



# **Procurement of Design and Build**

Provincial Government of Pampanga

**Design and Build of Central Healthcare Wastewater Treatment Facilities for Provincial and Various District Hospitals**

**PR No. 22-4106**

- 1) 300 CMD for Diosdado P. Macapagal Memorial Hospital (DPMMH), San Matias, Guagua, Pampanga;**
- 2) 150 CMD for Romana Pangan District Hospital, San Jose Floridablanca, Pampanga;**
- 3) 150 CMD for Escolastica Romero District Hospital, San Nicolas 1st, Lubao, Pampanga;**
- 4) 150 CMD for Andres S. Luciano, District Hospital, Balitucan, Magalang, Pampanga;**
- 5) 150 CMD for Jose Songco Lapid District Hospital, Babo Sacan, Porac, Pampanga;**
- 6) 150 CMD for Mabalacat District Hospital, Camachiles, Dau, Mabalacat City, Pampanga;**
- 7) 150 CMD for Ricardo P. Rodriguez Memorial Hospital at Bulaon Resettlement, City of San Fernando, Pampanga;**
- 8) 150 CMD for San Luis District Hospital, Sta. Lucia, San Luis, Pampanga;**
- 9) 150 CMD for Emigdio D. Cruz Memorial Hospital, San Agustin Norte, Arayat, Pampanga; and**
- 10) 150 CMD for Domingo B. Flores District Hospital, Batasan, Macabebe, Pampanga.**

# Preface

This Bidding Documents for the Design and Build of Central Healthcare Wastewater Treatment Facilities for Provincial and Various District Hospitals was prepared in conformance with the Philippine Bidding Documents (PBDs) for the procurement of Infrastructure Projects, Sixth Edition, July 2020 through Competitive Bidding, and incorporating provisions of Annex “G”, *Guidelines for the Procurement and Implementation of Contracts for Design and Build Infrastructure Projects* and in accordance with the provisions of the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

Specific scope, guidelines and provisions of this Bidding Documents for the Design and Build Contract/Project are indicated in *Section VI. Terms of Reference*, duly approved by the Procuring Entity.

Any similar or conflicting statement herein, except those stated in *Section VI* of this Bidding Documents, provisions of Annex “G” *Guidelines for the Procurement and Implementation of Contracts for Design and Build Infrastructure Projects* of the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184 (updated October 13, 2022) shall govern the procurement and implementation of the Project.

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# *Glossary of Terms, Abbreviations, and Acronyms*

**ABC** – Approved Budget for the Contract.

**ARCC** – Allowable Range of Contract Cost

**BAC** – Bids and Awards Committee.

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

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

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

**BIR** – Bureau of Internal Revenue.

**BSP** – Bangko Sentral ng Pilipinas.

**CDA** – Cooperative Development Authority.

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

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

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

**CPI** – Consumer Price Index.

**DOLE** – Department of Labor and Employment.

**DTI** – Department of Trade and Industry.

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

**GFI** – Government Financial Institution.

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

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

**GOP** – Government of the Philippines.

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

**LGUs** – Local Government Units.

**NFCC** – Net Financial Contracting Capacity.

**NGA** – National Government Agency.

**PCAB** – Philippine Contractors Accreditation Board.

**PhilGEPS** - Philippine Government Electronic Procurement System.

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

**PSA** – Philippine Statistics Authority.

**SEC** – Securities and Exchange Commission.



**SLCC** – Single Largest Completed Contract.

**UN** – United Nations.

## ***Section I. Invitation to Bid***



**Republic of the Philippines  
PROVINCE OF PAMPANGA  
City of San Fernando**

**Invitation to Bid No. 2023-15**

**Invitation to Bid for *Purchase Request No. 22-4106***

1. The **Provincial Government of Pampanga** (“Province”), through the **General Fund for CY 2022** intends to apply the sum of **One Hundred Ninety-Three Million Two Hundred Fourteen Thousand Three Hundred Eighty-Five Pesos (P 193,214,385.00)** being the aggregate Approved Budget for the Contract (ABC) to payments under the contract for ***Design and Build of Central Healthcare Wastewater Treatment Facilities for Provincial and Various District Hospitals:***
  - 1) ***300 CMD for Diosdado P. Macapagal Memorial Hospital (DPMMH), San Matias, Guagua, Pampanga;***
  - 2) ***150 CMD for Romana Pangan District Hospital, San Jose Floridablanca, Pampanga;***
  - 3) ***150 CMD for Escolastica Romero District Hospital, San Nicolas 1st, Lubao, Pampanga;***
  - 4) ***150 CMD Andres S. Luciano, District Hospital, Balitucan, Magalang, Pampanga;***
  - 5) ***150 CMD Jose Songco Lapid District Hospital, Babo Sacan, Porac, Pampanga;***
  - 6) ***150 CMD Mabalacat District Hospital, Camachiles, Dau, Mabalacat City, Pampanga;***
  - 7) ***150 CMD Ricardo P. Rodriguez Memorial Hospital at Bulaon Resettlement, City of San Fernando, Pampanga;***
  - 8) ***150 CMD San Luis District Hospital, Sta. Lucia, San Luis, Pampanga;***
  - 9) ***150 CMD Emigdio D. Cruz Memorial Hospital, San Agustin Norte, Arayat, Pampanga and;***
  - 10) ***150 CMD Domingo B. Flores District Hospital, Batasan, Macabebe, Pampanga***

The Procurement Project is composed of ten (10) lots and to be bid and awarded as a single contract. Bids received in excess of the ABC shall be automatically rejected on bid opening.

2. The **Province** now invites bids for the above Procurement Project. Completion of the Works is required **within Two Hundred Forty (240) Calendar Days upon the receipt of Notice-to-Proceed (NTP).**

The eligibility of design and build contractors shall be based on the legal, technical and financial requirement stated in the Bidding Documents. In the technical requirements, the design and build contractor (as solo or in joint venture/consortia) should be able to comply with the experience requirement under the IRR of R.A. 9184, where one of the parties (in a joint venture/consortia) should have at least one similar project, both in design and construction, with at least 50% of the cost of the ABC.

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

**Design and Build of at least 300 CMD Wastewater Treatment Facility**

For bidders with no design and build project on its own, it may enter into subcontracting, partnerships, or joint venture with design or engineering firms for the design portion of the contract. In this case, the SLCC requirement shall be:

For Civil Works Contractor:

*It must have successfully completed a similar construction project and where the value of the contract is at least fifty percent (50%) of the total ABC under bidding, adjusted to current prices using the Philippine Statistics Authority consumer price index.*

For the Design Consultant:

*The bidder's designer must have successfully completed the design of a similar project and where the value is at least fifty percent (50%) of the total ABC under bidding, adjusted to current prices using the Philippine Statistics Authority consumer price index.*

**Prospective Bidders should be registered with and classified by the Philippine Contractor's Accreditation Board (PCAB) with PCAB License of at least Category A for General Building and a Size Range of at least Medium B for Water Treatment Plant or System.**

The additional description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders) and Section III (Bid Data Sheet).

3. Bidding will be conducted through open competitive bidding procedures using non-discretionary "pass/fail" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
4. Interested bidders may obtain further information from the **Province** and inspect the Bidding Documents at the **Bids and Awards Committee (BAC) Secretariat Office, Ground Floor, Provincial Capitol, City of San Fernando, Pampanga between 8:00 A.M. to 5 P.M.**
5. A complete set of Bidding Documents may be acquired by interested bidders on **February 1, 2022 (Wednesday) between 8:00 A.M. to 5 P.M. up to March 15, 2023 (Wednesday) until 8:00 A.M. only** from the above stated address and upon the payment of applicable fee for the Bidding Documents, pursuant to the latest Guidelines of GPPB, in the amount of **Fifty Thousand Pesos (Php 50,000.00)**
6. The **Province** will hold a Pre-Bid Conference on **February 15, 2023 (Wednesday) 10:00 A.M.** at **Bids and Awards Committee (BAC) Session Hall, Ground Floor, Provincial Capitol, City of San Fernando, Pampanga**, which shall be open to prospective bidders.
7. Bids must be duly received by the BAC Secretariat through manual submission at **Bids and Awards Committee (BAC) Secretariat Office, Ground Floor, Provincial Capitol, City of San Fernando, Pampanga on or before 8:30 A.M of March 15, 2023 (Wednesday)**. Late bids shall not be accepted.
8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 15.
9. Bid opening (Technical Proposals) shall be on **March 15, 2023 (Wednesday) 10:00 A.M.** at **Bids and Awards Committee (BAC) Session Hall, Ground Floor, Provincial Capitol, City of San Fernando, Pampanga**.

All bids that are rated "passed" using a non-discretionary "pass/fail" criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184 shall be subjected to Bid Evaluation.

For this Design and Build procurement, bids that passes and meets Technical Proposal requirements and criteria shall be declared as “technically complying”.

Bid opening of Financial Proposals of “technically complying” bidders shall be on **April 5, 2023 (Wednesday) 10:00 A.M.** at **Bids and Awards Committee (BAC) Session Hall, Ground Floor, Provincial Capitol, City of San Fernando, Pampanga.**

All bids will be opened in the presence of the bidders’ representatives who choose to attend the activity.

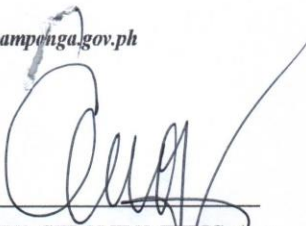
10. Online bid submission is not applicable.
11. The **Province** reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised Implementing Rules and Regulations (IRR) of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
12. For further information, please refer to:

**ATTY. CECIL L. ANDIN**  
**Chairperson – Bids and Awards Committee (BAC) Secretariat**  
**BAC Secretariat Office, Ground Floor, Provincial Capitol,**  
**City of San Fernando, Pampanga**

13. You may visit the following websites:

For downloading of Bidding Documents: [www.pampanga.gov.ph](http://www.pampanga.gov.ph)

February 1, 2023



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**ATTY. GEROME N. TUBIG**  
Chairman – Bids and Awards Committee

## ***Section II. Instructions to Bidders***

## 1. Scope of Bid

The Procuring Entity, the **Provincial Government of Pampanga**, invites Bids for the **Design and Build of Central Healthcare Wastewater Treatment Facilities for Provincial and Various District Hospitals**:

- 1) **300 CMD for Diosdado P. Macapagal Memorial Hospital (DPMMH), San Matias, Guagua, Pampanga;**
- 2) **150 CMD for Romana Pangan District Hospital, San Jose Floridablanca, Pampanga;**
- 3) **150 CMD for Escolastica Romero District Hospital, San Nicolas 1st, Lubao, Pampanga;**
- 4) **150 CMD for Andres S. Luciano, District Hospital, Balitucan, Magalang, Pampanga;**
- 5) **150 CMD for Jose Songco Lapid District Hospital, Babo Sacan, Porac, Pampanga;**
- 6) **150 CMD for Mabalacat District Hospital, Camachiles, Dau, Mabalacat City, Pampanga;**
- 7) **150 CMD for Ricardo P. Rodriguez Memorial Hospital at Bulaon Resettlement, City of San Fernando, Pampanga;**
- 8) **150 CMD for San Luis District Hospital, Sta. Lucia, San Luis, Pampanga;**
- 9) **150 CMD for Emigdio D. Cruz Memorial Hospital, San Agustin Norte, Arayat, Pampanga; and**
- 10) **150 CMD for Domingo B. Flores District Hospital, Batasan, Macabebe, Pampanga, with Project Identification Number PR. No. 22-4106.**

The Procurement Project (referred to herein as “Project”) is for the **Design and Build Works**, as described in Section VI. Terms of Reference

## 2. Funding Information

- 2.1. The GOP through the source of funding as indicated below for **CY 2021 and 2022** in the amount of **One Hundred Ninety Three Million Two Hundred Fourteen Thousand Three Hundred Eighty Five Pesos (Php 193,214,385.00)**.
- 2.2. The source of funding is:
  - a. General Fund, as approved by the Sanggunian.

### **3. Bidding Requirements**

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

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

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

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

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

### **5. Eligible Bidders**

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

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

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

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

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



## 6. Origin of Associated Goods

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

## 7. Subcontracts

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

The Procuring Entity has prescribed that:

- a. Subcontracting is allowed. The portions of Project and the maximum percentage allowed to be subcontracted are indicated in the **BDS**, which shall not exceed fifty percent (50%) of the contracted Works.

7.2 The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.

7.3 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-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address, **BAC Session Hall, Provincial Capitol Building, City of San Fernando, Pampanga** 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. In case of joint ventures, a special PCAB License, and registration for the type and cost of the contract for this Project, shall be required. 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 tradable 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 for **one hundred twenty (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 16 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	<p>For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be:</p> <p><b>Design and Build of at least 300 CMD Wastewater Treatment Facility.</b></p> <p><b>For bidders with no design and build project on its own, it may enter into subcontracting, partnerships, or joint venture with design or engineering firms for the design portion of the contract. In this case, the SLCC requirement shall be:</b></p> <p><b>For Civil Works Contractor:</b></p> <p><i>It must have successfully completed a similar construction project and where the value of the contract is at least fifty percent (50%) of the total ABC under bidding, adjusted to current prices using the Philippine Statistics Authority consumer price index.</i></p> <p><b>For the Design Consultant:</b></p> <p><i>The bidder's designer must have successfully completed the design of a similar project and where the value is at least fifty percent (50%) of the total ABC under bidding, adjusted to current prices using the Philippine Statistics Authority consumer price index.</i></p>
<p><b>Addenda on Clause 5.4</b></p>	<p><b>Additional Eligibility Requirements for Design and Build based on Annex "G" of the 2016 revised IRR of RA 9184:</b></p> <p><b><u>"9.2.i. Class "A" Documents (Legal, Technical and Financial Documents) and Class "B" Documents</u></b></p> <p><b>The prospective bidder shall submit all the required Class "A" and Class "B" documents for infrastructure projects and the following:</b></p> <p>a) relevant statements of all on-going, completed, awarded but not yet started design/design and build related contracts, curriculum vitae of key staff, partners or principal officers; and</p> <p>b) valid licenses issued by the Professional Regulatory Commission (PRC) for design professionals.</p>

	<p><b>9.2.ii. Eligibility Criteria</b></p> <p>a) The eligibility of design and build contractors shall be based on the legal, technical and financial requirements abovementioned. In the technical requirements, the design and build contractor (as solo or in joint venture/consortia) should be able to comply with the experience requirement under the IRR of R.A. 9184, where one of the parties (in a joint venture/consortia) should have at least one similar project, both in design and construction, with at least 50% of the cost of the ABC.</p> <p>b) If the bidder has no experience in design and build projects on its own it may enter into subcontracting, partnerships, or joint venture with design or engineering firms for the design portion of the contract.</p> <p>c) The relevant provisions under Section 23.4.2 of the IRR of R.A. 9184 on eligibility requirements shall be observed, with the following exceptions:</p> <p><b>Joint ventures/consortia among Filipino contractors and consultants or among Filipino contractors and foreign consultants shall be allowed subject to pertinent laws and the relevant provisions of the IRR of R.A.9184. The joint venture/consortia shall be jointly and severally responsible for the obligations and the civil liabilities arising from the design and build contract: Provided, however, That Filipino ownership or interest thereof shall be at least seventy five percent (75%): Provided further, That joint ventures/consortia in which Filipino ownership or interest is less than seventy-five percent (75%) may be eligible where the structures to be built require the application of techniques and/or technologies which are not adequately possessed by Filipinos and that Filipino ownership or interest shall not be less than twenty-five percent (25%): Provided, finally, that when the design services in which the joint venture wishes to engage involve the practice of professions regulated by law, all those who will actually perform the services shall be Filipino citizens and registered professionals authorized by the appropriate regulatory body to practice those professions and allied professions and where foreign designers are required, the foreign designer must be authorized by the appropriate Philippine Government professional regulatory body to engage in the practice of those professions and allied professions.</b></p>
7.1	<p><b>For the design component:</b></p> <p><i>If the bidder has no experience in design and build projects on its own it may enter into subcontracting, partnerships, or joint venture with design or engineering firms for the design portion of the contract.</i></p> <p><b>For the construction component:</b></p> <p><i>Up to 50% of the contract, in terms of cost, may be sub-contracted.</i></p>
10.3	No further instruction

10.4	The key personnel must meet the required minimum years of experience set below:																															
<b>For the design component:</b>																																
<table border="1"> <thead> <tr> <th data-bbox="384 371 667 450">Key Personnel/ Quantity</th> <th data-bbox="667 371 855 450">Gen. Experience</th> <th data-bbox="855 371 1043 450">Relevant Experience</th> <th data-bbox="1043 371 1401 450">Qualifications</th> </tr> </thead> <tbody> <tr> <td data-bbox="384 450 667 551">Design Architect - 1</td> <td data-bbox="667 450 855 551">10</td> <td data-bbox="855 450 1043 551">5</td> <td data-bbox="1043 450 1401 551">- Licensed Architect - Must have experience in design of a similar project.</td> </tr> <tr> <td data-bbox="384 551 667 719">Structural Engineer - 1</td> <td data-bbox="667 551 855 719">10</td> <td data-bbox="855 551 1043 719">5</td> <td data-bbox="1043 551 1401 719">- Licensed Structural Engineer - Must have experience in structural design of a similar project.</td> </tr> <tr> <td data-bbox="384 719 667 887">Professional Electrical Engineer - 1</td> <td data-bbox="667 719 855 887">10</td> <td data-bbox="855 719 1043 887">5</td> <td data-bbox="1043 719 1401 887">- Licensed Professional Electrical Engineer - Must have experience in electrical design of a similar project.</td> </tr> <tr> <td data-bbox="384 887 667 1055">Professional Mechanical Engineer - 1</td> <td data-bbox="667 887 855 1055">10</td> <td data-bbox="855 887 1043 1055">5</td> <td data-bbox="1043 887 1401 1055">- Licensed Professional Mechanical Engineer - Must have experience in mechanical design of a similar project.</td> </tr> <tr> <td data-bbox="384 1055 667 1189">Professional Sanitary Engineer - 1</td> <td data-bbox="667 1055 855 1189">10</td> <td data-bbox="855 1055 1043 1189">5</td> <td data-bbox="1043 1055 1401 1189">- Licensed Professional Sanitary Engineer - Must have experience in design of a similar project.</td> </tr> <tr> <td data-bbox="384 1189 667 1294">CADD Operators - 2</td> <td data-bbox="667 1189 855 1294">2</td> <td data-bbox="855 1189 1043 1294">2</td> <td data-bbox="1043 1189 1401 1294">- Bachelor's Degree in Architecture or Engineering</td> </tr> </tbody> </table>					Key Personnel/ Quantity	Gen. Experience	Relevant Experience	Qualifications	Design Architect - 1	10	5	- Licensed Architect - Must have experience in design of a similar project.	Structural Engineer - 1	10	5	- Licensed Structural Engineer - Must have experience in structural design of a similar project.	Professional Electrical Engineer - 1	10	5	- Licensed Professional Electrical Engineer - Must have experience in electrical design of a similar project.	Professional Mechanical Engineer - 1	10	5	- Licensed Professional Mechanical Engineer - Must have experience in mechanical design of a similar project.	Professional Sanitary Engineer - 1	10	5	- Licensed Professional Sanitary Engineer - Must have experience in design of a similar project.	CADD Operators - 2	2	2	- Bachelor's Degree in Architecture or Engineering
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Project Engineer – 2	5	2	- Licensed Civil Engineer - Must have experience similar in nature or complexity of this project																													
Materials Engineer – 1	8	5	- DPWH Accredited Materials Engineer																													



	Construction Safety Officer – 2	8	5	- DOLE Accredited - Must have experience similar in nature or complexity of this project	
	Electrical Engineer – 1	8	5	- Licensed Electrical Engineer - Must have experience similar in nature or complexity of this project	
	Mechanical Engineer – 1	8	5	- Licensed Mechanical Engineer - Must have experience similar in nature or complexity of this project	
	Sanitary Engineer - 1	8	5	- Licensed Sanitary Engineer - Must have experience similar in nature or complexity of this project	
10.5	The minimum major equipment requirements are the following:				
	Equipment			Capacity	No. of Units
	Backhoe			0.80 cu.m	1
	Payloader			1.50 cu.m	1
	Dump Trucks			9.0 cu.m	2
	Cargo/Service Trucks			5 m.t	1
	Service Vehicle			Pick-up Truck	2
	Water Truck			10,000 liters	1
	Welding Machine			500 amp	2
12	<b>The wastewater treatment technology considered for this project is Moving Bed Biofilm Reactor (MBBR). Prospective bidders may present a different technology to be used for all lots, deemed appropriate by the designer taking into consideration all requirements and parameters presented in the TOR and MPSP.</b>				
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 <b>Php 3,864,287.70</b> [two percent (2%) of ABC], if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; b. The amount of not less than <b>Php 9,660,719.25</b> [five percent (5%) of ABC] if bid security is in Surety Bond.				

