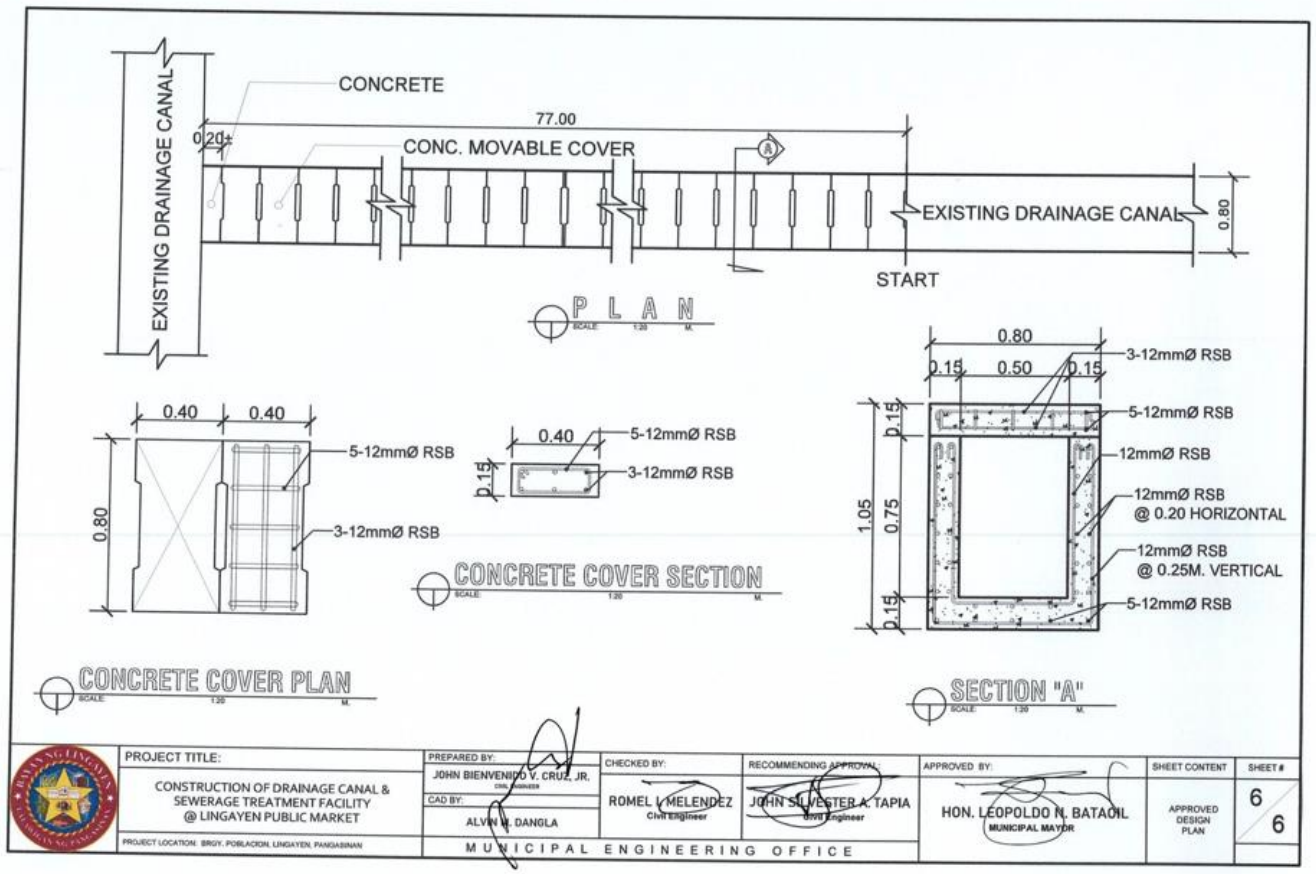





MANHOLE
2.00
STRAINER
0.25 0.40 0.30 0.40 0.25
8" CONCRETE
BAR 1 - 16mm @ 0.20m.
1.35
2.80
1.45
INVERT ELEV. OF EXISTING CANAL
16mm Ø @ 0.20mm O.C VERTICAL
2" Ø PVC PIPE
BAR 2 - 16mm @ 0.25m.
BAR 2 - 16mm @ 0.25m.
0.02 Ø GALV. STELL LADDER RUNG
0.20
2.60
BAR 4 - 16mm @ 0.20m.
BAR 3 - 16mm @ 0.25m.
BAR 1 - 16mm @ 0.20m.
12mm Ø @ 0.20mm O.C HORIZONTAL BOTH WAY
PLAN
FRONT ELEVATION
SIDE ELEVATION
SECTION "AA"
SCALE: 1:300M.
LADDER RUNG DETAIL
BAR 1
BAR 2
BAR 3
BAR 4 BOTTOM
BAR 4 TOP
BARS DETAIL
MANHOLE
2.00
STRAINER
0.25 0.40 0.30 0.40 0.25
8" CONCRETE
INVERT ELEV. OF EXISTING CANAL
2 Ø PVC PIPE
DETAIL "XX"
SCALE: NTS.
PROJECT TITLE:
CONSTRUCTION OF DRAINAGE CANAL & SEWERAGE TREATMENT FACILITY @ LINGAYEN PUBLIC MARKET
PROJECT LOCATION: BRGY. POBLACION, LINGAYEN, PANGASINAN
PREPARED BY:
JOHN BIENVENIDO V. CRUZ, JR.
CAD BY:
ALVIN M. DANGLA
CHECKED BY:
ROMEL I. MELENDEZ
Civil Engineer
RECOMMENDING APPROVAL:
JOHN SILVESTER A. TAPIA
Civil Engineer
APPROVED BY:
HON. LEOPOLDO N. BATAOIL
MUNICIPAL MAYOR
SHEET CONTENT
APPROVED DESIGN PLAN
SHEET #
3
6
MUNICIPAL ENGINEERING OFFICE


0.70
12mm x 14" U-BOLT W/ NUT & WASHER
0.70
PLAN
12mm x 14" U-VOLT W/ NUT & WASHER
0.70
12mm Ø CORR. RBB. SPACING @ 0.15m
0.20
3/4" PVC PIPE
ELEVATION
MANHOLE DETAIL
SCALE: NTS.
0.40
0.40
1/4x1 1/2 ANGLE BAR FRAME W/ 12MM Ø PLAIN RSB. ALUMINUM COATED SPACING @ 0.05m B.W
STRAINER DETAIL
SCALE: 1:20M.
12mmØ RSB @ EVERY 0.05M
L-2"x2"x1/4 FRAME
