



REPUBLIC OF THE PHILIPPINES  
QUEZON CITY GOVERNMENT  
BIDS AND AWARDS COMMITTEE –  
GOODS AND SERVICES



# **PHILIPPINE BIDDING DOCUMENTS**

(As Harmonized with Development Partners)

## **SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED WEATHER STATIONS AND OTHERS FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)**

LINE 1: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED  
WEATHER STATIONS AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY  
PROCUREMENT ACTIVITY)

LINE 2: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED RAIN  
GAUGES AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT  
ACTIVITY)

LINE 3: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF RIVER FLOW  
VELOCITY SENSOR AND RIVERFLOW MONITORING AND RISK ANALYSIS SYSTEM FOR THE YEAR 2025  
(EARLY PROCUREMENT ACTIVITY)

**PROJECT NO. QCDRRMO-25-EHSE-0124**

**Government of the Republic of the Philippines**

**Sixth Edition  
July 2020**

# Preface

These Philippine Bidding Documents (PBDs) for the procurement of Goods through Competitive Bidding have been prepared by the Government of the Philippines for use by any branch, constitutional commission or office, agency, department, bureau, office, or instrumentality of the Government of the Philippines, National Government Agencies, including Government-Owned and/or Controlled Corporations, Government Financing Institutions, State Universities and Colleges, and Local Government Unit. The procedures and practices presented in this document have been developed through broad experience, and are for mandatory use in projects that are financed in whole or in part by the Government of the Philippines or any foreign government/foreign or international financing institution in accordance with the provisions of the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract or Framework Agreement, as the case may be; (ii) the eligibility requirements of Bidders; (iii) the expected contract or Framework Agreement duration, the estimated quantity in the case of procurement of goods, delivery schedule and/or time frame; and (iv) the obligations, duties, and/or functions of the winning bidder.

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

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

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

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

# Table of Contents

Glossary of Acronyms, Terms, and Abbreviations	4
Section I. Invitation to Bid	7
Section II. Instructions to Bidders	11
1. Scope of Bid	12
2. Funding Information	12
3. Bidding Requirements	12
4. Corrupt, Fraudulent, Collusive, and Coercive Practices	12
5. Eligible Bidders	13
6. Origin of Goods	13
7. Subcontracts	13
8. Pre-Bid Conference	14
9. Clarification and Amendment of Bidding Documents	14
10. Documents comprising the Bid: Eligibility and Technical Components	14
11. Documents comprising the Bid: Financial Component	14
12. Bid Prices	14
13. Bid and Payment Currencies	15
14. Bid Security	15
15. Sealing and Marking of Bids	16
16. Deadline for Submission of Bids	16
17. Opening and Preliminary Examination of Bids	16
18. Domestic Preference	16
19. Detailed Evaluation and Comparison of Bids	16
20. Post-Qualification	17
21. Signing of the Contract	17
Section III. Bid Data Sheet	18
Section IV. General Conditions of Contract	21
1. Scope of Contract	22
2. Advance Payment and Terms of Payment	22
3. Performance Security	22
4. Inspection and Tests	22
5. Warranty	22
6. Liability of the Supplier	23
Section V. Special Conditions of Contract	24
Section VI. Schedule of Requirements	28
Section VII. Technical Specifications	36
Section VIII. Checklist of Technical and Financial Documents	49

# ***Glossary of Acronyms, Terms, and Abbreviations***

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

**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.

**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])

**CDA** - Cooperative Development Authority.

**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.

**CIF** – Cost Insurance and Freight.

**CIP** – Carriage and Insurance Paid.

**CPI** – Consumer Price Index.

**DDP** – Refers to the quoted price of the Goods, which means “delivered duty paid.”

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

**EXW** – Ex works.

**FCA** – “Free Carrier” shipping point.

**FOB** – “Free on Board” shipping point.

**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]).

**Framework Agreement** – Refers to a written agreement between a procuring entity and a supplier or service provider that identifies the terms and conditions, under which specific purchases, otherwise known as “Call-Offs,” are made for the duration of the agreement. It is in the nature of an option contract between the procuring entity and the bidder(s) granting the procuring entity the option to either place an order for any of the goods or services identified in the Framework Agreement List or not buy at all, within a minimum period of one (1) year to a maximum period of three (3) years. (GPPB Resolution No. 27-2019)

**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.

**GPPB** – Government Procurement Policy Board.

**INCOTERMS** – International Commercial Terms.

**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.

**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.

**Supplier** – refers to a citizen, or any corporate body or commercial company duly organized and registered under the laws where it is established, habitually established in business and engaged in the manufacture or sale of the merchandise or performance of the general services covered by his bid. (Item 3.8 of GPPB Resolution No. 13-2019, dated 23 May 2019). Supplier as used in these Bidding Documents may likewise refer to a distributor, manufacturer, contractor, or consultant.

**UN** – United Nations.

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

### **Notes on the Invitation to Bid**

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

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

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

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



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

### **Notes on the Instructions to Bidders**

This Section on the Instruction to Bidders (ITB) provides the information necessary for bidders to prepare responsive bids, in accordance with the requirements of the Procuring Entity. It also provides information on bid submission, eligibility check, opening and evaluation of bids, post-qualification, and on the award of contract.

## 1. Scope of Bid

The Procuring Entity, **Quezon City Local Government** wishes to receive Bids for the **SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED WEATHER STATIONS AND OTHERS FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)** with identification number **QCDRRMO-25-EHSE-0124**.

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

The Procurement Project (referred to herein as “Project”) is composed of **three (3) line items**, the details of which are described in Section VII (Technical Specifications).

## 2. Funding Information

2.1. The GOP through the source of funding as indicated below for **2025** in the amount of **SIXTY SIX MILLION FOUR HUNDRED THOUSAND PESOS AND 00/100 ONLY (Php66,400,000.00)**.

2.2. The source of funding is:

a) LGUs, the proposed Local Expenditure Program

## 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 Manuals and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

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

The Bidder, by the act of submitting its Bid, shall be deemed to have verified and accepted the general requirements of this Project, including 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, and Coercive Practices

The Procuring Entity, as well as the Bidders and Suppliers, 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. Foreign ownership exceeding those allowed under the rules may participate pursuant to:
  - i. When a Treaty or International or Executive Agreement as provided in Section 4 of the RA No. 9184 and its 2016 revised IRR allow foreign bidders to participate;
  - ii. Citizens, corporations, or associations of a country, included in the list issued by the GPPB, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines;
  - iii. When the Goods sought to be procured are not available from local suppliers; or
  - iv. When there is a need to prevent situations that defeat competition or restrain trade.
- 5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA's CPI, must be at least equivalent to:
  - a. For the procurement of **Non-Expendable Supplies and Services**: The Bidder must have completed a single contract that is similar to this Project, equivalent to at least **fifty percent (50%)** of the ABC.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

## 6. Origin of 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, subject to Domestic Preference requirements under **ITB** Clause 18.

## 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 twenty percent (20%) of the Project.

The Procuring Entity has prescribed that: Subcontracting is not allowed.

## **8. Pre-Bid Conference**

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address and/or through videoconferencing 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 VIII (Checklist of Technical and Financial Documents)**.
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within *the last three (3) years* prior to the deadline for the submission and receipt of bids.
- 10.3. 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. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an Apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

## **11. Documents comprising the Bid: Financial Component**

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII (Checklist of Technical and Financial Documents)**.
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.4. 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. Bid Prices**

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:

- a. For Goods offered from within the Procuring Entity's country:
  - i. The price of the Goods quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom, or off-the-shelf, as applicable);
  - ii. The cost of all customs duties and sales and other taxes already paid or payable;
  - iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
  - iv. The price of other (incidental) services, if any, listed in e.
- b. For Goods offered from abroad:
  - i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
  - ii. The price of other (incidental) services, if any, as listed in **Section VII (Technical Specifications)**.