<b>Addenda on Clause 19.1</b>	<b>Detailed evaluation and comparison of Bids shall be supplemented by Section 11. Bid Evaluation, of Annex “G”, <i>Guidelines for the Procurement and Implementation of Contracts for the Design and Build Infrastructure Projects</i> of the IRR. For this Project/Contract the BAC shall adapt a three-step procedure as detailed in Section VI. Terms of Reference.</b>
19.2	Partial Bids are not allowed.
20	No further instructions.
21	<b>No additional requirements except those stated in Section VI. Terms of Reference.</b>

## ***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

4.1. The Procuring Entity shall give possession of all or parts of the Site to the Contractor based on the schedule of delivery indicated in the **SCC**, which corresponds to the execution of the Works. If the Contractor suffers delay or incurs cost from failure on the part of the Procuring Entity to give possession in accordance with the terms of this clause, the Procuring Entity's Representative shall give the Contractor a Contract Time Extension and certify such sum as fair to cover the cost incurred, which sum shall be paid by Procuring Entity.

4.2. If possession of a portion is not given by the above date, the Procuring Entity will be deemed to have delayed the start of the relevant activities. The resulting adjustments in contract time to address such delay may be addressed through contract extension provided under Annex "E" of the 2016 revised IRR of RA No. 9184.

## 4. The Contractor's Obligations

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

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

## **5. Performance Security**

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

## **6. Site Investigation Reports**

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

## **7. Warranty**

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

## **8. Liability of the Contractor**

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

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

## **9. Termination for Other Causes**

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

## **10. Dayworks**

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

## **11. Program of Work**

11.1. The Contractor shall submit to the Procuring Entity’s Representative for approval the said Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works. The submissions of the Program of Work are indicated in the **SCC**.

11.2. The Contractor shall submit to the Procuring Entity’s Representative for approval an updated Program of Work at intervals no longer than the period stated in the **SCC**. If the Contractor does not submit an updated Program of Work within this period, the Procuring Entity’s Representative may withhold the amount stated in the **SCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program of Work has been submitted.

## **12. Instructions, Inspections and Audits**

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

## **13. Advance Payment**

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

## **14. Progress Payments**

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

## **15. Operating and Maintenance Manuals**

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

## *Section V. Special Conditions of Contract*



# Special Conditions of Contract

GCC Clause	
2	<p><b>The Winning Bidder/Contractor shall commence actual works upon the issuance by the Procuring Entity the Notice-To-Proceed.</b></p> <p><b>The Winning Bidder/Contractor shall complete the DAED within forty-five (45) calendar days including the securing all necessary permits and licenses for its implementation. Upon approval, the Contractor/Winning Bidder shall start the Construction Phase of the Project/Contract.</b></p> <p><b>The Contractor shall complete the Contract within 240 calendar days upon receipt of NTP.</b></p>
4.1	<p><b>The Provincial Government shall give possession of any or all parts of the Site to the Contractor upon issuance of the Notice to Proceed.</b></p>
6	<p><b>The site investigation reports are:</b></p> <ul style="list-style-type: none"> <li>- <b>Geo/Earthquake Hazard Assessment</b></li> <li>- <b>Engineering Surveys, incl. topographic, location and vicinity maps</b></li> <li>- <b>Soils and Foundation Investigation Reports</b></li> <li>- <b>Environmental Impact Assessment duly signed by a registered and licensed Environmental Planner</b></li> <li>- <b>Other site investigation reports as specified in the TOR or as required by concerned agencies.</b></li> </ul>
7.2	<p><b>Fifteen (15) years.</b></p>
10	<p><b>No dayworks are applicable to the contract.</b></p>
11.1	<p><b>The Contractor shall submit the Program of Work to the Procuring Entity's Representative within <i>fourteen (14)</i> days of delivery of the Notice to Proceed.</b></p>
11.2	<p><b>The Contractor shall submit an updated Program of Works within every first week of the month from the Start Date of the project up to its Final Completion. The Program of Work shall include among others:</b></p> <ul style="list-style-type: none"> <li><b>i. The order in which it intends to carry out the work including anticipated timing for each stage of design/detailed engineering and construction;</b></li> <li><b>ii. Periods for review of specific outputs and any other submissions and approvals;</b></li> <li><b>iii. Sequence of timing for inspections and tests as specified in the contract documents;</b></li> </ul>

	<p>iv. <b>General description of the design and construction methods to be adopted;</b></p> <p>v. <b>Number and names of personnel to be assigned for each stage of the work;</b></p> <p>vi. <b>List of equipment required on site for each major stage of the work; and vii. Description of the quality control system to be utilized for the project.</b></p> <p><b>The amount to be withheld for late submission of an updated Program of Work is five percent (5%) of the total cost accomplished.</b></p>
13	<p><b>The amount of the advance payment is 15% of the total Contract Price.</b></p> <p><b>To ensure that the advance payment shall be fully utilized exclusive for the project and assure the speedy implementation and completion of the projects, the DPWH policy shall be adopted whereby advance payment to contractors shall be paid in two equal installments:</b></p> <p><b>1) First installment (7.5%) shall be paid upon approval of the Contract, Issuance of the Notice to Proceed, acceptance by the Procuring Entity of an irrevocable standby letter of credit of equivalent value from a commercial bank, a bank guarantee or a surety bond callable upon demand, issued by a surety or insurance company duly licensed by the Insurance Commission and confirmed by the Procuring Entity; and</b></p> <p><b>2) The balance thereof (7.5%) shall be paid only after the contractor has fully mobilized the necessary scheduled Manpower and/or Equipment for the first two months.</b></p>
14	<p><b>Materials and equipment delivered on the site but not completely put in place shall be included for payment.</b></p>
15.1	<p><b>The date by which operating and maintenance manuals are required is within thirty (30) days upon the completion of Project.</b></p> <p><b>The date by which “as built” drawings are required is within thirty (30) days upon the completion of Project.</b></p>
15.2	<p><b>The amount to be withheld for failing to produce “as built” drawings and/or operating and maintenance manuals by the date required is the amount of remaining unpaid portion of the Project.</b></p>

## ***Section VI. Terms of Reference***

# **1. Project Information**

## **1.1 Project Background and Rationale**

Republic Act No. 9275, otherwise known as the Philippine Clean Water Act of 2004, was enacted to protect the country's water bodies from pollution from land-based sources, such as industries and commercial establishments, agriculture and community or household activities. As such, the law requires owners or operators of facilities that discharge regulated effluents to secure a Discharge Permit from the DENR.

Section 20 of the same Act provides that local government units (LGUs) share the responsibility in the management and improvement of water quality within their territorial jurisdictions. Therefore, LGUs, through their respective ENROs, are enjoined to monitor water quality, actively participate in all efforts concerning water quality protection and rehabilitation, and coordinate with other government agencies, civil society organizations, and other stakeholders in the implementation of measures to prevent and control water pollution.

RA 9275 prohibits the discharge of untreated wastewater into water bodies as well as the operation of facilities that discharge water pollutants without a valid Discharge Permit, among others. As provided under Section 28, the law imposes hefty fines, damages and penalties, which may range from not less than ten thousand pesos (₱10,000) to not more than two hundred thousand pesos (₱200,000.00) per day of violation, closure of the facility or cessation of its operations upon recommendation of the Pollution Adjudication Board (PAB), or even imprisonment of violators for a period of two to four years.

As part of its mandate and in compliance to Section 19 of RA 9275, the DENR promulgated and adopted the DENR Administrative Order No. 2016-08 entitled "Water Quality Guidelines and General Effluent Standards of 2016". DAO 2016-08 provided guidelines for the classification of water bodies in the country as well as a more stringent set of effluent standards, thereby superseding the previous effluent regulations under DAO 1990-35 as a key strategy in improving water quality.

Under the DAO 1990-35, general standards for all types of effluents are the same. In contrast, the DAO 2016-08 specifies significant effluent quality parameters per sector or industry, depending on the most probable pollutant(s) that a type of industry will most likely discharge into the environment. Likewise, DAO 2016-08 provided a grace period of not more than five (5) years since its effectivity upon which affected entities shall undertake to comply or meet the prescribed effluent standards. Thus, establishments are required to submit a Compliance Action Plan (CAP) with status of implementation to the DENR.

During the five-year grace period, there is a moratorium on the issuance of cease and desist and/or closure order, fines, and other penalties against the establishment's operations. After which, prohibited acts, such as the direct discharge of untreated effluent into a receiving water body or the absence of an operational wastewater treatment system, shall be penalized accordingly under Section 28 of the Clean Water Act.

The DENR-Environmental Management Bureau issued Memorandum Circular No. 2021-01 as clarification on the implementation of the five-year grace period under DAO 2016-08. Per MC 2021-01, the grace period commenced from the time the DAO 2016-08 took effect on June 17, 2016. Thus, the grace period, along with its advantages, shall be lifted on June 18, 2021. After

which, affected establishments are expected to regularly comply with the Clean Water Act, regardless of an approved or submitted CAP. Further, any violation committed by establishments after the grace period shall be subject to imposable penalties provided under RA 9275 and its implementing rules and regulations.

Healthcare facilities (HCFs), or in this document, primary district hospitals owned and operated by the Provincial Government of Pampanga, are covered by provisions of RA 9275 and other pertinent policies, issuances, and regulations on water quality management. Like other healthcare facilities, hospital wastewater may contain solids excreted by staff and patients, or liquid waste from health care-related activities, among which include cooking, cleaning, and laundry.

Under the DAO 2016-08, effluent from hospitals, clinics, nursing homes and other human health and residential care activities shall be monitored for the following parameters:

1. Color
2. Temperature
3. pH
4. Biochemical Oxygen Demand (BOD)
5. Total Suspended Solids (TSS)
6. Fecal Coliform
7. Ammonia
8. Nitrate
9. Phosphate
10. Oil and Grease
11. Surfactants

Because effluent from HCFs may contain pathogens, pollutants, or hazardous chemicals, and since the law categorically prohibits the discharge of untreated wastewater, it is therefore necessary for hospitals to establish their respective wastewater treatment plants or be connected to efficient treatment facilities prior to discharge to a municipal sewer or body of water.

At present, only three (3) out of the eleven (11) hospitals of the Provincial Government of Pampanga have existing Sewage Treatment Plants (STPs), namely, Jose Songco Lapid District Hospital in Porac, Romana Pangan District Hospital in Floridablanca, and Dr. Andres Luciano District Hospital in Magalang. The said STPs were awarded to the said hospitals through the Health Facilities Enhancement Program (HFEP) of the Department of Health (DOH).

Despite having existing STPs which adopt a sequencing batch reactor (SBR) system, the three (3) hospitals' effluent samples continue to fail the standards set in DAO 2016-08 based on tests conducted by a DENR-accredited laboratory. On the other hand, the eight (8) remaining hospitals only have conventional septic tanks, which, regardless of regular siphoning, fail certain parameters on the DENR Effluent Standards, also as evidenced by results of tests on their wastewater samples.

Meanwhile, in the absence of an STP, the Provincial Government's district hospitals have submitted their respective Compliance Action Plans (CAPs) to the DENR-EMB as a requirement for the renewal of their annual discharge permits. Duly signed by the Chief of Hospital (COH) and the Pollution Control Officer (PCO), the CAP includes the specific timeline of activities and responsible persons/offices, such as:

- ✓ submission of a formal request to the Provincial Government of Pampanga and regular coordination with its concerned offices for the allocation and funding of the establishment of its sewage treatment plant (STP);
- ✓ formulation of design, engineering plan and submission of budget proposal for the STP;
- ✓ establishment of the STP;
- ✓ monitoring and supervision of the operation of the STP, as well as the conduct of maintenance activities; and
- ✓ quarterly monitoring of effluent and submission of Self-Monitoring Reports (SMRs).

To sum, the CAP serves as the hospital's commitment to abide by the Clean Water Act by putting up its own wastewater treatment facility, which shall be implemented during the five-year grace period of DAO 2016-08. However, following the lapse of the grace period, all eleven (11) district hospitals are now expected to strictly observe the provisions set forth in RA 9275 and are subject for fines and penalties in case of violations specified in the Act.

As of this writing, the eleven (11) hospitals have yet to fully comply with the Clean Water Act due to the absence of an operational wastewater treatment facility; the implications of which could warrant the issuance of Notice of Violations (NOVs), filing of charges on the Chiefs of Hospitals and Pollution Control Officers if found liable, payment of hefty fines and penalties, or worse, cause the cessation of operations or closure of these hospitals if found guilty of gross violation by the Pollution Adjudication Board (PAB). These could bring about the collapse of the province's local healthcare system — a dire consequence that the Provincial Government cannot afford, especially at a time of a global pandemic.

With the lapse of the five-year grace period afforded to our district hospitals, it is high time for the Provincial Government to undertake in the soonest possible time the establishment of wastewater treatment facilities for the remaining eight (8) district hospitals to complete the implementation of their respective CAPs. Likewise, there is a need to upgrade, if not rehabilitate the existing treatment facilities of the three (3) hospitals to ensure that they meet the effluent standards prescribed under DAO 2016-08.

Through a series of meetings, chief doctors of the district hospitals have reviewed proposals on the establishment of the wastewater treatment facilities. Through a position paper submitted to the Governor, they recommended that the WTFs proposed for establishment shall do away with conventional treatment methods and instead use or adopt wastewater treatment technology that is **modern, state of the art, or future-proof**, should the subject hospitals' existing bed capacities increase, and should effluent standards be updated by the DENR in the future, as mandated by the Clean Water Act. Additionally, the selected technology shall have minimized potential harm to public health or adverse impacts to the environment.

Likewise, they have enumerated the **following technical, administrative, and financial considerations** in the establishment or upgrading of the district hospitals' wastewater treatment facilities:

<b>TECHNICAL</b>	<b>ADMINISTRATIVE and FINANCIAL</b>
<input type="checkbox"/> space requirements <input type="checkbox"/> capacity <input type="checkbox"/> noise and odor control <input type="checkbox"/> treatment efficiency <input type="checkbox"/> technology <input type="checkbox"/> lead time of completion <input type="checkbox"/> aftersales support <input type="checkbox"/> warranty <input type="checkbox"/> prior completed projects by the proponent	<input type="checkbox"/> manpower requirements <input type="checkbox"/> hours of operation <input type="checkbox"/> capital expenses <input type="checkbox"/> operating expenses

## 1.2 Project Objectives and Description

The Provincial Government of Pampanga, through the Design and Build Scheme aims to establish Wastewater Treatment Facilities (WWTF) including all its appurtenant facilities for its provincial and nine district hospital with an aggregate Approved Budget Cost (ABC) of **One Hundred Ninety Three Million Two Hundred Fourteen Thousand Three Hundred Eighty Five Pesos (Php 193,214,385.00)**. The Province shall award a single contract composed of the following lots;

<b>Lot</b>	<b>Name of Hospital</b>	<b>Location</b>	<b>Capacity</b>
1.	Diosdado P. Macapagal Memorial Hospital	San Matias, Guagua	300 cmd
2.	Romana Pangan District Hospital	San Jose, Floridablanca	150 cmd
3.	Escolastica Romero District Hospital	San Nicolas 1 <sup>st</sup> , Lubao	150 cmd
4.	Andres S. Luciano District Hospital	Balitucan, Magalang	150 cmd
5.	Jose Songco Lapid District Hospital	Babo Sacan, Porac	150 cmd
6.	Mabalacat District Hospital	Camachiles, Mabalacat City	150 cmd
7.	Ricardo P. Rodriguez Memorial Hospital	Bulaon Resettlement, City of San Fernando	150 cmd
8.	San Luis District Hospital	Sta. Lucia, San Luis	150 cmd
9.	Emigdio D. Cruz Memorial Hospital	San Agustin Norte, Arayat	150 cmd
10.	Domingo B. Flores District Hospital,	Batasan, Macabebe	150 cmd

The design and construction shall adopt the use of modern and/or future proof and most suitable wastewater treatment technology to ensure the said hospitals' consistent and satisfactory compliance to the standards set forth in the DENR Administrative Order No. 2016-08 or the "Water Quality Guidelines and General Effluent Standards of 2016" and its updated guidelines based on DENR Administrative Order No. 2021-19.

The wastewater treatment facilities to be proposed shall also account for the technical, administrative, and financial considerations as enumerated in the project background, and other factors affecting hospital operations, such as available space for the wastewater treatment facility, actual bed capacity, number of employees, and existing hospital facilities, among others.

### **1.3 Contractual Framework**

The contractual arrangement to be used for the project is the Design and Build Scheme. Under this scheme, the procuring entity awards a single contract for the architectural/engineering and construction to a single firm, partnership, corporation, joint venture or consortium.

### **1.4 Minimum Qualifications of Proponent**

The eligibility requirements shall comply with the provision of Annex “G” of the 2016 Revised Implementing Rules and Regulations of R.A. 9184 (updated as of October 13, 2022).

## **2. Scope of Contract**

### **2.1 General Scope of Contract**

The guidelines for the procurement and implementation of contracts for Design and Build infrastructure projects shall be govern by in Annex “G” - Guidelines for the Procurement and Implementation of Contracts for Design and Build Infrastructure Projects of the 2016 Revised Implementing Rules and Regulations of R.A. 9184 (updated as of October 13, 2022).