1.20
3PCS HINGES EVERY CATCH BASIN COVER
L-2"x2"x1/4
CATCH BASIN
FLAT BAR-2"x1/4" BRACE
CATCH BASIN COVER ELEVATION
PROJECT TITLE:
CONSTRUCTION OF DRAINAGE CANAL & SEWERAGE TREATMENT FACILITY @ LINGAYEN PUBLIC MARKET
PROJECT LOCATION: BRGY. POBLACION, LINGAYEN, PANGASINAN
PREPARED BY:
JOHN BIENVENIDO V. CRUZ, JR.
CAD BY:
ALVIN M. DANGLA
CHECKED BY:
ROMEL I. MELENDEZ
Civil Engineer
RECOMMENDING APPROVAL:
JOHN SILVESTER A. TAPIA
Civil Engineer
APPROVED BY:
HON. LEOPOLDO N. BATAOIL
MUNICIPAL MAYOR
SHEET CONTENT
APPROVED DESIGN PLAN
SHEET #
4
6
MUNICIPAL ENGINEERING OFFICE


1.20
0.52
0.52
12mmØ RSB
@ EVERY 0.05M
HINGES
L-2"x2"x1/4 FRAME
L-2"x2"x1/4 FRAME
1.00
1.00
CONCRETE DIKE
PLAN
CONCRETE DIKE
L-2"x2"x1/4 FRAME
12mmØ RSB @ EVERY 0.05M
3PCS HINGES EVERY
CATCH BASIN COVER
L-2"x2"x1/4
1.20
0.65
0.75
0.05
EXISTING DRAINAGE
CANAL @ BONIFACIO ST.
CATCH
BASIN
FLAT BAR-2"x1/4"
BRACE
STRAINER
NAT. GRD. LINE
INVERT ELEV. OF
EXISTING CANAL
ELEVATION
CATCH BASIN DETAIL
SCALE:
NTS.
PROJECT TITLE:
CONSTRUCTION OF DRAINAGE CANAL &
SEWERAGE TREATMENT FACILITY
@ LINGAYEN PUBLIC MARKET
PROJECT LOCATION: BRGY. POBLACION, LINGAYEN, PANGASINAN
PREPARED BY:
JOHN BIENVENIDO V. CRUZ, JR.
CIVIL ENGINEER
CAD BY:
ALVIN M. DANGLA
CHECKED BY:
ROMEL I. MELENDEZ
Civil Engineer
RECOMMENDING APPROVAL:
JOHN SILVESTER A. TAPIA
Civil Engineer
APPROVED BY:
HON. LEOPOLDO N. BATAOIL
MUNICIPAL MAYOR
SHEET CONTENT
APPROVED
DESIGN
PLAN
SHEET #
5
6
MUNICIPAL ENGINEERING OFFICE