### 13. Bid and Payment Currencies

- 13.1. For Goods that the Bidder will supply from outside the Philippines, the bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies, shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.
- 13.2. Payment of the contract price shall be made in:
  - a. Philippine Pesos.

### 14. Bid Security

- 14.1. The Bidder shall submit a Bid Securing Declaration<sup>1</sup> or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 14.2. The Bid and bid security *in no case shall exceed One Hundred Twenty (120) calendar days from the date of opening of bids, unless duly extended by the bidder upon the request of the Head of the Procuring Entity (HoPE) of the Quezon City Local Government*. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

---

<sup>1</sup> In the case of Framework Agreement, the undertaking shall refer to entering into contract with the Procuring Entity and furnishing of the performance security or the performance securing declaration within ten (10) calendar days from receipt of Notice to Execute Framework Agreement.

## **15. 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 or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

## **16. Deadline for Submission of Bids**

- 16.1. The Bidders shall submit on the specified date and time through manual submission as indicated in paragraph 7 of the **IB**.

## **17. Opening and Preliminary Examination of Bids**

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

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

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

## **18. Domestic Preference**

- 18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

## **19. Detailed Evaluation and Comparison of Bids**

- 19.1. The Procuring 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 the 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 15 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII (Technical Specifications)**, although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.

19.4. The Project shall be awarded as follows:

One Project having several items that shall be awarded as one contract.

19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

## **20. Post-Qualification**

20.1. 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**

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

## ***Section III. Bid Data Sheet***

### **Notes on the Bid Data Sheet**

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

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

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

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



# Bid Data Sheet

ITB Clause											
5.3	<p>For this purpose, contracts similar to the Project shall be:</p> <ol style="list-style-type: none"> <li><i>A single contract similar to the items to be bid and must be at least <b>fifty percent (50%)</b> of the ABC.</i></li> <li>Completed within the last three (3) years prior to the deadline for the submission and receipt of bids substantially in a <b>FORM prescribed by the QC-BAC-GOODS AND SERVICES, must be accompanied by a copy of Certificate of Acceptance by the end-user or Official Receipt (O.R) or Sales Invoice (S.I.) issued for the Contract.</b></li> </ol>										
7.1	Subcontracting is not allowed.										
12	The price of the Goods shall be quoted DDP <i>within Quezon City</i> or the applicable International Commercial Terms (INCOTERMS) for this Project.										
14.1	<p>The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:</p> <p><b>LINE 1: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED WEATHER STATIONS AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)</b></p> <ol style="list-style-type: none"> <li>The amount of not less than <b>Php422,000.00</b> or equivalent to two percent (2%) of ABC if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or</li> <li>The amount of not less than <b>Php1,055,000.00</b> or equivalent to five percent (5%) of ABC if bid security is in Surety Bond.</li> </ol> <p><b>LINE 2: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED RAIN GAUGES AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)</b></p> <ol style="list-style-type: none"> <li>The amount of not less than <b>Php594,000.00</b> or equivalent to two percent (2%) of ABC if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or</li> <li>The amount of not less than <b>Php1,485,000.00</b> or equivalent to five percent (5%) of ABC if bid security is in Surety Bond.</li> </ol> <p><b>LINE 3: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF RIVER FLOW VELOCITY SENSOR AND RIVERFLOW MONITORING AND RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)</b></p> <ol style="list-style-type: none"> <li>The amount of not less than <b>Php312,000.00</b> or equivalent to two percent (2%) of ABC if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or</li> <li>The amount of not less than <b>Php780,000.00</b> or equivalent to five percent (5%) of ABC if bid security is in Surety Bond.</li> </ol>										
19.3	<table border="1"> <thead> <tr> <th colspan="2">APPROVED BUDGET FOR THE CONTRACT (ABC)</th> </tr> </thead> <tbody> <tr> <td>LINE 1 -</td> <td>P 21,100,000.00 -</td> </tr> <tr> <td>LINE 2 -</td> <td>P 29,700,000.00 -</td> </tr> <tr> <td>LINE 3 -</td> <td>P 15,600,000.00 -</td> </tr> <tr> <td><b>TOTAL ABC:</b></td> <td><b>PHP 66,400,000.00 -</b></td> </tr> </tbody> </table>	APPROVED BUDGET FOR THE CONTRACT (ABC)		LINE 1 -	P 21,100,000.00 -	LINE 2 -	P 29,700,000.00 -	LINE 3 -	P 15,600,000.00 -	<b>TOTAL ABC:</b>	<b>PHP 66,400,000.00 -</b>
APPROVED BUDGET FOR THE CONTRACT (ABC)											
LINE 1 -	P 21,100,000.00 -										
LINE 2 -	P 29,700,000.00 -										
LINE 3 -	P 15,600,000.00 -										
<b>TOTAL ABC:</b>	<b>PHP 66,400,000.00 -</b>										
20.2	<p>List of required licenses and permits relevant to the Project and the corresponding law requiring it.</p> <ul style="list-style-type: none"> <li>No additional requirement</li> </ul>										

21.2	<p>Additional required documents relevant to the Project that are required by existing laws and/or the Procuring Entity.</p> <p><b>FOR LINE 1:</b></p> <ul style="list-style-type: none"> <li>• <b>Organizational Chart for the project (with project title and project number)</b></li> <li>• <b>List of Manpower Requirements (with project title and project number)</b> <ul style="list-style-type: none"> <li>• <i>Bidders should have at least two (2) field staff for the installation, one (1) Meteorologist and one (1) IT-Data Science resources for Training and continuous consultation within the project as this is a science-based data driven project.</i></li> <li>• <i>Bidder must submit a copy of their resume. It shall show relevant trainings and experiences.</i></li> </ul> </li> </ul> <p><b>FOR LINE 2:</b></p> <ul style="list-style-type: none"> <li>• <b>Organizational Chart for the project (with project title and project number)</b></li> <li>• <b>List of Manpower Requirements (with project title and project number)</b> <ul style="list-style-type: none"> <li>• <i>Bidders should have at least three (3) field staff for the installation, one (1) Meteorologist and one (1) IT-Data Science resources for Training and continuous consultation within the project as this is a science-based data driven project.</i></li> <li>• <i>Bidder must submit a copy of their resume. It shall show relevant trainings and experiences.</i></li> </ul> </li> </ul> <p><b>FOR LINE 3:</b></p> <ul style="list-style-type: none"> <li>• <b>Organizational Chart for the project (with project title and project number)</b></li> <li>• <b>List of Manpower Requirements (with project title and project number)</b> <ul style="list-style-type: none"> <li>• <i>Bidders should have at least one (1) field staff for the installation, one (1) Meteorologist and one (1) IT-Data Science resources for Training and continuous consultation within the project as this is a science-based data driven project.</i></li> <li>• <i>Bidder must submit a copy of their resume. It shall show relevant trainings and experiences.</i></li> </ul> </li> </ul>
------	--

## ***Section IV. General Conditions of Contract***

### **Notes on the General Conditions of Contract**

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

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

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

## **1. Scope of Contract**

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

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

Additional requirements for the completion of this Contract shall be provided in the **Special Conditions of Contract (SCC)**.

## **2. Advance Payment and Terms of Payment**

- 2.1. Advance payment of the contract amount is provided under Annex “D” of the revised 2016 IRR of RA No. 9184.
- 2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

## **3. Performance Security**

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than prior to 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 of RA No. 9184.

## **4. Inspection and Tests**

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the **SCC, Section IV (Technical Specifications)** shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

## **5. Warranty**

- 6.1. In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.