#### **A. Obligations of the Winning Bidder/Contractor**

1. Render architectural and allied engineering design services necessary for the implementation of the project. The allied engineering design services shall include, but not limited to, design for civil, structural, electrical, mechanical, sanitary, and plumbing.
2. Undertake Detailed Architectural and Engineering Designs (DAED) based on data as provided by the procuring entity such as vicinity map, location plans, initial concept designs in conformity to the Minimum Performance Parameters and Specifications (MPSP) attached herein and/or in accordance with latest and appropriate codes, guidelines and standards.
3. Prepare and submit necessary detailed engineering investigations, surveys and designs in accordance with the provisions of Annex “A” of the updated 2016 Revised IRR of R.A. 9184 prior to construction.
4. Cover expenses and secure all the necessary permits and licenses and other pertinent documents required for the implementation of the project up to its final turnover. This shall include, but not limited to the following:
  - a. Building permits and other Ancillary Permits;
  - b. Fire Safety Evaluation Clearance;
  - c. Fire Safety Inspection Certificate;
  - d. Environmental Compliance Certificate (ECC); and
  - e. Other related permits and clearances or as may be required.



5. Undertake project Scope of Works as indicated on Section 2.2 of this TOR.
6. During Construction perform measures and procedures for:
  - a. Control and monitoring of the Construction Schedule as against actual construction works;
  - b. Supervision and monitoring of the quality control and assurance programs of the Works, including integrity of the tests conducted;
  - c. Monthly updating of the Construction Plan and monthly progress reports;
  - d. Development and approval of Construction documentation including putting up a records management and indexing protocols that will enable referencing of all designs and construction records to the Project's components, sub-projects, work type and location.

7. Undertake the following responsibilities of the Winning Bidder/Contractor;

Generally, but without limiting the Winning Bidder's/Contractor's responsibilities elsewhere stated under this agreement, it shall:

- a. Carry out services with sound architectural and engineering theories and practices to ensure that the final works will provide the most economical and feasible development for the Project;
  - i. Accept full responsibility for the Design and Build service to be performed under his Contract for which the Winning Bidder/Contractor is liable to the Provincial Government of Pampanga;
  - ii. Perform services efficiently and diligently and shall use its best effort to keep the reimbursable cost down to possible minimum without impairing the quality of services rendered; and
  - iii. Comply with, strictly observe all laws and take full responsibility regarding workmen's health and safety, workmen's welfare, compensation for injuries, minimum wage, hours of labor and other laws.
- b. The Winning Bidder/Contractor shall be held responsible for the failure of the facility/structure due to faulty design. The review and approval made by the Provincial Government through its implementing unit, shall not release the Winning Bidder/Contractor from responsibility, except when substantial changes in the design have been made without the conformity of the Winning Bidder/Contractor.
- c. For faulty design and/or construction performed by its sub-contractors, the Winning Bidder/Contractor shall assume full responsibility.

## **B. Obligations of the Provincial Engineer's Office (PEO)**

1. Will serve as the Implementing Unit of the Contract/Project in behalf of the Provincial Government of Pampanga;
2. Provide full information on all requirements of the Project;
3. Review, examine, comment and recommend for approval the Contractor's/Winning Bidder's design, construction documents and other submittals without diminishing the Contractor's/Winning Bidder's full and sole responsibility thereof.
4. Supervise and monitor the implementation of the Project/Contract; and
5. Review and recommend for payment the work accomplished by the Winning Bidder/Contractor in conformance with the approved DAED and MPSP included under the Design and Build Contract.

## **C. Obligations of the Environment and Natural Resources Office (PG-ENRO)**

1. Provide technical assistance to the Provincial Engineer's Office (PEO) during the implementation of the Contract/Project whenever necessary;
2. Review the submitted proposal of the Winning Bidder/Contractor relative to compliance to pertinent environmental laws, issuances, and regulations;
3. Request from the Winning Bidder/Contractor for relevant data or information about the constructed wastewater treatment facilities prior to the application for renewal of each hospital's wastewater discharge permit before the DENR-Environmental Management Bureau;
4. Coordinate with the Winning Bidder/Contractor as to quarterly testing for significant parameters per DENR Administrative Order No. 2016-08 (Water Quality Guidelines and General Effluent Standards of 2016) and DENR Administrative Order No. 2021-19 (Updated Water Quality Guidelines and General Effluent Standards for Selected Parameters) upon completion of each wastewater treatment facility.

## **2.2 Project Components**

### **A. Design Phase**

#### **A.1. Preliminary Architectural and Engineering Design (PAED)**

The PAED shall outline in detail the work required for the architectural, structural, electrical, sanitary, mechanical, among others, presented in the form of plans elevations, sections and details using appropriate scales and full size details as required in the Building Permit applications and other application necessary for the construction of the building, together with the schedules and notes conforming with the features

shown in the preliminary conceptual plans and patterned after government standards and requirements.

At the bidding stage, the Bidder/Contractor shall prepare and submit a PAED for each lot based on site maps, design parameters and Minimum Performance Specifications and Parameters (MPSP) as attached herein. Each PAED shall be prepared with a degree of accuracy of approximately plus or minus twenty percent (+/-20%) of the final quantities as per the MPSP.

The PAED, which shall form part of the Bidding Proposal, shall include, but not limited to the following:

1. Preliminary Design and Conceptual Plans

a. Proposed Process Flows and Diagrams (including Design Narrative)

b. Preliminary Surveys and Investigations

- Location plan/vicinity maps
- Utility locations
- Other considerations

c. Architectural Plans and Drawings

- General plans, sections and elevations
- Site development plans
- Other considerations

d. Structural Plans and Drawings

- Structural Design Criteria, Parameters and Design Concept
- Foundation and other structural plans and details
- Design analysis and computations
- Other considerations

e. Plumbing/Sanitary Plans and Drawings

- Sanitary/Plumbing layouts
- Drainage layouts
- Isometric Diagrams
- Other considerations

f. Electrical Plans and Drawings

- Power and lighting layout and diagrams
- Applicable design analysis and computations
- Other considerations

g. Mechanical Plans and Drawings

- Equipment details, layouts and diagrams
- Applicable design analysis and computations
- Other considerations

h. Site Development Plans and Drawings

2. Design and construction methods

- a. Design concept approach and methodology with presentation of project problems, risks and suggested solutions;
- b. Construction methods and schedules;

3. Value Engineering Analysis of design and construction method; and

4. Detailed estimates including a summary sheet indicating the unit prices of construction materials, labor rates and equipment rentals used in coming up with the bid. In the preparation of detailed estimates, DPWH D.O. 143, Series of 2017, prescribing the Standard Pay Item List for Infrastructure Projects and DPWH D.U.P.A (DPWH D.O. 137, Series of 2017, Cost Estimation Manual for Low Rise Buildings) shall be used.

Items of Work per lot shall be summarized as follows based on DPWH standard;

Part II – Other General Requirements

B.1 - Office, Shops, Stores and Workmen Accommodation for Contractor

B.3 - Permits and Clearances

B.4(1) - Construction Survey and Staking

B.7(2) - Occupational Safety and Health Program

B.9 - Mobilization/Demobilization

B.25 - Detailed Engineering and Architectural Design

Part A – Earth Works

Part B – Plain and Reinforced Concrete Works

Part C – Finishing and Other Civil Works

Part D – Electrical Works

Part E – Mechanical Works

Part F – Plumbing and Sanitary Works (under Part C)

Bidders shall present their Preliminary Architectural and Engineering Design (PAED) Plans on suitable scale on 20”x30” white print paper together with the CAD file in USB for easy evaluation. All other textual submittals shall be printed and ring-bound on A4-sized sheets. Bidders shall submit a single copy of each PAED requirements during the bidding stage.

## **A.2. Detailed Architectural and Engineering Design (DAED)**

Under the Contract Agreement, the Winning Bidder/Contractor shall prepare the Detailed Architectural and Engineering Design (DAED) of the Project and submit the DAED to the Provincial Government for approval before the execution of Construction Phase.

The DAED shall be prepared based on the PAED and MPSP as prescribed herein. The DAED shall be undertaken with a degree of accuracy that will allow the estimates to be made within approximately plus or minus (+/-5%) of the final quantities.

Once approved by the Provincial Government, the DAED shall form part of the MPSP. The approved DAED, together with the MPSP provisions on Construction under this TOR, shall govern the actual Construction undertaken by the Winning Bidder/Contractor.

The approved DAED which shall form part of the Contract shall include, but not limited to the following;

1. Detailed Architectural and Engineering Design Plans and Drawings signed and sealed by qualified design professionals and patterned after government standards and requirements;
2. Survey Reports;
3. Site investigation Reports;
4. Soils and Foundation Investigation Reports (if applicable);
5. Technical Specifications, where applicable, in conformance to the latest editions of the DPWH Standard Specifications for Public Work Structures, Volume II and III;
6. Quantity and Cost Estimates of Work Items, based on D.O. 143, Series of 2017, Prescribing the Standard Pay Item List for Infrastructure Projects;

7. Detailed Program of Works covering all components of the Project;
8. Construction Materials Investigation Reports, Minimum Testing Requirements and Quality Control Program in conformity with DPWH standards;
9. Construction Schedule and estimated Cash Flow;
10. Utility Relocation Plan (if applicable);
11. Design Reports;
12. Environmental Impact Assessment as defined by the Department of Environment and Natural Resources (DENR) for the issuance of Environmental Compliance Certificate (ECC), as well as securing Tree Cutting Permit;
13. Construction and Safety and Health Program;
14. Value Engineering Analysis;
15. Construction organization and management structures for the Project, identifying key personnel, positions and functions, contractors, and sub-contractors under the Minimum Manpower Requirement set forth in the Bidding Documents; and
16. Management systems, process and procedures to be implemented.

## **B. Construction Phase**

### **B.1 Scope, Standards and Specifications**

The Winning Bidder/Contractor shall undertake the Construction Works of the Project in accordance with the DAED prepared by the same, as reviewed and approved by the Procuring Entity.

The Construction of the Project shall also comply with MPSP for construction herein prescribed. The MPSP for Construction includes conformance to the provisions about building and subsidiary works, and under the latest edition of the DPWH Blue Book, Volumes II and III.

The Blue Book prescribes among other things, the material requirement and construction requirements for different items of work, including test to be conducted during Construction by the Winning Bidder/Contractor. Attention shall be given to the relevant items of work in the following parts of the Blue Book including standard pay item under D.O. 143, Series of 2017.

### **B.2 Implementation**

Contract implementation shall comply with Annex "E", *Contract Implementation Guidelines for the Procurement of Infrastructure Projects* and supplemented by Section 13. Contract Implementation, of Annex "G", *Guidelines for the Procurement and Implementation of Contracts for Design and Build Infrastructure Projects* and other relevant guidelines of the 2016 Revised Implementing Rules and Regulations of R.A. 9184 (updated as of October 13, 2022).

### **B.3 Completion of Construction**

The Provincial Government shall issue a Certificate of Final Completion of Construction and certify that the following requirements are fully met:

1. All Tests for Construction comply with the pertinent provisions of the Blue Book and other test requirements of the MPSP for Construction;
2. All parts of the project have been completed following the approved DAED and the MPSP for Construction, including the rectification of defects;
3. The Winning Bidder/Contractor, certified as meeting the MPSP, and approved by the Provincial Government through its Implementing Unit, has submitted the required Operation and Maintenance Manuals and performed necessary Testing and Commissioning works; and
4. The Winning Bidders Project Completion Report has been submitted and certified by the Implementing Unit as complying with the requirements.

Also, the Winning Bidder/Contractor shall turn over and transfer to the Provincial Government all reports, working papers, complete set of construction drawings in hard and soft copies including, but not limited to;

ITEM	COPIES EACH
Preliminary Architectural and Engineering Design (PAED) Plans, Drawings, Reports and other submittals	Three (3)
Detailed Architectural and Engineering Design (DAED) Plans, Drawings, Reports and other submittals	Three (3)
Construction Documents Reports and other submittals	Three (3)
Signed and Sealed As Built Plans	Three (3)
Training, Operations and Maintenance Manuals	Three (3)

### **B.4 Warranties and Liabilities**

The design and build project shall have a Defects Liability Period of one (1) year from project completion. This is without prejudice, however, to the liabilities imposed upon the engineer/architect who drew up the plans and specifications for a building sanctioned under Article 1723 of the New Civil Code of the Philippines.

Also, plans prepared and approved, shall be the full responsibility of the design Consultants and/or Winning Bidder/Contractor in accordance with Section 5 of Annex "A" of The 2016 Revised IRR of R.A. 9184, which states that the approval by the authorized government officials of detailed engineering surveys and designs undertaken

by Consultants neither diminishes the responsibility of the latter for the technical integrity of the surveys and designs nor transfer any part of that responsibility to the approving officials.

The contractor shall be held liable for design and structural defects and/or failure of the completed project within a period of Fifteen (15) years as specified in Section 62.2.3.2 of the 2016 Revised IRR of R.A. 9184.

All major machineries, equipment and controls supplied by the Contractor or its Subcontractors shall have warranty period of two (2) years reckoned from the project completion date. The Contractor shall repair or replace at his own expense and as soon as practicable any equipment and/or component, within the said period. Provided however, damage or malfunction caused by improper operation contrary to the provided operations manual, instructions, by negligence or lack of proper maintenance on the part of the end-user, voids the warranty.

## **C. Post-Construction Stage**

### **C.1 WWTF Testing and Commissioning**

The Provincial Government and the Contractor shall make up a Commissioning Team to plan the commissioning and turnover of the WWTF. The contractor shall develop the commissioning procedures necessary for its testing and turnover.

The contractor shall join and advise the Provincial Government on the following tests necessary to establish and demonstrate that the WWTF and all its components are reliable and functional and that the performance meets the standard effluent parameters and criteria:

- a. Functional tests – to ensure all equipment installed such as pumps, valves, control center, electrical, instrumentation, pipelines, etc., complies with approved specifications.
- b. Take over tests – shall include reliability tests, water quality tests, among others to demonstrate satisfactory operation of the WWTF under manual and automatic control after the functional tests.
- c. Performance tests – technically, as part of the takeover tests, a performance test shall be carried out on the effluent water quality for one (1) year to verify the WWTF's compliance with the requirements of DAO 2016-08 and DAO 2021-19. Quarterly effluent testing shall be conducted to note the individual treatment efficiency of each wastewater treatment process involved in the WWTF.
- d. Other tests and or/permits as may be required.

All testing and certification requirements including applicable fees shall form part of the bid.

### **C.2 One Year (1) Performance Test Period and Defects Liability Period**

To ensure the completed project will operate and fully adhere to design and build requirements prior to its Final Acceptance by the Procuring Entity, each completed lots shall have a one (1) year Performance Test Period and Defects Liability Period from the issuance of the Procuring Entity's representative the certificate of project completion. During this period the contractor shall;



- a. Undertake all repair works, at his own expense any damage to the infrastructure on account of use of materials of inferior quality as soon as practicable;
- b. Replace all defective machine, equipment, including tools and spare parts after being given due notice to ensure the continuous operation of each WWTF.
- c. Provide relevant lectures (minimum of one day session) and hands-on training (minimum of three months) to hand-picked Government personnel for the proper maintenance and operation of each WWTF.
- d. Ensure the availability of qualified personnel/technician within 48-hour notice in case of system failure or malfunction.
- e. Perform and periodic maintenance on each completed lots and prepare and submit quarterly (or as needed) preventive maintenance reports.
- f. As part of the bid, supply all necessary chemicals, biological additives and/or other consumables to be used in the treatment technology for the whole duration of the performance test period.

### **C.3 Turnover and Technology Transfer**

All relevant documents, plans, manuals, testing records, and other design and operations documents shall be transferred to the Provincial Government after the end of the one (1) year Performance Test period reckoned from project completion. This shall include, but not limited to the following:

- a. Updated Operation and Maintenance Manuals and Records
- b. Report of projected yearly operating and maintenance cost for a 5-year period.
- c. Other plan/manual/records as may be required

Also, in case of consultations on the entire second year of operations, especially on extraordinary circumstances, communications may be done via email and other possible means that do not necessarily require the physical assignment of technical personnel by the contractor. This should not require additional cost to the Provincial Government.

## **3. Minimum Performance Specifications and Parameters (MPSP)**

The Winning Bidder/Contractor shall undertake the design and construction of the project in conformance with the TOR and its MPSP.

It should be noted that the herein attached MPSP data are for reference only. The procuring entity does not guarantee that these data are fully correct, up to date, and applicable to the project at hand, in which case, the Winning Bidder/Contractor is allowed to adopt appropriate design standards and specifications subject to review and validation of the Procuring Entity or its representative.

The purpose of MPSP is:

1. To establish the minimum requirements that the bidder must conform to the design and construction of the project; and

2. Create certainty on both the Provincial Government and prospective Bidders in the expected output for the Project.

Section VII. Other References, shall also form part of this MPSP.

The Winning Bidder/Contractor shall provide design and build services, which shall meet the following minimum performance specifications and parameters;

### **3.1 General Requirements**

1. The Design and Build Contractor shall be wholly responsible for all aspects of the design and construction of the WWTF including treatment process, mechanical, electrical, control, instrumentation and automation, site development and civil works, architectural, and building services.
2. The treatment processes and installation designs proposed shall be compatible to the influent wastewater characteristics and pollution load, to the receiving water body classification.
3. The WWTF designer shall consider a compact modular design taking into account the space constraints on some locations.
4. The WWTF shall be designed to incorporate effective and yet low operational expenses.
5. The WWTF tank should be able to handle the anticipated highly fluctuating flow and water surge, an equalization tank with an effective capacity of 4 hours minimum shall be provided.
6. The WWTF shall have a design to recycle portion of the treated effluent for toilet flushing in some of the hospital facilities, landscapes maintenance and where appropriate or deemed possible;
7. All key equipment of the WWTF shall be provided with n+1 setup (back up).
8. The WWTF shall have a maximum treatment time or process retention time of 1 hour;
9. The WWTF shall have minimal to low odor emissions;
10. The WWTF shall operate on a maximum noise level of 45dB;
11. The layout shall facilitate safe, secure and easy access to areas during its operation and maintenance;
12. The treatment processes design to be proposed must be kept to the simplest possible and proven cost effective;
13. Spare parts and supplies of the WWTF components that need replacement shall be locally manufactured or must be available in the Philippine market for future maintenance purposes;

14. The WWTF shall be designed such that in the event of emergency, failure in the processes, the WWTF will revert to standby or holding facility, or to a safe status, as appropriate, to allow the WWTF to operate continuously;
15. The WTF shall be designed to consistently provide effluent complying with DENR Administrative Order No. 2016-08 “Water Quality Guidelines and General Effluent Standards of 2016” and Administrative Order 2021-19, “Updated Water Quality Guidelines and General Effluent Standards for Selected Parameters”, particularly for Class C waters or higher.

