LEBAK WATER DISTRICT

LEBAK, SULTAN KUDARAT

NEGOTIATED PROCUREMENT

TWO FAILED BIDDINGS

TITLE: SUPPLY, DELIVERY AND INSTALLATION OF VARIOUS MATERIALS AND FITTINGS FOR REHABILITATION AND EXPANSION OF TRANSMISSION AND DISTRIBUTION LINES AT BRGY. PASANDALAN, BRGY. POBLACION 3, BRGY. TIBPUAN AND BRGY. SALAMAN

ABC: PHP 6,120,738.01

Contract No.: GIP2024-10-007

Sixth Edition

PREFACE

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

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

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

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

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

a. All the documents listed in the Table of Contents are normally required for the procurement of Infrastructure Projects. However, they should be adapted as necessary to the circumstances of the particular Project.

b. Specific details, such as the "*name of the Procuring Entity*" and "*address for bid submission*," should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.

c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, BDS, General Conditions of Contract, Special Conditions of Contract, Specifications, Drawings, and Bill of Quantities are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.

d. The cover should be modified as required to identify the Bidding Documents as to the names of the Project, Contract, and Procuring Entity, in addition to date of issue.

e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference has to be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.

f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

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GLOSSARY OF TERMS, ABBREVIATIONS, AND ACRONYMS

ABC –Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

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

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

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

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

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

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

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

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

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

GFI – Government Financial Institution.

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

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

GOP – Government of the Philippines.

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

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

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

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

SECTION I. REQUEST FOR QUOTATION

REQUEST FOR QUOTATION

NEGOTIATED PROCUREMENT TWO-FAILED BIDDINGS

SUPPLY, DELIVERY AND INSTALLATION OF VARIOUS MATERIALS AND FITTINGS FOR REHABILITATION AND EXPANSION OF TRANSMISSION AND DISTRIBUTION LINES AT BRGY. PASANDALAN, BRGY. POBLACION 3, BRGY. TIBPUAN AND BRGY. SALAMAN

Contract No.: GIP2024-10-007

1. The Lebak Water District (LEWADI) intends to procure Supply, Delivery and Installation of Various Materials and Fittings for Rehabilitation and Expansion of Transmission and Distribution Lines at Brgy. Pasandalan, Brgy. Poblacion 3, Brgy. Tibpuan and Brgy. Salaman with an Approved Budget for the Contract (ABC) of Six Million One Hundred Twenty Thousand Seven Hundred Thirty-Eight Pesos & 01/100 (Php6,120,738.01)

2. The LEWADI Bids and Award Committee (BAC) now invites technically, legally, and financially capable suppliers for the said project.

3. The Procurement procedure for this requirement is Negotiated Procurement - Two Failed Biddings pursuant to Section 53.1 of 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184. The selection of the successful offer shall be based on the best and final offer that will be submitted on the set deadline by the BAC and which would meet the minimum technical specifications required.

4. The schedule of bidding activities is herein stated below:

Activities	Schedule
1. Issuance and availability of Request for Quotation and other documents	Starting January 14, 2025 from 08:00 AM to 05:00 PM only
2. Conduct of Pre-Negotiation Conference	Starting January 15, 2025 to January 22, 2025 from 08:00 AM to 05:00 PM only Which shall be open to prospective bidders.
3. Deadline for the Submission of Quotation	January 29, 2025, 01:00 PM Lebak Water District Office, Purok Mahogany, Brgy. Aurelio F. Freires Sr., Lebak, Sultan Kudarat, Philippines
4. Opening of Quotation (Best Offer)	January 29, 2025, 01:00 PM Lebak Water District Office, Purok Mahogany, Brgy. Aurelio F. Freires Sr., Lebak, Sultan Kudarat, Philippines Late bids shall not be accepted.

5. A complete set of Bidding Documents may be acquired by interested bidders starting January 14, 2025 at the given address, upon payment of the applicable fee of Ten Thousand Pesos (Php10,000.00).

6. The offer must be duly received by the LEWADI BAC Secretariat through manual submission at the office address indicated below on or before January 29, 2025, 01:00 PM. Late submission shall not be accepted.

7. Bid opening shall be on January 29, 2025, 01:00 PM at the given address below. Bids will be opened in the presence of the bidder's representative who choose to attend the activity.

8. Further information may be obtained from the following:

   JEANNETTE MAYAO MABAGUE
   BAC Secretariat
   Lebak Water District
   Purok Mahogany, Brgy. Aurelio F. Freires Sr.,
   Municipality of Lebak, Province of Sultan Kudarat
   Tel No. (064) 205-3554; Cell No. 0905-400-7534
   Email: lewadi.bac2021@gmail.com

9. The Lebak Water District (LEWADI) 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.

Signed dated 05/22/2024

ENGR. HENRY JAMES H. GALLETO
BAC Chairperson

SECTION II. INSTRUCTIONS TO BIDDERS

1. Scope of Bid

The Procuring Entity, **Lebak Water District (LEWADI**) invites Bids for the **SUPPLY, DELIVERY AND INSTALLATION OF VARIOUS MATERIALS AND FITTINGS FOR REHABILITATION AND EXPANSION OF TRANSMISSION AND DISTRIBUTION LINES AT BRGY. PASANDALAN, BRGY. POBLACION 3, BRGY. TIBPUAN AND BRGY. SALAMAN**, with Project Identification Number **GIP2024-10-007.**

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

2. Funding Information

2.1. The GOP through the source of funding as indicated below for **2024** in the amount of **SIX MILLION ONE HUNDRED TWENTY THOUSAND SEVEN HUNDRED THIRTY-EIGHT PESOS & 01/100 (PHP6,120,738.01).**

2.1. The source of funding is:

a. NGA, the General Appropriations Act of 2017.

3. Negotiation Requirements

The Negotiated Procurement – Two Failed Biddings for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manuals 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 IB by the BAC through the issuance of a supplemental or bid bulletin.

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

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

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

5. Eligible Bidders

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

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

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

5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.

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

6. Origin of Associated Goods

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

7. Subcontracts

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

The Procuring Entity has prescribed that:

a. Subcontracting is not allowed.

7.1. Subcontracting of any portion of the Project does not relieve the Contractor of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Contractor's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

8. Pre-Negotiation Conference

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

9. Clarification and Amendment of Bidding Documents

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

10. Documents Comprising the Bid: Eligibility and Technical Components

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

10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

10.3. A valid PCAB License is required, and in case of joint ventures, a valid special PCAB License, and registration for the type and cost of the contract for this Project. Any additional type of Contractor license or permit shall be indicated in the **BDS**.

10.4. A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.

10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

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

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

11.3. For Foreign-funded procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Alternative Bids

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

13. Bid Prices

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

14. Bid and Payment Currencies

14.1. Bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid

evaluation, Bids denominated in foreign currencies shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.

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

a. Philippine Pesos.

15. Bid Security

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

15.2. The Bid and bid security shall be valid until **120 calendar days from Bid Opening**. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.
The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

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

17. Deadline for Submission of Bids

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

18. Opening and Preliminary Examination of Bids

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

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

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

19. Detailed Evaluation and Comparison of Bids

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

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

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

20. Post Qualification

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

21. Signing of the Contract

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

SECTION III. BID DATA SHEET

BID DATA SHEET

ITB Clause

5.2 For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be:

a. **REHABILITATION OF TRANSMISSION AND DISTRIBUTION LINES**

7.1 Subcontracting is not allowed.

10.4 The key personnel must meet the required minimum years of experience set below:

Key Personnel	General Experience	Relevant Experience*
Project Engineer	5	5
Safety Officer	5	5
Foreman	5	5
Welder	5	5
Pipe Fitter	5	5

*Relevant experience in Rehabilitation of Transmission and Distribution Lines Projects.

10.5 The minimum major equipment requirements are the following:

Equipment	Min. Capacity	Number of Units
Welding Machine		1
Concrete Mixer	1 bagger	1
Concrete Cutter		1
Power Generator capable for welding machine	500mm max	1

15.1 The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts:

a. The amount of not less than **Php122,414.76***,* if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit;

b. The amount of not less than **Php306,036.90,** if bid security is in Surety Bond.