- 6.2. The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

## **6. Liability of the Supplier**

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

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

## ***Section V. Special Conditions of Contract***

### **Notes on the Special Conditions of Contract**

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

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

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

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

## Special Conditions of Contract

GCC Clause	
1	<p><i>[List here any additional requirements for the completion of this Contract. The following requirements and the corresponding provisions may be deleted, amended, or retained depending on its applicability to this Contract:]</i></p> <p><b>Delivery and Documents –</b></p> <p>For purposes of the Contract, “EXW,” “FOB,” “FCA,” “CIF,” “CIP,” “DDP” and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:</p> <p><i>[For Goods supplied from abroad, state:]</i> “The delivery terms applicable to the Contract are DDP delivered <i>[indicate place of destination]</i>. In accordance with INCOTERMS.”</p> <p><i>[For Goods supplied from within the Philippines, state:]</i> “The delivery terms applicable to this Contract are delivered <i>[indicate place of destination]</i>. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination.”</p> <p>Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).</p> <p>For purposes of this Clause the Procuring Entity’s Representative at the Project Site is <i>[indicate name(s)]</i>.</p> <p><b>Incidental Services –</b></p> <p>The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements: <i>Select appropriate requirements and delete the rest.</i></p> <ul style="list-style-type: none"> <li>a. performance or supervision of on-site assembly and/or start-up of the supplied Goods;</li> <li>b. furnishing of tools required for assembly and/or maintenance of the supplied Goods;</li> <li>c. furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;</li> <li>d. performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and</li> </ul>
	<ul style="list-style-type: none"> <li>e. training of the Procuring Entity’s personnel, at the Supplier’s plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.</li> <li>f. <i>[Specify additional incidental service requirements, as needed.]</i></li> </ul> <p>The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.</p>

	<p><b>Spare Parts –</b></p> <p>The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:</p> <p><i>Select appropriate requirements and delete the rest.</i></p> <ul style="list-style-type: none"><li>a. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and</li><li>b. in the event of termination of production of the spare parts:<ul style="list-style-type: none"><li>i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and</li><li>ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested.</li></ul></li></ul> <p>The spare parts and other components required are listed in <b>Section VI (Schedule of Requirements)</b> and the cost thereof are included in the contract price.</p> <p>The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of <i>[indicate here the time period specified. If not used indicate a time period of three times the warranty period]</i>.</p> <p>Spare parts or components shall be supplied as promptly as possible, but in any case, within <i>[insert appropriate time period]</i> months of placing the order.</p>
	<p><b>Packaging –</b></p> <p>The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods’ final destination and the absence of heavy handling facilities at all points in transit.</p> <p>The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.</p> <p>The outer packaging must be clearly marked on at least four (4) sides as follows:</p> <p>Name of the Procuring Entity Name of the Supplier</p>



	<p>Contract Description Final Destination Gross weight Any special lifting instructions Any special handling instructions Any relevant HAZCHEM classifications</p>
	<p>A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.</p> <p><b>Transportation –</b></p> <p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.</p> <p>Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.</p>
	<p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.</p> <p>The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.</p> <p><b>Intellectual Property Rights –</b></p> <p>The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.</p>
2.2	<p><i>[If partial payment is allowed, state]</i> “The terms of payment shall be as follows: _____.”</p>
4	<p>The inspections and tests that will be conducted are: <i>Product Presentation/Demonstration/Site Inspection, if applicable.</i></p>

# Section VI. Schedule of Requirements

PROJECT NAME: LINE 1: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED WEATHER STATIONS AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY) - PROJECT NO. QCDRRMO-25-EHSE-0124

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item Number	Description	Unit of Issue	Quantity	Delivered, Weeks / Months
1	<p><b>SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED WEATHER STATIONS AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)</b></p> <p><b>Project Scope of Work</b></p> <p>The CDRRMO plans to install ten (10) automated weather stations within the City identified by CDRRMO. The datasets will then be integrated into the existing data display and data management system (cloud-based and QCITDD) of CDRRMO along with the previously procured sensors. National and local protocols should be followed in the analysis of the sensors' datasets.</p> <p><b>System Output</b></p> <ul style="list-style-type: none"><li>➤ Ten (10) Operational Automated Weather Stations</li><li>➤ Spatial Risk Analysis System<ul style="list-style-type: none"><li>• Data Display</li><li>• Report</li><li>• Alerts</li><li>• Integration</li><li>• Data Backup/Redundancy</li><li>• Historical data</li></ul></li></ul> <p><b>Technical Specifications</b></p> <p><b>1) TEN (10) AUTOMATED WEATHER STATIONS</b></p> <ul style="list-style-type: none"><li>• Power supply through solar</li><li>• Plug and play</li><li>• No programming and complex wiring</li><li>• Real-time access to data from any web browser</li><li>• LCD display for easy field deployment</li><li>• Cloud-based data access</li><li>• Smart Sensor Connectors: 10 inputs.</li><li>• Logging Rate: Configurable for as low as one (1) second.</li><li>• Parameters<ul style="list-style-type: none"><li>◦ Temperature</li><li>◦ Humidity</li><li>◦ Wind Speed</li><li>◦ Wind Direction</li><li>◦ Rain</li><li>◦ Solar Radiation</li></ul></li><li>• Derived Parameters<ul style="list-style-type: none"><li>◦ Heat Index</li><li>◦ Dew Point Temperature</li></ul></li><li>• Interface: RS485</li></ul> <p><b>2) SENSOR SERVICE REPLACEMENT, MAINTENANCE, WARRANTY AND DATA SUBSCRIPTION</b></p> <p>Quarterly checking of station such as:</p> <ul style="list-style-type: none"><li>• Automated Weather Station</li><li>• Data logger</li><li>• Battery</li><li>• Solar Charge Controller</li><li>• Solar Panel</li></ul>	lot	1	<p><b>Within Forty-Five (45) Calendar Days Upon Issuance of Notice to Proceed</b></p>

	<ul style="list-style-type: none"><li>• Three (3) years coverage</li></ul> <p>Replacement of devices and accessories such as:</p> <ul style="list-style-type: none"><li>• Automated Weather Station</li><li>• Data logger</li><li>• Battery</li><li>• Solar Panel</li><li>• Solar Charge</li><li>• Controller</li><li>• Three (3) years coverage</li></ul> <p>Emergency Repair and Maintenance</p> <ul style="list-style-type: none"><li>• 24/7 Availability of Personnel</li><li>• Three (3) years coverage</li></ul> <p>Data Connectivity Subscription</p> <ul style="list-style-type: none"><li>• Three (3) years coverage</li></ul> <p><b>3) SPATIAL RISK ANALYSIS SYSTEM</b></p> <p>Data Display</p> <ul style="list-style-type: none"><li>• GIS, Table, Graph and Threat Matrix display of real-time and historical of automated weather station data</li><li>• GIS analysis overlaying automated weather station data</li><li>• Menu &amp; Settings to display clustered view and per sensor view</li><li>• Spatial analysis of existing and new Sensors (temperature, humidity, heat index, and wind speed) that covers the whole city with color-coding based on identified threshold.</li></ul> <p>Report</p> <ul style="list-style-type: none"><li>• Report Facility to assign automated email reports per location and its recipients</li><li>• Email (HTML) Format</li></ul> <p>Alerts</p> <ul style="list-style-type: none"><li>• Alert Facility to provide weather monitoring and early warning alerts</li><li>• Integrated to existing Telegram alerts for group alerts</li></ul> <p>Integration</p> <ul style="list-style-type: none"><li>• Integration to existing web application and data dump system (cloud-based and QCITDD)</li><li>• Integration to IRISE UP application</li></ul> <p>Data Backup/Redundancy</p> <ul style="list-style-type: none"><li>• Data dumps are to be performed every 15 minutes or shorter (all details pertaining to access to the QCRRMO database such as address or URL to a management console, user id and password are to be given to QCRRMO)</li><li>• Perform redundant data writes to an ITDD database</li><li>• Historical data must be stored in the existing QCRRMO database with redundancy on the ITDD database</li></ul> <p>Software License</p> <ul style="list-style-type: none"><li>• Perpetual software license with three (3) years technical support and maintenance</li></ul> <p><b>4) SENSOR INSTALLATION</b></p> <ul style="list-style-type: none"><li>• Ten (10) Locations</li><li>• Site Survey</li><li>• Installation and Calibration</li><li>• Engineering works</li></ul> <p><b>5) TRAINING</b></p> <ul style="list-style-type: none"><li>• Two (2) days end user orientation for processing of datasets, analysis of datasets, and generation of spatial risk analysis.</li></ul>				<p><b>Within Forty-Five (45) Calendar Days Upon Issuance of Notice to Proceed</b></p>
--	--	--	--	--	---