### 3.2 Design Parameters

#### 1. The Sewerage System

The existing sewerage system for each lot were built few years ago. The system designer should consider the system as outdated, inefficient or non-performing aside from the fact that sewer lines are shared with domestic and T&BHW influent, violating further DENR-DOH Joint AO No. 02 – S-05.

The Designer must seriously consider to conduct a comprehensive physical survey, flow monitoring, sampling and lab analysis of both influents, distance of sources and volume flows to appropriately size the piping requirements, locations and size of lift stations and mechanical appurtenances needed to transport the wastewater to pre-treatment and WWTF.

#### 2. Influent Characteristics

The contractor shall conduct initial and complete influent wastewater analysis to verify, validate and determine the degree and extent of pollution loading from all sources of wastewater to be tapped into the treatment facility. The following figures shall be used as the basis for the WWTF design:

Nature of Wastewater	Domestic
Average Sewage Flow/ Day	300 m <sup>3</sup> /150 m <sup>3</sup>
Discharge Pattern	Continuous
Peak Factor	2.4
Influent BOD5 concentration	300 mg/L
Influent TSS concentration	300 mg/L
Influent COD concentration	600 mg/L
Influent TKN concentration	80 mg/L
Influent Oil & Grease	≤ 50 mg/L
Total coliform concentration	> 106 – 108 MPN/100 mL

### 3. Effluent Characteristics

The WWTF shall achieve a final effluent water quality that will consistently meet the effluent standards under Table 9 of the DENR Administrative Order No. 2016-08 for Class C Water Body Classification:

Parameter	Unit	Effluent Standard
Color	TCU	150
Temperature	°C Change	3
pH (range)		6.0 – 9.5
Biochemical Oxygen Demand (BOD)	mg/L	50
Total Suspended Solids (TSS)	mg/L	100
Fecal Coliform	MPN/100 mL	400
Ammonia	mg/L	0.5
Nitrate	mg/L	14
Phosphate	mg/L	1
Oil and Grease	mg/L	5
Surfactants (MBAS)	mg/L	15

For any parameters not listed above, the discharge standards shall at no time exceed those set under Class C Inland Waters.

### 4. Design Capacity and Flows

The WWTFs to be established in the following hospitals shall have the corresponding capacities in cubic meters per day (cmd) operations for an average influent wastewater generation:

<b>Lot</b>	<b>Name of Hospital</b>	<b>Location</b>	<b>Capacity</b>
1.	Diosdado P. Macapagal Memorial Hospital	San Matias, Guagua	300 cmd
2.	Romana Pangan District Hospital	San Jose, Floridablanca	150 cmd
3.	Escolastica Romero District Hospital	San Nicolas 1 <sup>st</sup> , Lubao	150 cmd
4.	Andres S. Luciano District Hospital	Balitucan, Magalang	150 cmd
5.	Jose Songco Lapid District Hospital	Babo Sacan, Porac	150 cmd
6.	Mabalacat District Hospital	Camachiles, Mabalacat City	150 cmd
7.	Ricardo P. Rodriguez Memorial Hospital	Bulaon Resettlement, City of San Fernando	150 cmd
8.	San Luis District Hospital	Sta. Lucia, San Luis	150 cmd
9.	Emigdio D. Cruz Memorial Hospital	San Agustin Norte, Arayat	150 cmd
10.	Domingo B. Flores District Hospital,	Batasan, Macabebe	150 cmd

The minimum and maximum treated wastewater flowrates, as well as the number of operating hours per given day, and other relevant operating parameters, shall be determined during the study to be conducted by the Contractor/Winning Bidder for optimum design.

The design MUST also allow for possible future expansion in operations.

#### 5. WWTF Design Life Span

The WWTFs shall be designed in such a way as to provide for minimum life span assumptions and projections under expected normal operation, with regular maintenance in place, duties, works and environments the component infrastructure are subjected to. This is for it to continue to function optimally for its purpose and for the Provincial Government to have a sound basis of forecasting renovation and repair budget requisites and plans:

Process Equipment - 5 years

(Mechanical and Electrical System)

Pumps	-	3 years
Structural/Civil works	-	15 years

Materials used for the WWTF shall be so that it is able to function within the said minimum life span. It should also be considered that the life spans set, assumes that the users and technical workers assigned in the WWTF practice regular inspection and routine maintenance procedures.

### 3.3 Process Descriptions and Elements

The wastewater treatment technology considered for this project is Moving Bed Biofilm Reactor (MBBR). Prospective bidders may present a different technology to be used for all lots, deemed appropriate by the designer taking into consideration all requirements and parameters presented in this TOR and MPSP.

#### 1. Pre-Treatment Process

- a. The design shall take into account the flow conditions at the completion of the Works.
- b. The WWTF will be handling both domestic waste and toxic & bio-hazardous (T&BHW) waste from each hospitals' operations.
- c. T&BHW pre-treatment unit must consider the special wastewater quality criteria as defined in Joint DENR-DOH AO 02 – S-05 as to bio-hazards of infectious and toxic waste exposure and the requirement for proper neutralization-decontamination-stabilization process involved prior combining the treated wastewater with domestic wastewater – at equalization tank to downstream processes to the secondary treatment system;
- d. Filterable solids removal must be fully addressed prior further processes as this will greatly affect treatment efficiency;
- e. Manual bar fine screen thickness/sizes shall be Mesh Steel Wire with 3.6m<sup>3</sup>/min with 2 mm slit size, SS AISI 304. The control system and the hydraulics shall allow for this to reduce solid deposition.
- f. The design of the installation must ensure access for maintenance of the equipment and in particular allow for manual cleaning of the screened solids from the screen and for cleaning away solids build up upstream and downstream of the screens.
- g. All equipment shall be shipped in one piece. All wetted parts and screen bars shall be SS AISI 304 material as a minimum.
- h. The cleaning of screened and dewatered solid material is undertaken such that there is no visual fecal matter and that the screenings are in a suitable condition for road transport and ultimate offsite disposal, therefore it is upon contractor-designer's responsibility that so such occurrence of this kind will happen;
- i. The collected emulsified oils and grease shall be for proper disposal.

- j. The WWTF shall be able to accommodate all flow conditions, as specified, therefore, equalization tank shall be provided.
- k. Any acceptable influent flow measurement device that accurately monitor flow rates is allowed provided it meets performance standards;
- l. Suitable materials/equipment must be used in transporting and treatment of special hospital wastewater; Equalization Submersible Non-Clog channel type Transfer Pump with Cutter, maybe used for the purpose. It shall have minimum 76.2 mm diameter or as per flow design parameters.
- m. The equalization tank shall be continually mixed with air supplied by an air using Equalization Coarse Bubble Air Diffusers.
- n. The equalization tank should be covered and equipped with an emergency high level channel sensor to indicate the water level in tank.
- o. Option for flow redirection for cases of tank equipment facility maintenance while maintaining continuous and efficient wastewater treatment.

## **2. Secondary Treatment**

- a. The combined pre-treated T&BHW and domestic wastewater must be designed to consider the Biological Nutrient Removal (BNR) System involving non-chemical solutions- intervention as suggested by DENR-DOH – in carrying out Nitrification-Denitrification methods of reducing-removing excess nutrients and organic constituents in wastewater;
- b. The system should operate to strictly exclude as unacceptable storm cycle conditions.
- c. For air requirements below five (<5) Nm<sup>3</sup>/min, a positive displacement blower is allowed. Air requirements above five (>5) Nm<sup>3</sup>/hr, a centrifugal air-bearing turbo blower is required. The blowers shall provide adequate air supply for biological activity under required operating conditions. The duty blowers should have sufficient capacity to provide enough aeration for the biological treatment and for nutrient removal requirement. A standby unit should be installed to continuously provide the required air supply in case of breakdown of the duty blower
- d. Waste Sludge Non-Clog Submersible Pump shall be of the following thickness/size and class; Min. 76.2 mm Dia. Bore or as per Design Capacity Body Cast Iron FC250, Motor Shaft Stainless Steel SUS420J2
- e. Centrifugal air-bearing turbo blowers must be provided with a VFD to interlock with the DO value reading in the aeration tanks. A blow off valve (BOV) should be equipped in the blower for pressure release. SBR Turbo Air Blowers should meet the following requirements:
  - i. 21.29 m<sup>3</sup>/min @ 500 bar
  - ii. Aluminum Casing & Impeller
  - iii. Ti Alloy Shaft

- iv. Ni Alloy Bearing
  - v. Reduce energy consumption by at least 20%
  - vi. Shall have a built-in interface touch screen HMI for easier controls
  - vii. Low noise and no vibration
  - viii. Oil free cooling and lubrication system
  - ix. Oil free maintenance
  - x. Low maintenance cost
- f. Air Diffusers should meet the following requirements:
- i. Fine bubble diffuser type: Min 304.8 mm DISC or as per design capacity
  - ii. Consist of diffuser elements, distribution piping, valves, air manifolds, and blower assembly.
  - iii. Include all associated equipment to provide aeration and mixing for the aeration tank(s)
  - iv. Provide the required actual oxygen transfer rates as well as provide complete mixing over the entire tank.
  - v. Diffuser's membrane material shall be EPDM with PTFE coating.
- g. An Anoxic phase is required as part of the biological nutrient removal to promote denitrification process. Proper mixing of contents must be provided.
- h. A recirculating line should be included to prevent loss of microorganisms from the aeration tank and maintain an adequate population for treatment of the wastewater. The recirculating line should flow back to the anoxic zone of the process.
- i. Biological process of reducing nutrients is encouraged in the overall treatment scheme, otherwise preferred by contractor-designer;
- j. Any means of removing effluent including materials specifications is the responsibility of the proponent.
- k. Dissolved Oxygen Meter installed shall comply with IEC 61298-2 – Process measurement and control devices - General methods and procedures for evaluating performance - Part 2 at nominal operating conditions.
- l. The biological treatment process shall be designed and installed such that the treated effluent meets quality required by the DENR AO 2016-08/DAO 2021-19 - for Class C Water, as summarized under performance specification, and is consistently and robustly met
- m. Process critical mechanical and electrical items shall be required to have a minimum of one installed standby.



- n. Walkways shall be provided to access all permanent equipment within a tank. This shall include all aeration control valves. Easy access into tanks and brackets to support ladders and/or sufficiently large man ways shall be provided.
- o. As part of the initial design requirements, the Contractor shall fully detail the frequency and means of accessing the tank for maintenance. The Contractor shall provide all equipment and fittings needed to facilitate easy and safe maintenance access. They shall also undertake a demonstration of the means of access prior to commissioning and make modifications to the proposal/equipment based on the findings of this demonstration.
- p. The design of aeration systems, inclusive of all pipe works, valves, and headers for the process aeration and mixing requirements, shall be using Fine Bubble Diffusers.
- q. The Contractor shall submit within the bid submission the calculations supporting the design of the aeration system proposed, including all parameter values and other factors assumed in those calculations.
- r. Option for flow redirection for cases of tank/equipment/facility maintenance while maintaining continuous and efficient wastewater treatment

### **3. Post Treatment**

- a. The disinfection unit should be utilized and capable of eliminating pathogenic microorganisms in the effluent prior to discharge
- b. The Contractor may use UV Disinfection Process or Chlorination Disinfection Process
- c. For final effluent chlorination, the system shall use sodium hypochlorite. The sodium hypochlorite shall be delivered to the site in liquid form at minimum 7% concentration
- d. The final effluent shall be required to achieve the minimum disinfection standard as indicated by the Coliform levels in Effluent Limits. Residual Chlorine should be 0.3 mg L minimum
- e. A minimum contact time (CT) for chlorine disinfection shall be 25 to 30 minutes.
- f. The Contractor shall be required to confirm the suitability of this CT based on the expected quality of the effluent and decay rates.
- g. Plug flow reactor shall be provided for disinfection and mixing the treated water and the disinfectant. The design of the plug flow reactor shall ensure that sufficient mixing is provided at the upstream side of the tank.
- h. For UV disinfection, treated effluent will pass through ultraviolet lamps submerged in the effluent, instantaneously neutralizing microorganisms.
- i. Ultraviolet Sterilizer shall be of the following thickness/size and class; Min 195m<sup>3</sup>/h @ 254nm, 1 cm or as per design requirements, SS AISI 304 or 316

or HDPE

- j. Effluent Electro Magnetic Flowmeter shall be of the following thickness/size and class: Min 406.4 mm Dia, or as per design requirements, Carbon Steel ASTM A 105 for housing and Flanges, SS AISI 304 or 316.
- k. Provision of catch-basin as water sampling area located after the disinfection unit and before connection to public drainage/sewer line
- l. A post-treatment system to re-use the treated water can be proposed as an optional item, with separate cost or at no cost to the owner.

#### **4. Sludge Handling**

- a. An aerobic sludge digester (ASD) tank shall be provided for the waste activated sludge (WAS) generated in the aeration tanks. This tank shall have air mixing and a minimum retention time of five (5) days under the full design capacity to stabilize the biomass.
- b. Aerobic Sludge Digester Wide Band Bubble Diffuser shall be of the following thickness/size and class; Min. 24 Holes L=24' or as design requirements, SS AISI 304 or 316.
- c. ASD Non-Clog Submersible Transfer Pump/Screw Press Feed Pump shall be of the following thickness/size and class; Min 76.2 mm Dia Bore or as design requirements;
- d. Roots type Air Blower or equivalent may be used according to design requirement and as recommended by manufacturers;
- e. The stabilized and digested sludge from the aerobic sludge digester will be pumped to the proposed dewatering facility which could be either filter media-bed type with carper mechanism or mechanical type sludge dewatering equipment;
- f. The Standard Sludge Filter Press using all PP Chamber Plate may be considered should it be preferred and guaranteed by the contractor-designer. Complete sludge thickening and chemical solutions preparation and dosing facilities must be included;
- g. The operational site shall not cause excessive noise disruption to the surrounding community.

#### **5. Chemical Dosing and Storage Facilities**

- a. All storage tanks transfer and dosing pumps shall be located within bund wall when available space warrants, otherwise, a suitable option must be presented and approved by OWNER;
- b. Chlorine storage and dosing facilities shall be provided in well ventilated rooms. All chemical storage area shall be properly ventilated. As part of the installation a

bund with adequate drainage must be provided to allow safe disposal drainage of spilt polymer. A secondary containment must be provided for liquid chlorine.

- c. The chemical storage tanks shall be fabricated from FRP, MDPE, HDPE or PP, PE. All chemical storage should be located in the area not prone to flooding or flood protected.

#### **6. Odor Control**

- a. The anticipated odor management will comply with government regulations.
- b. The facility will comply with ISO (international) standards acceptable to even areas in close proximity to residential areas.
- c. Principles of odor management are;
  - i. No odor is emitted from operations with natural ventilation
  - ii. Malodorous sewage is encapsulated in airtight operations;
  - iii. Reliable equipment and back up are provided.

### **3.6. Governing Codes, Standards and References;**

The following latest editions of design codes and standards shall govern the preparation both PAED and DAED;

1. DENR Administrative Order No. 2021-19, Updated Water Quality Guidelines (WQG) and General Effluent Standards (GES) for Selected Parameters
2. DENR Administrative Order No. 2016-08, Water Quality Guidelines (WQG) and General Effluent Standards (GES) of 2016
3. National Building Code of the Philippines and its Latest and Amended IRR
4. National Building Code of the Philippines
5. 2010 National Structural Code of the Philippines Volumes 1 & 2 (NSCP)
6. National Plumbing Code of the Philippines
7. American Society for Testing and Materials (ASTM)
8. American Concrete Institute Manual of Concrete Practice (ACI)
9. American Society of Civil Engineers Manual 7-95 (ASCE)
10. Uniform Building Code 1994
11. American Institute of Steel Construction, Allowable Stress Design (AISC-ASD)
12. Philippine Electrical Code
13. Philippine Mechanical Code
14. Fire Code of the Philippines

15. National Fire Protection Association (NFPA)
16. American Water Works Association (AWWA International organization for Standardization (ISO) Standards
17. Other relevant codes, standards, manuals and references.

The Contractor may use other standards which are equal to or better than herein specified, The Contractor shall clearly state which standards are implemented for each element of work.

### **3.7 Materials and Workmanship**

#### **A. General**

Material and workmanship incl. test requirements shall conform to the provisions of the latest edition of the DPWH Standard Specifications (Blue Book), Volumes II and III. Attention shall be given to the relevant items of work in following parts of the Blue Book including the standard pay item under D.O. 143, Series of 2017.

In addition, for satisfactory completion of Works the Winning Bidder/Contractor shall;

1. Ensure all materials to be supplied are new and free from defects. The quality of materials shall be of the best grade and appropriate kind for the purpose;
2. When called for or directed, furnish for approval, full information and satisfactory evidence as to the kind and quality of materials or articles to be incorporate in the work. Materials and articles installed without such approval shall be at risk of subsequent rejection;
3. Ensure all works are performed in the best and acceptable manner and in strict accordance with the requirements of the plan and specification.
4. Ensure all workmanship is in accordance with the best standard practices, performed in neat workman-like manner, and executed by qualified skilled personnel.
5. Remedy all defective works and replace unapproved materials, on his expense.

### **3.8 Plans and Drawings**

1. All drawings shall be computer-drafted. Drawings shall be submitted in “20 x 30” tracing paper, signed and sealed by a qualified design professional.
2. Keep the same orientation for all plans. The north orientation shall be indicated in all architectural floor plans. The orientation of the architectural plans shall be consistent with all the engineering plans.
3. Existing buildings and new works shall be clearly indicated and labeled in the site plans.
4. Detailed plans shall have a scale not smaller than 1: 50 meters.

5. Spot detailed plans, elevations, and sections shall have a scale not smaller than 1:10 meters.
6. Avoid notes such as ‘see architectural detail’ or ‘see structural’. Always refer with a callout to the specific detail drawing and sheet number.
7. The site plans shall have a scale not smaller than 1:400 meters.

### **3.9 Minimum Requirements for Construction and Safety and Health**

All requirements, provisions and instructions pertaining to Construction Safety and Health for the Contract shall be governed by D.O. 56 Series of 2005, Guidelines for the Implementation of DOLE D.O. No 13, Series of 1998, On Occupational Safety and Health in the Construction Industry

## **4. Summary of Deliverables**

1. Preliminary Architectural and Engineering Design (PAED) of each individual lots based on the TOR and its MPSP.
2. Detailed Architectural and Engineering Design (DAED) of each individual lots based on the TOR and its MPSP.
3. Construction of ten (10) lots of wastewater treatment facilities based on approved DAED and Specifications by the Procuring Entity or its representative.
4. Testing and commissioning prior to turnover of each individual lots as discussed in this TOR and its MPSP.
5. Training, Operations and Maintenance Manuals and other submittals as discussed in this TOR and its MPSP.

## **5. Approved Budget for the Contract (ABC)**

*The ABC is One Hundred Ninety Three Million Two Hundred Fourteen Thousand Three Hundred Eighty Five Pesos (P 193,214,385.00). Bids higher than the ABC shall be automatically rejected.*

## **6. Eligibility Criteria for Bidders**

Eligibility requirements for the Design and Build Project/Contract shall comply with the provisions of Section 9, Annex “G” of the 2016 Revised Implementing Rules and Regulations of R.A. 9184 (updated as of March 31, 2022).