EXISTING DRAINAGE CANAL
CONCRETE
0.20±
77.00
CONC. MOVABLE COVER
EXISTING DRAINAGE CANAL
0.80
START
PLAN
0.40
0.40
5-12mmØ RSB
3-12mmØ RSB
0.80
0.40
5-12mmØ RSB
0.15
3-12mmØ RSB
CONCRETE COVER SECTION
CONCRETE COVER PLAN
0.80
0.15
0.50
0.15
3-12mmØ RSB
5-12mmØ RSB
12mmØ RSB
12mmØ RSB
@ 0.20 HORIZONTAL
12mmØ RSB
@ 0.25M. VERTICAL
5-12mmØ RSB
0.15
1.05
0.75
0.15
SECTION "A"
PROJECT TITLE:
CONSTRUCTION OF DRAINAGE CANAL &
SEWERAGE TREATMENT FACILITY
@ LINGAYEN PUBLIC MARKET
PROJECT LOCATION: BRGY. POBLACION, LINGAYEN, PANGASINAN
PREPARED BY:
JOHN BIENVENIDO V. CRUZ, JR.
CIVIL ENGINEER
CAD BY:
ALVIN M. DANGLA
CHECKED BY:
ROMEL I. MELENDEZ
Civil Engineer
RECOMMENDING APPROVAL:
JOHN SILVESTER A. TAPIA
Civil Engineer
APPROVED BY:
HON. LEOPOLDO N. BATAOIL
MUNICIPAL MAYOR
SHEET CONTENT
APPROVED
DESIGN
PLAN
SHEET #
6
6
MUNICIPAL ENGINEERING OFFICE

Section VIII. Bill of Quantities

Republic of the Philippines
Province of Pangasinan
Municipality of Lingayen

Bill of Quantities

CONSTRUCTION OF DRAINAGE CANAL AND SEWERAGE TREATMENT FACILITY AT LINGAYEN PUBLIC MARKET, BARANGAY POBLACION, LINGAYEN, PANGASINAN					
Item No.	Description	Qty.	Unit	Unit Price (Pesos)	Amount (Pesos)
	OTHER GENERAL REQUIREMENTS				
I.	Project Billboards	1.00	l.s.	In words:Pesos	In words:Pesos
II.	Construction Health and Safety	1.00	l.s.	In words:Pesos	In words:Pesos
	CIVIL WORKS				
III.	Excavation	216.60	Cu.m	In words:Pesos	In words:Pesos
IV.	Concrete Works	105.24	Cu.m	In words:Pesos	In words:Pesos
V.	Reinforcing Steel & Wire Rope	6,197.40	Kg	In words:Pesos	In words:Pesos
VI.	Forms & Falseworks	1.00	Lot	In words:Pesos	In words:Pesos
VII.	Steel Works	1.00	Lot	In words:Pesos	In words:Pesos
VIII.	Sanitary Works	1.00	Lot	In words:Pesos	In words:Pesos
TOTAL AMOUNT IN WORDS:					

Submitted by:

_____ Date: _____

Contractor

Section IX. Checklist of Technical and Financial Documents

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;

(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.

Section XI. Bid Forms

Bid Form for the Procurement of Infrastructure Projects

[shall be submitted with the Bid]

BID FORM

Date : _____

To: Bids and Awards Committee
Local Government Unit of Lingayen
Municipal Hall Building, Lingayen, Pangasinan

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 guidelines[12] 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.

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: _____

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;

Undersigned undertakes that it is compliant with all laws, rules, regulations, and orders of the national government or any of its departments, instrumentalities, agencies, and governing bodies. As such, the undersigned holds the Head of the Procuring Entity and the members of the Bids and Awards Committee and its secretariat free from any liability which might arise from the contractor's non-compliance with the laws, rules, regulations, and orders.

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

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

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

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

[If a corporation or joint venture:] None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the

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

7. *[Name of Bidder]* complies with existing labor laws and standards; and

8. *[Name of Bidder]* is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:

   a. Carefully examining all of the Bidding Documents;
   b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
   c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
   d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.

9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

10. **In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.**

IN WITNESS WHEREOF, I have hereunto set my hand this_____day of, 20_____at

_____, Philippines.

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]

Affiant

[Jurat]

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