TERMS OF REFERENCE

Consulting Services for the Architectural and Detailed Engineering Design for the Construction of Academic Building I of Philippine Science High School Zamboanga Peninsula Region Campus (located in Barangay Cogon, Dipolog City, Zamboanga del Norte)

I. BACKGROUND

The PSHS System will be constructing its 16th Campus in Barangay Cogon, Dipolog City; starting with the construction of the Academic Building I. The budget per under FY 2016 General Appropriations Act (R.A. 10717) for the construction of the proposed Academic Building I is PHP 34,100,000.00.

The Approved Budget for the Contract of the abovementioned consulting services project is EIGHT HUNDRED THIRTY-EIGHT THOUSAND ONE HUNDRED PESOS (PHP 838,100.00).

With this, the PSHS System intends to engage the technical and professional expertise of a local consultant firm/company to undertake the following general A & E work:

1.1. Prepare and Submit Design Standards in accordance with appropriate standards and accepted detailed engineering practice of PSHS and the Department of Public Works and Highways (DPWH), see annex A for PSHS Building Standards and Specifications. Design standards for structures shall take into account, among other things, the seismicity of the area to determine the optimum safety of structures in the event of an earthquake.

In the event of an earthquake, the structures should withstand Magnitude 9.

1.2. Prepare and Submit Field Surveys and Investigation Reports which include, but not necessarily limited to the following activities: hydrographic, topographic, hydrologic, sub-surface, and other related field surveys. These field investigations shall be carried out in accordance with the design guidelines, criteria and standards adopted by the PSHS System and the DPWH. All survey and investigation works shall be prepared in a manner satisfactory to carry out accurate design and production of plans that will permit quantity estimates to be made within plus or minus ten percent (10%) of the final quantities of the completed structure.

1.3 Prepare and submit a Master Plan covering the entire development area and showing the location of each structure listed in Annex A.

1.4 Prepare a scaled model of the development.
The objective of hiring an A & E Design Consultant is to tap its expertise in developing the architectural and detailed engineering design for the proposed development project, which will be used as basis for preparing the Scope of Work, and the Technical Specifications of the construction project.

PSHS envisions a building that is safe, conducive to learning, state-of-the-art yet economical, energy saving and environment friendly.

II. SCOPE OF WORK & SERVICES

2.1. Submit a desirable A & E Design plan for the proposed construction/development project that is compliant with the minimum building and design specifications of PSHS (Annex A).

2.2. Prepare a complete set of architectural drawing consisting of the following sketches and charts:

2.2.1. Foundation Plan – showing the layout and dimensions of slab-on-grade, basement or crawlspace walls of the site plan which indicates how the underpinning structure of the building is supported by the Earth below it.

2.2.2. Framing plan – depicting the frame and structures of walls, joists, trusses and beams which would reveal the structural strength and capacity of the building.

2.2.3. Roof Plan – presenting the top view of the entire roof system, including the ridges, hips, valleys, rakes, and eaves, including the location of the gutters and downspouts.

2.2.4. Mechanical Plan – Indicating the location of building equipments or stationary machines, plumbing and appropriate Heating, Ventilation and Air Conditioning (HVAC) ducts, duly signed by appropriate licensed professionals.

2.2.5. Electrical Plan – Showing the general and specialized electrical requirements of the building (e.g. general purpose receptacles, specialized office equipments, computer lines, etc.), lighting systems, and electrical distribution systems, including their corresponding electrical loads.

2.2.6. Elevation – Showing the front, side, and rear exteriors of the building, providing a flat straight-on-view of the siding, windows, doors and the entire exterior of the building from the ground floor to the roof ridge.
2.2.7. Cross-sections – Showing all the hidden details of the building through a cross section (imaginary line) through the middle of the structure so that the interior of the walls, floors, ceilings and roof can be examined.

2.2.8. Construction Plan and Building Design – Showing the detailed construction plan of the Academic Building I, as well as the location and general design of each building.

2.2.9. Other Details – Highlighting specific areas of construction such as: foundation connections, door assemblies, and window installations, which require greater details.

2.3. Conduct a preliminary engineering study that establishes the technical feasibility of the construction project and conformance to land use and zoning guidelines prescribed by existing laws.

2.4. Conduct a Site Analysis and Investigation on the entire Lot that shall include the following:
   2.4.1. Relocation Survey
   2.4.2. Site Investigation
   2.4.3. Soils and Foundation Investigation
   2.4.4. Construction Materials Investigation
   2.4.5. Preparation of Site or Right-of-Way plans including Schedule of Acquisition
   2.4.6. Preparation of Environmental Impact Assessment for Critical Projects as Defined by the Department of Environment and Natural Resources (DENR)

2.5. Conduct a schedule of detailed engineering activities for the construction of the Academic Building I that shall include the following:
   2.5.1. Preparation of Building Plan, Design, and Structural Analysis
   2.5.2. Preparation of Technical Specifications
   2.5.3. Preparation of Quantity and Costs Estimates
   2.5.4. Preparation of Program of Work
   2.5.5. Preparation of Proposed Construction Schedule and Estimated Cash Flow
   2.5.6. Preparation of Site or Right-of-Way Plans including Schedule of Acquisition, if applicable
   2.5.7. Preparation of Utility Relocation Plan
   2.5.8. Preparation and Submission of Design Report
2.6. Prepare and submit a Master Plan and a Scaled Model of Development.
2.7. The CONSULTANT shall submit to the Head of Procuring Entity (HOPE), within ten (10) working days from receipt of the Notice to Proceed (NTP), the detailed approach, work plan and schedule under sections 2.1 to 2.6.