## **7. Contents of the Bids**

Bid proposals shall comply with the provisions of Section 10, Annex “G” of the 2016 Revised Implementing Rules and Regulations of R.A. 9184 (updated as of March 31, 2022).

### **A. Technical Component Envelope (First Envelope)**

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

The bidder shall submit one (1) original set of its Technical Envelope.

### **B. Financial Component Envelope (Second Envelope)**

Contents of the second envelope are specified **Section IX. Checklist of Technical and Financial Documents.**

The bidder shall also submit one (1) original set of its Financial Envelope.

## **8. Preliminary Examination of Bid**

The BAC, during bid opening shall be checking the **First Envelope** of each Bidder against **Section IX. Checklist of Technical and Financial Documents**, to ascertain if they are all present, using a non-discretionary “pass/fail” criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184

Bids which are rated “passed” shall be subjected to the second stage of bidding, Bid Evaluation.

## **9. Bid Evaluation**

For the detailed evaluation of the design and build proposals three-step procedure shall be adopted by the BAC as follows;

### **1. Evaluation of Eligibility**

The BAC shall evaluate the Eligibility Documents submitted by each bidder to determine compliance with the Eligibility Requirements in Section 6 of this TOR.

If the bidder meets all of the Eligibility Requirements, the BAC shall declare the bidder as “eligible” and proceed with the detailed evaluation of its Technical Proposal. If not, the BAC shall issue the Notice of Ineligibility to the bidder and return its unopened Technical and Financial Proposals to the bidder.

### **2. Evaluation of Technical Proposal**

After the evaluation of eligibility, the BAC shall then conduct the evaluation of the Technical Proposal of each eligible bidder for compliance in the following criteria;

- a. Adherence to preliminary design plans to the required MPSS and degree of detail.

Bids shall be evaluated using the criterion below:

Preliminary Design Plans (See PAED)	Conforms to TOR/ MPSS	Degree of Detail (not less than 80%)
a. Process Flows and Diagrams with Design Narrative	Passed/Failed	Passed/Failed
b. Preliminary Surveys and Investigations	Passed/Failed	Passed/Failed
c. Architectural Plans and Drawings	Passed/Failed	Passed/Failed
d. Structural Plans and Drawings	Passed/Failed	Passed/Failed
e. Plumbing Plans and Drawings	Passed/Failed	Passed/Failed
f. Electrical Plans and Drawings	Passed/Failed	Passed/Failed
g. Mechanical Plans and Drawings	Passed/Failed	Passed/Failed
h. Site Development Plans	Passed/Failed	Passed/Failed

b. Adequacy of concept of approach and methodology for detailed engineering design and construction

The BAC shall rate the bidder on the criterion using the following rating system (DPWH Manual of Procedures for Design and Build Projects), which gives the maximum possible points for each sub-criterion, to qualify, the bidder must obtain a minimum or passing rating of 50 points on this criterion.

Sub- Criterion and Characteristics	Maximum Points
<b>A. Plan Approach</b>	<b>80</b>
1. Clarity- quality of narrative description of methodology and work plan in the submitted TPF3-a	<b>20</b>

a. The description discussed fully all aspects of the Design Services in TPF3-a.	(7)
b. The work plan is described in proper order of works activities in TPF3-a.	(7)
c. There are no significant errors and irrelevant discussions in TPF3-a.	(6)
<b>2. Feasibility- do ability of work plan</b>	<b>30</b>
a. The proposed team includes all required key personnel, and the tasks of each key personnel are clearly defined in TPF4 – Team Composition Tasks.	(6)
b. The work activities are achievable and given in logical sequence in TPF6.b – Activity Work Schedule	(7)
c. The assignment of personnel in TPF5 – Time Schedule of Proposed Professional Staff is consistent with the work activities in TPF6.a – Activity Work Schedule	(7)
d. Each of the key personnel has a letter commitment to work on the project	(10)
<b>3. Innovativeness- adoption of quality standards or new technology or tools of approach</b>	<b>10</b>
a. There is innovation with discussion on how the methodology will enhance the quality of work outputs and ensure the timely completion of the Design Services in TPF3-a Description of the Methodology and Work Plan	(5)
b. The methodology completely describes the technology and tools to be used in TPF3-a	(5)
<b>4. Comprehensiveness- completeness and adequate level of the work plan as to how the Design Services shall be carried out in the Minimum Standards and Specifications (MPSS)</b>	<b>20</b>
a. All works required in the Design are sufficiently covered in TPF6.a - Activity Work Schedule	(5)
b. All of the required key personnel are covered in TPF4- Team Composition and Tasks	(5)
c. There is a clear presentation of interdependency of work activities, such as PERT/CPM, as shown in TPF6.b.	(5)
d. The work plan integrates interactions among the bidder, LGUs representative, and other government offices, in TPF3- Description of the Methodology and Work Plan, and/or TPF6.a and TPF6.b – Activity Work Schedule	(5)
<b>B. Interpretation of Project Problems, Risks and Suggested Solutions</b>	<b>20</b>
1. Interpretation of problems and risks that may be encountered in performing the Design Services	<b>10</b>
There is a clear discussion on possible problems and risks based on actual site inspection.	(10)
2. Appropriateness or doability of suggested solutions to the problems and risks.	<b>10</b>
a. The suggested solutions are responsive to the problems and practicable, as stated in TPF2- Comments and Suggestions of designer in the MPSS by the Procuring Entity	(5)
b. There is a clear discussion on how the proposed solutions shall be carried out in TPF2 and TPF3.	(5)
<b>Grand Total</b>	<b>100</b>



### c. Quality of Personnel

For this criterion the bidder must meet the minimum manpower requirements as stated in BDS Clause 10.4.

During the bid evaluation stage, the Procuring Entity may require the prospective Bidders to make an oral presentation of its technical proposal within fourteen (14) calendar days after the opening of bids. The presentation shall include a technical report of the wastewater treatment technology to be used for the project, as well as its efficiency or success rate based on existing projects.

If the bidder passes the meets the Technical Proposal requirements and criteria, the BAC shall declare as “technically complying.” All technically complying bidders shall be treated on the same footing for purposes of the evaluation of the Financial Proposals.

### **3. Evaluation of Financial Proposals**

The financial envelope of “technically complying” bids shall be opened to the public. The BAC, during the second stage of bid opening shall be checking the **Second Envelope** of each Bidder against **Section IX. Checklist of Technical and Financial Documents**, to ascertain if they are all present, using a non-discretionary “pass/fail” criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184.

Each “passed” bid shall be evaluated using non-discretionary criteria - including arithmetical corrections for computational errors - as stated in the Bidding Documents, to determine the correct total calculated bid prices. The BAC shall automatically disqualify any total calculated bid price which exceeds the ABC. The total calculated bid prices (not exceeding the ABC) shall be ranked, in ascending order, from lowest to highest. The bid with the lowest total calculated bid price shall be identified as the Lowest Calculated Bid (LCB).

## **10. Post-Qualification and Award of the Contract.**

This section shall comply with the provisions of Section 12, Annex “G” of the 2016 Revised Implementing Rules and Regulations of R.A. 9184 (updated as of October 13, 2022).

## **11. Design and Build Period**

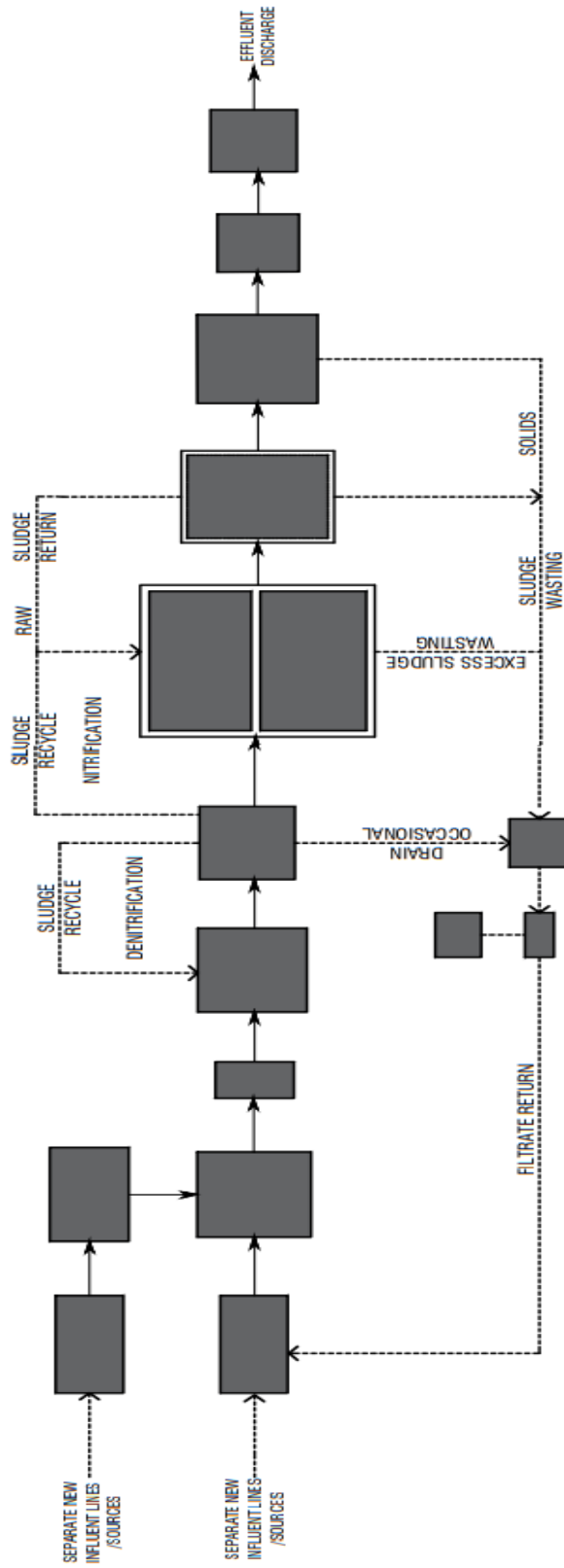
The Winning Bidder/Contractor shall commence actual works upon the issuance by the Procuring Entity the Notice-To-Proceed.

The Winning Bidder/Contractor shall complete the DAED within forty five (45) calendar days including the securing all necessary permits and licenses for its implementation. Upon approval, the Contractor/Winning Bidder shall start the Construction Phase of the Project/Contract.

The Contractor shall complete the Contract within two hundred forty (240) calendar days upon receipt of NTP.

## *Section VII. Other References*

# 1. WWTF Schematic Flow Diagram



1 WWTF SCHEMATIC FLOW DIAGRAM  
 A-1 SCALE  
 NTS

2. Vicinity Map – Diosdado P. Macapagal Memorial Hospital (DPMMH), San Matias, Guagua



DIOSDADO P. MACAPAGAL DISTRICT HOSPITAL

### 3. Vicinity Map - Romana Pangan District Hospital, San Jose Floridablanca, Pampanga

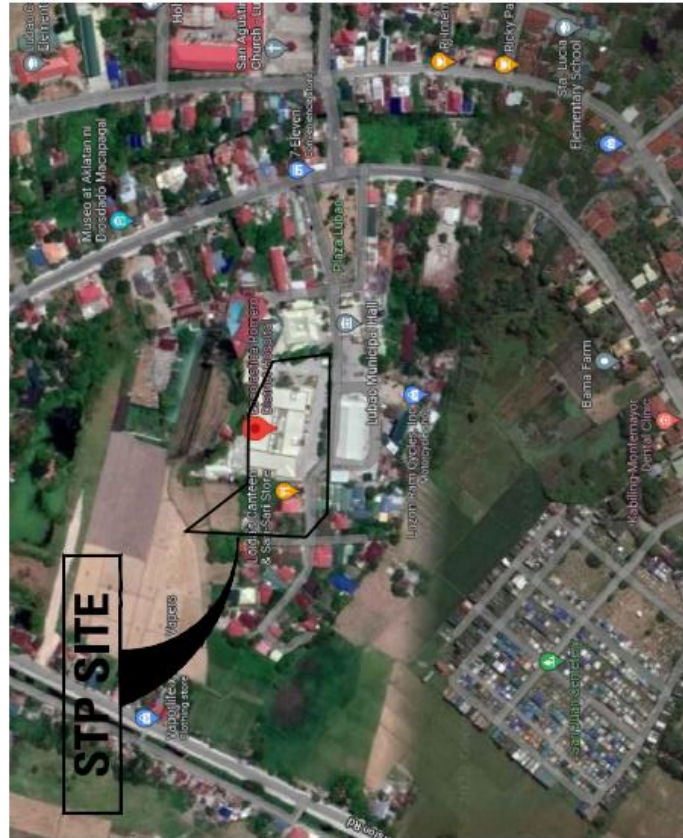


EXISTING STP- OPTION TO REUSE AS CONTROL ROOM OR DISMANTLE & USE THE AREA

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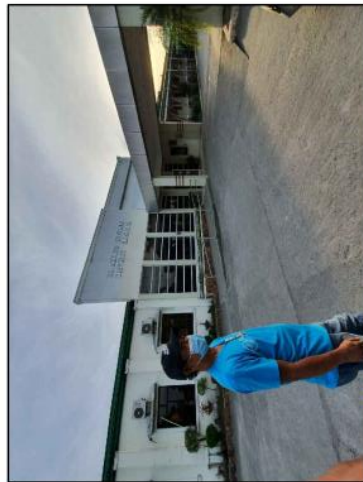
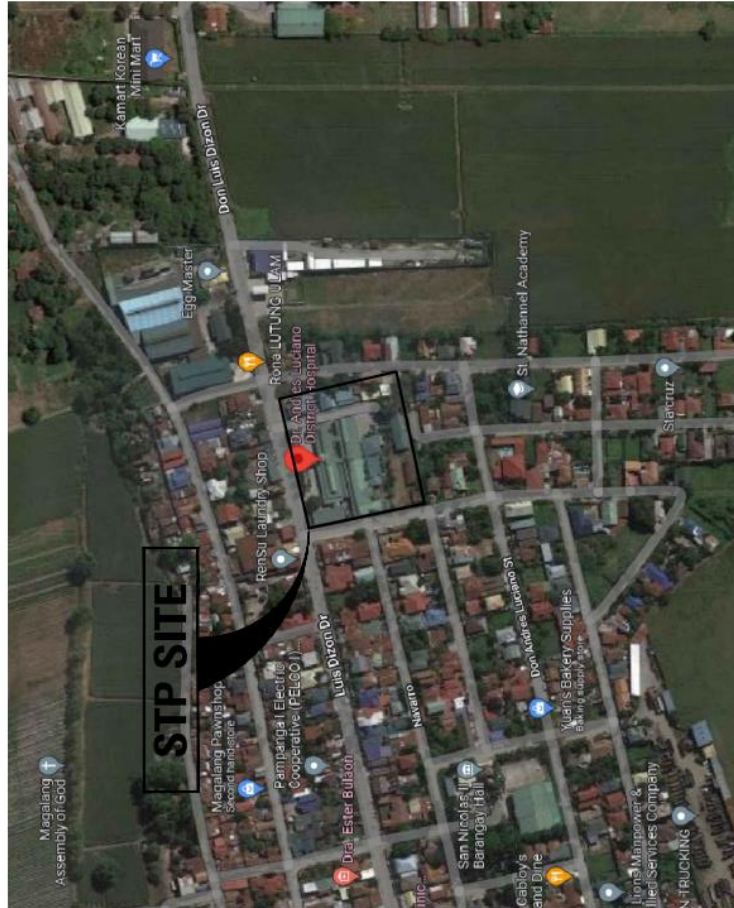
4. Vicinity Map - Escolastica Romero District Hospital, San Nicolas 1st, Lubao, Pampanga



ESCOLASTICA ROMERO DISTRICT HOSPITAL



5. Vicinity Map - Andres S. Luciano, District Hospital, Balitucan, Magalang, Pampanga

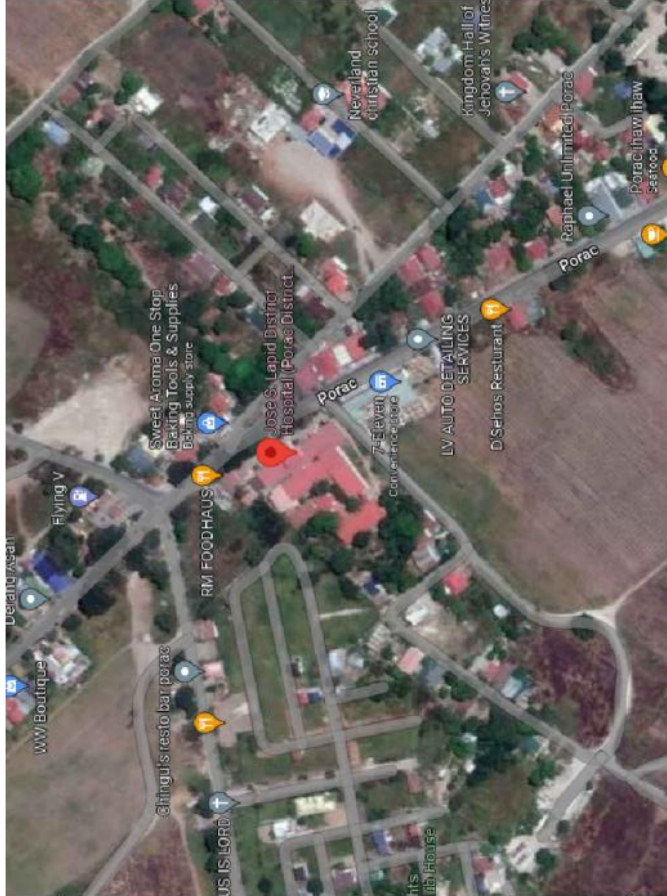


DR. ANDRES J. LUCIANO DISTRICT HOSPITAL



EXISTING STP: OPTION TO REUSE AS CONTROL ROOM OR DISMANTLE & USE THE AREA

6. Vicinity Map - Jose Songco Lapid District Hospital, Babo Sacan, Porac, Pampanga



EXISTING STP- OPTION TO REUSE AS CONTROL ROOM OR DISMANTLE & USE THE AREA



NOTE



7. Vicinity Map - Mabalacat District Hospital, Camachiles, Dau, Mabalacat City, Pampanga



MABALACAT DISTRICT HOSPITAL GROUND



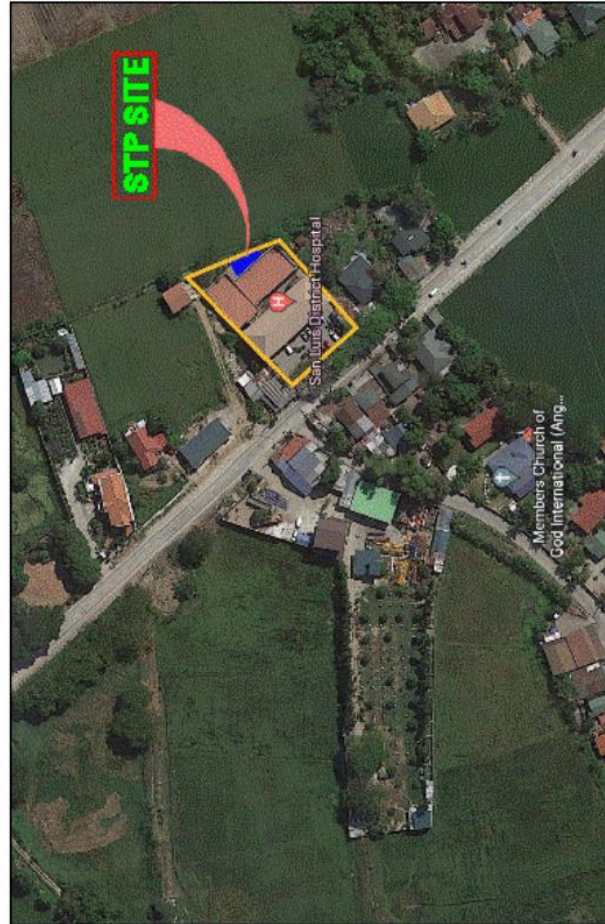
8. Vicinity Map - Ricardo P. Rodriguez Memorial Hospital at Bulaon Resettlement, City of San Fernando, Pampanga