19.2 Partial bids are not allowed for this Project

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**.

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 whole of the Project Works Intended Completion Date is **ONE HUNDRED TWENTY (120) CALENDAR DAYS** from the Notice to Proceed (NTP).
7.2	Warranty Period: **Five (5) years**.
10	No dayworks are applicable to the contract.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative within **thirty (30) 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 **Php10, 000.00**.
13	The amount of the advance payment is **15% of the total contract price**.
14	Materials and equipment delivered on the site but not completely put in place shall be included for payment.
15.1	The date by which "as built" drawings are required is **thirty (30) calendar days upon completion of the project**.
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 **Php10, 000.00**.

SECTION VI. SPECIFICATIONS

I. SCOPE OF WORK

The work items included in the approved Program of Work are to furnish materials, labor, tools and equipment for the **SUPPLY, DELIVERY AND INSTALLATION OF VARIOUS MATERIALS AND FITTINGS FOR REHABILITATION AND EXPANSION OF TRANSMISSION AND DISTRIBUTION LINES AT BRGY. PASANDALAN, BRGY. POBLACION 3, BRGY. TIBPUAN AND BRGY. SALAMAN**. This project shall be completed within **ONE HUNDRED TWENTY (120) CALENDAR DAYS** from issuance of Notice to Proceed (NTP).

II. LWUA STANDARD SPECIFICATIONS

The revised LWUA Technical Standards Manual (2nd Edition) shall be part of the Technical Specifications.

Any conflict or discrepancies between herein Section VI – Technical Specifications of the Bidding Documents and the LWUA Technical Standards Manual (2nd Edition) herein Section VI – Technical Specifications shall govern over the LWUA Technical Standard.

III. MATERIAL AND WORKMANSHIP

1.0 GENERAL

All materials and workmanships shall comply with the specifications. Other standards superior to the enumerated in this specification shall be acceptable, subject to the approval of the Project Engineer, the authorized representative of LEWADI. The opinion of LEWADI Project Engineer must be obtained prior to utilizing such materials or workmanship on or off the site.

2.0 PREPARATION OF SITE

The location of the Site is as shown in the Drawings. The Contractor shall be deemed to have inspected the Site before tendering and to take into account all the conditions there, such as means of access, facilities for transport, storage and movement of materials, and any other contingencies liable to affect his tender price, as no claim for extra payment in this connection will be entertained.

The Contractor shall be liable for and shall indemnify the Procuring Entity against any damaged, expense, liability, loss, claim or proceedings whatsoever arising at common law or by statute in respect of personnel injury to or death of any person whomsoever or to any property arising out of or in the course of or by reason of the visit to the Site.

3.0 PLANS AND SPECIFICATION

The pipelaying components of this project shall be implemented in accordance with the established standards set by LWUA/LEWADI. While the backfilling, compaction, restoration and concreting works shall follow the Department of Public Works & Highways (DPWH) Standard Specifications for public works & highways following its Schedule of Minimum Test Requirements. All fees relative hereto shall be shouldered by the Contractor.

4.0 PERMITS

With the assistance of LEWADI, all necessary permits, clearances, and taxes due to the national or local government necessary for the implementation of the

project to include incidental expenses shall be processed, secured and paid for by the contractor who shall solely responsible in case of delays.

5.0 RIGHT-OF-WAYS

With the assistance of LEWADI, the Contractor shall coordinate with the DPWH, the concerned LGU who has jurisdiction in clearing the right of way and the Landowners. Any fees related hereto shall be shouldered by the Contractor.

6.0 PROTECTION OF PROPERTY

The Contractor shall be liable for all damages that may incurred during the construction of the project. Leakages on the existing pipelines of the District shall be immediately reported to the LEWADI for repair, if it is the Contractor that caused such leakage, materials and cost of repair therefore shall be made chargeable against and in no case shall it be a reason for stoppage of work. It shall be the responsibility of the Contractor to complete the project amidst any impediments that will arise during the implementation phase. Only force majeure shall be sufficient reason for time extension.

Any accident or mishap that may happen during project implementation shall be the sole responsibility of the Contractor.

7.0 BARRICADES AND WARNING DEVICE

It is mandatory upon the Contractor to provide reflectorized signage, barricades, and early warning devices enclosing the area where work is on-going. LEWADI Project Engineer has the right to order the stoppage of work by reason of insufficiency of these devices or non-compliance thereof while the period to complete the project shall continue to run.

8.0 CLEARING OF ROUTE IN ROAD

Route of the proposed pipeline in road is shown in the plans. Clearing of said route shall be the responsibility of the Contractor including the settlement of claims and complaints by the affected public.

9.0 MATERIALS TESTING

It is a matter of requirement that the contracting company must have its own materials engineer, who shall be at the premises of the principal office of the contracting company during inspection. Appropriate licenses and documents shall be readily available. The costs of all tests shall be borne by the Contractor. The Contractor must present to the LEWADI Project Engineer the material's test results as provided for sub-base, base course and surface course of the Schedule of the Minimum Test Requirements Governing Items of Work of the DPWH Standard Specification.

The Contractor cannot proceed with the next work item unless he can present that the materials indeed passed the testing requirements, in which case, the LEWADI Project Engineer has the right to demand from the Contractor.

10.0 INSPECTION AND TESTING

All pipes and fittings shall be subjected to inspection by the LEWADI Project Engineer/Representative and the Contractor prior to installation.

IV. EARTHWORKS

1.0 GENERAL

The Contractor shall perform all earthworks required and shown on the drawings.

2.0 EXCAVATION

a. General

Except when specifically provided to the contrary, excavation shall include the removal of materials of whatever nature encountered, that would interfere with the proper execution and completion of the work. Except for obstructions from other utilities, the Contractor shall take extra care as to prevent damages. The Contractor shall take full responsibility as to whatever damage it may encounter. The removal of said materials shall conformed to the lines and grades shown or ordered. Unless otherwise provided, the entire construction site shall be stripped of all vegetation and debris, and such materials shall be removed from the site prior to performing any excavation or placing any fill. The Contractor shall secure permits and clearances from Department of Environment and Natural Resources (DENR) concerning the cutting of tress if needed and shall provide the materials and equipment required. The Contractor shall furnish, place and maintain all supports and shoring that may be required for the sides of the excavations, and all pumping, ditching or other approved measures for the removal or exclusion of water, including taking care of storm water and waste water reaching the site of the work from any source. The walls and faces of all excavations in which workers are exposed to dangers from unstable ground shall be guarded against by a shoring system, sloping of the excavation, or some other acceptable method. The Contractor shall furnish, install and maintain such sheeting, bracing, etc., as may be necessary to protect the workers and to prevent any movement of earth which could injure or delay the work or endanger adjacent structures.

3.0 BACKFILL

All materials used for backfill shall be new and selected materials, free from grass, roots, brush, or other vegetation, or rocks.

V. SURFACE RESTORATION

1.0 GENERAL

The Contractor shall furnish all materials, labor, plant, and equipment for the removal of pavement, property, and surface structures that are necessary for the proper prosecution of the work, but only upon approval of the parties having jurisdiction thereof and of the LEWADI Project Engineer. Unless otherwise shown, the Contractor shall restore at his own expense all property removed or destroyed by its operation at least equal to conditions prior to work under this Contract or to the satisfaction of the property owner.

VI. CONCRETE WORKS

1.0 CONCRETE

Cast in place concrete required for this work is indicated on the drawings. All concrete mix to be used shall be of class “A” concrete mix except otherwise as specified. Use 4000 psi ready concrete mixture for foundation, wall, slab and concrete pavement as indicated in the plan. Concrete shall be consolidated by hand-spading and tamping or as instructed by LEWADI Project Engineer. The Contractor shall ensure all places for concreting shall be free from debris. Any concrete pouring will be performed with the prior advisory to the LEWADI Project Engineer.

2.0 REINFORCING BARS

All reinforcing steel bars used shall be A615 Grade 60, new and free from rust, oil, defects and greases or other materials which tend to destroy bond between the concrete and the reinforcement shall be removed before placing the steel and before concreting begins, In slabs splices of reinforcement at points of maximum stress shall be generally avoided and may allowed only upon written approval of splice details by the LEWADI Project Engineer. Splices shall provide sufficient lap to transfer stress between bars by bonding shear. Splices in adjacent bars shall be generally staggered. All splices shall be in accordance with the requirements indicated on the plan. Concrete must not be poured until the reinforcements have been inspected by the LEWADI Project Engineer.

