

PHILIPPINE BIDDING DOCUMENTS

**SUPPLY AND DELIVERY
OF TECHNICAL AND
SCIENTIFIC EQUIPMENT**

IB NO. 010-20

Government of the Republic of the Philippines

**Sixth Edition
July 2020**

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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



INVITATION TO BID FOR THE SUPPLY AND DELIVERY OF TECHNICAL AND SCIENTIFIC EQUIPMENT

1. The *Bureau of Agricultural and Fisheries Engineering (BAFE)* through the *GAA CY 2019 Continuing Funds and GAA CY 2020 Funds* intends to apply the sum of *Eight Million Two Hundred Sixty Seven Thousand Three Hundred Pesos (PhP 8,267,300.00)* being the ABC to payments under the contract for *the Supply and Delivery of Technical and Scientific Equipment under IB No. 010-20, details as follows:*

LOT NO.	DESCRIPTION	ABC (PhP)
1	Various Technical and Scientific Equipment	398,000.00
2	Various Technical and Scientific Equipment	1,280,000.00
3	Set of Soil Moisture Meter (Probe-Type) with Data Logger	475,000.00
4	Set of Modern Land Surveying and Post-Processing Tools and Equipment	2,420,000.00
5	Various Technical and Scientific Equipment	765,000.00
6	Set of Terrestrial Survey Instrument (Total Station)	904,040.00
7	Various Technical and Scientific Equipment	690,000.00
8	Various Technical and Scientific Equipment	256,200.00
9	4-in 1 PH, EC/TDS & Temperature Meter	560,000.00
10	Various Technical and Scientific Equipment	140,760.00
11	Various Technical and Scientific Equipment	318,300.00



12	Lux Meter	60,000.00
	GRAND TOTAL	8,267,300.00

Bids received in excess of the ABC shall be automatically rejected at bid opening.

- The **BAFE** now invites bids for the above Procurement Project. Delivery of the Goods is required ***within Thirty (30) Calendar Days upon conforme of the Notice to Proceed (NTP)***. Bidders should have completed, within ***two (2) years*** from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).

- Bidding will be conducted through open competitive bidding procedures using a non-discretionary “*pass/fail*” criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.

- Prospective Bidders may obtain further information from ***BAFE-BAC Secretariat, BAFE Office*** and inspect the Bidding Documents at the address given below during ***9:00 AM – 4:00 PM, Monday to Friday***.
- A complete set of Bidding Documents may be acquired by interested Bidders on ***November 20, 2020 – November 27, 2020*** from the address below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, details are as follows

Approved Budget for the Contract	Maximum Cost of Bidding Documents (in Philippine Peso)
500,000.00 and below	500.00
More than 500,000 up to 1 Million	1,000.00
More than 1 Million up to 5 Million	5,000.00
More than 5 Million to 10 Million	10,000.00

Note: Bidders may participate in all or any lots of this requirement

It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the



Republic of the Philippines
Department of Agriculture
BUREAU OF AGRICULTURAL AND FISHERIES ENGINEERING
Diliman, Quezon City
TeleFax No. (02) 8941-8151
Email Add: od.bafe@gmail.com

Procuring Entity, provided that Bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids.

6. The **BAFE-BAC** will hold a Pre-Bid Conference¹ on **December 01, 2020, 9:00 AM** at **DA New Building, Elliptical Road, Diliman, Quezon City**, which shall be open to prospective bidders. The prospective bidders may join physically or through online platform (e.g., Cisco WEBEX).
7. Bids must be duly received by the BAC Secretariat through manual submission at the office address indicated below on or before **December 10, 2020, 12 nn.** Late bids shall not be accepted.
8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
9. Bid opening shall be on **December 10, 2020, 1 pm** at **DA New Building, Elliptical Road, Diliman, Quezon City**. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
10. The **BAFE-BAC** reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
11. For further information, please refer to:

***Attention: Bids and Awards Committee
BAFE Office
4th floor, Department of Agriculture,
Elliptical Road, Diliman, Quezon City
Telefax No. (02) 8941-8151
bafe.procurement@gmail.com***

ORIGINAL SIGNED

ENGR. NOEMI L. CARPIO
Chairperson, Bids and Awards

¹ May be deleted in case the ABC is less than One Million Pesos (PhP1,000,000) where the Procuring Entity may not hold a Pre-Bid Conference.



Republic of the Philippines
Department of Agriculture
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Diliman, Quezon City
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Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, *Bureau of Agricultural and Fisheries Engineering (BAFE)* wishes to receive **Bids for the Supply and Delivery of Technical and Scientific Equipment**, with *IB No. 010-20*.

The Procurement Project (referred to herein as “Project”) is composed of *twelve (12) lots*, 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 *CY 2019 Continuing Funds* in the amount of *Eight Million Two Hundred Sixty Seven Thousand Three Hundred Pesos (PhP 8,267,300.00)*

2.2. The source of funding is:
a. NGA, the General Appropriations Act or Special Appropriations.

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 limited to those allowed under the rules may participate in this Project.
- 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 **December 01, 2020 at DA New Building Elliptical Road, Diliman, Quezon City, and/or through online platform (e.g., Cisco WEBEX)** 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 two (2) 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:
Philippine Pesos.

14. Bid Security

- 14.1. The Bidder shall submit a Bid Securing Declaration² 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**.

The Bid and bid security shall be valid until *One Hundred Twenty (120) calendar days from the opening of bids*. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

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.

² 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.

16. Deadline for Submission of Bids

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

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 grouped into several lots, which shall be awarded as separate contracts per lot.