RICARDO P. RODRIGUEZ MEMORIAL HOSPITAL  
GROUNDS



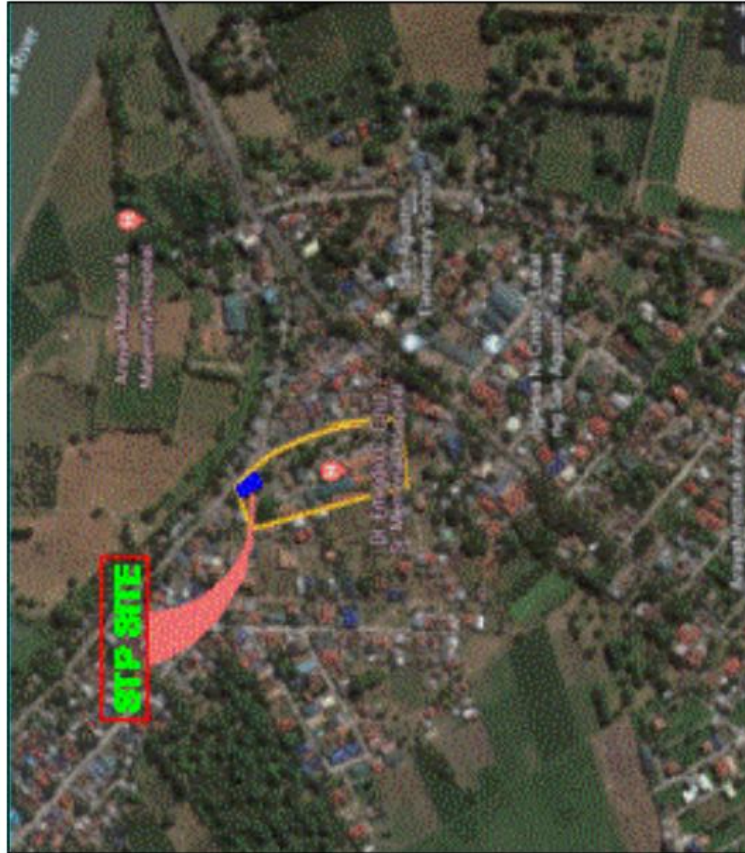
9. Vicinity Map - San Luis District Hospital, Sta. Lucia, San Luis, Pampanga



SAN LUIS DISTRICT HOSPITAL  
GROUNDS



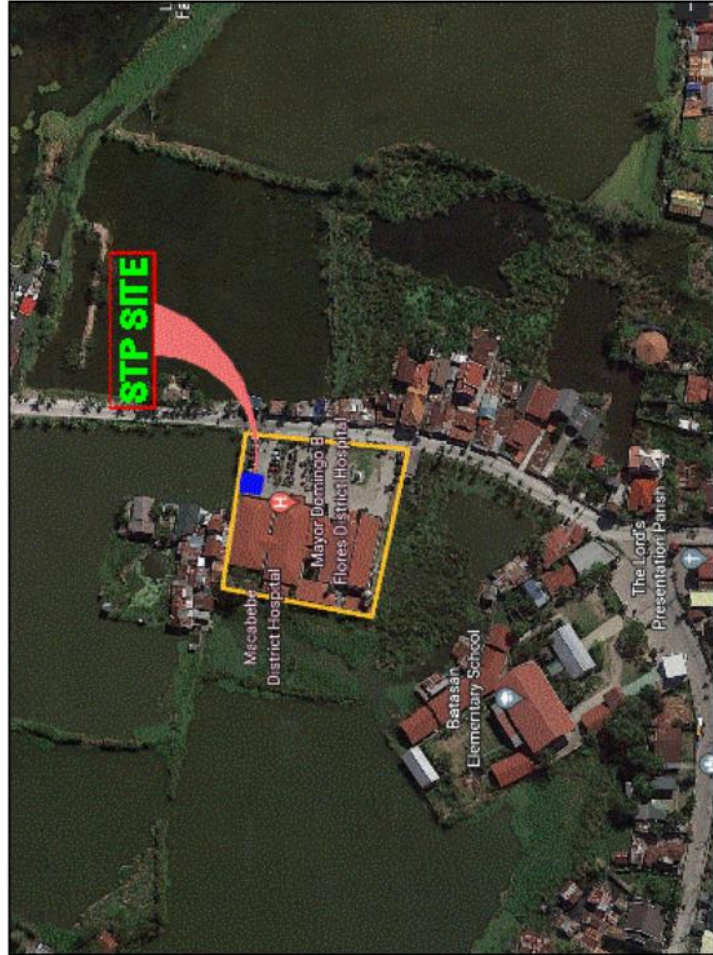
10. Vicinity Map - Emigdio D. Cruz Memorial Hospital, San Agustin Norte, Arayat, Pampanga



DR. EMIGDIO D. CRUZ MEMORIAL HOSPITAL  
GROUNDS



11. Vicinity Map - Domingo B. Flores District Hospital, Batasan, Macabebe, Pampanga



DOMINGO B. FLORES DISTRICT HOSPITAL  
GROUNDS



## 12. Annex 11 – Annex “G” of the Revised 2016 IRR

### **The 2016 Revised Implementing Rules and Regulations – Annex “G”**

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#### **ANNEX “G” GUIDELINES FOR THE PROCUREMENT AND IMPLEMENTATION OF CONTRACTS FOR DESIGN AND BUILD INFRASTRUCTURE PROJECTS**

##### **1. SCOPE AND APPLICATION**

These guidelines shall govern the procurement and implementation of contracts for design and build infrastructure projects and shall supplement applicable provisions of Republic Act No. 9184 (RA 9184) and its Revised Implementing Rules and Regulations (IRR) in particular Section 17.6 and Annex E.

##### **2. PURPOSE**

These guidelines are formulated to determine the conditions for the use of the design and build scheme for infrastructure projects and the procedures for the implementation thereof.

##### **3. GUIDING PRINCIPLES**

The procuring entity, prior to resorting to the design and build scheme, should consider the following advantages and disadvantages of said scheme:

###### **3.1. Advantages:**

- a) Since both design and construction are in the hands of the contractor, there is a single point of responsibility for quality, cost, and schedule adherence, including the risks related to design. This precludes buck-passing and finger-pointing between the designer and the builder.
- b) Because design and construction periods can overlap, the total design and construction time, as well as the final project cost, will be significantly reduced.
- c) The procuring entity is assured of quality considering that the larger responsibility implicit in the design-build scheme serves as motivation for high quality of the facility to be provided. Once the requirements of the procuring entity are defined in performance terms, the designer-builder is responsible for producing the results accordingly. The designer-builder warrants to the procuring entity that the design documents are complete and free from error.
- d) The procuring entity does not need to spend much time and money in seeing to it that the work is done by the contractor exactly as indicated by the design documents prepared by the designer, and in coordinating and arbitrating between separate design and construction contracts.

###### **3.2. Disadvantages:**

- a) Procuring Entities should, however, take into account that in utilizing the design and build scheme for a particular project, contractors are given too much discretion in determining the project cost and there is difficulty in predicting its final cost until the actual commencement of construction.

## **The 2016 Revised Implementing Rules and Regulations – Annex "G"**

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This, however, can be addressed by prescribing that the bid/contract price should not exceed the Approved Budget for Contract (ABC) of the procuring entity and that the contract price is a fixed lump sum amount.

- b) Considering that the extent of the integration of design and construction of the project is exceptionally dependent on the contractor, there may be cases when the end-result may not be exactly in accordance with what the procuring entity has required. These cases can be avoided if the procuring entity adequately defines the output or performance specifications and parameters.

### **4. DEFINITION OF TERMS**

- a. **Approved Budget for the Contract (ABC).** This shall be a lump sum amount that shall cover the cost of design and construction works (*at the option of the procuring entity*) based on the conceptual design and performance specifications and in accordance with applicable provisions of the law or agency guidelines. The ABC shall be calculated based on either the approximate quantities of work of the conceptual design, from standardized designs or from cost records of previous projects of similar kind.
- b. **Bidding Documents for Design and Build Scheme.** These shall basically be similar to the Bidding Documents for infrastructure projects and shall also include the performance specifications and parameters to be followed by the design and build contractors and the method for allocation of risks for the design and build contract, among others.
- c. **Conceptual Design.** This shall describe the general idea of the procuring entity with regard to the completed facility and shall identify the scope or physical components and structures, specific outputs and requirements of the structures and proposed methods of construction, where necessary.
- d. **Design and Build Projects.** This refers to infrastructure projects where the procuring entity awards a single contract for the architectural/engineering design and construction to a single firm, partnership, corporation, joint venture or consortium.
- e. **Performance Specifications and Parameters.** The procuring entity shall define the required performance specifications and criteria and its means of measurement based on the operating outputs and in accordance with appropriate design and construction standards, legal and technical obligations and any other relevant government commitments as required by existing laws and regulations. It shall not be drawn up to favor a particular solution, design and construction method.
- f. **Preliminary Investigations.** These shall include, among others, information on soil, geotechnical, hydrologic, hydraulic, seismic, traffic, and environmental conditions that shall be used to define project design criteria, to set the basis for any changed conditions and establish preliminary project cost estimates.
- g. **Preliminary Survey and Mapping.** These shall determine boundaries and provide stationing along control lines to establish feature and design criteria

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location, and identify existing and future right-of-way limits and construction easements associated with the procuring entity's conceptual design.

- h. **Project Description.** This shall define the objectives, purpose, limitations or constraints, as well as the allocation of risks between the procuring entity and the winning bidder.
- i. **Utility Locations.** The procuring entity shall provide information on existing utilities in and around the project's area.

### **5. CONDITIONS FOR THE USE OF THE DESIGN AND BUILD SCHEME**

5.1. The Design and Build scheme shall be applied under any of the following cases:

- a. For flagship, priority and fast track projects that need to be completed on a tight completion schedule, as included in the Medium-Term Public Investment Program (MTPIP) for national projects and in the Regional Development Investment Plan (RDIP) for regional and provincial projects;
- b. For infrastructure projects requiring advanced engineering or construction technologies or whose intellectual property rights belong to private companies;
- c. For infrastructure projects where design, equipment, plant and construction can be provided exclusively by a company or where manufacturer's know-how is important in the construction of such facility; or
- d. For small projects where there are previously approved drawings or standardized designs and an innovation in design and construction methods under the design and build scheme will result in lower costs and higher quality projects. Examples of these are school buildings, rural health units, among others.

5.2. All design and build projects shall be included in the Annual Procurement Plan (APP) of the procuring entity concerned and shall be subject to prior approval by the Head of the Procuring Entity or his/her duly authorized representative.

### **6. CREATION OF DESIGN and BUILD COMMITTEE**

The procuring entity may create a Design and Build Committee (DBC) composed of highly technical personnel experienced in the field of architecture, engineering and construction in the particular type of project to be bid. The DBC shall assist the project management office (PMO) in the preparation of the conceptual design and performance specifications and parameters, review of detailed engineering design and supervision of the project. It shall, likewise, assist the Bids and Awards Committee (BAC) and the Technical Working Group (TWG) in the evaluation of technical proposals in accordance with the criteria set in the Bidding Documents.

### **7. PRELIMINARY DESIGN AND CONSTRUCTION STUDIES**

No bidding and award of design and build contracts shall be made unless the required preliminary design and construction studies have been sufficiently carried out and duly



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approved by the Head of the Procuring Entity that shall include, among others, the following:

- i. Project Description
- ii. Conceptual Design
- iii. Performance Specifications and Parameters
- iv. Preliminary Survey and Mapping
- v. Preliminary Investigations
- vi. Utility Locations
- vii. Approved Budget for the Contract
- viii. Proposed Design and Construction Schedule
- ix. Minimum requirements for a Construction Safety and Health Program for the project being considered
- x. Tender/Bidding Documents, including Instructions to Bidders and Conditions of Contract

The above data are for reference only. The procuring entity does not guarantee that these data are fully correct, up to date, and applicable to the project at hand. The contractor is responsible for the accuracy and applicability of all data, including the above, that it will use in its design and build proposal and services.

The acquisition of right-of-way and the conduct of eminent domain proceedings shall still be the responsibility of the procuring entity, which shall include a preliminary budget for this purpose.

### **8. DETAILED ENGINEERING REQUIREMENTS**

- 8.1. Upon award of the design and build contract, the winning bidder shall be responsible for the preparation and submission of all necessary detailed engineering investigations, surveys and designs in accordance with the provisions of Annex “A” of this IRR (with the exception of the Bidding Documents and the ABC).
- 8.2. The procuring entity shall ensure that all the necessary schedules with regard to the submission, confirmation and approval of the detailed engineering design and the details of the construction methods and procedures shall be included in the contract documents.
- 8.3. The procuring entity shall review, order rectification, and approve or disapprove – for implementation only - the submitted plans within these schedules. All instructions for rectification shall be in writing stating the reasons for such rectification. The design and build contractor shall be solely responsible for the

## **The 2016 Revised Implementing Rules and Regulations – Annex “G”**

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integrity of the detailed engineering design and the performance of the structure irrespective of the approval/confirmation by the procuring entity.

### **9. ELIGIBILITY REQUIREMENTS**

- 9.1. The eligibility requirements for Design and Build infrastructure projects shall comply with the applicable provisions of Sections 23 to 24 of IRR.
- 9.2. A modified set of requirements integrating eligibility documents and criteria for infrastructure projects and consulting services shall be adopted, as follows:

i. Class “A” Documents (Legal, Technical and Financial Documents) and Class “B” Documents

The prospective bidder shall submit all the required Class “A” and Class “B” documents for infrastructure projects and the following:

- a) relevant statements of all on-going, completed, awarded but not yet started design/design and build related contracts, curriculum vitae of key staff, partners or principal officers; and
- b) valid licenses issued by the Professional Regulatory Commission (PRC) for design professionals. <sup>(a)</sup>

ii. Eligibility Criteria

- a) The eligibility of design and build contractors shall be based on the legal, technical and financial requirements abovementioned. In the technical requirements, the design and build contractor (as solo or in joint venture/consortia) should be able to comply with the experience requirement under the IRR of R.A. 9184, where one of the parties (in a joint venture/consortia) should have at least one similar project, both in design and construction, with at least 50% of the cost of the ABC.
- b) If the bidder has no experience in design and build projects on its own it may enter into subcontracting, partnerships, or joint venture with design or engineering firms for the design portion of the contract.
- c) The relevant provisions under Section 23.4.2 of the IRR of R.A. 9184 on eligibility requirements shall be observed, with the following exceptions:

Joint ventures/consortia among Filipino contractors and consultants or among Filipino contractors and foreign consultants shall be allowed subject to pertinent laws and the relevant provisions of the IRR of R.A. 9184. The joint venture/consortia shall be jointly and severally responsible for the obligations and the civil liabilities arising from the design and build contract: *Provided, however,* That Filipino ownership or interest thereof shall be at least seventy five percent (75%): *Provided further,* That joint ventures/consortia in which Filipino ownership or

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interest is less than seventy-five percent (75%) may be eligible where the structures to be built require the application of techniques and/or technologies which are not adequately possessed by Filipinos and that Filipino ownership or interest shall not be less than twenty-five percent (25%): *Provided, finally*, that when the design services in which the joint venture wishes to engage involve the practice of professions regulated by law, all those who will actually perform the services shall be Filipino citizens and registered professionals authorized by the appropriate regulatory body to practice those professions and allied professions and where foreign designers are required, the foreign designer must be authorized by the appropriate Philippine Government professional regulatory body to engage in the practice of those professions and allied professions.

### **10. SUBMISSION AND RECEIPT OF BIDS**

10.1. In the submission of bids, the first envelope (Technical Proposal) shall contain all the required documents for infrastructure projects under Section 25.2(b) of the IRR of R.A 9184 and the following additional documents:

- i. Preliminary Conceptual Design Plans in accordance with the degree of details specified by the procuring entity;
- ii. Design and construction methods;
- iii. List of design and construction personnel, to be assigned to the contract to be bid, with their complete qualification and experience data; and
- iv. Value engineering analysis of design and construction method.

10.2. The second envelope (Financial Proposal) shall contain all the required documents for infrastructure projects under Section 25.3 of the IRR of R.A 9184 and the following additional documents:

- i. Lump sum bid prices, which shall include the detailed engineering cost, in the prescribed Bid Form;
- ii. Detailed estimates including a summary sheet indicating the unit prices of construction materials, labor rates and equipment rentals used in coming up with the bid; and
- iii. Cash flow by the quarter and payments schedule.

### **11. BID EVALUATION**

For the detailed evaluation of the design and build proposals a two-step procedure shall be adopted by the BAC, which may be undertaken with the assistance of the DBC.

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### **11.1. First-Step Procedure:**

- i. The first step of the evaluation shall involve the review of the preliminary conceptual designs and track record submitted by the contractor as indicated in the Bidding Documents using a non-discretionary "pass/fail" criteria that involve compliance with the following requirements:
  - a. Adherence of preliminary design plans to the required performance specifications and parameters and degree of details;
  - b. Concept of approach and methodology for detailed engineering, design and construction with emphasis on the clarity, feasibility, innovativeness and comprehensiveness of the plan approach, and the quality of interpretation of project problems, risks, and suggested solutions;
  - c. Quality of personnel to be assigned to the project which covers suitability of key staff to perform the duties of the particular assignments and general qualifications and competence including education and training of the key staff;
- ii. For complex or unique undertakings, such as those involving highly specialized or advanced engineering technology, eligible bidders may be required, at the option of the agency concerned, to make an oral presentation within fifteen (15) calendar days after the deadline for submission of technical proposals.