VII. PIPING WORKS

1.0 SCOPE OF WORK

a) The Contractor shall furnish and install pipes, fittings, closure pieces, supports, bolts, nuts, gaskets, jointing materials, and appurtenances as shown and specified in the plans, and as required for a completed and workable piping system. Shop drawings of all piping shall be furnished in accordance with Clause VIII – Shop Drawings and Catalog Data.

b) All exposed piping shall be adequately supported with devices of appropriate design. Where details are shown, the supports shall conform thereto and shall be placed as indicated. Provided that support for all piping shall be complete and adequate regardless of whether or not supporting devices are specifically shown.

c) All pipes shall be laid in a uniform profile as shown on the drawings.

2.0 PRESSURE AND LEAKAGE TESTING

a) Inspection before testing - Pipe section must be partially backfill 0.45 m over pipe, to secure from movement, leaving only the joints open for usual visual inspections. All pipe ends must be copped and restrained to prevent movement. Make provisions to relieve trapped air from high points and pipe ends.

b) Visual inspection of leakages - Prior to any testing, the pipe section must be cleaned by flushing with a minimum flushing velocity of 0.80 m/s(2.5 feet per second).
- After filling apply a slight pressure of at least 20 psi and allow 48 hours
for the line to settle and stabilize during the 48-hr period visually examine all exposed pipe joints, couplings, valves and fittings for possible leaks. Also during

this period examine all thrust blocks especially at test ends for excessive movements duo to trust forces which developed.

c) Pressure and leakage testing/inspection - Refer to the applicable specification all procedures as given or follow the specifications below.

"As per LWUA standards, the test shall consist of holding test pressure on each section of the line for a period of two (2) hours. The test pressure at the lowest point shall be 1.0 MPa (150 Psi) according to the class of pipe installed. Pressure recorder of pressure logger shall also be provided at all ends of the section tested. The water necessary to maintain the pressure shall be measured using a meter or any other satisfactory means. The leakage shall be considered the amount of water entering the pipeline during the two (2) hr. test period"

Formula: AL (Allowable leakage) = 1.85 liters /mm (dia.) per [Length in km (day)]

"For all other types of pipes except cast iron or ductile pipe, the allowable leakage should not exceed 1.85 liters/mm of pipe diameter/km/24hrs".

"Must ensure that all newly installed closure pipes shall be tested and pass the leak test by subjecting the joints (of Closure pipes) to a pressure of 50 psi for the period of five minutes and visually checking for leakages".

Leakage Testing for Steel Pipes

Leakage test shall be conducted to at least 150m – 300m length. Welded joint shall not be covered during leak test.

3.0 FLUSHING AND DISINFECTION

a) Conduct flushing to make sure that the water main is clean before starting disinfection to remove any foreign materials that may interfere with the disinfection activity.

b) Flushing Should be done through a hydrant or blow-off.

c) Minimum flushing velocity is 0.8 r/s (2.5 &s) to attain proper flushing action, Take a record and include in the report on how much water must be used to flush different pipe sizes at residual pressure of28 m (40 psi).

d) Introduce Chlorine Solution. Determine pipeline capacity to determine amount of chlorine needed.

e) A chlorine solution of not more than fifty milligrams per liter (50 mg/l) is pumped at the beginning of a valve section of pipeline until full. Determine chlorine solution with the aid of "Chlorine Residual Test Kit."

f) The preferred application point is usually at one end of the pipe section through a stop inserted on top of the laid pipe.

g) The high points of pipe section be being disinfected should be properly vented.

h) At the opposite end of the pipe section, a Blow-off valve should be provided to bleed or drain water during the injection process.

4.0 RETENTION PERIOD OF CHLORINE SOLUTION

a) The average retention or contact period for 50 mg/liter Chlorine solution is 24 hours.

b) All pipeline valves and appurtenances should be operated to ensure that they are also disinfected.

c) During the 24-hour contact period, chlorinated water should not be allowed to flow into the potable water distribution system.

d) After a contact period of 24 hours, samples should be taken along the entire length of the pipe line and tested for chlorine residual. Residual chlorine shall not be less than 25 mg/L; otherwise, the treatment procedure shall be repeated until satisfactory results are obtained.

e) Never discharge highly chlorinated water to the surrounding area to avoid possible damage to properties and persons.

5.0 DRAINING AND FINAL FLUSHING

a) Drain the Chlorine solution through the blow-off valve into a storm-sewer line.

b) Use clean water to flush the disinfected pipeline.

c) After flushing, the residual chlorine should be between 0.30 to 1.50 mg/L

6.0 INTERCONNECTION

a) No interconnection shall be done without the approval of the LEWADI Engineer, an interconnection permit shall be secured first.

b) Prepare all the necessary materials, fitting, tools, equipment, barricades, warning devices, etc.

c) Inspect the valves and fittings for conformance to shop drawings and materials.

d) Contractor must notify LEWADI or the affected consumers in the area for low water supply or possible interruption of water supply.

e) Isolate the sections of the mainline by closing the nearest isolating valves if applicable

f) Open a hydrants /blow-off valves or tap to relieve line pressure.

g) Cut the interconnection portion of the pipe line. It is best to use pipe cutter, to assure uniformity of cut, but a conventional wood saw or hacksaw will suffice for HDPE pipes, for CLCCSP – Steel pipes the appropriate tools and equipment must be used.

h) Dewater the excavation.

i) Maneuver the fittings into the proper position after making sure that the pipe ends are properly cut.

j) Always check the alignment of all valves and fittings involved.

k) Make sure that the rubber gaskets are not damaged for steel pipes alignment is important, clean and free from dust and other foreign materials.

l) Nut tightening should follow a definite sequence. One "round and round" and the other is "crisscross". Either should be satisfactory.

m) Inspect pipe flange for warping. lf bolts are tightened against a warped flange, there is a danger of cracking the cast iron valve flange.

n) After all valves and flanges are joined and interconnected, subject it for a low pressure to check for leakage. Increase the pressure gradually.

o) If there are leaks at any joints, cut the supply of water and repair it immediately.

p) Provide concrete trust blocks and anchors to prevent movement of fittings.

q) Let the concrete mixture dry and prepare the area for backfilling.

7.0 WARNING TAPE

a) Material

The Contractor shall be furnished for each pipe above or equal to 75 mm an Alu-foil tape (minimum width is 4 cm) with the mention “Attention Water Main.”

b) Installation

The warning tape shall be laid into the trench between two backfill layers at 30 cm above the pipe.

8.0 THRUST BLOCK, ANCHOR AND CONCRETE ENCASEMENTS

Pipe thrust blocks shall be installed located on strategic locations in the pipe system as shown on plans and instructed by the LEWADI Project Engineer.

Pipe Trust Blocks - is a mass of concrete poured in place between the pipe fittings and undisturbed soil at the bottom or side of the pipe trench.

Pipe Thrust Anchors - is a mass of concrete with embedded steel strap rods to resist upward thrusts induced by pressure on pipes or fittings.

Concrete Encasement - is a mass of concrete with embedded steel strap rods to protect HDPE pipe from external trust and resist upward thrusts induced by external pressure or force.

9.0 INSTALLATION FOR THRUST BLOCKS, ANCHORS AND CONCRETE ENCASEMENT SHALL CONFORM TO THE STANDARD SET BY LWUA

a) Non-structural concrete (2,000 psi) should be placed between the fitting and the undisturbed bearing soil.

b) The concrete should be kept behind the bell of the fitting it should not be allowed to run over against the pipe or into the joint.
c) The concrete should fill in completely around the fitting. The pipe or fitting should not be encased, as there should be allowance for slight movement due to temperature changes and pressure.

d) Thrust block are not needed at the welded flanged joints of steel pipes.

e) For concrete encasement the entire length of the pipe including the bell is permitted to be poured over by concrete with steel reinforcement as reflected in the detailed drawing.