	<ul style="list-style-type: none"> <li>All training will have eight (8) hours per day with five (5) attendees ✓</li> </ul>			
	<b>(With attached Terms of Reference which will form an integral part of this Philippine Bidding Documents)</b> ✓			
***				

I hereby certify to comply and deliver all the above requirements.

Name: \_\_\_\_\_

Legal Capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

# Section VI. Schedule of Requirements

PROJECT NAME: LINE 2: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED RAIN GAUGES AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)  
PROJECT NO. QCDRRMO-25-EHSE-0124

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item Number	Description	Unit of Issue	Quantity	Delivered, Weeks / Months
1	<p><b>SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED RAIN GAUGES AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)</b></p> <p><b>Project Scope of Work</b></p> <p>The CDRRMO plans to install twenty-two (22) automated rain gauges within the City identified by CDRRMO to aid on the barangay cluster rain analysis. The datasets will then be integrated into the existing data display and data management system (cloud-based and QCITDD) of CDRRMO along with the previously procured sensors. National and local protocols should be followed in the analysis of the sensors' datasets.</p> <p><b>System Output</b></p> <ul style="list-style-type: none"><li>➤ Twenty-two (22) Operational Automated Rain Gauges</li><li>➤ Spatial Risk Analysis System<ul style="list-style-type: none"><li>• Data Display</li><li>• Report</li><li>• Alerts</li><li>• Integration</li><li>• Data Backup/Redundancy</li><li>• Historical data</li></ul></li></ul> <p><b>Technical Specifications</b></p> <p><b>1) TWENTY-TWO (22) AUTOMATED RAIN GAUGES</b></p> <ul style="list-style-type: none"><li>• Power supply through solar</li><li>• Plug and play</li><li>• No programming and complex wiring</li><li>• Real-time access to data from any web browser</li><li>• Enables to monitor data 24/7 via web browser or smartphone</li><li>• Alarm capabilities via text/email</li><li>• LCD display for easy field deployment</li><li>• Cloud-based data access option</li><li>• Smart Sensor Connectors: 10 inputs.</li><li>• Logging Rate: Configurable for as low as ten (10) minutes</li><li>• Accuracy: 0-250mm/hr: +/-2%</li><li>• Accuracy: 250-500mm/hr: +/-3%</li></ul> <p><b>2) SENSOR SERVICE REPLACEMENT, MAINTENANCE, WARRANTY AND DATA SUBSCRIPTION</b></p> <p>Quarterly checking of station such as:</p> <ul style="list-style-type: none"><li>• Rain Gauge</li><li>• Data logger</li><li>• Battery</li><li>• Solar Charge Controller</li><li>• Solar Panel</li><li>• Three (3) years coverage</li></ul> <p>Replacement of devices and accessories such as:</p> <ul style="list-style-type: none"><li>• Rain Gauge</li><li>• Data logger</li><li>• Battery</li></ul>	lot	1	<p><b>Within Sixty (60) Calendar Days Upon Issuance of Notice to Proceed</b></p>

<ul style="list-style-type: none"><li>• Solar Panel</li><li>• Solar Charge Controller</li><li>• Three (3) years coverage</li></ul> <p>Data Connectivity Subscription</p> <ul style="list-style-type: none"><li>• Three (3) years coverage</li></ul> <p><b>3) SPATIAL RISK ANALYSIS SYSTEM</b></p> <p>Data Display</p> <ul style="list-style-type: none"><li>• GIS, Table, Graph and Threat Matrix display of real time and historical of automated weather station data</li><li>• GIS analysis overlaying rain data</li><li>• Menu &amp; Settings to display clustered view and per sensor view</li><li>• 3-D level rain analysis of existing and new rain gauges with color-coding based on identified threshold</li><li>• Spatial rain analysis of existing and new rain gauges that covers the whole city with color-coding based on identified threshold.</li></ul> <p>Report</p> <ul style="list-style-type: none"><li>• Report Facility to assign automated email reports per location and its recipients</li><li>• Email (HTML) Format</li></ul> <p>Alerts</p> <ul style="list-style-type: none"><li>• Alert Facility to provide rain monitoring and early warning alerts</li><li>• Integrated to existing Telegram alerts for group alerts</li></ul> <p>Integration</p> <ul style="list-style-type: none"><li>• Integration to existing web application and data dump system (cloud-based and QCITDD)</li></ul> <p>Data Backup/Redundancy</p> <ul style="list-style-type: none"><li>• Data dumps are to be performed every 15 minutes (all details pertaining to access to the QCRRMO database such as address or URL to a management console, user id and password are to be given to QCRRMO)</li><li>• Perform redundant data writes to an ITDD database</li></ul> <p>Software License</p> <ul style="list-style-type: none"><li>• Perpetual software license with three (3) years technical support and maintenance</li></ul> <p><b>4) SENSOR INSTALLATION</b></p> <ul style="list-style-type: none"><li>• Twenty-two (22) Locations</li><li>• Site Survey</li><li>• Installation and Calibration</li><li>• Engineering works</li></ul> <p><b>5) TRAINING</b></p> <ul style="list-style-type: none"><li>• Two (2) days end user orientation for processing of datasets, analysis of datasets, and generation of spatial rain risk analysis.</li><li>• All training will have eight (8) hours per day with five (5) attendees</li></ul>				<p><b>Within Sixty (60) / Calendar Days Upon Issuance of Notice to Proceed</b></p>
<p><b>(With attached Terms of Reference which will form an integral part of this Philippine Bidding Documents)</b></p>				
<p>***</p>				

I hereby certify to comply and deliver all the above requirements.

Name: \_\_\_\_\_  
Legal Capacity: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

6.