- 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

- 20.2. 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

Bid Data Sheet

ITB Clause				
5.3	For this purpose, contracts similar to the Project shall be: <ul style="list-style-type: none"> a. <i>Supply and Delivery of Technical and Scientific Equipment</i> b. completed within <i>two (2) years</i> prior to the deadline for the submission and receipt of bids. 			
7.1	<i>Subcontracting is not allowed.</i>			
14.1	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:			
	Lot No.	Item/Description	Amount Cash, Cashier's / Manager's Check, Bank, Draft/ Guarantee or Irrevocable Letter of Credit (2%)	Surety Bond (5%)
	1	Various Technical and Scientific Equipment	PhP 7,960.00	PhP 19,900.00
	2	Various Technical and Scientific Equipment	PhP 25,600.00	PhP 64,000.00
	3	Set of Soil Moisture Meter (Probe-Type) with Data Logger	PhP 9,500.00	PhP 23,750.00
	4	Set of Modern Land Surveying and Post-Processing Tools and Equipment	PhP 48,400.00	PhP 121,000.00
	5	Various Technical and Scientific Equipment	PhP 15,300.00	PhP 38,250.00
	6	Set of Terrestrial Survey Instrument (Total Station)	PhP 18,080.80	PhP 45,202.00
	7	Various Technical and Scientific Equipment	PhP 13,800.00	PhP 34,500.00
	8	Various Technical and Scientific Equipment	PhP 5,124.00	PhP 12,810.00
	9	4-in 1 PH, EC/TDS & Temperature Meter	PhP 11,200.00	PhP 28,000.00

	10	Various Technical and Scientific Equipment	PhP 2,815.20	PhP 7,038.00
	11	Various Technical and Scientific Equipment	PhP 6,366.00	PhP 15,915.00
	12	Lux Meter	PhP 1,200.00	PhP 3,000.00
		Grand Total	PhP 165,346.00	PhP 413,365.00
	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:			
19.3	<i>The Project will be awarded by lot, list the grouping of lots by specifying the group title, items, and the quantity for every identified lot, and the corresponding ABC for each lot.</i>			
20.2	<i>No further instructions</i>			
21.2	<i>No further instructions</i>			

Section IV. General Conditions of Contract

1. Scope of Contract

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

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

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 VII (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

- 5.1 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.
- 5.2 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

Special Conditions of Contract

GCC Clause	
1.	<p>Delivery and Documents –</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>The delivery terms applicable to this Contract are delivered BAFE Office, SRA Building, North Avenue, Diliman, Quezon City. 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 ENGR. JESSA RICA C. PANDIÑO/ MS. EVELYN SORIANO/ MS. JULIE MABBAGU AND RHODORA R. CONCEPCION.</p> <p>Incidental Services –</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:</p> <ol style="list-style-type: none"> a. performance or supervision of on-site assembly and/or start-up of the supplied Goods; b. furnishing of tools required for assembly and/or maintenance of the supplied Goods; c. furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods; 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
	<ol style="list-style-type: none"> 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. <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>Spare Parts –</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:

- 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
- b. in the event of termination of production of the spare parts:
 - i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and
 - ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested.

The spare parts and other components required are listed in **Section VI (Schedule of Requirements)** and the cost thereof are included in the contract price.

The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of ***three years warranty***.

Spare parts or components shall be supplied as promptly as possible, but in any case, within [*insert appropriate time period*] months of placing the order.

Packaging –

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.

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.

The outer packaging must be clearly marked on at least four (4) sides as follows:

Name of the Procuring Entity

Name of the Supplier

	<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>Transportation –</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>Intellectual Property Rights –</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	<i>Terms of Payment: One-time payment after full delivery and acceptance of the items.</i>
4	The inspections and tests that will be conducted are physical count and compliance to the technical specifications of the delivered goods as required in the contract.

Section VI. Schedule of Requirements

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

LOT NO.	Description	Quantity	Total	Delivered, Weeks/Months
1	1. DIGITAL HANDHELD ULTRASONIC FLOWMETER	2	238,000.00	Within thirty (30) calendar days upon the conforme of the Notice to Proceed (NTP).
	2. WATER LEVEL ELECTRONIC SOUNDER	1	160,000.00	
	SUBTOTAL		398,000.00	
2	3. REBAR DETECTION, COVER, AND DIAMETER SIZE METER	2	870,000.00	
	4. CONCRETE TEST HAMMER	2	410,000.00	
	SUBTOTAL		1,280,000.00	
3	5. SET OF SOIL MOISTURE METER (PROBE-TYPE) WITH DATA LOGGER	1	475,000.00	
	SUBTOTAL		475,000.00	
4	6. SET OF MODERN LAND SURVEYING AND POST-PROCESSING TOOLS AND EQUIPMENT	1	2,420,000.00	
	SUBTOTAL		2,420,000.00	
5	7. CLAMP ON METER WITH AC/DC MICRO CURRENT AND TRUE HORSEPOWER MEASUREMENT	4	291,200.00	
	8. CLAMP-ON METER WITH HIGH AC/DC CURRENT, TRUE POWER, APPARENT POWER AND REACTIVE POWER MEASUREMENT	4	338,800.00	