VIII. PIPES, FITTINGS AND SERVICE CONNECTION

I. WATER METER

a) TECHNICAL SPECIFICATIONS

1. Metrological Class: ISO 4064 Class B or its equivalent to latest edition

2. Nominal Diameter: Body Marking: ½" (15mm)

3. Meter Type: Multi-Jet, Magnetic Drive, Dry Type; M type dial

4. Meter Body: - Copper alloy containing not less than 75% copper or a Copper Alloy containing not less than 57% copper but with anti-corrosion treatment. Shall submit 2021 Certification from DOST-MIRDC material testing laboratory during the Bid Opening but required to submit the 2021 Certification during the Post-Qualification evaluation.

5. Register: - Hermetically vacuum sealed. - Magnetically driven sealed register for fraud protection. - Hermetically sealed encapsulated stainless-steel capsule/dome type - Clear glass lens tempered high impact lens and abrasion resistant. - Meter register in Cubic Meters with a minimum of five (5) digits. - Straight Reading - Meter capacity should be placed preceded by the letter "N" or "Qn"

6. Dimensions: - Water Meter ½" (15mm) - Length without tailpiece = 165mm to 190mm, Height = 102mm – 120mm, Width = 95mm – 106mm, Weight (Kgs) 1.5Kgs. evaluation, post qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.] 28 (For verification during bidding and upon delivery)

7. Working Conditions:
   a. Working Pressure: 145 to 150 psi max
   b. Maximum Working Temp. 50^{O}C

8. Metrological Characteristics: a. Maximum Flowrate (Qmax) = 3.0m^3/h allowance error in accuracy ± 2% b. Nominal Flowrate (Qn) = 1.5m^3/h allowance error in accuracy ± 2% c. Transitional Flowrate (Qt) = 120 l/h allowance error in accuracy ± 2% d. Minimum Flowrate (Qmin) = 30 l/hr allowance error in accuracy ± 5% (For testing and verification during bidding process and upon delivery at authorized accredited testing laboratory)

9. Strainer Screen: Strainer screen or with filter installed to the INLET part Strainer 17

10. Meter Seal: Sealed (Plastic)

11. Meter Body Markings and Logo: a. Flow direction by arrow b. Meter Size – (ND Marking is 15mm ND (1/2") c. SN will appear on the external top surface of the register covered and should be permanent. d. LEWADI Logo shall be printed on the internal top surface of the water meter.

12. Meter /Serial Number (SN) -SN or Meter Number shall be unique or no duplication in every meter -SN or Meter Number shall be engraved (laser) in Big, Bold and Block Type Font with a font height 6mm – 10mm (For verification upon delivery). See enclosed picture for reference. -SN or Meter Number will appear on the external top surface of the register cover ring and should be permanent.

    "SN for ½": LEWADI Year-0101 to LEWADI Year-0400"

13. Painting -Automotive finished, epoxy coated or electro statistically coated BLUE color

14. Catalog -include product catalog/literature/brochures

15. Testing Standards -Random test of the water meter shall be done at Philippine Government accredited laboratory to be witnessed by LEWADI Representatives at 100% of the quantity purchased.

    a. Flow rates to be tested shall be followed and determined (PASSED or FAILED) in accordance with meter performance.
    b. A pressure test shall not be less than 145 – 150 psi

16. Warranty - All water meter shall be guaranteed against defects in workmanship and materials for a period of one and a half (1 ½) year from the date of acceptance. Discovered defective meters shall be replaced, with result of each calibration, within thirty (30) calendar days without charge upon return to the manufacturer/supplier. Note: - The obligation of the warranty shall be covered by at the Supplier's option, either retention money in an amount equivalent to at least five percent (5%), or a special bank guarantee equivalent to at least five percent (5%) of the Contract Price. The said amount shall only be released after the lapsed of the warranty period.

17. Packaging: Water Meter Packaging for 15mm

b) SPECIFICATIONS FOR PACKAGING

1. Corrugated Fiber Box
2. Single Wall 3 Ply (Double Face) / C Flute (4.00-4.7mm)
3. 200# / 32 ECT (Edge Crush Test) Grade for standard stacking performance
4. Dimension: 7" x 4.5" x 4" (LxWxH)
5. Color: Kraft

Box – Each box shall contain 10 pieces of Water Meters and indicate the correct series of serial numbers with its control number below.
Example: "SN for ½": LEWADI Year-0101 to LEWADI Year-0400" Box No. 1

II. **UNPLASTICIZED POLYVINYL CHLORIDE (uPVC)**

a) GENERAL

1. This standard covers the requirements of Unplasticized Polyvinyl Chloride (uPVC) Pipes with PNS classification as Series 7 and Series 8, with sizes ranging from Ø63 mm through Ø450 mm, intended for use

in the transportation of potable water under pressure and of temperature up to 45°C.

2. The manufacturer, distributor, importer, retailers and pipe product, shall comply with the mandatory requirements of PNS 65 (Philippine National Standard for Unplasticized Polyvinyl Chloride Pipes for Potable Water Supply), latest edition.

3. The manufacturing plant shall be an ISO 9001-2000 certified plant in accordance with the international standards.

4. The manufacturer must have a product certificate of all pipe sizes to be bid certified by the testing institute duly accredited by the Bureau of Product Standards (BPS).

5. Importers of said products shall secure an Import Commodity Clearance (ICC) from the BPS as a pre-requisite of import shipments to be released by the Bureau of Custom (BOC).

b) MATERIALS

1. PVC pipe shall be made from class 12454 – A or class 12454 – B virgin compounds as defined in ASTM D 1784 or materials which conforms to PNS 291. All compounds shall qualify for a rating of 150 psi (1.03 mPa) for water at 28°C and as per requirements of PNS 65, latest edition.

2. No rework and/or recycled materials shall be used in the manufacture of uPVC pipes to be supplied for LEWADI under this standard.

3. The PVC compounds used to make pipes shall contain no ingredient in an amount that has been demonstrated to migrate into water in quantities considered to be toxic, organoleptic or microbial growth hazard or to impair the fabrication or welding properties or the product or to impair the chemical, mechanical and physical properties. The pipe shall not give rise to unpleasant taste or odor, cloudiness or discoloration of water.

4. Concentration of substances, chemicals and biological agents leached from materials in contact with potable water and measurements of the relevant organoleptic/physical parameters shall not exceed the maximum values recommended by the World Health Organization in its publication “Guidelines for drinking water quality” Vol. 1 “Recommendations” (WHO, Geneva, 1984).

5. The PVC compound or products shall be tested for chemical extractants and certified as suitable for potable water distribution service by an accredited testing agency acceptable to LEWADI.

c) PIPE REQUIREMENTS

1. Workmanship

Pipe shall be homogenous throughout; free from voids, cracks, inclusions, and other defects; and as uniform as commercially practical in blue color (which nearest to RAL 5012), density and other physical properties. Pipe surfaces shall be free from nicks and scratches. The joining surfaces of pipe spigots of integral –bell and sleeve re-inforced bell sockets shall be free from gauges and other imperfections that might cause leakage at

joints. Excessive die lines and/or stress marks (particularly in the socket and bell groove) as well as discernible material marbling are not allowed. The end of the pipe shall be cleanly out and square to the axis of the pipe.