# Section VI. Schedule of Requirements

PROJECT NAME: LINE 3: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF RIVER FLOW VELOCITY SENSOR AND RIVERFLOW MONITORING AND RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)  
PROJECT NO. QCDRRMO-25-EHSE-0124

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item Number	Description	Unit of Issue	Quantity	Delivered, Weeks / Months
1	<p><b>SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF RIVER FLOW VELOCITY SENSOR AND RIVERFLOW MONITORING AND RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)</b></p> <p><b>Project Scope of Work</b></p> <p>The CDRRMO plans to install three (3) river flow monitoring sensor within the City identified by CDRRMO to identify the role of river systems on flooding occurrences within the city. The datasets will then be integrated into the existing data display and data management system (cloud-based and QCITDD) of CDRRMO along with the previously procured sensors.</p> <p><b>System Output</b></p> <ul style="list-style-type: none"><li>➤ Three (3) Operational River Flow Monitoring Sensors</li><li>➤ River Flow Monitoring and Risk Analysis System<ul style="list-style-type: none"><li>• Data Display</li><li>• Report</li><li>• Alerts</li><li>• Integration</li><li>• Data Backup/Redundancy</li><li>• Historical data</li></ul></li></ul> <p><b>Technical Specifications</b></p> <p><b>1) THREE (3) RIVER FLOW MONITORING SENSORS</b></p> <p><b>FLOW VELOCITY SENSOR</b></p> <ul style="list-style-type: none"><li>• Power supply: 6 to 30 V</li><li>• Power consumption at 12 VDC: Active measurement approx. 110 mA</li><li>• Outputs: RS-485 ASCII / Modbus RTU SDI-12</li><li>• Operating temperature: -40 to 75°C</li><li>• Storage temperature: -40 to 60°C</li><li>• Relative humidity: 0 to 100 %</li><li>• Protection rating: IP67</li><li>• Detectable measurement range: 0.08 to 18 m/s (depending on waves)</li><li>• Accuracy: ± 0.01 m/s</li><li>• Resolution: 1 mm/s</li><li>• Direction recognition: +/-</li><li>• Measurement duration: 5 to 240 s</li><li>• Measurement interval: 8s to 5 h</li><li>• Measurement frequency: 24 GHz (K-Band)</li><li>• Radar opening angle: 12°</li><li>• Distance to water surface:<ul style="list-style-type: none"><li>◦ 0.50... 130 m</li><li>◦ 0.05...130 m</li></ul></li><li>• Automatic vertical angle compensation<ul style="list-style-type: none"><li>◦ Accuracy: ± 1°</li><li>◦ Resolution: ±0.1°</li></ul></li><li>• Solar Power Set</li><li>• Cage</li><li>• Equipment Calibration</li></ul> <p><b>Data Logger:</b></p> <ul style="list-style-type: none"><li>• Protection Class: IP67</li><li>• Remote Data Transmission via 2G/4G modem</li></ul>	lot	1	<p><b>Within Sixty (60) Calendar Days Upon Issuance of Notice to Proceed</b></p>

6

	<ul style="list-style-type: none"><li>• Sensor supply: 5 /100 mA or 12 V / 200 mA</li><li>• Reference voltage 2.5 V for potentiometer (max. 4 mA)</li><li>• Number of channels up to 99</li><li>• Operating temperature -35°C to 60°C</li></ul> <p><b>2) SENSOR SERVICE REPLACEMENT, MAINTENANCE, WARRANTY AND DATA SUBSCRIPTION</b></p> <p>Quarterly checking of station such as:</p> <ul style="list-style-type: none"><li>• Flow Velocity Sensor</li><li>• Data logger</li><li>• Battery</li><li>• Solar Charge Controller</li><li>• Solar Panel</li><li>• Three (3) years coverage</li></ul> <p>Replacement of devices and accessories such as:</p> <ul style="list-style-type: none"><li>• Flow Velocity Sensor</li><li>• Data logger</li><li>• Battery</li><li>• Solar Panel</li><li>• Solar Charge Controller</li><li>• Three (3) years coverage</li></ul> <p>Emergency Repair and Maintenance</p> <ul style="list-style-type: none"><li>• 24/7 Availability of Personnel</li><li>• Three (3) years coverage</li></ul> <p>Data Connectivity Subscription</p> <ul style="list-style-type: none"><li>• Three (3) years coverage</li></ul> <p><b>3) RIVER FLOW MONITORING AND RISK ANALYSIS SYSTEM</b></p> <p>Data Display</p> <ul style="list-style-type: none"><li>• GIS, Table, Graph and Threat Matrix display of real time and historical of river flow velocity data</li><li>• GIS analysis overlaying river flow velocity data</li><li>• Menu &amp; Settings to display clustered view and per sensor view</li></ul> <p>Report</p> <ul style="list-style-type: none"><li>• Report Facility to assign automated email reports per location and its recipients</li><li>• Email (HTML) Format</li></ul> <p>Alerts</p> <ul style="list-style-type: none"><li>• Alert Facility to provide river flow velocity monitoring and early warning alerts</li><li>• Integrated to existing Telegram alerts for group alerts</li></ul> <p>Integration</p> <ul style="list-style-type: none"><li>• Integration to existing web application and data dump system (cloud-based and QCITDD)</li><li>• Integration to iRISE UP application</li></ul> <p>Data Backup/Redundancy</p> <ul style="list-style-type: none"><li>• Data dumps are to be performed every 15 minutes or shorter (all details pertaining to access to the QCRRMO database such as address or URL to a management console, user id and password are to be given to QCRRMO)</li><li>• Perform redundant data writes to an ITDD database</li><li>• Historical data must be stored in the existing QCRRMO database with redundancy on the ITDD database</li></ul> <p>Software License</p> <ul style="list-style-type: none"><li>• Perpetual software license with three (3) years technical support and maintenance</li></ul> <p><b>4) SENSOR INSTALLATION</b></p> <ul style="list-style-type: none"><li>• Three (3) Locations</li><li>• Site Survey</li></ul>				<p><b>Within Sixty (60) Calendar Days Upon Issuance of Notice to Proceed</b></p>
--	---	--	--	--	--



	<ul style="list-style-type: none"> <li>• Installation and Calibration</li> <li>• Engineering works</li> </ul> <p><b>5) TRAINING</b></p> <ul style="list-style-type: none"> <li>• Two (2) days end user orientation for processing of datasets, analysis of datasets, and generation of spatial risk analysis</li> <li>• All training will have eight (8) hours per day with five (5) attendees</li> </ul>			
	<b>(With attached Terms of Reference which will form an integral part of this Philippine Bidding Documents)</b>			
***				

I hereby certify to comply and deliver all the above requirements.

Name: \_\_\_\_\_

Legal Capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

## ***Section VII. Technical Specifications***

### **Notes for Preparing the Technical Specifications**

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying their Bids. In the context of Competitive Bidding, the specifications (e.g. production/delivery schedule, manpower requirements, and after-sales service/parts, descriptions of the lots or items) must be prepared to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of transparency, equity, efficiency, fairness, and economy in procurement be realized, responsiveness of bids be ensured, and the subsequent task of bid evaluation and post-qualification facilitated. The specifications should require that all items, materials and accessories to be included or incorporated in the goods be new, unused, and of the most recent or current models, and that they include or incorporate all recent improvements in design and materials unless otherwise provided in the Contract.

Samples of specifications from previous similar procurements are useful in this respect. The use of metric units is encouraged. Depending on the complexity of the goods and the repetitiveness of the type of procurement, it may be advantageous to standardize the General Technical Specifications and incorporate them in a separate subsection. The General Technical Specifications should cover all classes of workmanship, materials, and equipment commonly involved in manufacturing similar goods. Deletions or addenda should then adapt the General Technical Specifications to the particular procurement.

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

### **Sample Clause: Equivalency of Standards and Codes**

Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest edition or revision of the relevant standards and codes shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.

Reference to brand name and catalogue number should be avoided as far as possible; where unavoidable they should always be followed by the words "*or at least equivalent.*" References to brand names cannot be used when the funding source is the GOP.

Where appropriate, drawings, including site plans as required, may be furnished by the Procuring Entity with the Bidding Documents. Similarly, the Supplier may be requested to provide drawings or samples either with its Bid or for prior review by the Procuring Entity during contract execution.

Bidders are also required, as part of the technical specifications, to complete their statement of compliance demonstrating how the items comply with the specification.