### **11.2. Second-Step Procedure:**

Only those bids that passed the above criteria shall be subjected to the second step of evaluation.

The BAC shall open the financial proposal of each "passed" bidder and shall evaluate it using non-discretionary criteria - including arithmetical corrections for computational errors - as stated in the Bidding Documents, and thus determine the correct total calculated bid prices. The BAC shall automatically disqualify any total calculated bid price which exceeds the ABC. The total calculated bid prices (not exceeding the ABC) shall be ranked, in ascending order, from lowest to highest. The bid with the lowest total calculated bid price shall be identified as the Lowest Calculated Bid (LCB).

## **12. POST-QUALIFICATION and AWARD OF THE CONTRACT**

- 12.1. The LCB shall be subject to post-qualification in accordance with Section 34, Rule X of this IRR to determine its responsiveness to the eligibility and bid requirements. If after post-qualification the Lowest Calculated Bid is determined to be post-qualified it shall be considered the Lowest Calculated and Responsive Bid (LCRB) and the contract shall be awarded to the bidder. In case of post-disqualification of the LCB, the procedure under Section 34 shall also be followed.

## **The 2016 Revised Implementing Rules and Regulations – Annex “G”**

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  - a. Adherence of preliminary design plans to the required performance specifications and parameters and degree of details;
  - b. Concept of approach and methodology for detailed engineering, design and construction with emphasis on the clarity, feasibility, innovativeness and comprehensiveness of the plan approach, and the quality of interpretation of project problems, risks, and suggested solutions;
  - c. Quality of personnel to be assigned to the project which covers suitability of key staff to perform the duties of the particular assignments and general qualifications and competence including education and training of the key staff;
- ii. For complex or unique undertakings, such as those involving highly specialized or advanced engineering technology, eligible bidders may be required, at the option of the agency concerned, to make an oral presentation within fifteen (15) calendar days after the deadline for submission of technical proposals.

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- 12.2. The Head of the Procuring Entity shall approve or disapprove the recommendations of the BAC within a period not exceeding fifteen (15) calendar days from the determination and declaration by the BAC of the LCRB.
- 12.3. The Head of the Procuring Entity concerned shall award the contract to the said bidder pursuant to the provisions of Section 37, Rule XI of this IRR.

### **13. CONTRACT IMPLEMENTATION**

As a rule, contract implementation guidelines for the procurement of infrastructure projects shall comply with Annex "E" of this IRR. The following provisions shall supplement these procedures:

- 13.1. No works shall commence unless the contractor has submitted the required documentary requirements and the procuring entity has given written approval. Work execution shall be in accordance with reviewed and approved documents.
- 13.2. The contractor shall be responsible for obtaining all necessary information as to risks, contingencies and other circumstances which may affect the works and shall prepare and submit all necessary documents specified by the procuring entity to meet all regulatory approvals as specified in the contract documents.
- 13.3. The Contractor shall submit a detailed program of work within fourteen (14) calendar days after the issuance of the Notice to Proceed for approval by the procuring entity that shall include, among others:
  - i. The order in which it intends to carry out the work including anticipated timing for each stage of design/detailed engineering and construction;
  - ii. Periods for review of specific outputs and any other submissions and approvals;
  - iii. Sequence of timing for inspections and tests as specified in the contract documents;
  - iv. General description of the design and construction methods to be adopted;
  - v. Number and names of personnel to be assigned for each stage of the work;
  - vi. List of equipment required on site for each major stage of the work; and
  - vii. Description of the quality control system to be utilized for the project.
- 13.4. Any errors, omissions, inconsistencies, inadequacies or failure submitted by the contractor that do not comply with the requirements shall be rectified,

## **The 2016 Revised Implementing Rules and Regulations – Annex "G"**

resubmitted and reviewed at the contractor's cost. If the Contractor wishes to modify any design or document which has been previously submitted, reviewed and approved, the contractor shall notify the procuring entity within a reasonable period of time and shall shoulder the cost of such changes.

- 13.5. As a rule, changes in design and construction requirements shall be limited only to those that have not been anticipated in the contract documents prior to contract signing and approval. The following guidelines shall govern approval for change or variation orders:
  - i. Change Orders resulting from design errors, omissions or non-conformance with the performance specifications and parameters and the contract documents by the contractor shall be implemented by the contractor at no additional cost to the procuring entity.
  - ii. Provided that the contractor suffers delay and/or incurs costs due to changes or errors in the procuring entity's performance specifications and parameters, he shall be entitled to either one of the following:
    - a. an extension of time for any such delays under Section 10 of Annex "E"; or
    - b. payment for such costs as specified in the contract documents, provided, that the cumulative amount of the variation order does not exceed ten percent (10%) of the original contract price.
- 13.6. The contract documents shall include the manner and schedule of payment specifying the estimated contract amount and installments in which the contract price will be paid.
- 13.7. The contractor shall be entitled to advance payment subject to the provisions of Section 4 of Annex "E".
- 13.8. The procuring entity shall define the quality control procedures for the design and construction in accordance with agency guidelines and shall issue the proper certificates of acceptance for sections of the works or the whole of the works as provided for in the contract documents.
- 13.9. The contractor shall provide all necessary equipment, personnel, instruments, documents and others to carry out specified tests.
- 13.10. All design and build projects shall have a minimum Defects Liability Period of one (1) year after contract completion or as provided for in the contract documents. This is without prejudice, however, to the liabilities imposed upon the engineer/architect who drew up the plans and specification for a building sanctioned under Article 1723 of the New Civil Code of the Philippines.
- 13.11. The contractor shall be held liable for design and structural defects and/or failure of the completed project within the warranty periods specified in Section 62.2.3.2 of the IRR.

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### **14. AMENDMENTS AND FORMS**

In the implementation of these guidelines, the GPPB may issue additional guidelines or introduce modifications thereto through the amendment of its specific provisions as the need arises, as well as, formulate, approve and disseminate standard Bidding Documents, forms and evaluation documents, whenever necessary.



## *Section VIII. Bill of Quantities*

# 1. Form of Bill of Quantities

## BILL OF QUANTITIES

Lot No: <insert Lot number>

Location: <insert Location> ex. 150 CMD for Romana Pangan District Hospital, San Jose Floridablanca, Pampanga

Contract ID : PR No. 22-4106

Pay Item No.	Description	unit of measure	Quantity	Unit Price [ Pesos ]	Total [ Pesos ]
<b>PART II OTHER GENERAL REQUIREMENTS</b>					
B.1	Office, Shops, Stores and Workmens Accomodation for Contractor	L.S	1.00	P _____	P _____
B.3	Permits and Clearances	L.S	1.00	P _____	P _____
B.4(1)	Construction Survey and Staking	L.S	1.00	P _____	P _____
B.7(2)	Occupational Safety and Health Program	L.S	1.00	P _____	P _____
B.9	Mobilization/Demobilization	L.S	1.00	P _____	P _____
B.25	Detailed Engineering and Architectural Design	L.S	1.00	P _____	P _____

**Total for Part II: OTHER GENERAL REQUIREMENTS : P \_\_\_\_\_**

Printed Name and signature of: \_\_\_\_\_

Designation: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Date: \_\_\_\_\_

Note:

1. Pay Item No., Description and Unit of Measure of each Item shall be based on DPWH DO 143, Series 2017, Standard Pay Item List for Infrastructure Projects.
2. Attach individual DUPA for each Item (see format) based on DPWH DO 137, Series 2017, Cost Estimation Manual for Low Rise Buildings
3. Attach additional sheets if necessary

## BILL OF QUANTITIES

**Lot No:** <insert Lot number>

**Location:** <insert Location> ex. 150 CMD for Romana Pangan District Hospital, San Jose Floridablanca, Pampanga

**Contract ID :** PR No. 22-4106

Pay Item No.	Description	unit of measure	Quantity	Unit Price [ Pesos ]	Total [ Pesos ]
<b>PART A</b>					
<b>EARTH WORKS</b>					
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____

**Total for Part A: EARTH WORKS P \_\_\_\_\_**

Printed Name and signature of: \_\_\_\_\_

Designation: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Date: \_\_\_\_\_

**Note:**

1. Pay Item No., Description and Unit of Measure of each Item shall be based on DPWH DO 143, Series 2017, Standard Pay Item List for Infrastructure Projects.
2. Attach individual DUPA for each Item (see format) based on DPWH DO 137, Series 2017, Cost Estimation Manual for Low Rise Buildings
3. Attach additional sheets if necessary

**BILL OF QUANTITIES**

Lot No: <insert Lot number>

Location: <insert Location> ex. 150 CMD for Romana Pangan District Hospital, San Jose Floridablanca, Pampanga

Contract ID : PR No. 22-4106

Pay Item No.	Description	unit of measure	Quantity	Unit Price [ Pesos ]	Total [ Pesos ]
<b>PART B PLAIN AND REINFORCED CONCRETE WORKS</b>					
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____

**Total for Part B: PLAIN AND REINFORCED CONCRETE WORKS: P \_\_\_\_\_**

Printed Name and signature of: \_\_\_\_\_

Designation: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Date: \_\_\_\_\_

Note:

1. Pay Item No., Description and Unit of Measure of each Item shall be based on DPWH DO 143, Series 2017, Standard Pay Item List for Infrastructure Projects.
2. Attach individual DUPA for each Item (see format) based on DPWH DO 137, Series 2017, Cost Estimation Manual for Low Rise Buildings
3. Attach additional sheets if necessary

## BILL OF QUANTITIES

**Lot No:** <insert Lot number>

**Location:** <insert Location> ex. 150 CMD for Romana Pangan District Hospital, San Jose Floridablanca, Pampanga

**Contract ID :** PR No. 22-4106

Pay Item No.	Description	unit of measure	Quantity	Unit Price [ Pesos ]	Total [ Pesos ]
<b>PART C FINISHING AND OTHER CIVIL WORKS</b>					
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____

**Total for Part C: FINISHING AND OTHER CIVIL WORKS: P \_\_\_\_\_**

Printed Name and signature of: \_\_\_\_\_

Designation: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Date: \_\_\_\_\_

**Note:**

1. Pay Item No., Description and Unit of Measure of each Item shall be based on DPWH DO 143, Series 2017, Standard Pay Item List for Infrastructure Projects.
2. Attach individual DUPA for each Item (see format) based on DPWH DO 137, Series 2017, Cost Estimation Manual for Low Rise Buildings
3. Attach additional sheets if necessary

**BILL OF QUANTITIES**

Lot No: <insert Lot number>

Location: <insert Location> ex. 150 CMD for Romana Pangan District Hospital, San Jose Floridablanca, Pampanga

Contract ID : PR No. 22-4106

Pay Item No.	Description	unit of measure	Quantity	Unit Price [ Pesos ]	Total [ Pesos ]
<b>PART D</b>	<b>ELECTRICAL WORKS</b>				
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____

**Total for Part D: ELECTRICAL WORKS: P \_\_\_\_\_**

Printed Name and signature of: \_\_\_\_\_

Designation: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Date: \_\_\_\_\_

Note:

1. Pay Item No., Description and Unit of Measure of each Item shall be based on DPWH DO 143, Series 2017, Standard Pay Item List for Infrastructure Projects.
2. Attach individual DUPA for each Item (see format) based on DPWH DO 137, Series 2017, Cost Estimation Manual for Low Rise Buildings
3. Attach additional sheets if necessary

**BILL OF QUANTITIES**

**Lot No:** <insert Lot number>

**Location:** <insert Location> ex. 150 CMD for Romana Pangan District Hospital, San Jose Floridablanca, Pampanga

**Contract ID :** PR No. 22-4106

Pay Item No.	Description	unit of measure	Quantity	Unit Price [ Pesos ]	Total [ Pesos ]
<b>PART E</b>	<b>MECHANICAL WORKS</b>				
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____

**Total for Part E: MECHANICAL WORKS P \_\_\_\_\_**

Printed Name and signature of: \_\_\_\_\_

Designation: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Date: \_\_\_\_\_

**Note:**

1. Pay Item No., Description and Unit of Measure of each Item shall be based on DPWH DO 143, Series 2017, Standard Pay Item List for Infrastructure Projects.
2. Attach individual DUPA for each Item (see format) based on DPWH DO 137, Series 2017, Cost Estimation Manual for Low Rise Buildings
3. Attach additional sheets if necessary

## BILL OF QUANTITIES

**Lot No:** <insert Lot number>

**Location:** <insert Location> ex. 150 CMD for Romana Pangan District Hospital, San Jose Floridablanca, Pampanga

**Contract ID :** PR No. 22-4106

Pay Item No.	Description	unit of measure	Quantity	Unit Price [ Pesos ]	Total [ Pesos ]
<b>PART F PLUMBING and SANITARY WORKS</b>					
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____
<insert pay item No.>	<insert description>	_____	_____	P _____	P _____

**Total for Part F: PLUMBING and SANITARY WORKS P \_\_\_\_\_**

Printed Name and signature of: \_\_\_\_\_

Designation: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Date: \_\_\_\_\_

**Note:**

1. Pay Item No., Description and Unit of Measure of each Item shall be based on DPWH DO 143, Series 2017, Standard Pay Item List for Infrastructure Projects.
2. Attach individual DUPA for each Item (see format) based on DPWH DO 137, Series 2017, Cost Estimation Manual for Low Rise Build
3. Attach additional sheets if necessary



## 2. Form of Bid Summary Sheet Per Lot

### BID SUMMARY SHEET PER LOT

Lot No: <insert Lot number>

Location: <insert Location> ex. 150 CMD for Romana Pangan District Hospital, San Jose Floridablanca, Pampa

Contract ID : · PR No. 22-4106

Item No.	Description / Scope of Work	unit	Quantity	Bid Amount
PART II	OTHER GENERAL REQUIREMENTS	LS	1.00	P _____
PART A	EARTHWORK	LS	1.00	P _____
PART B	PLAIN AND REINFORCED CONCRETE WORKS	LS	1.00	P _____
PART C	FINISHINGS AND OTHER CIVIL WORKS	LS	1.00	P _____
PART D	ELECTRICAL WORKS	LS	1.00	P _____
PART E	MECHANICAL	LS	1.00	P _____
PART F	PLUMBING AND SANITARY WORKS	LS	1.00	P _____

**TOTAL: P** \_\_\_\_\_

I / We certify that our bid meets the conditions and requirements of the contract documents with our total bid amount of <insert amount in words and figures> .

Submitted by :

Name and signature : \_\_\_\_\_

Designation : \_\_\_\_\_

Name of Firm : \_\_\_\_\_

Date : \_\_\_\_\_

### 3. Bid Summary Sheet

#### BID SUMMARY SHEET

Contract ID : PR No. 22-4106

Design and Build of Central Healthcare Wastewater Treatment Facilities for Provincial and Various District Hospitals	Unit	Quantity	Bid Amount (in Pesos)
1) 300 CMD for Diosdado P. Macapagal Memorial Hospital (DPMMH), San Matias, Guagua, Pampanga	L.S.	1	
2) 150 CMD for Romana Pangan District Hospital, San Jose Floridablanca, Pampanga	L.S.	1	
3) 150 CMD for Escolastica Romero District Hospital, San Nicolas 1st, Lubao, Pampanga	L.S.	1	
4) 150 CMD Andres S. Luciano, District Hospital, Balitucan, Magalang, Pampanga	L.S.	1	
5) 150 CMD Jose Songco Lapid District Hospital, Babo Sacan, Porac, Pampanga	L.S.	1	
6) 150 CMD Mabalacat District Hospital, Camachiles, Dau, Mabalacat City, Pampanga	L.S.	1	
7) 150 CMD Ricardo P. Rodriguez Memorial Hospital at Bulaon Resettlement, City of San Fernando, Pampanga	L.S.	1	
8) 150 CMD San Luis District Hospital, Sta. Lucia, San Luis, Pampanga	L.S.	1	
9) 150 CMD Emigdio D. Cruz Memorial Hospital, San Agustin Norte, Arayat, Pampanga	L.S.	1	
10) 150 CMD Domingo B. Flores District Hospital, Batasan, Macabebe, Pampanga	L.S.	1	
<b>GRAND TOTAL (TOTAL BID) :</b>			-

I / We certify that our bid meets the conditions and requirements of the contract documents with our total bid amount of <insert amount in words and figures> to be completed in <insert no. of days>.

Submitted by :

Name and signature : \_\_\_\_\_  
 Designation : \_\_\_\_\_  
 Name of Firm : \_\_\_\_\_  
 Date : \_\_\_\_\_

#### 4. Form of DUPA/Detailed Estimates

##### DETAILED UNIT PRICE ANALYSIS (DUPA)

Item No./Description : <insert Item No. and Description>  
 Unit of Measurement : <insert unit of measurement>  
 Output per hour : <insert out per hour ai applicable>

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.	Labor				
	Sub - Total for A				-
	Name and Capacity	No of Units	No. of Hours	Hourly Rate	Amount
B.	Equipment				
	Sub - Total for B				-
C.	Total (A + B)				
D.	Output per Hour -				
E.	Direct Unit Cost (C ÷ D)				
	Name and Specification	Unit	Quantity	Unit Cost	Amount
F.	Materials				
	Sub - Total for F				-
G.	Direct Unit Cost (E + F)				
H.	Overhead, Contingencies & Miscellaneous (OCM)			x % of G	-
I.	Contractor's Profit (CP)			x % of G	-
J.	Value Added Tax (VAT)			x % of (G + H + I)	-
K.	Total Unit Cost			(G + H + I + J)	-

## ***Section IX. Checklist of Technical and Financial Documents***

# 1. Checklist Technical Component Envelope



**REPUBLIC OF THE PHILIPPINES**  
**Province of Pampanga**  
**City of San Fernando**

**BIDS AND AWARDS COMMITTEE**

## CHECKLIST OF TECHNICAL DOCUMENTS FOR THE PROCUREMENT OF DESIGN AND BUILD PROJECTS

**PROJECT:** \_\_\_\_\_

**BIDDER:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

<b>TECHNICAL COMPONENT ENVELOPE</b>
-------------------------------------

### Class "A" Documents

**Legal Documents**

										(a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) in accordance with <b>Section 8.5.2 of the IRR</b> ;
--	--	--	--	--	--	--	--	--	--	--

**Technical Documents**

										(b) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; <b>and</b>
--	--	--	--	--	--	--	--	--	--	--

										(c) Statement of all on-going, completed, awarded but not yet started design/design and build related contracts; <b>and</b>
--	--	--	--	--	--	--	--	--	--	--

										(d) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules; <b>and</b>
--	--	--	--	--	--	--	--	--	--	---

										(e) Special PCAB License in case of Joint Ventures; <b>and</b> registration for the type and cost of the contract to be bid; <b>and</b>
--	--	--	--	--	--	--	--	--	--	--

										(f) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission; <b>or</b> Original copy of Notarized Bid Securing Declaration. <b>and</b>
--	--	--	--	--	--	--	--	--	--	--

										(g) Project Requirements, which shall include the following: a. Organizational chart for the contract to be bid including contractor's key staff, partners or principal officers, design and construction personnel b. List of contractor's key staff, partners or principal officers, design and construction personnel to be assigned to the contract to be bid, with their complete qualification and experience data; (i) Individual Key Personnel's Bio-Data (ii) Individual Key Personnel's Certificate of Employment (iii) Valid PRC Licenses 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; <b>and</b>
--	--	--	--	--	--	--	--	--	--	--

--	--	--	--	--

- (h) Preliminary Design and Conceptual Plans
  - a. Proposed Process Flows and Diagrams with Design Narrative
  - b. Preliminary Surveys and Investigations
  - c. Architectural Plans and Drawings
  - d. Structural Plans and Drawings
  - e. Plumbing/Sanitary Plans and Drawings
  - f. Electrical Plans and Drawings
  - g. Mechanical Plans and Drawings
  - h. Site Development Plans

--	--	--	--	--

- (i) Design and Construction Methods (see Section X Bidding Forms)
  - a. TPF 1. Designer's References
  - b. TPF 2. Comments and Suggestions of Designer
  - c. TPF 3a. Description of Methodology and Work Plan (Design)
  - d. TPF 3b. Construction Management Strategy
  - e. TPF 4. Team Composition and Tasks
  - f. TPF 5. Time Schedule for Design Professional
  - g. TPF 6a. Activity/Work Schedule (Design)
  - h. TPF 6B. Activity/Work Schedule (Construction)

--	--	--	--	--

- (j) Value engineering analysis of design and construction methods **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***

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- (l) The bidder's computation of Net Financial Contracting Capacity (NFCC).