2. Dimensions

The pipes shall be furnished in standard laying lengths of 6 meters (± 25 mm tolerance), unless otherwise agreed on at time of purchase. The dimensions and tolerance of the pipe barrel shall conform to the requirements listed in Table 1 when measured as specified in PNS 65. Table 1. Dimensions for Series 7 & Series 8 uPVC Pressure Pipes

Table 1. Dimensions for Series 7 & Series 8 uPVC Pressure Pipes

Nominal Outside Diameter		Tolerance		Minimum Socket	Effective	Socket Diameter		WALL THICKNESS , (mm)							
								PNS 65 : 1993						ISO 4422	
		O.D.	OVALITY	Depth	Length	min	max	Series 10/Class 100		Series 8/Class 150		Series 7		Series 8 ISO	
(inch)	(mm)	(mm)	(mm)	(mm)	(m)	(mm)	(mm)	(min)	(max)	(min)	(max)	(min)	(max)	(min)	(max)
2	63	0.30	± 0.80	97	6.00	63.88	64.10	3	3.5	3.60	4.16	4.30	4.93	3.80	4.40
2-1/2	75	0.30	± 0.95	101	6.00			3.6	4.16	4.30	4.93	5.10	5.81	4.50	5.20
3	90	0.30	± 1.10	107	6.00	91.10	91.40	4.4	5.04	5.20	5.92	6.20	7.02	5.40	6.20
4	110	0.40	± 1.40	114	6.00	111.40	111.80	5.3	6.03	6.30	7.13	7.50	8.45	6.60	7.60
6	160	0.50	± 1.70	131	6.00	162.00	162.50	7.7	8.67	9.20	10.32	1.10	12.30	9.50	10.90
8	225	0.70	± 2.70	154	6.00	227.70	228.40	10.8	12.08	12.90	14.39	15.40	17.14	13.40	15.40
10	280	0.90	± 3.00	173	6.00	283.00	283.90	13.5	15.05	16.00	17.80	19.20	21.32	16.60	19.10
12	315	1.00	± 3.80	195	6.00	328.80	329.80	15.2	16.92	18.00	20.00	21.60	23.96	18.70	21.60
14	355	1.10	± 4.30	207	6.00	359.30	360.40	17.1	19.01	20.30	22.53	24.30	26.93	21.10	24.30
16	400	1.20	± 4.80	-	6.00	404.80	406.00	-	-	-	-	-	-	-	-
18	450	1.40	± 5.40	-	6.00	455.40	456.80	-	-	-	-	-	-	-	-

3. Quality Assurance

- Resistance to Acetone and Sulfuric Acid. When determined with ISO 3472, The pipe shall not show signs of delamination or disintegration when immersed in acetone. Flattening and/or swelling of the pipe shall not be deemed to constitute failure when tested in accordance with ISO 3472. When immersed with sulfuric acid, the mass of the specimen shall not increase by more than 0.316 g nor decrease by more than 0.013 g when tested in accordance with PNS 979. The effect of the acid on the surface appearance of the specimen (roughening, bleaching or blackening) shall be ignored).

- Sustained Pressure. The pipe shall not fail, balloon, burst, or weep, as defined in ASTM D 1598 at 500 psi (3.45 mPa) sustained pressure based on the fiber stress of 4,200 psi (28.96 mPa) at 23°C with duration of 1,000 hours as specified in ASTM D 2241.

- Hydrostatic Pressure. The pipe shall conform to the applied pressure at 28°C for the hydrostatic pressure test for Series 8 pressure pipes when tested in accordance with PNS 65 should be the following: a. Short Term Pressure. The pipe shall withstand the applied pressure in accordance to PNS 65 for at least one hour without failure. The value for induced stress used in calculating pressure requirement is 35.7 mPa at 28°C. b. Long Term Pressure. The pipe shall withstand the applied pressure in accordance to PNS 65 for at least 1,000 hours. The value for induced stress used in calculating pressure requirement is 24.6 mPa

at 28°C. c. Burst Pressure. The pipe shall withstand the applied pressure in accordance to PNS 65 for at least 60 seconds. The value for induced stress used in calculating pressure requirement is 37.5 mPa at 28°C

- Flattening. The pipe shall be no evidence of splitting, cracking and breaking when flattened to a minimum of 40% its outside diameter when tested in accordance with ASTM D 2241 and PNS 800.

- Resistance to External Blows. The true impact rate of the batch at 28°C shall not exceed 10% when tested in accordance with ISO 3127. The true impact rate is the total number of broken test pieces divided by the total number of blows expressed as percentage as if the whole batch had been tested. In practice, test pieces are drawn at random from the batch and the only estimate of the true impact rates are obtained.

- Longitudinal Reversion. When tested in accordance to ISO 2505-1&2, the longitudinal reversion shall not be greater than 5%.

- Gasket and Lubricants. Gasket and lubricants intended for use with PVC pipe shall be made from materials that are compatible with the plastic material and with each other when used together. The material shall not support the growth of bacteria nor adversely affect the potable quality of the water to be transported. One gasket shall be furnished with each length of elastomeric-gasket bell-end pipe and two gaskets shall be furnished with each elastomeric-gasket for double socket pipe. Elastomeric gaskets shall be manufactured to conform to the requirements of PNS 1008.

d) SAMPLING AND TESTING

The pipes shall be sampled and tested in accordance with the requirements and methods prescribed in PNS 65 and this Standard.

e) MARKINGS

1. All third-party certification known as the PS quality and Safety certification mark shall be obtained from the Bureau of Product Standards (BPS) by all manufacturer of said products.

2. The pipe shall be clearly marked with the following information spaced at intervals of not more than one meter.

    a. Name of the Product
    b. Nominal outside diameter, mm
    c. Series and Nominal pressure in mPa
    d. Manufacturer’s name and/or its recognized trademark and production record code.
    e. Date and place manufactured
    f. The words “For Potable Water”
    g. Seal, or mark, of the testing agency, that certified the compliance of the pipe in accordance with PNS 65 and the suitability of the pipe material for potable water products.

f) PLANT INSPECTION BY LEWADI REPRESENTATIVE

1. Production Notice
   When plant inspection is specified, the manufacturer shall provide the purchaser with adequate advance notice of when and where production of ordered materials will start.

2. Plant Access

   The LEWADI representative or inspector shall have free access to those part of a manufacturer's plant that are necessary to assure that products comply with all requirements. The manufacturer shall make available for the inspector's use, without charge, such tools and assistance that are necessary for inspection and handling of materials.

g) PRODUCT WARRANTY

The manufacturer/dealer shall guarantee the purchaser that the uPVC Pipes furnished are new and of current manufacture, free from defects in materials, design and workmanship and shall work best within a minimum period of one (1) year starting from the date of acceptance of the products by the purchaser. During the warranty period, if the uPVC pipes furnished are found to be defective due to materials, design and workmanship under normal condition, operation and use, the manufacturer/dealer at his own option shall either replace or repair the defective product/s to its original condition. A certificate of Warranty is required to this effect.

h) AFFIDAVIT OF COMPLIANCE

The manufacturer shall furnish the purchaser with an affidavit stating that the uPVC Pressure Pipes and all materials used in its construction conform to all applicable requirements of this standard and the purchaser's specifications and that all test specified herein have been performed and all test requirements have been met.

III. VALVES

A) GENERAL

- All valves shall be new.

- Flanged valves may be plain faced with serrated gasket surface or raised. Flanged of valves for water working pressure of 1.2 MPa (175 psi) or less shall be faced and drilled to 125-lb American Standard dimensions; flanges of valves for water working pressures greater than 1.2 MPa (175 psi) shall be faced and drilled to 250-lb American Standard dimensions.

- Each valve body shall be tested under a test pressure equal to twice (350 psi) its design water working pressure.

- All valves shall be provided with an exterior protective coating.

- Operating nut shall turn counter-clockwise to open.

B) GATE VALVES

- All gate valves 50mm (2 in.) through 300mm (12 in) shall conform with the "Standard for Resilient Seated Gate Valves". Gate Valves where the pipeline design pressure is 1.0 Mpa (150 psi) & shall be cast iron bodied, with resilient seats applied to the body or gate. Discs shall be cast iron with

bronze disc rings, and the seat ring shall be bronze and replaceable. The valve shall be non-rising stem with minimum of two “O” ring seals (at least one above the stem collar), or rising stem when shown on the Drawings. The valves shall have a 50mm (2 ins.) square operating nut with a cast arrow showing direction in which the nut is to be turned to open the valve. Valves shall be constructed to permit the replacement of the “0” rings above the stem collar under full working water pressure with the valves in the full open position.

- TESTING REQUIREMENTS

  Operation Test – Each valve shall be operated in the position for which it was designed to ensure free and perfect functioning of all parts in the intended manner. Any defects of workmanship shall be corrected and the test repeated until satisfactory performance is demonstrated.

  Shell Test – A hydrostatic test pressure equal to twice the rated working pressure of the valve shall be applied to the body with the gate in the open position. The test shall show no leakage through the metal, flanged joints, or stem seals.