# Technical Specifications

PROJECT NAME: LINE 1: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF  
AUTOMATED WEATHER STATIONS AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025  
(EARLY PROCUREMENT ACTIVITY)  
PROJECT NO. QCDRRMO-25-EHSE-0124

Item	Specification	Statement of Compliance
		<i>[Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]</i>
A.1	<p><b>SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED WEATHER STATIONS AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)</b></p> <p><b>Project Scope of Work</b></p> <p>The CDRRMO plans to install ten (10) automated weather stations within the City identified by CDRRMO. The datasets will then be integrated into the existing data display and data management system (cloud-based and QCITDD) of CDRRMO along with the previously procured sensors. National and local protocols should be followed in the analysis of the sensors' datasets.</p> <p><b>System Output</b></p> <ul style="list-style-type: none"><li>➤ Ten (10) Operational Automated Weather Stations</li><li>➤ Spatial Risk Analysis System<ul style="list-style-type: none"><li>• Data Display</li><li>• Report</li><li>• Alerts</li><li>• Integration</li><li>• Data Backup/Redundancy</li><li>• Historical data</li></ul></li></ul> <p><b>Technical Specifications</b></p> <p><b>1) TEN (10) AUTOMATED WEATHER STATIONS</b></p> <ul style="list-style-type: none"><li>• Power supply through solar</li><li>• Plug and play</li><li>• No programming and complex wiring</li><li>• Real-time access to data from any web browser</li><li>• LCD display for easy field deployment</li><li>• Cloud-based data access</li><li>• Smart Sensor Connectors: 10 inputs.</li><li>• Logging Rate: Configurable for as low as one (1) second.</li><li>• Parameters<ul style="list-style-type: none"><li>○ Temperature</li><li>○ Humidity</li><li>○ Wind Speed</li><li>○ Wind Direction</li><li>○ Rain</li></ul></li></ul>	

	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>○ Solar Radiation</li> </ul> </li> <li>• Derived Parameters           <ul style="list-style-type: none"> <li>○ Heat Index</li> <li>○ Dew Point Temperature</li> </ul> </li> <li>• Interface: RS485</li> </ul> <p><b>2) SENSOR SERVICE REPLACEMENT, MAINTENANCE, WARRANTY AND DATA SUBSCRIPTION</b></p> <p>Quarterly checking of station such as:</p> <ul style="list-style-type: none"> <li>• Automated Weather Station</li> <li>• Data logger</li> <li>• Battery</li> <li>• Solar Charge Controller</li> <li>• Solar Panel</li> <li>• Three (3) years coverage</li> </ul> <p>Replacement of devices and accessories such as:</p> <ul style="list-style-type: none"> <li>• Automated Weather Station</li> <li>• Data logger</li> <li>• Battery</li> <li>• Solar Panel</li> <li>• Solar Charge</li> <li>• Controller</li> <li>• Three (3) years coverage</li> </ul> <p>Emergency Repair and Maintenance</p> <ul style="list-style-type: none"> <li>• 24/7 Availability of Personnel</li> <li>• Three (3) years coverage</li> </ul> <p>Data Connectivity Subscription</p> <ul style="list-style-type: none"> <li>• Three (3) years coverage</li> </ul> <p><b>3) SPATIAL RISK ANALYSIS SYSTEM</b></p> <p>Data Display</p> <ul style="list-style-type: none"> <li>• GIS, Table, Graph and Threat Matrix display of real-time and historical of automated weather station data</li> <li>• GIS analysis overlaying automated weather station data</li> <li>• Menu &amp; Settings to display clustered view and per sensor view</li> <li>• Spatial analysis of existing and new Sensors (temperature, humidity, heat index, and wind speed) that covers the whole city with color-coding based on identified threshold.</li> </ul> <p>Report</p> <ul style="list-style-type: none"> <li>• Report Facility to assign automated email reports per location and its recipients</li> <li>• Email (HTML) Format</li> </ul> <p>Alerts</p> <ul style="list-style-type: none"> <li>• Alert Facility to provide weather monitoring and early warning alerts</li> <li>• Integrated to existing Telegram alerts for group alerts</li> </ul> <p>Integration</p> <ul style="list-style-type: none"> <li>• Integration to existing web application and data dump system (cloud-based and QCITDD)</li> <li>• Integration to iRISE UP application</li> </ul> <p>Data Backup/Redundancy</p> <ul style="list-style-type: none"> <li>• Data dumps are to be performed every 15 minutes or shorter (all details pertaining to access to the QCRRMO database such as address or URL to a management console, user id and password are to be given to QCRRMO)</li> <li>• Perform redundant data writes to an ITDD database</li> </ul>	
--	---	--

	<ul style="list-style-type: none"><li>• Historical data must be stored in the existing QCDRRMO database with redundancy on the ITDD database</li></ul> <p>Software License</p> <ul style="list-style-type: none"><li>• Perpetual software license with three (3) years technical support and maintenance</li></ul> <p><b>4) SENSOR INSTALLATION</b></p> <ul style="list-style-type: none"><li>• Ten (10) Locations</li><li>• Site Survey</li><li>• Installation and Calibration</li><li>• Engineering works</li></ul> <p><b>5) TRAINING</b></p> <ul style="list-style-type: none"><li>• Two (2) days end user orientation for processing of datasets, analysis of datasets, and generation of spatial risk analysis.</li><li>• All training will have eight (8) hours per day with five (5) attendees</li></ul>	
	<i>(With attached Terms of Reference which will form an integral part of this Philippine Bidding Documents)</i>	
<b>B.</b>	<b>Compliance to the Schedule of Requirements (Section VI)</b>	

I hereby certify to comply and deliver all the above requirements.

Name: \_\_\_\_\_

Legal Capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

# Technical Specifications

PROJECT NAME: LINE 2: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED RAIN GAUGES AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)  
PROJECT NO. QCRRMO-25-EHSE-0124

Item	Specification	Statement of Compliance
		<i>[Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]</i>
A.1	<p><b>SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED RAIN GAUGES AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)</b></p> <p><b>Project Scope of Work</b></p> <p>The CDRRMO plans to install twenty-two (22) automated rain gauges within the City identified by CDRRMO to aid on the barangay cluster rain analysis. The datasets will then be integrated into the existing data display and data management system (cloud-based and QCITDD) of CDRRMO along with the previously procured sensors. National and local protocols should be followed in the analysis of the sensors' datasets.</p> <p><b>System Output</b></p> <ul style="list-style-type: none"><li>➤ Twenty-two (22) Operational Automated Rain Gauges</li><li>➤ Spatial Risk Analysis System<ul style="list-style-type: none"><li>• Data Display</li><li>• Report</li><li>• Alerts</li><li>• Integration</li><li>• Data Backup/Redundancy</li><li>• Historical data</li></ul></li></ul> <p><b>Technical Specifications</b></p> <p><b>1) TWENTY-TWO (22) AUTOMATED RAIN GAUGES</b></p> <ul style="list-style-type: none"><li>• Power supply through solar</li><li>• Plug and play</li><li>• No programming and complex wiring</li><li>• Real-time access to data from any web browser</li><li>• Enables to monitor data 24/7 via web browser or smartphone</li><li>• Alarm capabilities via text/email</li><li>• LCD display for easy field deployment</li><li>• Cloud-based data access option</li><li>• Smart Sensor Connectors: 10 inputs.</li><li>• Logging Rate: Configurable for as low as ten (10) minutes</li><li>• Accuracy: 0-250mm/hr: +/-2%</li><li>• Accuracy: 250-500mm/hr: +/-3%</li></ul>	

6

**2) SENSOR SERVICE REPLACEMENT, MAINTENANCE, WARRANTY AND DATA SUBSCRIPTION**

Quarterly checking of station such as:

- Rain Gauge
- Data logger
- Battery
- Solar Charge Controller
- Solar Panel
- Three (3) years coverage

Replacement of devices and accessories such as:

- Rain Gauge
- Data logger
- Battery
- Solar Panel
- Solar Charge Controller
- Three (3) years coverage

Data Connectivity Subscription

- Three (3) years coverage

**3) SPATIAL RISK ANALYSIS SYSTEM**

Data Display

- GIS, Table, Graph and Threat Matrix display of real time and historical of automated weather station data
- GIS analysis overlaying rain data
- Menu & Settings to display clustered view and per sensor view
- 3-D level rain analysis of existing and new rain gauges with color-coding based on identified threshold
- Spatial rain analysis of existing and new rain gauges that covers the whole city with color-coding based on identified threshold.

