



## REQUEST FOR PROPOSAL

The Philippine Ports Authority Bids and Awards Committee for Engineering and Consultancy Projects (BAC-EP-CON) will undertake the Consultancy Services for the Hydrographic and Topographic Survey for the Construction of Tubajon Port, Municipality of Tubajon, Dinagat Islands, per attached Terms of Reference (TOR):


**APPROVED BUDGET FOR THE CONTRACT (ABC):**                    **₱ 275,044.67**

**DEADLINE FOR SUBMISSION OF PROPOSAL:**                    **11 September 2019**

All quotations must be duly-signed and submitted to BAC Office, 5<sup>th</sup> Floor, PPA Bldg., Bonifacio Drive, South Harbor, Port Area, Manila on or before the prescribed deadline for submission together with the required documents, such as Mayor's/Business Permit, Professional License/Curriculum Vitae of personnel to be assigned to the project, PhilpGEPS Registration Number and Omnibus Sworn Statement.

For further information, please refer to:

BAC Secretariat, Philippine Ports Authority  
5<sup>th</sup> Floor, PPA Bldg., A. Bonifacio Drive,  
South Harbor, Port Area, Manila  
Telephone/Fax No. 527-4735  
527-8356 to 83 loc. 539  
PPA Website: [www.ppa.com.ph](http://www.ppa.com.ph)

  
**MARK JON S. PALOMAR**  
Chairperson, HO-BAC-EP/PGCS

## **TERMS OF REFERENCE**

### **HYDROGRAPHIC AND TOPOGRAPHIC SURVEY**

for the

### **CONSTRUCTION OF TUBAJON PORT MUNICIPALITY OF TUBAJON, DINAGAT ISLANDS**

#### **SECTION 1: PROJECT SITE**

Tubajon is a coastal municipality in the province of Dinagat Islands. The municipal center of Tubajon is situated approximately 10° 19' North, 125° 34' East with an estimated elevation of 1.6 meters or 5.1 feet above mean sea level.

From Metro Manila, the Philippine Airlines and Cebu Pacific has a regular flight going to Surigao City, the capital of Surigao del Norte.

The Province of Dinagat Islands can be reached by ferry boat coming from Surigao City. It is the closest jump-off point to the province with travel time of about 1-1.5 hours depending on the sea conditions. Boats and ferries bound for San Jose (the capital town of Dinagat Islands) leave as early as 5:30 AM from the port in the boulevard of Surigao City and the last trip departs in the early afternoon at around 2:00 PM.

Upon arrival at San Jose Port in Dinagat Islands, take a tricycle or hire a van going to the Tubajon Port which is approximately 63 kilometers apart.

The coordinates of the project site is 10°19'31"N, 125°33'25"E and the area for survey is about 20,000 square meters (please see attached map).

#### **SECTION 2: PURPOSE/OBJECTIVES**

PPA seeks the services of a qualified Consultant for the hydrographic and topographic survey for the Construction of Tubajon Port Project, to be referred hereinafter as the Consultant that can provide the engineering proficiency, quality workmanship and timely completion of the hydrographic and topographic survey necessary for the preparation of design plans of the above-mentioned port project.

The Consultant shall provide in his proposal the right amount of hydrographic and topographic survey necessary to give a clear understanding of contours, water levels, elevations of all surface infrastructure, bathymetry of the seabed and to establish appropriate benchmarks that will be needed on the engineering design and construction of the project.

a. Planning and Scoping for the Survey Works

The Consultant will be responsible in gathering data, conduct of field investigation and the corresponding analysis with respect to the size and complexity of the proposed port project and shall familiarize himself with sites specific conditions essential for the hydrographic and topographic survey.

b. Execution, Acceptance and Turn-over of Reports

The Consultant shall supply the needed professional competence, materials, equipment and methodologies in a workmanlike manner. Turn-over and final acceptance of works within one (1) month after issuance of Notice to Proceed (NTP) shall be strictly based on the agreed quality of workmanship and the totality of satisfactory implementation of the hydrographic and topographic survey.

c. Project Quality Requirements

The Consultant shall provide detailed workflow and timetable from planning, execution and turn-over of hydrographic and topographic survey reports and specifications for all workmanship that form part of the survey report. The level of workmanship must be defined to attain the specified quality of the completed report. The Consultant must provide the methodologies or the technical approach including methods of interpreting the survey data, analysis and studies including alternative approach, if any. A work plan must be included in the proposal containing the breakdown of activities the content and duration, phasing and interrelations and delivery dates of important reports. This work plan must be consistent with the methodologies used for the proposal. A list of final documents, such as reports, drawings, etc. must be included as part of the work plan. Manpower loading with the key expert responsible and the proposed technical and support staff should form part of the organization. The qualification of each individual staff must be consistent with the role and responsibilities for the job.

d. Safety Issues

It is mandatory that the Consultant shall make the necessary planning and preparation to ensure the safe and careful execution of every stage of the work process.