  Seal Test – A test shall be made at rated working pressure to prove the sealing ability of each valve from both directions of flow. The test shall show no leakage through the metal, pressure-containing joints, or past the seat.

  Hydrostatic Test – One prototype valve of each size and class of a manufacturer’s design shall be hydrostatically tested with twice the specified rated pressure on the other side. The test is to be made in each direction across the gate. Under this hydrostatic test, the manufacturer may make special provisions to prevent leakage past the seats. No part of the valve or gate shall be permanently deformed by the test.

  Torque Test – A prototype of each size should be over torqued in the closed and open positions to demonstrate no distortion of the valve stem or damage to the resilient seat as evidenced by failure to seal at rated pressure. The applied torque shall be 250 ft-lb for 3 and 4 NRS valves, and 350 ft-lb for 6, 8, 10, and 12 NRS valves (1.0 ft-lb = 0.736 Newton-metre = 0.66 kg-m).

  Leakage Test – Two prototype valve of each size chosen by the LEWADI quality control inspector to represent the extremes of seat compression shall be fully opened and closed to a seal for 500 completed cycles with sufficient flow that the valve is at 200 psi pressure differential at the point of opening and closing. The valves shall be top tight under rated pressure differential applied alternately to each side of the gate after completion of the tests.

  Pressure Test – One prototype of each valve size shall be tested to 500 psi with the closure member in the open position. There shall be no rupture or cracking of the valve body, valve bonnet, or seal plate. Leakage at pressure-containing joints shall not be a cause for failure of the tests.

a) MATERIALS

Body and Bonnet:	Ductile Iron, GGG-50 to DIN 1693
Coating:	Electrostatically applied epoxy resin to DIN 30677 – Internally and externally

Stem:	Stainless steel, DIN x 20 Cr 13
Stem sealing:	NBR wiper ring, 2 NBR O-rings inside and 2 outside a plastic bearing EPDM rubber manchette
Wedge:	Ductile iron, GGG-50, core fully encapsulated with EDPM rubber with integral wedge nut of dezincification resistant brass, CZ 132 to BS 2874
Thrust Collar:	Dezincification resistant brass, CZ 132 to BS 2872
Bonnet Bolts:	Stainless steel A2, sealed with hot melt
Bonnet Gasket:	EPDM rubber

b) TECHNICAL SPECIFICATIONS

- Ductile Iron Body
- Bonnet Gland Flange and Wrench Nut
- Electro-statically applied fusion bonded, epoxy resin coating
- Epoxy is applied automatic fluid system. Quality standard is DIN 30677
- Epoxy coating thickness to DIN 30677 minimum 250 to 300 microns on all pressure bearing parts
- Stainless stem (cold rolled threaded)
- Wedge: Ductile Iron fully encapsulated with EPDM-rubber compound wedge
- Wedge Nut is made of dezincification resistant brass with lubricating ability
- Stainless Steel 304 Sealed with Hot Melt Bonnet Bolts
- Stainless Steel 304 Hexagon Gland Bolts
- ASTM D2000 BUNA “N” Nitrile Rubber Gasket / Bonnet Gasket
- Wiper O-Ring Stem Seals
- Four (4) O-ring Gland Seal with Polyamid Bearing for Smooth Operation and Low Torque
- Resilient Seated
- Two (2) Components Only (Body and Bonnet)
- Working Pressure is 250.

C) CHECK VALVES

Check valves 100 mm (4 ins) and larger shall have flanged connections and be of the swing type with outside lever and weight. The valve shall be designed for a minimum water working pressure of 1.0 MPs (150 psi), and shall have 125-lb American Standard Flanges. Valve bodies hall be cast iron or steel. The valves shall have bronze gate rings and seat rings and type 18-8 stainless steel hinge pins. The check valves shall be designed so that disc and body seat may be easily removed without removing valve from the line.

D) AIR RELEASE VALVES

Air release valves up to and including 75 mm (3 in.) in diameter shall have threaded connections, except where otherwise shown on the drawings, and shall be designed for a water working pressure of 1.0 MPa (150 psi). The body shall be of high strength cast iron and the float shall be of stainless steel316. All internal parts, except the seat, shall be of stainless steel 316 or bronze. The seat shall be of material insuring water tightness with a minimum of maintenance. The valve shall be designed to automatically permit the escape of accumulated air under pressure

while the pipe is in operation. The valves shall be either direct or lever operating. Air Release Valves shall be made of brass base

E) FITTINGS

SHORT BODY DUCTILE IRON FITTINGS

Short body ductile iron fittings shall conform with the requirements of the "American Standard for Ductile-Iron Fittings, 2 in. through 48 in., for Water and Other Liquids or "Ductile Iron Pipes, Special Castings and Cast-Iron Parts for Pressure Main Lines", ISO R13. Fittings shall have a wall thickness of not less than that of the pipe with which they are used and the ends shall have inside diameters suitable for making a watertight joint with the ductile iron pipe furnished.
Preferably, all DI fittings shall have exterior metallic zinc & bitumen coating, and interior epoxy lining (400microns or thicker). All fittings shall be subject to inspection at the place of manufacturer and place of coating and lining application, and shall be laboratory tested in accordance with the requirements of ISO 2531 (or higher), to be witnessed by LEWADI representatives and the Supplier.

F) GALVANISED IRON

a) GENERAL

This standard specifies requirements for the heavy gauge, black and galvanized (hot dipped zinc-coated) iron fittings with sizes ranging from Ø15mm through Ø200mm for ordinary use in water service and supply lines. G.I. fittings under this standard shall conform to the requirements of PNS 26 (Philippine National Standard for Steel-Black and Hot-dipped Zinc-Coated Longitudinally Welded Steel Pipes), latest edition.

b) MATERIALS

The fittings shall be made from low carbon steel strips conforming to the requirements of PNS 33, latest edition. The fittings shall be made by the electric resistance welding or furnace-butt-welding process. For the threaded fitting, both ends shall be provided with taper threads, and a socket shall be screwed into one of the threaded ends. Both the fitting and socket shall be galvanized before threading. It shall be coated with zinc both inside and outside by the hot-dip process in accordance with ASTMA-120.

c) FITTING REQUIREMENTS

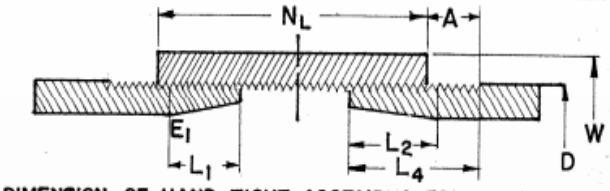
- Workmanship. The fitting shall be straight and both ends of the fitting shall be at right angle to the axis of the fitting. The inside and outside surfaces of the fitting shall be free from grooves, cracks, pinholes and other defects.

- Zinc Coating. The fitting shall be zinc coated (galvanized) in a hot-dipped process in accordance with ASTM A120. The mass of zinc coating shall not be less than 550 g/m2 of the total coated surface, as determined by the average results of the two specimens taken for test and not less than 490 g/m2 for either of the specimens.

- Threads. The fitting shall be threaded in accordance with Table 2. Each length of threaded fitting shall be provided with one coupling of which thread shall be in accordance with Table 1.