Report

- Report Facility to assign automated email reports per location and its recipients
- Email (HTML) Format

Alerts

- Alert Facility to provide rain monitoring and early warning alerts
- Integrated to existing Telegram alerts for group alerts

Integration

- Integration to existing web application and data dump system (cloud-based and QCITDD)

Data Backup/Redundancy

- Data dumps are to be performed every 15 minutes (all details pertaining to access to the QCRRMO database such as address or URL to a management console, user id and password are to be given to QCRRMO)
- Perform redundant data writes to an ITDD database

Software License

- Perpetual software license with three (3) years technical support and maintenance

**4) SENSOR INSTALLATION**

- Twenty-two (22) Locations
- Site Survey
- Installation and Calibration
- Engineering works

	<b>5) TRAINING</b> <ul style="list-style-type: none"><li>Two (2) days end user orientation for processing of datasets, analysis of datasets, and generation of spatial rain risk analysis.</li><li>All training will have eight (8) hours per day with five (5) attendees All training will have eight (8) hours per day with five (5) attendees</li></ul>	
	<b><i>(With attached Terms of Reference which will form an integral part of this Philippine Bidding Documents)</i></b>	
<b>B.</b>	<b>Compliance to the Schedule of Requirements (Section VI)</b>	

I hereby certify to comply and deliver all the above requirements.

Name: \_\_\_\_\_

Legal Capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

8.



# Technical Specifications

PROJECT NAME: LINE 3: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF RIVER FLOW VELOCITY SENSOR AND RIVERFLOW MONITORING AND RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)  
PROJECT NO. QCDRRMO-25-EHSE-0124

Item	Specification	Statement of Compliance
		<i>[Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]</i>
A.1	<p><b>SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF RIVER FLOW VELOCITY SENSOR AND RIVERFLOW MONITORING AND RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)</b></p> <p><b>Project Scope of Work</b></p> <p>The CDRRMO plans to install three (3) river flow monitoring sensor within the City identified by CDRRMO to identify the role of river systems on flooding occurrences within the city. The datasets will then be integrated into the existing data display and data management system (cloud-based and QCITDD) of CDRRMO along with the previously procured sensors.</p> <p><b>System Output</b></p> <ul style="list-style-type: none"><li>➤ Three (3) Operational River Flow Monitoring Sensors</li><li>➤ River Flow Monitoring and Risk Analysis System<ul style="list-style-type: none"><li>• Data Display</li><li>• Report</li><li>• Alerts</li><li>• Integration</li><li>• Data Backup/Redundancy</li><li>• Historical data</li></ul></li></ul> <p><b>Technical Specifications</b></p> <p><b>1) THREE (3) RIVER FLOW MONITORING SENSORS</b></p> <p><b>FLOW VELOCITY SENSOR</b></p> <ul style="list-style-type: none"><li>• Power supply: 6 to 30 V</li><li>• Power consumption at 12 VDC: Active measurement approx. 110 mA</li><li>• Outputs: RS-485 ASCII / Modbus RTU SDI-12</li><li>• Operating temperature: -40 to 75°C</li><li>• Storage temperature: -40 to 60°C</li><li>• Relative humidity: 0 to 100 %</li><li>• Protection rating: IP67</li><li>• Detectable measurement range: 0.08 to 18 m/s (depending on waves)</li><li>• Accuracy: ± 0.01 m/s</li><li>• Resolution: 1 mm/s</li><li>• Direction recognition: +/-</li></ul>	

	<ul style="list-style-type: none"> <li>• Measurement duration: 5 to 240 s</li> <li>• Measurement interval: 8s to 5 h</li> <li>• Measurement frequency: 24 GHz (K-Band)</li> <li>• Radar opening angle: 12°</li> <li>• Distance to water surface: <ul style="list-style-type: none"> <li>◦ 0.50... 130 m</li> <li>◦ 0.05...130 m</li> </ul> </li> <li>• Automatic vertical angle compensation <ul style="list-style-type: none"> <li>◦ Accuracy: ± 1°</li> <li>◦ Resolution: ±0.1°</li> </ul> </li> <li>• Solar Power Set</li> <li>• Cage</li> <li>• Equipment Calibration</li> </ul> <p><b>Data Logger:</b></p> <ul style="list-style-type: none"> <li>• Protection Class: IP67</li> <li>• Remote Data Transmission via 2G/4G modem</li> <li>• Sensor supply: 5 /100 mA or 12 V / 200 mA</li> <li>• Reference voltage 2.5 V for potentiometer (max. 4 mA)</li> <li>• Number of channels up to 99</li> <li>• Operating temperature -35°C to 60°C</li> </ul> <p><b>2) SENSOR SERVICE REPLACEMENT, MAINTENANCE, WARRANTY AND DATA SUBSCRIPTION</b></p> <p>Quarterly checking of station such as:</p> <ul style="list-style-type: none"> <li>• Flow Velocity Sensor</li> <li>• Data logger</li> <li>• Battery</li> <li>• Solar Charge Controller</li> <li>• Solar Panel</li> <li>• Three (3) years coverage</li> </ul> <p>Replacement of devices and accessories such as:</p> <ul style="list-style-type: none"> <li>• Flow Velocity Sensor</li> <li>• Data logger</li> <li>• Battery</li> <li>• Solar Panel</li> <li>• Solar Charge Controller</li> <li>• Three (3) years coverage</li> </ul> <p>Emergency Repair and Maintenance</p> <ul style="list-style-type: none"> <li>• 24/7 Availability of Personnel</li> <li>• Three (3) years coverage</li> </ul> <p>Data Connectivity Subscription</p> <ul style="list-style-type: none"> <li>• Three (3) years coverage</li> </ul> <p><b>3) RIVER FLOW MONITORING AND RISK ANALYSIS SYSTEM</b></p> <p>Data Display</p> <ul style="list-style-type: none"> <li>• GIS, Table, Graph and Threat Matrix display of real time and historical of river flow velocity data</li> <li>• GIS analysis overlaying river flow velocity data</li> <li>• Menu &amp; Settings to display clustered view and per sensor view</li> </ul> <p>Report</p> <ul style="list-style-type: none"> <li>• Report Facility to assign automated email reports per location and its recipients</li> <li>• Email (HTML) Format</li> </ul> <p>Alerts</p> <ul style="list-style-type: none"> <li>• Alert Facility to provide river flow velocity monitoring and early warning alerts</li> <li>• Integrated to existing Telegram alerts for group alerts</li> </ul> <p>Integration</p> <ul style="list-style-type: none"> <li>• Integration to existing web application and data dump system (cloud-based and QCITDD)</li> <li>• Integration to iRISE UP application</li> </ul>	
--	---	--

	<p>Data Backup/Redundancy</p> <ul style="list-style-type: none"> <li>• Data dumps are to be performed every 15 minutes or shorter (all details pertaining to access to the QCRRMO database such as address or URL to a management console, user id and password are to be given to QCRRMO)</li> <li>• Perform redundant data writes to an ITDD database</li> <li>• Historical data must be stored in the existing QCRRMO database with redundancy on the ITDD database</li> </ul> <p>Software License</p> <ul style="list-style-type: none"> <li>• Perpetual software license with three (3) years technical support and maintenance</li> </ul> <p><b>4) SENSOR INSTALLATION</b></p> <ul style="list-style-type: none"> <li>• Three (3) Locations</li> <li>• Site Survey</li> <li>• Installation and Calibration</li> <li>• Engineering works</li> </ul> <p><b>5) TRAINING</b></p> <ul style="list-style-type: none"> <li>• Two (2) days end user orientation for processing of datasets, analysis of datasets, and generation of spatial risk analysis</li> <li>• All training will have eight (8) hours per day with five (5) attendees</li> </ul>	
	<i>(With attached Terms of Reference which will form an integral part of this Philippine Bidding Documents)</i>	
<b>B.</b>	<b>Compliance to the Schedule of Requirements (Section VI)</b>	

I hereby certify to comply and deliver all the above requirements.