	9. DIGITAL HANDHELD MULTIMETER WITH WIDE RANGE OF CURRENT, VOLTAGE, RESISTANCE, CAPACITANCE, AND TEMPERATURE MEASUREMENT	6	135,000.00	
	SUBTOTAL		765,000.00	
6	10. SET OF TERRESTRIAL SURVEY INSTRUMENT (TOTAL STATION)	1	904,040.00	
	SUBTOTAL		904,040.00	
7	11. LASER DISTANCE METER (RANGEFINDER)	6	480,000.00	
	12. LASER MEASURER	7	210,000.00	
	SUBTOTAL		690,000.00	
8	13. NON-CONTACT DIGITAL LASER INFRARED THERMOMETER	42	231,000.00	
	14. THERMOHYGROMETER	3	25,200.00	
	SUBTOTAL		256,200.00	
9	15. 4-IN-1 PH, EC/TDS & TEMPERATURE METER	40	560,000.00	
	SUBTOTAL		560,000.00	
10	16. EQUIPMENT PROTECTIVE CASE WITH FOAM	6	75,000.00	
	17. ROLLING STORAGE TOOL CONTAINER	6	65,760.00	
	SUBTOTAL		140,760.00	
	ALTIMETER	7	70,700.00	
	CALCULATOR	10	14,000.00	
	CLAMP-ON METER	3	15,600.00	

11	DIGITAL CALIPER	5	28,000.00
	DIGITAL LASER INFRARED THERMOMETER	2	11,200.00
	DIGITAL POCKET STOPWATCH	5	7,000.00
	EQUIPMENT BOX	4	22,400.00
	FEELER GAUGE (29 BLADES)	2	13,600.00
	GRADUATED CYLINDER (1000ML)	3	13,500.00
	GRADUATED CYLINDER (100ML)	3	10,200.00
	GRADUATED CYLINDER (25ML)	3	6,900.00
	MAGNIFYING LENS, 10X MAGNIFICATION	2	2,400.00
	MICROCONTROLLER	2	12,400.00
	OPEN REEL FIBERGLASS LONG TAPE	5	11,500.00
	SOUND LEVEL METER	4	9,200.00
	STEEL TAPE	7	4,900.00
	STEM THERMOMETER	4	13,600.00
	TACHOMETER	4	9,200.00
	THERMOHYGROMETER	5	42,000.00
	SUBTOTAL		318,300.00
12	LUX METER	20	60,000.00
	SUBTOTAL		60,000.00
	GRAND TOTAL		8,267,300.00

Section VII. Technical Specifications

Technical Specifications

Item	Specification	Statement of Compliance
		<p><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></p>
LOT NO.	TECHNICAL AND SCIENTIFIC EQUIPMENT	STATEMENT OF “COMPLY” OR “NOT COMPLY”
	<p>“Attached are the Technical Specifications and Terms of Reference (TOR) to be complied with, marked as Annex “A” of this Bidding Documents.”</p>	

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

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class “A” Documents

Legal Documents

- (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);
or
- (b) Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document,
and
- (c) Mayor’s or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas;
and
- (d) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

Technical Documents

- (e) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
- (f) 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; **and**
- (g) 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**
- (h) Conformity with the Technical Specifications, which may include production/delivery schedule, manpower requirements, and/or after-sales/parts, if applicable; **and**
- (i) 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

- (j) The Supplier’s audited financial statements, showing, among others, the Supplier’s total and current assets and liabilities, stamped “received” by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; **and**

- (k) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC);
or
A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.

Class "B" Documents

- (l) 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.

II. FINANCIAL COMPONENT ENVELOPE


- (m) Original of duly signed and accomplished Financial Bid Form; **and**
- (n) Original of duly signed and accomplished Price Schedule(s).


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

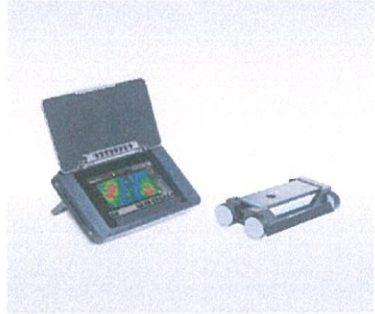
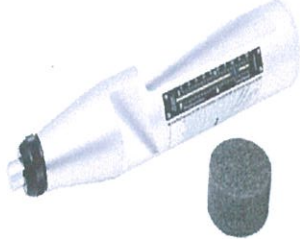
- (o) *[For foreign bidders claiming by reason of their country's extension of reciprocal rights to Filipinos]* Certification from the relevant government office of their country stating that Filipinos are allowed to participate in government procurement activities for the same item or product.
- (p)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




ANNEX A: Specifications of Technical and Scientific Equipment

Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
1	<p data-bbox="253 284 734 312">Digital Handheld ultrasonic flowmeter</p> <div data-bbox="286 331 640 708">  </div> <p data-bbox="667 507 898 536">(Sample picture only)</p> <p data-bbox="253 730 517 759"><u>Technical Specifications:</u></p> <ul style="list-style-type: none"> <li data-bbox="253 759 976 788">-Must have an accuracy at least 1%, and repeatability at least 0.2% <li data-bbox="253 788 701 817">-Must have an LCD with backlight display <li data-bbox="253 817 965 845">-Must have light-touch keyboard and simulation keyboard software <li data-bbox="253 845 994 874">-Must include ultrasonic signal cable at least 5meters, and data cable <li data-bbox="253 874 875 903">-The software of the meter can be upgraded via computer <li data-bbox="253 903 1308 954">-Can be used at least the following pipe material: Steel, Stainless steel, Cast iron, Copper, Cement Pipe, PVC, Aluminum, Glass steel product, and liner. <li data-bbox="253 954 981 983">-Can work with pipe diameter between 50-700mm nominal diameter <li data-bbox="253 983 1263 1034">-Can measure at least the following type of liquid: Water, Ultra-pure liquids, Solvents and other liquids; <li data-bbox="253 1034 875 1062">-Transducers can be clamped-on to different types of pipe <li data-bbox="253 1062 1379 1120">-Can work with temperature within the following type of transducers: Standard transducer (between -30°C to 90°C), and High-temperature transducer (between:-40°C to 160°C) <li data-bbox="253 1120 831 1149">-Can work under 10,000ppm turbidity with less bubble <li data-bbox="253 1149 757 1177">-Can work within flowrate between 0 to ±10m/s <li data-bbox="253 1177 824 1206">-Can work within temperatures between -20°C to 60°C <li data-bbox="253 1206 719 1235">-Can be connected through AC 110V-240V <li data-bbox="253 1235 1151 1264">-Must include durable carrying case and components per brochure and user manual <li data-bbox="253 1264 533 1292">-Must be battery operated <li data-bbox="253 1292 987 1321">-Must include a set of rechargeable compatible batteries and charger <li data-bbox="253 1321 674 1350">-Must include additional coupling agent <li data-bbox="253 1350 539 1378">-Must include user manual <li data-bbox="253 1378 517 1407">-At least 1-year warranty 	2	119,000.00	238,000.00

Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	<p data-bbox="253 244 663 276">Water Level Electronic Sounder</p>  <p data-bbox="622 549 853 580">(Sample picture only)</p> <p data-bbox="253 799 517 826"><u>Technical Specifications:</u></p> <ul data-bbox="253 826 1081 1161" style="list-style-type: none"> -Can measure water level between 10-500 ft (Normal) and 200-1200ft (Deep) -Must have a resolution of 0.1 ft -Must have an approximate accuracy of +/- 0.2% of reading -Can operate at temperature within 30 to 140° F (-1 to 60° C) -Must be battery operated -Sonic measuring duct diameter must be 5/8 in (16mm) -Hole diameter must be at least 1/2-inch pipe thread -Sonic measuring duct length: 2 in (5 cm) -Must include a compatible carrying case -Must include a set of rechargeable compatible batteries and charger -Must include user manual -At least 1-year warranty 	1	160,000.00	160,000.00
	Subtotal			398,000.000


Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
2	<p data-bbox="250 248 864 277">Rebar detection, cover, and diameter size meter</p>  <p data-bbox="645 443 875 472">(Sample picture only)</p> <p data-bbox="250 667 521 695"><u>Technical Specifications:</u></p> <ul data-bbox="250 695 1317 1026" style="list-style-type: none"> -Must have a colored display with touch screen operation -Can measure and detect up to 185mm deep -Must have a cover accuracy of +/-4mm -Must have pre-installed software for downloading of data and customized reports -Must be upgradable (Software) -Must include compatible rebar locator, cover meter, universal probe, detachable wheeled scanning cart, at least 5ft Probe Cable, power supply, carrying case and strap -Must have at least 8GB Internal Flash Memory -Must be battery operated -Must include a set of rechargeable compatible batteries and charger -Must include user manual -At least 1-year warranty 	2	435,000.00	870,000.00
	<p data-bbox="250 1032 539 1061">Concrete test hammer</p>  <p data-bbox="613 1230 844 1259">(Sample picture only)</p>	2	205,000.00	410,000.00



Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	<p><u>Technical Specifications:</u></p> <ul style="list-style-type: none"> -Can measure impact energy at least 2.207Nm -Can measure concrete compressive strength between 10-100 N/mm² -Can store at least 90 impacts in series -Must be ergonomically designed for easy handling -Must have a readable display under any conditions -Must be sealed to prevent the penetration of dust and dirt -Must have the capacity to upload data via USB -Must include accessories per user manual -Must be battery operated -Must include a set of rechargeable compatible batteries and charger -Must include user manual -At least 1-year warranty 			
Subtotal				1,280,000.00
3	<p>Set of Soil Moisture Meter (Probe-type) with data logger</p> <div style="text-align: center;">  <p>(Sample picture only)</p> </div> <p><u>Technical Specifications:</u></p> <ul style="list-style-type: none"> -Profile probe can measure up to 100cm -Profile probe must consist of 6 integral soil moisture sensors -Profile probe must be fitted with IP68 connector -Profile probe must include accessories per its user manual -Must have compatible cable -Must include 10 units fiber glass long access tube for installation of augered hole, and must include cap, bung, and collar -Must include 1 dedicated meter 	1	475,000.00	475,000.00


Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	<ul style="list-style-type: none"> -Must include user manual -At least 1-year warranty -Data logger must have at least 6 voltage inputs -Data logger must include compatible adapter cable -Data logger must have the capacity to log at least 16K readings -Must include standard accessories per user manual such as software manual disks, alkaline batteries among others -At least 1-year warranty -Soil moisture sensor must be fitted with IP68 connector -Soil moisture sensor must have compatible cable -Soil moisture sensor can measure soil temperature when buried -Must include 1 dedicated moisture meter -At least 1-year warranty -Moisture meter must have integral connector for sensor or PC connection -Must include compatible connector cap, battery, connector cap, battery, software, and manuals disk and cable assembly -Must include at least 90cm cable that will connect to the soil moisture sensor and other devices -At least 1-year warranty -Must include complete augering kit -Can be used for access tube installation (long and short tubes) -Must include pilot auger, finishing auger, stabilization plate, access tube insertion rod, mallet flexicanes, carrying bag cleaning rod and user manual -At least 1-year warranty 			
Subtotal				475,000.00
4	Set of Modern Land Surveying and Post-processing tools and equipment	1	2,420,000.0 0	2,420,000.00


Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	<div data-bbox="309 247 564 630" data-label="Image"> </div> <p data-bbox="683 462 913 491">(Sample picture only)</p> <p data-bbox="253 742 519 766"><u>Technical Specifications:</u></p> <ul data-bbox="253 769 1272 1404" style="list-style-type: none"> -GNSS Receivers (Base and Rover) -Must include at least 2 units GNSS receivers (Base and Rover), and complete set of UHF kit -Must have at least 600 GNSS channels -Can gather at least multiple satellite signals such as GPS, GLONASS, BeiDou, Galileo, and QZSS -Must be real-time corrections services ready -Must have fast search engine for acquiring and re-acquiring GNSS signals -Can produce an output in real-time raw data up to 20Hz -Must produce accurate results at least Real-Time Kinematic Position (RTK): 25cm +1ppm (Horizontal), and 50cm +1ppm (Vertical) -Can log data from between 0.05-999 seconds interval -Must have a display -Must be Wi-Fi ready for configuration, operation, status, and data transfer -Must be Bluetooth and GSM ready -Must have serial, USB ports -Must have at least 4GB internal memory -Must have expandable memory up to 32GB -Can operate at temperature between -40°C to 65°C -Must be protected against water, sand, and dust or at least IP67 rating -Can withstand up to 2m pole drop on concrete with an impact-resistant casing -Must be shock and vibration resistant -Must be battery operated - Additional battery 			



Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	<ul style="list-style-type: none"> -Must have an anti-theft capability -Batteries' life can last up to 10hrs -Must include components per listed in the brochure/user manual -Must include additional set of compatible batteries and charger -Must include 32GB microSDXC card -Must include heavy duty metal tripod -Must include two-way long-range (at least 5 km radius) radio, set of 4with additional set of compatible batteries and charger -Must include user manual -Must include folding working table and tent -At least 2 years warranty -Must include Data collector with built-in survey software -Must be compatible with the GNSS receivers -Must have durable housing with integrated drop bumpers -Can operate at temperature within -20 °C to 60 °C -Must be waterproof, sand and dust resistant -Must be shock and vibration resistant -Must have pre-installed survey software -Must have a processor speed ranging from 1.1GHz up to 2.5GHz -Must have at least 8GB of RAM -Can store up to 64GB, and can be expanded up to 2TB -Must be battery operated, removable, and have charge LED indicator -Batteries' life can last up to 7 hours -Must have large screen size multi-touch display, at least 7 inches -Must have built-in keypad/keyboard -Must have audio, external speaker/microphone -Must have at least USB 3.0 port -Must be Wi-Fi, GSM, and Bluetooth ready -Must have rear and front camera -Must have sensors at least, 3 axis accelerometer, magnetic sensor, ambient light sensor and proximity sensor -Must have pre-installed OS for professionals software -Must include components and accessories per brochure/user manual -Must include additional set of compatible batteries and charger -Must include at least 512GB microSDXC card -Must include compatible pole mount bracket -Must include dedicated shoulder sling bag -Must include compatible 12V vehicle charger/adapter -At least 1-year warranty -Must include post-processing equipment 			

Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	<ul style="list-style-type: none"> -Must have pre-installed latest Operating System, and office professional software compatible with the GNSS receivers and Data Collector -Must have a processor speed between 2.2GHz and 4.1GHz clock speed (4GHz with 4 cores, 3.9GHz with 6 cores) -Must have a memory at least 16GB DDR4 2666MHz SDRAM (8GB on-board + 8GB SDRAM Slot) -Must have an SSD at least 256GB PCIe 3.0 -Must have at least 15.6" Full HD display -Must have a graphics card at least 6GB GDDR5 VRAM -Must include a built-in keyboard, audio, camera -Must include I/O ports at least USB 2.0, HDMI 2.0, headphone, and microphone combo jack -Must be Wi-Fi and Bluetooth ready -Must include ergonomic at least 16,000 DPI optical sensor mouse -Must include at least 1TB shock-resistant USB 3.1 external hard drive -At least 1-year warranty 			
Subtotal				2,420,000.00
5	<p data-bbox="253 691 1245 715">Clamp-on meter with AC/DC micro current and true horsepower measurement</p> <div style="display: flex; align-items: center;">  <div data-bbox="745 751 1375 1107"> <p data-bbox="745 751 1014 775"><u>Technical Specifications:</u></p> <ul style="list-style-type: none"> -Must be True RMS -Can measure single phase/ 3-phase -Can measure a wide range of AC+DC current from 100 microA to 1000A -Can measure Horsepower equivalent or at least 800hp -Can measure AC Current equivalent or at least 1000A -Can measure True power(kW), Apparent power(kVA) and Reactive power(kVAR) equivalent or at least 600 power -Can measure AC/DC voltage equivalent or at least 600V -Can measure resistance equivalent or at least 100 Mohm </div> </div> <p data-bbox="387 1137 613 1161" style="text-align: center;">(Sample picture only)</p> <ul style="list-style-type: none"> -Can measure capacitance equivalent or at least 7000 microfarad -Can measure temperature (Type K) equivalent or at least 900°C -Must be battery operated -Must be complete with test lead kit, general purpose Type K thermocouple probe, carrying case and other necessary accessories as per user's manual -Must have a set of compatible rechargeable compatible batteries and charger 	4	72,800.00	291,200.00



Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	<ul style="list-style-type: none"> -Must include user manual -At least 1-year warranty 			
	<p data-bbox="253 312 1330 368">Clamp-on meter with high AC/DC Current, True Power, Apparent Power and Reactive Power measurement</p> <p data-bbox="725 373 954 400">(Sample picture only)</p>  <p data-bbox="725 456 987 483"><u>Technical Specifications:</u></p> <ul style="list-style-type: none"> -Must be True RMS -Can measure 3-phase -Can measure AC/DC Current equivalent or at least 2000A -Can measure True power(kW), Apparent power(kVA) and Reactive power(kVAR) equivalent or at least 1200 power -Can measure AC/DC Voltage equivalent or at least 600VAC/800VDC, respectively <ul style="list-style-type: none"> -Must be battery operated -Must include test leads and carrying case and other necessary accessories as per user's manual -Must have a set of compatible rechargeable compatible batteries and charger -Must include user manual -At least 1-year warranty 	4	84,700.00	338,800.00
	<p data-bbox="253 847 1375 903">Digital handheld multimeter with wide range of current, voltage, resistance, capacitance, and temperature measurement</p>  <p data-bbox="439 1158 667 1185">(Sample picture only)</p> <p data-bbox="736 935 999 962"><u>Technical Specifications:</u></p> <ul style="list-style-type: none"> -Must be AC True RMS -Can measure range of AC/DC current from 600 micro-amperes to 10 Amperes -Can measure wide range of AC/DC voltage from 600 millivolts to 1000 volts -Can measure Temperature (Type K) equivalent or at least 1000°C <ul style="list-style-type: none"> -Can measure capacitance equivalent or at least 25 microfarads -Must have an optical link USB interface -Must be battery operated with fuse -Must have a set of compatible rechargeable compatible batteries and charger -Must include additional set of compatible fuses -Must include user manual -At least 1-year warranty 	6	22,500.00	135,000.00

Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
Subtotal				765,000.00
6	<p data-bbox="253 276 898 304">Set of Terrestrial Survey Instrument (Total Station)</p> <div data-bbox="277 344 698 724">  </div> <p data-bbox="721 504 954 533">(Sample picture only)</p> <p data-bbox="253 783 521 807"><u>Technical Specifications:</u></p> <ul data-bbox="253 810 1137 1361" style="list-style-type: none"> -Must have an autofocus function -Must have tangent clamps and high sensitivity level vials -Must have 2 colored touch-screen LCD back-lit displays -Must have a memory at least 512MB RAM, 4GB Flash memory -Must have an Optical or Class 2 laser internal plummet -Must have a fast and powerful EDM at least 800m range Non-prism -Must have a telescope magnification at least 30x -Must have a field of view of 1°25' -Must have a resolving power at least 3" -Must have a track light -Must have a dual-axis type tilt sensor -Must have a compensation range of +/-3' or better -Must have communication ports such as serial and USB -Must be Bluetooth ready -Must include additional set of compatible batteries and charger -Must have a dust and water protection at least IP66 -Must have a battery life at least 14hrs -Must include 2 compatible prisms with holder -Must include 2 compatible aluminum range poles with graduation and built-in level -Must have heavy duty, aluminum tripod 	1	904,040.00	904,040.00


Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	<ul style="list-style-type: none"> -Must have two-way long-range (at least 5km radius) radio set of 4 with additional set of compatible batteries and charger -Must include user manual -Must include folding working table and tent -At least 2 years warranty -Must include post-processing equipment <ul style="list-style-type: none"> -Must be compatible with the terrestrial survey instrument -Must have the latest Operating System, and office professional software -Must have a processor speed between 2.2GHz and 4.1GHz clock speed (4GHz with 4 cores, 3.9GHz with 6 cores) -Must have a memory at least 16GB DDR4 2666MHz SDRAM -Must have an SSD at least 512GB PCIe 2 -Must have at least 15.6" FHD display -Must have a graphics card at least 6GB GDDR6 VRAM -Must include a built-in keyboard, audio, camera -Must include I/O ports at least USB 3.1, HDMI 2.0b, headphone and microphone combo jack -Must be Wi-Fi and Bluetooth ready -Must include ergonomic at least 16,000 DPI optical sensor mouse -Must include at least 1TB shock-resistant USB 3.1 external hard drive -At least 1-year warranty 			
Subtotal				904,040.00
7	<p data-bbox="250 887 703 914">Laser Distance Meter (Rangefinder)</p> <div data-bbox="309 997 607 1310" style="display: inline-block; vertical-align: middle;">  </div> <p data-bbox="304 1334 533 1361">(Sample picture only)</p> <p data-bbox="629 1002 898 1029"><u>Technical Specifications:</u></p> <ul style="list-style-type: none"> -Can measure 10m to 500m or more -Must be battery operated -Must have 6x magnification monocular -Must be waterproof -Must have viewfinder and external display -Must be capable to measure linear & horizontal distance, height, angle, vertical separation among others -Must include 2 sets of compatible rechargeable batteries and a charger of the one set of battery -Must include user manual -At least 1 year warranty 	6	80,000.00	480,000.00


Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	<p data-bbox="255 240 456 268">Laser Measurer</p>  <p data-bbox="629 411 853 438">(Sample picture only)</p> <p data-bbox="255 608 517 635"><u>Technical Specifications:</u></p> <ul data-bbox="255 635 1279 938" style="list-style-type: none"> -Must be at least IP 65 -Must have 360° tilt sensor -Must have smart horizontal mode -Must be height tracking -Must be power range technology -Must be illuminated 4-line display -Must have automatic multifunctional end-piece -Can measure up to 120 m -Must include 2 sets of compatible rechargeable batteries and a charger of the one set of battery -Must include user manual -At least 1 year warranty 	7	30,000.00	210,000.00
Subtotal				690,000.00
8	<p data-bbox="255 975 864 1002">Non-contact Digital Laser Infrared Thermometer</p>  <p data-bbox="775 1161 999 1189">(Sample picture only)</p>	42	5,500.00	231,000.00

Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	<p><u>Technical Specifications:</u></p> <ul style="list-style-type: none"> -Must have a temperature range between -30°C to 350°C -Must have an accuracy of ±2°C -Must have a response time of <500 ms -Must have a spectral response of 8 mm to 14 mm -Must have an emissivity of 0.10 to 1.00 -Must have a distance to spot size ratio of 10:1 -Must have a display resolution of 0.1°C (0.2°F) -Must be battery operated -Can withstand a battery life laser and backlight of 12 hours -Can work within temperatures between 0°C to 50°C <ul style="list-style-type: none"> -Must have a storage temperature of -20°C to +60 ° C (-4°F to 140°F), without battery -Must have a 10% - 90% relative humidity , 30°C (86°F) non-condensing -Must be compliant with IEC 60529 IP40 requirements -Must be compliant with IEC 68-2-6 2.5 g, 10200 Hz, IEC 68-2-27, 50 g, 11 ms -Must be compliant with EN / IEC 61010-1 -Must be compliant with FDA and EN 60825-1 two -Must be compliant with 61326-2 -Must include 2 sets of compatible rechargeable batteries and a charger of the one set of battery -Must include user manual -at least 1 year warranty 			
	Thermohygrometer	3	8,400.00	25,200.00

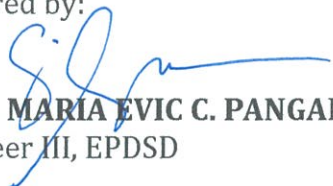
Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	 <p data-bbox="577 277 1375 526"> <u>Technical Specifications:</u> -Must have a temperature range of 0°C to 50°C -Must have humidity resolution of atleast 1% RH -Must have a temperature accuracy of at least ±1°C -Must have a humidity accuracy of at least ±5% RH -Must include 2 sets of compatible rechargeable batteries and a charger of the one set of battery -Must include user manual -at least 1 year warranty </p> <p data-bbox="577 679 808 707">(Sample picture only)</p>			
Subtotal				256,200.00
9	<p data-bbox="248 916 752 943">4-in-1 pH, EC/TDS & temperature meter</p>  <p data-bbox="730 1134 960 1161">(Sample picture only)</p>	40	14,000.00	560,000.00

Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	<p><u>Technical Specifications:</u></p> <p>pH sensor: - can measure up to 14 pH - has an accuracy of ± 0.02 pH - has a Resolution of 0.01 pH - has 1 or 2 calibration points</p> <p>temperature sensor: - can measure up to 60 °C - has an accuracy of ± 0.4 °C - has a Resolution of 0.1 °C</p> <p>EC/TDS -can measure up to 3999 microsiemens/cm, EC -can measure up to 2000 ppm TDS -has an automatic calibration at 1 point</p> <p>-must be waterproof -must have spare pH electrode -must include standard set of calibration solutions for pH -must include standard set of calibration solutions for EC/TDS -must include cleaning solution -must include standard set of accessories -must have LCD Display -Power source: Battery, comes with at least 2 sets of compatible batteries with auto off function -Must include user manual -at least 1 year warranty</p>			
Subtotal				560,000.00
10	Equipment Protective Case with foam	6	12,500.00	75,000.00


Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	 <p data-bbox="660 351 896 383">(Sample picture only)</p> <p data-bbox="257 590 526 614"><u>Technical Specifications:</u></p> <ul data-bbox="257 646 1153 981" style="list-style-type: none"> -Must be strong, durable and waterproof hard case -Must include foam set -Must be airtight, dustproof chemical resistant and corrosion proof -Must have easy open latches -Must have a steel hinge -Must have a provision for a security lock -Must include air valve for quick equalization after changes in atmospheric pressure. -at least 600 x 500 x 200 mm", exterior dimensions -must include compatible lock -Must have side haul handles and an extension handle -Must have a durable wheels. - With at least 1 year warranty 			
	Rolling Storage Tool Container	6	10,960.00	65,760.00

Lot #	Technical and Scientific Equipment	Quantity	Unit Cost	Total Cost
	 <p data-bbox="533 579 763 608">(Sample picture only)</p> <p data-bbox="250 794 517 817"><u>Technical Specifications:</u></p> <ul data-bbox="250 850 1189 1018" style="list-style-type: none"> -Must be strong, durable and watertight hard case -Must have anti-rust metal latches -Must have a large volume box for bulky items at least 500 x 400 x 1000 mm dimensions -must include compatible lock -Must have telescopic handle and durable wheels at least 7" for maneuverability. - With at least 1 year warranty 			
Subtotal				140,760.00
GRAND TOTAL				7,889,000.00

Prepared by:


ENGR. MARIA EVIC C. PANGANIBAN
 Engineer III, EPDSD

Approved by:


ENGR. ALLAN C. GOLENG
 Engineer IV, EPDSD

TERMS AND CONDITIONS

1. The delivery and acceptance including demonstration/testing is within 120 calendar days upon the receipt of Notice to Proceed;
2. Freight-on-Board (FOB) Destination. The supplier will shoulder the delivery expense to the drop-off point;
3. Delivery point is at 4th floor, Bureau of Agricultural and Fisheries Engineering (BAFE), Department of Agriculture Elliptical Road, Diliman, Quezon City or New Office.
4. The technical representative of the supplier shall be the one to unpack the package after the delivery to the drop-off point and test for the functionality of the equipment;
5. The technical representative of the supplier shall be the one assemble, adjust and provide training on the actual use and operation of Set of Modern Land Surveying and Post-processing tools and equipment and Set of Terrestrial Survey Instrument (Total Station). The training materials/inputs/medium to be used in the training and testing of functionality shall be provided by the supplier at no cost;
6. The training will be conducted prior to the acceptance of the equipment upon the availability of the end-user.
7. Certificate of undertaking of the training shall be provided by the technical representative of the supplier.
8. The supplier must provide after-sales invoice within 72 hours.
9. The supplier must have at least two (2) years experience.