Table 1. Thread requirements on fitting and coupling

PIPE		THREADS					COUPLING		
NPS Designa-tor	Outside Diameter, mm	Number of Threads per 25.4 mm	End of Pipe to Hand Tight Plane, mm	Effective Length, mm	Total Length, mm	Pitch Dia. at Hand Tight Plane, mm	Outside Diameter mm	Length mm	Hand Tight Stand-off (No. of Threads)
			L_1	L_2	L_4	E_1	W	N_L	
15	21.3	14	8.1	13.6	19.9	19.8	27.0	39.7	5
20	26.7	14	8.6	13.9	20.2	25.1	33.4	41.3	5
25	33.4	11.5	10.2	17.3	25.0	31.5	40.0	50.8	5
32	42.2	11.5	10.7	18.0	25.6	40.2	48.3	52.4	5
40	48.3	11.5	10.7	18.4	26.0	46.3	55.9	52.4	5.5
50	60.3	11.5	11.1	19.2	26.9	58.1	69.9	54.0	5.5
65	73.0	8	17.3	28.9	39.9	70.2	82.6	79.4	5.5
80	88.9	8	19.5	30.5	41.5	86.1	101.6	82.6	5.5
100	114.3	8	21.4	33.0	44.0	111.4	127.0	88.9	5
125	141.3	8	23.8	35.7	46.7	138.4	159.9	95.3	5
150	168.3	8	24.3	38.4	49.4	165.3	187.7	101.6	6
200	219.1	8	27.0	43.5	54.5	215.9	244.5	133.4	2
250	273.0	8	30.7	48.9	59.9	269.8	298.5	146.1	2
300	323.8	8	34.5	54.0	65.0	320.5	355.6	155.6	2



DIMENSION OF HAND TIGHT ASSEMBLY FOR USED WITH TABLE

- Hydraulic. All fittings shall withstand to the hydraulic pressure required prior to zinc coating. The Hydraulic test shall be carried out using a hydrostatic tester with the standard values to be used as criteria for this test.

Nominal Fitting Size (mm)	Hydraulic Test Pressure	
	MPa	Meter Water Column (M.W.C.)
15 - 25	4.90	(500)
32 - 80	6.86	(700)
100 - 300	8.30	(850)

d) SAMPLING AND TESTING

Sampling and testing of the GI Fittings manufactured/purchased under this Standard shall be in accordance with the requirements and procedure prescribed in PNS 26 and this Standard.

e) MARKINGS

Each fitting shall be properly marked by rolling, stamping or stenciling to contain the following information:

a. Name or material of the product
b. Nominal pipe size, mm
c. Schedule number and/or Nominal pressure, Mpa
d. Manufacturer's name and/or its recognized trademark and production record code.

f) PRODUCT WARRANTY

The manufacturer/dealer shall guarantee the purchaser that the G.I. fittings furnished are new and of current manufacture, free from defects in materials, design, and workmanship, and shall work best within a minimum period of one (1) year starting from the date of acceptance of the products by the purchaser. During the warranty period, if the fittings furnished are found to be defective

due to materials, design, and workmanship under normal condition, operation and use, the manufacturer/dealer at his own option shall either replace or repair the defective product/s to its original condition. A Certificate of Warranty is required to this effect

g) AFFIDAVIT OF COMPLIANCE

The manufacturer shall furnish the purchaser with an affidavit stating that the fittings furnished conform to all applicable requirements of this standard and the purchaser's specifications, and that all test specified herein have been performed and all test requirements have been met.

IX. GENERAL CONDITIONS

What is not shown on the Plan but mentioned in this Specification and vice versa shall be considered as shown and specified. Indirect Cost shall cover all necessary labor, materials and equipment not considered or specified in the quotation form but is needed to complete the project as indicated in the plan and specifications.

X. AS BUILT DRAWINGS

Before the acceptance of the work, Contractor shall furnish at his own expense and submit to Lebak Water District Engineer as built drawings indicating in all details the actual construction or as built conditions of the work in this contract. As built plans shall be, Two (2) sets and the electronic -copy in CAD file.

SECTION VII. DRAWINGS

Item No.	Drawing Title	Sheet No.
1	PIPE TRENCH EXCAVATION DETAILS, PIPE CROSS SECTION DETAILS AND GENERAL NOTES	01/08
2	ACROSS THE ROAD DETAILS	02/08
3	BARANGAY PASANDALAN TO CARAVELL HOTEL PIPELINES	03/08
4	CARAVELL HOTEL TO BARANGAY TIBPUAN PIPELINES	04/08
5	CARAVELL HOTEL TO BARANGAY TIBPUAN VIA LEBAK ROAD NO. 5 PIPELINES	05/08
6	SUKELCO OFFICE TO BARANGAY SALAMAN PIPELINES	06/08
7	BLOW-OFF STANDARD TECHNICAL DETAILS	07/08
8	INTERCONNECTION DETAILS	08/08

SECTION VIII. BILL OF QUANTITIES

BILL OF QUANTITIES

WORK ITEM		QUANTITY / UNIT	UNIT PRICE (PhP) IN-PLACE COST	TOTAL PRICE (PhP)
I.	**GENERAL REQUIREMENTS**			
1.0	Temporary Facility	1 Ls		
1.1	Project Billboard / Signboard	1 unit		
1.2	Construction Safety and Health	1 Ls		
1.3	Mobilization / Demobilization	1 Ls		
II.	**PIPELINES**			
2.0	150mm⌀ uPVC Pipeline, Series 10	1,542 lm		
2.1	100mm⌀ uPVC Pipeline, Series 10	1,800 lm		
2.2	75mm⌀ uPVC Pipeline, Series 10	2,502 lm		
2.3	50mm⌀ uPVC Pipeline, Series 10	1,002 lm		
III.	**FITTINGS (CAST IRON)**			
3.0	Reducer Tee 150 x 150 x 100mm⌀	1 pc		
3.1	Reducer Tee 75 x 75 x 50mm⌀	1 pc		
3.2	Reducer Tee 150 x 100mm⌀	1 pc		
3.3	Reducer Tee 100 x 75mm⌀	1 pc		
3.4	45º Elbow 150mm⌀	2 pcs		
3.5	45º Elbow 75mm⌀	6 pcs		
3.6	90º Elbow 150mm⌀	3 pcs		
3.7	90º Elbow 100mm⌀	2 pcs		
3.8	End Cap 50mm⌀	3 pcs		
IV.	**BLOW OFFS, GATE VALVES, ETC.**			
4.1	Gate Valves Assembly			
	*On 150mm⌀ Distribution Line	2 sets		
	*On 100mm⌀ Distribution Line	4 sets		
	*On 75mm⌀ Distribution Line	2 sets		
4.2	Blow-Off Assembly			
	*On 100mm⌀ Distribution Line	1 set		
	*On 75mm⌀ Distribution Line	2 sets		
V.	**PAVEMENT DEMOLITION AND RESTORATION**			
5.0	Pavement Demolition and Restoration	1 ls		
VI.	**SERVICE CONNECTIONS**			
6.0	Brass Water Meter ½" Dry Dial Type, Class B Standard, ISO4064, Calibrated	300 sets		
6.1	Brass Ball Valve with Lockwing ½" (LW hole size:10mm)	300 pcs		
6.2	Brass Check Valve, Swing Type ½"	300 pcs		

6.3	GI Nipple ½” x 2”, Sched 40	300 pcs		
6.4	PE Compression Male Elbow ½”, PNS/ISO 4427	300 pcs		
6.5	Thread Seal Tape ½" x 10m	300 rolls		
VII.	**ADDITIONAL PIPELINES AND FITTINGS**			
7.0	DI Tee Reducer, 75 x 50mmø w/ BNGW	1 set		
7.1	DI Cross Tee, 150mmø w/ BNGW	4 sets		
7.2	DI Cross Tee, 100mmø w/ BNGW	1 set		
7.3	DI Tee, 150mmø w/ BNGW	1 set		
7.4	DI Tee, 100mmø w/ BNGW	2 sets		
7.5	DI Tee, 50mmø w/ BNGW	3 sets		
7.6	DI Reducer, 150mm x 100mmø w/ BNGW	4 sets		
7.7	DI Reducer, 100mm x 50mmø w/ BNGW	2 sets		
7.8	DI Elbow 45º, 150mmø w/ BNGW	5 sets		
7.9	DI Elbow 45º, 50mmø w/ BNGW	3 sets		
7.10	DI Mechanical Elbow 90º, 100mmø w/ BNGW	3 sets		
7.11	DI Mechanical Elbow 90º, 50mmø w/ BNGW	2 sets		
7.12	DI Blind Flange 100mmø w/ BNGW	2 sets		
7.13	GI Pipe, 150mmø PNS26:2018	18 lm		
7.14	BI Weldeable Elbow 90º, 150mmø Sched 40	16 pcs		
7.15	GI Nipple 25mm x 75mmø Sched 40	15 sets		
7.16	DI Saddle Clamp 75mm x 25mmø w/ BNGW	5 sets		
7.17	DI Saddle Clamp 50mm x 25mmø w/ BNGW	5 sets		
7.18	DI Mechanical Gate Valve, 75mmø w/ BNGW & Cover	1 set		
7.19	DI STC 200mmø w/ BNGW	2 sets		
7.20	DI STC 150mmø w/ BNGW	14 sets		
7.21	DI STC 100mmø w/ BNGW	3 sets		
7.22	DI STC 75mmø w/ BNGW	14 sets		
7.23	DI STC 50mmø w/ BNGW	14 sets		
7.24	DI Mechanical Reducer 75mm x 50mmø w/ BNGW	3 sets		
7.25	DI Mechanical Reducer 100mm x 75mmø w/ BNGW	7 sets		
7.26	GI Pipe 25mmø, PNS26:2018	18 lm		
7.27	GI Pipe 50mmø, PNS26:2018	6 lm		
7.28	GI Pipe 75mmø, PNS26:2018	84 lm		
7.29	GI France Coupling 75mmø Sched 40	11 sets		
7.30	BI Weldeable Elbow 45º, 75mmø Sched 40	8 pcs		
7.31	GI Elbow 45º, 50mmø Sched 40	1 set		