Name: \_\_\_\_\_

Legal Capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

Cost Derivation

PROJECT NAME: LINE 1: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF  
AUTOMATED WEATHER STATIONS AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025  
(EARLY PROCUREMENT ACTIVITY)  
PROJECT NO. QCDRRMO-25-EHSE-0124

Item Number	Description	Unit of Issue	Quantity	Unit Cost	Total Cost
1	AUTOMATED WEATHER STATIONS	UNIT	10		
2	SENSOR SERVICE REPLACEMENT, MAINTENANCE, WARRANTY AND DATA SUBSCRIPTION	lot	1		
3	SPATIAL RISK ANALYSIS SYSTEM	lot	1		
4	SENSOR INSTALLATION	lot	1		
5	TRAINING	lot	1		
GRAND TOTAL:					

I hereby certify to comply and deliver all the above requirements.

Name: \_\_\_\_\_

Legal Capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

Cost Derivation

PROJECT NAME: LINE 2: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF AUTOMATED RAIN GAUGES AND SPATIAL RISK ANALYSIS SYSTEM FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)  
PROJECT NO. QCRRMO-25-EHSE-0124

Item Number	Description	Unit of Issue	Quantity	Unit Cost	Total Cost
1	AUTOMATED RAIN GAUGES	unit	22		
2	SENSOR SERVICE REPLACEMENT, MAINTENANCE, WARRANTY AND DATA SUBSCRIPTION	lot	1		
3	SPATIAL RISK ANALYSIS SYSTEM	lot	1		
4	SENSOR INSTALLATION	lot	1		
5	TRAINING	lot	1		
GRAND TOTAL:					

I hereby certify to comply and deliver all the above requirements.

Name: \_\_\_\_\_

Legal Capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

Cost Derivation

PROJECT NAME: LINE 3: SUPPLY, DELIVERY, INSTALLATION, TESTING AND COMMISSIONING OF  
RIVER FLOW VELOCITY SENSOR AND RIVERFLOW MONITORING AND RISK ANALYSIS SYSTEM  
FOR THE YEAR 2025 (EARLY PROCUREMENT ACTIVITY)  
PROJECT NO. QCRRMO-25-EHSE-0124

Item Number	Description	Unit of Issue	Quantity	Unit Cost	Total Cost
1	RIVER FLOW MONITORING SENSORS	unit	3		
2	SENSOR SERVICE REPLACEMENT, MAINTENANCE, WARRANTY AND DATA SUBSCRIPTION	lot	1		
3	RIVER FLOW MONITORING AND RISK ANALYSIS SYSTEM	lot	1		
4	SENSOR INSTALLATION	lot	1		
5	TRAINING	lot	1		
GRAND TOTAL:					

I hereby certify to comply and deliver all the above requirements.

Name: \_\_\_\_\_

Legal Capacity: \_\_\_\_\_

Signature: \_\_\_\_\_

Duly authorized to sign the Bid for and behalf of: \_\_\_\_\_

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

### **Notes on the Checklist of Technical and Financial Documents**

The prescribed documents in the checklist are mandatory to be submitted in the Bid, but shall be subject to the following:

- a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or
- b. Any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

The BAC shall be checking the submitted documents of each Bidder against this checklist to ascertain if they are all present, using a non-discretionary “pass/fail” criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184.

# Checklist of Technical and Financial Documents

## I. TECHNICAL COMPONENT ENVELOPE

### *Class "A" Documents*

#### Legal Documents

- ☐ (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) **in accordance with Section 8.5.2 of the IRR;**

#### 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 (in a **FORM prescribed by the QC-BAC-GOODS AND SERVICES**); **and**
- ☐ (c) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided for in Sections 23.4.1.3 and 23.4.2.4 of the 2016 revised IRR of RA No. 9184, within the relevant period as provided in the Bidding Documents (in a **FORM prescribed by the QC-BAC-GOODS AND SERVICES**); **and**
- ☐ (d) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission; **or**  
Original copy of Notarized Bid Securing Declaration; **and**
- ☐ (e) Conformity with Section VI. (Schedule of Requirements) and Section VII. (Technical Specifications), which may include production/delivery schedule, manpower requirements, and/or after-sales/parts, if applicable; **and**
- ☐ (f) 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

- ☐ (g) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC) (in a **FORM prescribed by the QC-BAC-GOODS AND SERVICES**);  
**or**  
A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.

### *Class "B" Documents*

- ☐ (h) If applicable, a duly signed joint venture agreement (JVA) 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.

#### Other documentary requirements under RA No. 9184 (as applicable)

- ☐ (i) *[For foreign bidders claiming by reason of their country's extension of reciprocal rights to Filipinos]* Certification from the relevant government office of their country stating that Filipinos are allowed to participate in government procurement activities for the same item or product.
- ☐ (j) Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.



## II. FINANCIAL COMPONENT ENVELOPE

- ☐ (a) Original of duly signed and accomplished Financial Bid Form;
- ☐ (b) Original of duly signed and accomplished Price Schedule(s); **and**
- ☐ (c) Cost Derivation.

## III. REQUIRED DOCUMENTS in BDS SECTION 20.2 and 21.2

### FOR LINE 1:

- **Organizational Chart for the project (with project title and project number)**
- **List of Manpower Requirements (with project title and project number)**
  - *Bidders should have at least **two (2)** field staff for the installation, one (1) Meteorologist and one (1) IT-Data Science resources for Training and continuous consultation within the project as this is a science-based data driven project. Bidder must submit a copy of their resume. It shall show relevant trainings and experiences.*

### FOR LINE 2:

- **Organizational Chart for the project (with project title and project number)**
- **List of Manpower Requirements (with project title and project number)**
  - *Bidders should have at least **three (3)** field staff for the installation, one (1) Meteorologist and one (1) IT-Data Science resources for Training and continuous consultation within the project as this is a science-based data driven project. Bidder must submit a copy of their resume. It shall show relevant trainings and experiences.*

### FOR LINE 3:

- **Organizational Chart for the project (with project title and project number)**
- **List of Manpower Requirements (with project title and project number)**
  - *Bidders should have at least **one (1)** field staff for the installation, one (1) Meteorologist and one (1) IT-Data Science resources for Training and continuous consultation within the project as this is a science-based data driven project. Bidder must submit a copy of their resume. It shall show relevant trainings and experiences.*

Note:

1. Please refer to  
[\[https://drive.google.com/file/d/1uiYurh5WrpBL5B\\_pqpzAb62yucAblR1p/view?usp=sharing\]](https://drive.google.com/file/d/1uiYurh5WrpBL5B_pqpzAb62yucAblR1p/view?usp=sharing) for the following requirements:
  - a. Computation of NFCC;
  - b. List of All Ongoing Contracts/List of Contracts already awarded but not yet started;
  - c. Statement of Single Largest Completed Contract
2. Please refer to GPPB Resolution No. 16-2020 for the following requirements:
  - a. Bid Form;
  - b. Price Schedule (for Goods Offered from Abroad/ Within the Philippines)
  - c. Bid Securing Declaration; and
  - d. Omnibus Sworn Statement

Republic of the Philippines



Government Procurement Policy Board