### **SECTION 3: APPROVED BUDGET FOR THE CONTRACT (ABC)**

The Approved Budget for the Contract (ABC) is Two Hundred Seventy-Five Thousand Forty-Four Pesos and Sixty-Seven Centavos (Php275,044.67), inclusive of value added tax and other applicable withholding taxes.

### **SECTION 4: CONTRACT DURATION**

The Topographic and Hydrographic Survey Consultant shall be engaged for a period of thirty (30) calendar days.

### **SECTION 5: SCOPE OF WORK**

#### **General**

The Consultant shall provide the qualified personnel to undertake the hydrographic and topographic survey, quality workmanship, tools, and the necessary equipment for the successful execution of works with the specified project areas. Hydrographic and topographic survey shall comprise but not limited to the following works:

- a. GPS control survey
- b. Detailed topographic survey
- c. Hydrographic survey
- d. Contouring

#### **Hydrographic and Topographic Survey Requirement**

The Consultant shall coordinate and report to the Port Planning and Design Department (PPDD) of PPA for uniformity and cohesiveness in the preparation of related documents, consistent with the latest edition of the Design Guidelines, Criteria and Standards for executing the hydrographic and topographic survey and other applicable provisions of existing laws and codes. All reports, plans and other related documents prepared by the Consultant shall be in a format agreed and accepted by PPA.

The Consultant shall prepare and submit drawings/plans in accordance with standard PPA template, and with the following scales:

- a. Development Plan Drawing: 1/1000 or 1/1500
- b. Plan of Intersection: 1/500
- c. Profile: Horizontal; 1/1000, Vertical; 1/500
- d. Cross Section: 1/200
- e. Contour Interval: 1.0m or less

## 1. Drawings

- a. All survey results shall be drawn by computer using a Computer Aided Design and Drafting (CADD) software in accordance with standard PPA template showing the following:
  - Vicinity Map
  - Location Plan
  - Legend, Abbreviations and Symbols
  - General Notes
- b. The Consultant shall submit drawings and reports, with the following sizes:
  - All drawings: A2
  - All reports: A3 or A4

In addition to the above drawings, the Consultant shall submit all survey data including field notes, photographs of site survey and other data obtained during the field survey. All drawings and report must be submitted in raw/soft and hard copy.

Also, the Consultant shall reflect the existing facilities at the port area that will be essential in the preparation of design plans in coordination with PPDD among others street light, outfall of drainage and its invert elevation, concrete pole for electrical, and etc.

## 2. Submissions


The Consultant shall submit the following documents:

- a. Electronic Data in three (3) CDs including digital data of survey results, drawings (DWG & PDF format), worksheets/tables, photographs, scanned field notes, etc.
- b. Hard copy drawings duly signed by a licensed Geodetic Engineer: one (1) original and two (2) duplicate copies.
- c. Hard copy of the survey report duly signed by a licensed Geodetic Engineer: one (1) original and two (2) duplicate copies.
- d. Geo-tagged pictures during the conduct of the actual survey including equipment used.

**Quality Control System and General Requirements**

- a. The Consultant must institute a comprehensive quality control system on all stages of the work.
- b. The Consultant shall be responsible for the security and safe-keeping of their personnel and equipment.
- c. The Consultant must provide a certificate of calibration from a registered institution. All equipment to be used in the project site must be calibrated not earlier than six (6) months before the date of commencement of survey work.
- d. The Consultant shall strictly observe/adopt the standard practice of the following:
  - Association of Geodetic Engineers of the Philippines
  - American Association of Geodetic Surveying
  - National and Local Code of the Philippines
  - Occupational Safety and Health Act (OSHA)

Prepared by:



**CHRISTOPHER H. ORNUM**  
Principal Engineer A

Checked / Reviewed by:

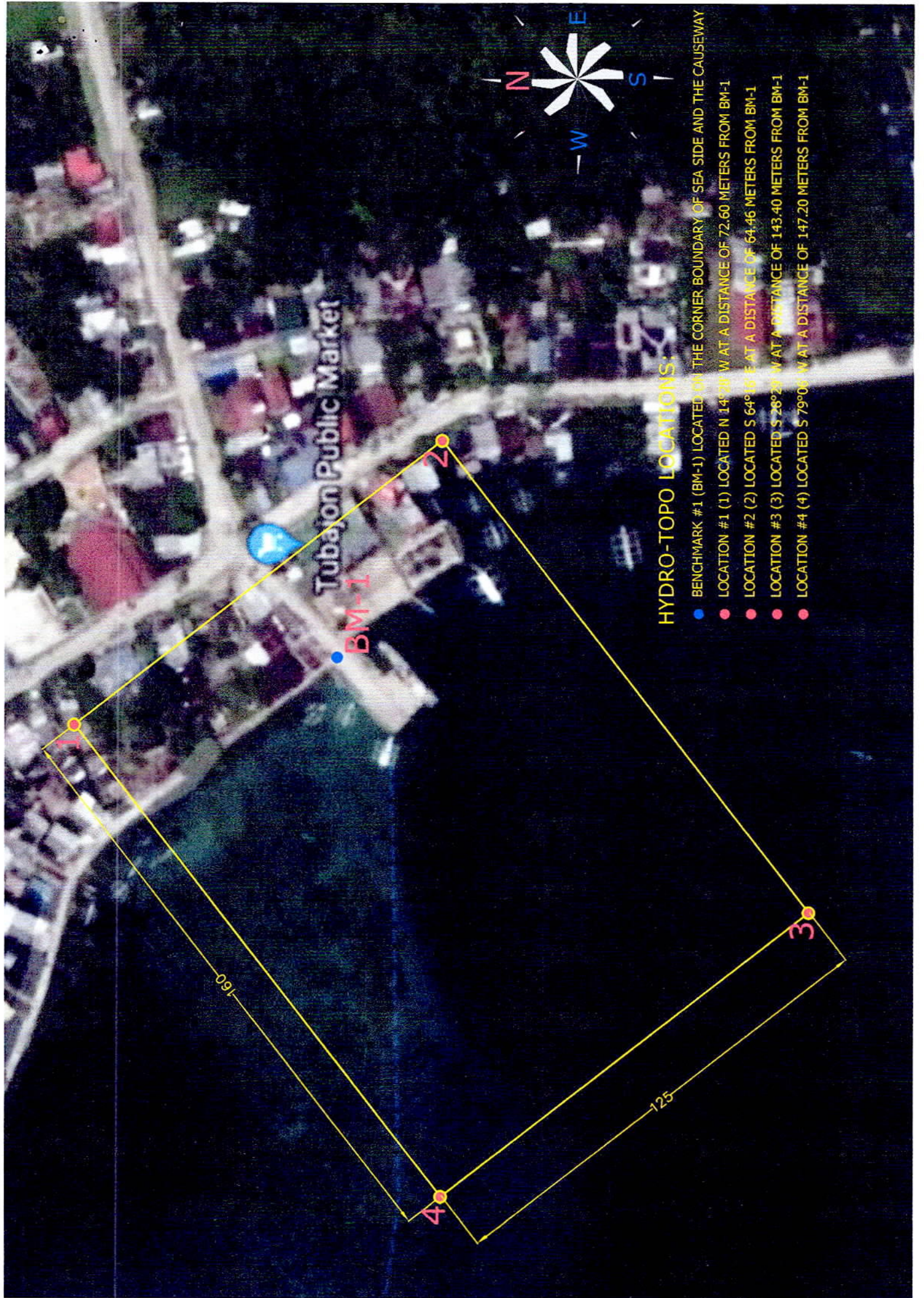


**JOVENCIO C. PAJINAG**  
Division Manager, PIAD

Approved by

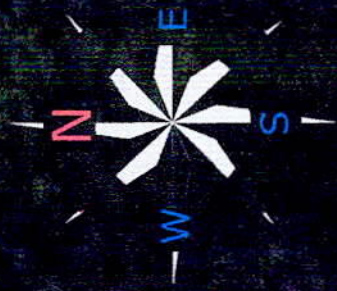


**REYNAND C. PARAFINA**  
Manager, PPDD



Tubajon Public Market

BM-1



**HYDRO-TOPO LOCATIONS:**

- BENCHMARK #1 (BM-1) LOCATED ON THE CORNER BOUNDARY OF SEA SIDE AND THE CAUSEWAY
- LOCATION #1 (1) LOCATED N 14°38' W AT A DISTANCE OF 72.60 METERS FROM BM-1
- LOCATION #2 (2) LOCATED S 64°18' E AT A DISTANCE OF 64.46 METERS FROM BM-1
- LOCATION #3 (3) LOCATED S 26°20' W AT A DISTANCE OF 143.40 METERS FROM BM-1
- LOCATION #4 (4) LOCATED S 79°03' W AT A DISTANCE OF 147.20 METERS FROM BM-1

160

125

1

2

3

4