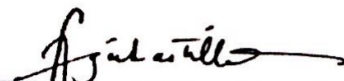
TECHNICAL AND SPECIFIC EQUIPMENT

GENERAL DESCRIPTION	QUANTITY	UNIT	UNIT COST	SPECIFICATIONS
Lux Meter	20	pcs	3,000.00	<ul style="list-style-type: none">- Measuring range: 0-20,000 lux/0-20,000 FC- Sensor Type - Photo Diode- Battery Type - 1.5 V AA or 9 V 6F22 battery- With data hold functions- Automatic Power-Off, Data Storage, Interfaces- Accuracy: $\pm 3\%$- Resolution: 0.01 Lux/0.01 FC- With data Automatic record- With minimum and maximum function- With FC/lux unit selection- At least one (1) year warranty

Prepared by:



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Engineer II, SRED



ENGR. DJAYA C. ASTILLA
Engineer I, SRED

Approved by:



ENGR. ARJAY P. SABASAJE
OIC Chief, SRED

Technical and Scientific Equipment

ITEM	PROPOSED SPECIFICATIONS
Altimeter	Method: atmospheric pressure, GPS, or whichever is better Average deviation: at most 100 m Power source: battery Weight: at most 200g Operating Temperature: at least 40°C
Calculator	Display: dot matrix and natural textbook display Mantissa: 10-digit + 2-digit exponential display With multi-replay Power source: solar and battery Able to perform following mathematics operations: basic mathematical functions, table generation, base-n calculation, scientific constants, vector, basic statistics, differentiation, matrix, equation, integration, metric conversion function, complex number calculation
Clamp-on Meter	AC Current: at least 500A AC Voltage: at least 500V Resistance: at most 300 Ω, With buzzer sounds below 30 ± 20Ω Conductor size: at most Φ35 mm Frequency range: 40 Hz to 1 kHz Conforming to following safety standards: IEC 61010-1 CAT. III 600 V IEC 61010-2-031, IEC 61010-2-032
Digital Caliper	Caliper Type: Digital or whichever is better Capacity: at least 150mm System: Both Imperial or Metric Display Type: Digital or whichever is better Accuracy: at least ±0.05 mm Resolution: at least 0.02 mm
Digital Laser Infrared Thermometer	Measuring temperature (°C): at least -50°C Laser class: class 2 or whichever is better Temperature display method: digital or whichever is better Automatic power Off: at most 20 seconds Sensor Type: Infrared sensor or whichever is better Type of thermometer: radiation thermometer (gun type) or whichever is better Sampling speed: at least 1 time / sec Resolution (°C): at most 0.1 Included accessories: with instruction manual Battery life: at least 10 hours Power supply: 9V battery IP rating: IP 53 or whichever is better
Digital Pocket Stopwatch	Type: digital pocket type Maximum time: at least 24 h Resolution: at least 1/100s Power source: battery With alarm function and calendar IP rating: IPX7 or whichever better rating Case material: plastic or whichever better material
Equipment Box	External height: at least 100mm External width: at least 200mm

	External depth: at least 300mm With necessary cushion
Feeler Gauge (29 Blades)	Number of blades: at least 29 Unit of measurement imperial and metric units Blade length: at least 180mm
Graduated Cylinder (1000mL)	Material: impact-resistant PMP or whichever better material With pour spout and molded graduation Capacity: 1000 mL
Graduated Cylinder (100mL)	Material: impact-resistant PMP or whichever better material With pour spout and molded graduation Capacity: 100 mL
Graduated Cylinder (25mL)	Material: impact-resistant PMP or whichever better material With pour spout and molded graduation Capacity: 25 mL
Magnifying lens, 10x magnification	Magnification power: at least 10 Lens diameter: at least 30mm Type: illuminated and battery magnifier
Microcontroller	Operating voltage: at least 5V Analog input pins: at least 6 (A0 - A5) Digital I/O pins: at least 14 (Out of which 6 provide PWM output): Flash memory: at least 32 KB Frequency (clock speed): 16MHz With USB cable, breadboard, potentiometer, active buzzer, passive buzzer, infrared receiving head, roll ball switch, 5V stepper motor, temperature and humidity sensor module, water level measurement module, RFID module, RGB three color module and 9V battery connector With hard case and instruction paper
Open Reel Fiberglass Long Tape	Maximum tape length: at least 100 meters Material: fiberglass or whichever better material With metric units printed on one side of tape and imperial units printed on the other side Smallest graduation: at least 1mm (metric) and/or at least 1/8-inch (imperial) tape width: at least 10mm With winder and high impact ABS case
Sound Level Meter	Maximum sound Level: at least 125dB Minimum sound Level: at most 40dB Display type: LCD display or whichever better display Interface type: Bluetooth or whichever better interface Maximum frequency: at least 8 kHz Minimum frequency: at most 31.5 Hz Power supply: batteries Microphone: 1/2 electret condenser microphone or whichever better microphone
Steel Tape	Maximum tape length: at least 5m Tape width: at least 15 mm Unit of measurement: Imperial and Metric units
Stem Thermometer	Maximum temperature measurement: at least 150°C Minimum temperature measurement: at most -20°C Material: stainless steel or whichever better material Accuracy: at most $\pm 2^{\circ}\text{F}/1^{\circ}\text{C}$ Resolution: at most $0.1^{\circ}/1^{\circ}\text{F}$

Tachometer	Maximum RPM measurement: at least 99999RPM Minimum RPM measurement: at most 2RPM Accuracy: at most 0.1 % Sampling Time: at least 0.5s Maximum detecting distance: at least 500mm
Thermohygrometer	Maximum temperature measurement: at least 50°C Minimum temperature measurement: at most 0°C Humidity resolution: at least 1% RH Temperature accuracy: at least ±1°C Humidity accuracy: at least ±5% RH Display type: LCD display or whichever better display

Prepared by:

dexulgar
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Engineer I, PPMD

Reviewed by:

[Signature]
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Engineer IV, PPMD