**Class "B" Documents**

--	--	--	--	--

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

**Any missing document/s in the above-mentioned checklist is a ground for outright declaration of "Non-Compliance". Suppliers and Contractors who will participate in the public bidding of the Province shall submit one (1) original and two (2) copies of the technical component of its Bid.**

[     ] **Passed**

[     ] **Failed**

## 2. Checklist Financial Component Envelope



REPUBLIC OF THE PHILIPPINES  
Province of Pampanga  
City of San Fernando

**BIDS AND AWARDS COMMITTEE**

### FINANCIAL REQUIREMENT FOR THE PROCUREMENT OF DESIGN AND BUILD PROJECTS

PROJECT: \_\_\_\_\_  
BIDDER: \_\_\_\_\_  
DATE: \_\_\_\_\_

#### FINANCIAL COMPONENT ENVELOPE

**Financial Envelope:** Shall contain the following information/documents and shall be opened only if the bidder has complied with the requirements in the the technical envelope.

**Bid Form**

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

**Other documentary requirements under RA No. 9184**

(o) Lump sum bid prices (Summary of Bid), which shall include the detailed engineering cost, in the prescribed form

**and**  
 (p) Detailed estimates including a summary sheet indicating the unit prices of construction materials, labor rates and equipment rentals used in coming up with the bid; and

**and**  
 (q) Cash flow by the quarter and payment schedule.

**Any missing document/s in the above-mentioned checklist is a ground for outright declaration of "Non-Compliance". Suppliers and Contractors who will participate in the public bidding of the Province shall submit one (1) original and two (2) copies of the financial component of its Bid.**

[ ] Passed

[ ] Failed

## *Section X. Bidding Forms*



# 1. Form of Bio Data

## BIO-DATA

Proposed Position: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

Name of Staff: \_\_\_\_\_

Profession: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Years with Firm/Entity: \_\_\_\_\_ Nationality: \_\_\_\_\_

Membership in Professional Societies: \_\_\_\_\_

\_\_\_\_\_

Detailed Tasks Assigned: \_\_\_\_\_

\_\_\_\_\_

### Key Qualifications:

*[Give an outline of staff member's experience and training most pertinent to tasks on project. Describe degree of responsibility held by staff member on relevant previous projects and give dates and locations. Use about half a page.] Training should be supported with Certificate of Training or equivalent document.*

\_\_\_\_\_

### Education:

*[Summarize college/university and other specialized education of staff members, giving names of schools, dates attended, and degrees obtained. Use about one quarter of a page.] To be supported with Diploma or equivalent document.*

---

**Employment Record:**

*[Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, titles of positions held, and locations of projects. For experience in last ten years, also give types of activities performed and client references, where appropriate. Use about two pages.]*

---

**Languages:**

*[For each language, indicate proficiency: excellent, good, fair, or poor in speaking, reading, and writing.]*

---

**Certification:**

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

\_\_\_\_\_ Date: \_\_\_\_\_  
*[Signature of staff member and authorized representative of the firm] Day/Month/Year*

Full name of staff member: \_\_\_\_\_

Full name of authorized representative: \_\_\_\_\_

## 2. Form of Key Personnel's Certificate of Employment

### KEY PERSONNEL'S CERTIFICATE OF EMPLOYMENT/COMMITMENT TO WORK

To :

**BAC Chairperson  
Bids and Awards Committee, Provincial Government of Pampanga  
Capitol Compound, City of San Fernando, Pampanga**

Dear Sir/Madame :

I am \_\_\_\_\_ (*Name of Nominee*), with Professional License No. \_\_\_\_\_ issued on \_\_\_\_\_ at \_\_\_\_\_.

I hereby certify that \_\_\_\_\_ (*Name of Bidder*) has engaged my services as \_\_\_\_\_ (*Designation*) for \_\_\_\_\_ for the Contract if awarded to it.

As \_\_\_\_\_ (*Designation*), I designed and/or supervised the following completed projects (mention only projects of the same nature as the Contract);

Name of Project	Owner	Cost	Date Completed
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

In case of my separation for any reason whatsoever from the above-mentioned Contractor, I shall notify the **Provincial Government of Pampanga through the Bids and Awards Committee** at least twenty-one (21) days before the effective date of my separation.

**<Select one, delete the other>**

As a \_\_\_\_\_ (*Designation*), I know I will have to stay in the Project during the Design Phase and any time the need arises at the jobsite during Construction Phase to the best of my ability. **or**

As a \_\_\_\_\_ (*Designation*), I know I will have to stay in the job site all the time to supervise and manage the Contract works to the best of my ability, and aware that I am authorized to handle only one (1) contract at a time.

I do not allow the use of my name for the purpose of enabling the above-mentioned Contractor to qualify for the Contract without any firm commitment on my part to assume the post of \_\_\_\_\_ (*Designation*) therefore, if the contract is awarded to him since I understand that to do so will be a sufficient ground for my disqualification as \_\_\_\_\_ (*Designation*) in any future **Provincial Government of Pampanga** bidding or employment with any Contractor doing business with the Provincial Government.

(*Name and Signature of Nominee*)

REPUBLIC OF THE PHILIPPINES

CITY OF \_\_\_\_\_)

SUBSCRIBED AND SWORN to me before this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ at \_\_\_\_\_, Philippines, affiant exhibiting to me his/her Residence Certificate No. \_\_\_\_\_ issued at \_\_\_\_\_ on \_\_\_\_\_.

Notary Public

Doc. No. \_\_\_\_\_  
Page No. \_\_\_\_\_  
Book No. \_\_\_\_\_  
Series of \_\_\_\_\_

### 3. NFCC Computation

Contract ID : \_\_\_\_\_  
Contract : \_\_\_\_\_

#### NET FINANCIAL CONTRACTING CAPACITY (NFCC)

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

Where :  $K = 15$

Submitted By : \_\_\_\_\_  
Designation : \_\_\_\_\_  
Name of Firm : \_\_\_\_\_  
Date : \_\_\_\_\_

#### 4. Single Largest Completed Contract (SLCC)

Contract ID : \_\_\_\_\_  
 Contract : \_\_\_\_\_

**STATEMENT OF SINGLE LARGEST COMPLETED CONTRACT (SLCC)**

Name of Project	Project Description	Contract Amount	Owner/Implementing Agency	Date Finished	Remarks
		P			

Submitted by :

Printed Name & Signature : \_\_\_\_\_  
 Designation : \_\_\_\_\_  
 Name of Firm : \_\_\_\_\_  
 Date : \_\_\_\_\_

Note :

1. Prospective bidder must have completed a similar contract to be bid within the last **ten (10) years** and must be atleast **fifty percent (50 %) of the ABC.**
2. Attach Certificate of Completion or Acceptance from Implementing Agency/Project Owner.
3. Contractors under Small A and B categories without similar experience may be allowed to bid if the cost of such contract is not more than the Allowable Range of Contract Cost (ARCC) of their PCAB Registration.

## 5. List of All On-Going Government and Private Contracts

Contract ID : \_\_\_\_\_  
 Contract : \_\_\_\_\_

### LIST OF ALL ON-GOING GOVERNMENT & PRIVATE CONTRACTS (incl. contracts awarded but not yet started)

a. b.	Name of Contract and Project Cost	Owner	Nature of Work	Bidders Role (%)	a. Date Start b. Target		% Completion	Value of Outstanding Works
On-Going								
					a. b.			P -
					a. b.			P -
Awarded but not yet started								
					a. b.			P -
					a. b.			P -
								<b>Total Cost :</b>
								P      -

Submitted by :

Printed Name & Signature : \_\_\_\_\_  
 Designation : \_\_\_\_\_  
 Name of Firm : \_\_\_\_\_  
 Date : \_\_\_\_\_

**6. List of All Related Design/Design and Build Contracts**

Contract ID : \_\_\_\_\_  
 Contract : \_\_\_\_\_

**LIST OF ALL ON-GOING, COMPLETED, AWARDED RELATED DESIGN/DESIGN and BUILD CONTRACTS**

a. b.	Name of Contract and Project Cost	Owner	Nature of Work	Bidders Role (%)	a. Date Start b. Target		% Completion	Value of Outstanding Works
Completed								
					a. b.			P -
On-Going								
					a. b.			P -
Awarded but not yet started								
					a. b.			P -
								<b>Total Cost : P</b>

*\* use additional page if necessary*

Submitted by :

Printed Name & Signature : \_\_\_\_\_  
 Designation : \_\_\_\_\_  
 Name of Firm : \_\_\_\_\_  
 Date : \_\_\_\_\_



## 7. Organizational Chart

Contract ID : \_\_\_\_\_  
Contract : \_\_\_\_\_

### CONTRACTOR'S ORGANIZATIONAL CHART FOR THE CONTRACT

*Submit Copy of the Organizational Chart that the Contractor intends to use to execute the Contract if awarded to him. Indicate in the chart the names of all Key Personnel (see Minimum Manpower Requirement under BDS Clause 12.1(b)(ii.2))*

Attached the required Proposed Organizational Chart for the Contract

Submitted By : \_\_\_\_\_  
Designation : \_\_\_\_\_  
Name of Firm : \_\_\_\_\_  
Date : \_\_\_\_\_

## 8. List of Equipment Pledge to the Contract

Contract ID : \_\_\_\_\_  
 Contract : \_\_\_\_\_

**LIST OF EQUIPMENT, OWNED OR LEASED AND/OR UNDER PURCHASE AGREEMENTS, PLEDGE TO THE PROPOSED CONTRACT**

Name of Firm : \_\_\_\_\_  
 Address : \_\_\_\_\_

Description	Model, Year	Capacity	Plate No.	Motor No.	Location	Condition	Proof Of Ownership
<i>A. Owned</i>							
<i>B. Leased</i>							

Submitted By : \_\_\_\_\_  
 Designation : \_\_\_\_\_  
 Name of Firm : \_\_\_\_\_  
 Date : \_\_\_\_\_

## 9. Financial Bid Form

### BID FORM

Date : \_\_\_\_\_  
Project Identification No. : \_\_\_\_\_

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

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

- a. We have no reservation to the PBDs, including the Supplemental or Bid Bulletins, for the Procurement Project: *[insert name of contract]*;
- b. We offer to execute the Works for this Contract in accordance with the PBDs;
- c. The total price of our Bid in words and figures, excluding any discounts offered below is: *[insert information]*;
- d. The discounts offered and the methodology for their application are: *[insert information]*;
- e. The total bid price includes the cost of all taxes, such as, but not limited to: *[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties]*, which are itemized herein and reflected in the detailed estimates,
- f. Our Bid shall be valid within the a period stated in the PBDs, and it shall remain binding upon us at any time before the expiration of that period;
- g. If our Bid is accepted, we commit to obtain a Performance Security in the amount of *[insert percentage amount]* percent of the Contract Price for the due performance of the Contract, or a Performance Securing Declaration in lieu of the the allowable forms of Performance Security, subject to the terms and conditions of issued GPPB guidelines<sup>12</sup> 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].

- I. 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: \_\_\_\_\_

## 10. Omnibus Sworn Statement

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

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REPUBLIC OF THE PHILIPPINES )  
CITY/MUNICIPALITY OF \_\_\_\_\_ ) S.S.

#### AFFIDAVIT

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

*[Insert signatory's legal capacity]*  
Affiant

**[Jurat]**

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

## 11. Form of Bid Securing Declaration

### **Bid Securing Declaration Form**

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

REPUBLIC OF THE PHILIPPINES)  
CITY OF \_\_\_\_\_ ) S.S.

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

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

I/We, the undersigned, declare that:

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

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

*[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]*  
*[Insert signatory's legal capacity]*  
Affiant

#### **[Jurat]**

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

## 12. TPF 1. Designer's References

### TPF 1. DESIGNER'S REFERENCES

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#### Relevant Services Carried Out That Best Illustrate Qualifications

Using the format below, provide information on each project for which your firm/entity, either individually, as a corporate entity, or as one of the major companies within an association, was legally contracted.

Project Name:		Country:
Location within Country:		Professional Staff Provided by Your Firm/Entity(profiles):
Name of Client:		No. of Staff:
Address:		No. of Staff-Months; Duration of Project:
Start Date (Month/Year):	Completion Date (Month/Year):	Approx. Value of Services (in Current US\$):
Name of Associated Consultants, if any:		No. of Months of Professional Staff Provided by Associated Consultants:
Name of Senior Staff (Project Director/Coordinator, Team Leader) Involved and Functions Performed:		
Narrative Description of Project:		
Description of Actual Services Provided by Your Staff:		

Consultant's Name: \_\_\_\_\_



### 13. TPF 2. Comments and Suggestions of Designer

**TPF 2. COMMENTS AND SUGGESTIONS OF DESIGNER ON THE  
TERMS OF REFERENCE, MINIMUM PERFORMANCE STANDARDS  
AND SPECIFICATIONS (MPSS), AND DATA PROVIDED BY THE  
PROCURING ENTITY**

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Terms of Reference

- 1.
- 2.
- 3.

Minimum Performance Specifications and Parameters:

- 1.
- 2.
- 3.

Data Provided by the Procuring Entity:

- 1.
- 2.
- 3.

## 14. TPF 3a. Description of Methodology and Work Plan (Design)

### **TPF 3a. DESCRIPTION OF METHODOLOGY AND WORK PLAN FOR PERFORMING THE PROJECT (Design)**

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The Bidder shall submit a design methodology which addresses the key items identified in the Employer's Requirements, which include, inter alia, the following:

- (a) Organizational arrangements for the design, including: team structure, roles and responsibilities, design works plan, interface arrangements, design review and approval procedures, and quality assurance arrangements;
- (b) Proposed design deliverables (Per TOR requirements);
- (c) Design statement to describe the approach and methodology that demonstrate the capability in the design of the Project, as described in the Employer's Requirements, which the design statement shall cover the following aspects:
  - 1. Location Plan/Vicinity Map
  - 2. General Notes on Design Parameter & Construction Procedure
  - 3. Topographic Survey Plan
  - 4. Architectural Plans and Elevation
  - 5. Structural Plans and details
  - 6. Electrical Plans and details
  - 7. Plumbing / Sanitary Plans
  - 8. Electronic Plan
  - 9. Mechanical Plan
  - 10. Other details
- (d) Any added value the Bidder will bring or examples of innovative aspects of the design;
- (e) Details of the approach to managing risks, stakeholder engagement, consultation, and environmental permits/consents; and
- (f) Value Engineering.

## 15. TPF 3b. Construction Management Strategy

### **TPF 3b. CONSTRUCTION MANAGEMENT STRATEGY AND METHOD STATEMENT FOR CONSTRUCTION INCLUDING PERT- CPM**

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The Bidder shall submit a construction management strategy as per Employer's Requirements, which address, inter alia, the following:

- (a) Organizational arrangements for construction management, including team structure, roles and responsibilities, interface arrangements, and quality assurance arrangements;
- (b) Subcontractor selection and management;
- (c) Support from the Employer in obtaining and managing consents, permits, and approvals from third parties;
- (d) Site setup proposals, including access, accommodation, welfare facilities and arrangement for plant and material storage;
- (e) Construction phasing proposals, including sequence of work methodology and management of conflicting activities;
- (f) Risk management approach for geotechnical and subsurface aspects of the Works;
- (g) Quality management system, including a draft of the Quality Management Plan;
- (h) Preparation, approval, and implementation for the Contractor's Environmental and Social Management Plan;
- (i) Preparation, approval, and implementation for the Contractor's Health and Safety Management Plan;
- (j) Reporting arrangements;
- (k) Arrangements for site handover, including completion of As-Built Drawings, preparation of operating and maintenance manuals, and any other relevant aspects, and;
- (l) Appreciation of any key construction constraints or difficulties of the Project and the technical solutions.

## 16. TPF 4. Team Composition and Tasks

### TPF 4. TEAM COMPOSITION AND TASKS

Design		
<b>1. Technical/Managerial Staff</b>		
Name	Position	Task
<b>2. Support Staff</b>		
Name	Position	Task
Construction		
<b>1. Technical/Managerial Staff</b>		
Name	Position	Task
<b>2. Support Staff</b>		
Name	Position	Task

17. TPF 5. Time Schedule for Design Professional

TPF 5. TIME SCHEDULE FOR PROFESSIONAL PERSONNEL

Name	Position	Reports Due/Activities	Months (in the Form of a Bar Chart)												Number of Months									
			1	2	3	4	5	6	7	8	9	10	11	12										
Design																1	1	1	1	1	0	1	2	
Construction																								
																								Subtotal (1)
																								Subtotal (2)
																								Subtotal (3)
																								Subtotal (4)

Full-time: \_\_\_\_\_  
 Reports Due: \_\_\_\_\_  
 Activities Duration: \_\_\_\_\_  
 Location: \_\_\_\_\_

Part-time: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 (Authorized representative)

**18. TPF 6a. Activity/Work Schedule (Design)**

**TPF 6a. ACTIVITY (WORK) SCHEDULE (Design)**

**A. Field Investigation and Study Items**

	<i>[1st, 2nd, etc. are months from the start of project.]</i>											
	1st	2 <sup>nd</sup>	3 <sup>rd</sup>	4th	5th	6th	7th	8th	9th	10th	11th	12th
Activity (Work)												
_____												
_____												
_____												
_____												

**B. Completion and Submission of Reports**

Reports	Date
1. Inception Report	
2. Interim Progress Report (a) First Status Report (b) Second Status Report	
3. Draft Report	
4. Final Report	

**19. TPF 6b. Activity/Work Schedule (Construction)**

**TPF 6b. ACTIVITY (WORK) SCHEDULE (Construction)**

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Bar Chart/PERT-CPM