7.32	GI Elbow 90º, 50mm⌀ Sched 40	1 set		
7.33	GI Tee 50mm⌀ Sched 40	1 set		
7.34	GI Reducing Bush 50mm x 25mm⌀ Sched 40	1 set		
7.35	GI Drain Plug 50mm⌀ Sched 40	1 set		
7.36	Plastic Air Release Valve 25mm⌀ Sched 40	2 sets		
7.37	Welding Rod (E-7018)	20 kgs		
7.38	Welding Rod (E-6013)	10 kgs		
7.39	Angle Bar 2” x 2” x ⅜” x 6m	4 pcs		
7.40	Bolt, Nut & Washer 8mm x 65mm	104 pcs		
7.41	Cutting Disc, 100mm⌀	15 pcs		
7.42	Grinding Disc, 100mm⌀	15 pcs		
7.43	Bolted U-Clamp with Nut & Washer, 75mm⌀	26 pcs		
7.44	Portland Cement 40kg	17 bags		
7.45	Mixed Sand and Gravel	5 cu.m		
7.46	Deformed Re-bars 12mm⌀ x 6m	34 pcs		
7.47	Tie Wire	11 kgs		
7.48	Oil Filled Pressure Gauge 100PSI (¼” NPT), 50mm⌀	1 set		
TOTAL AMOUNT:				

In words:

_____

_____ (_____).

Signature of Bidder:	Date:

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;

or

Original copy of Notarized Bid Securing Declaration; **and**

(j) Project Requirements, which shall include the following:

☐ a. Organizational chart for the contract to be bid;

☐ b. List of contractor's key personnel (*e.g.*, Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;

☐ c. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; **and**

☐ (k) Original duly signed Omnibus Sworn Statement (OSS);

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

Financial Documents

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

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

Class "B" Documents

☐ (n) If applicable, duly signed joint venture agreement (JVA) in accordance with RA No. 4566 and its IRR in case the joint venture is already in existence;

or

duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.

II. FINANCIAL COMPONENT ENVELOPE

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

Other documentary requirements under RA No. 9184

☐ (p) Original of duly signed Bid Prices in the Bill of Quantities; **and**

☐ (q) Duly accomplished Detailed Estimates Form, including a summary shee indicating the unit prices of construction materials, labor rates, and equipment rentals used in coming up with the Bid; **and**

SECTION X. BIDDING FORMS

TABLE OF CONTENTS

BID FORM

Date: _____

Invitation to Bid: _____

To: [Name and address of Procuring Entity]

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

a. We have no reservation to the PBDs, including the Supplemental or Bid Bulletins, for the Procurement Project: *[insert name of contract];*

b. We offer to execute the Works for this Contract in accordance with the PBDs;

c. The total price of our Bid in words and figures, excluding any discounts offered below is: *[insert information]*;

d. The discounts offered and the methodology for their application are: *[insert information]*;

e. The total bid price includes the cost of all taxes, such as, but not limited to: *[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties],* which are itemized herein and reflected in the detailed estimates,

f. Our Bid shall be valid within the a period stated in the PBDs, and it shall remain binding upon us at any time before the expiration of that period;

g. If our Bid is accepted, we commit to obtain a Performance Security in the amount of *[insert percentage amount]* percent of the Contract Price for the due performance of the Contract, or a Performance Securing Declaration in lieu of the allowable forms of Performance Security, subject to the terms and conditions of issued GPPB guidelines[1] 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: _____

FORM OF CONTRACT AGREEMENT

THIS AGREEMENT, made this [insert date] day of [insert month], [insert year] between Lebak Water District, LEWADI Office, Victory Commercial Building, Purok Mahogany, Aurelio F. Freires Sr., Lebak, Sultan Kudarat, Philippines (hereinafter called the"Entity") and [name and address of Contractor] (hereinafter called the "Contractor").

WHEREAS, the Entity is desirous that the Contractor execute [name and identification number of contract] (hereinafter called "the Works") and the Entity has accepted the Bid for [insert the amount in specified currency in numbers and words] by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be attached, deemed to form, and be read and construed as integral part of this Agreement, to wit:

    (a) General and Special Conditions of Contract;

    (b) Drawings/Plans;

    (c) Specifications;

    (d) Invitation to Bid;

    (e) Instructions to Bidders;

    (f) Bid Data Sheet;

    (g) Addenda and/or Supplemental/Bid Bulletins, if any;

    (h) Bid form, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents submitted (e.g., Bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;

    (i) Eligibility requirements, documents and/or statements;

    (j) Performance Security;

    (k) Notice of Award of Contract and the Bidder's conform thereto;

    (l) Other contract documents that may be required by existing laws and/or the Entity.

3. In consideration of the payments to be made by the Entity to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Entity to execute and complete the Works and remedy any defects therein in conformity with the provisions of this Contract in all respects.

4. The Entity hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects wherein, the Contract Price or such other sum as may become payable under the provisions of this Contract at the times and in the manner prescribed by this Contract.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

Signed, sealed, delivered by _____ the _____ (for the Entity)

Signed, sealed, delivered by _____ the _____ (for the Contractor).

Binding Signature of Procuring Entity

_____

Binding Signature of Contractor

_____

[Addendum showing the corrections, if any, made during the Bid evaluation should be attached with this agreement]

BID SECURING DECLARATION FORM

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

Invitation to Bid: *[Insert Reference number]*

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

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid Securing Declaration.

2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f),of the IRR of RA No. 9184; without prejudice to other legal action the government may undertake.

3. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:

    a) Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
    b) I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right; and
    c) I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

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

[Insert NAME OF BIDDER'S AUTHORIZED REPRESENTATIVE]
[Insert Signatory's Legal Capacity]
Affiant

SUBSCRIBED AND SWORN to before me this ___ day of [month] [year] at [place of execution], Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no. _____ and his/her Community Tax Certificate No. _____ issued on ____ at _____.

Witness my hand and seal this ___ day of [month] [year].

NAME OF NOTARY PUBLIC
Serial No. of Commission _____
Notary Public for _____ until _____
Roll of Attorneys No. _____
PTR No. _____ *[date issued], [place issued]*
IBP No. _____ *[date issued], [place issued]*

Doc. No. _____
Page No. _____
Book No. _____
Series of _____

OMNIBUS SWORN STATEMENT

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

AFFIDAVIT

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

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

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

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

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

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

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

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

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

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

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

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

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

8. *[Name of Bidder]* is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes: a. Carefully examining all of the Bidding Documents; b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract; c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.

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

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

_____
Bidder's Representative/Authorized Signatory

SUBSCRIBED AND SWORN to before me this ___ day of *[month] [year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no. _____ and his/her Community Tax Certificate No. _____ issued on ____ at _____.

Witness my hand and seal this ___ day of *[month] [year]*.

NAME OF NOTARY PUBLIC
Serial No. of Commission _____
Notary Public for _____ until _____
Roll of Attorneys No. _____
PTR No. _____*[date issued], [place issued]*
IBP No. _____*[date issued], [place issued]*

Doc. No. _____
Page No. _____
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Series of _____


LEBAK WATER DISTRICT
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