III. BASIC INFORMATION ON PROPOSED PROJECT

3.1. Location : Barangay Cogon, Dipolog City
3.2. Type of Project: Consulting Services for the Architectural and Detailed Engineering Design for the Construction of Academic Building I

IV. DURATION OF CONTRACT (45 calendar days, excluding project supervision)

4.1. Component I – Field Study and Investigation
   4.1.1. Schedule of detailed engineering activities
           Within fifteen (15) calendar days from receipt of Notice to Proceed. Refer to section 2.4

4.2. Component II - Architectural and Detailed Engineering Design
   4.2.1. Design Phase/ Schematic Design Phase
           Within thirty (30) calendar days from the completion of the approved Field Study and Investigation Reports. Refer to sections 2.2, 2.3, 2.5 and 2.6 of this document.

4.3. Component III – Project Supervision
   4.3.1. Project Supervision Phase
           Periodic supervision for the duration of the project construction phase but not more than Seven Hundred Thirty (730) calendar days from the receipt of the Notice to Proceed (NTP).

V. CONSULTANCY SERVICE REQUIREMENTS

5.1. A local consultancy firm/ company with experience in Architecture and Detailed Engineering design with the following profile:
   5.1.1. A corporate or partnership entity duly registered with the Philippines’ Securities and Exchange Commission, and where the majority shareholder is a Filipino;
   5.1.2. Must be operational for at least five (5) years;
   5.1.3. Must have at least five (5) years of consulting experience in A & E design.
   5.1.4. Must have previously handled/ managed at least three (3) A & E design with at least one (1) project whose total construction cost is worth at least Thirty-nine Million and One Hundred Thousand Pesos (₱39,100,000,000).
VI. MANPOWER AND QUALIFICATION REQUIREMENTS

6.1. The CONSULTANT, as a minimum requirement of the project, must be able to provide the following manpower:

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<th>POSITION</th>
<th>NUMBER OF PERSONNEL</th>
<th>QUALIFICATIONS</th>
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<tr>
<td>Principal Architect</td>
<td>1</td>
<td>- Licensed Architect</td>
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<td>- At least three (3) years experience in A &amp; E Design</td>
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<td>Structural Engineer</td>
<td>1</td>
<td>- At least three (3) years experience in Construction Supervision and Management Services</td>
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<td>- Licensed structural engineer/ civil engineer</td>
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<td>- At least three (3) years experience in A &amp; E Design</td>
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<td>Professional Electrical Engineer</td>
<td>1</td>
<td>- Licensed Professional Electrical Engineer</td>
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<tr>
<td></td>
<td></td>
<td>- At least three (3) years experience in A&amp;E Design</td>
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<tr>
<td>Sanitary Engineer</td>
<td>1</td>
<td>- Licensed Professional Sanitary Engineer</td>
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<tr>
<td></td>
<td></td>
<td>- At least three (3) years experience in A&amp;E design</td>
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6.2. The CONSULTANT may provide additional personnel for the proper and timely completion of the project, but at no additional cost to PSHS.

6.3. The CONSULTANT must provide the Professional Regulation Commission (PRC) License and Professional Tax Receipt (PTR) of assigned staff for this project (refer to section 6.1.), as well as any relevant proof of skills, qualifications, work experience and professional certifications that shall establish the qualifications of the staff for the job.

6.4. There shall be no replacement of identified Architect and/ or Structural Engineer assigned in the project until after fifty percent (50%) of the personnel man-months have been served, except for justifiable reason/s. Any replacement shall be approved by the Head of the Procuring Entity (HOPE).
VII. RESPONSIBILITIES OF PSHS

The BAC shall:

7.1. Receive/review/evaluate/recommend approval of the detailed architectural drawings and sketches mentioned in Section 2.2 within five (5) calendar days from receipt thereof;

7.2. Receive/review/evaluate/recommend approval of documents pertaining to the engineering and technical studies conducted as mentioned in Section 2.3 within five (5) calendar days from receipt thereof;

7.3. Receive/review/evaluate/recommend approval of documents pertaining to the site analysis and investigation activities conducted as mentioned in Section 2.4. within five (5) calendar days from receipt thereof;

7.4. Receive the detailed engineering activities/work plan and schedule for the Academic Building I as mentioned in Section 2.5.

7.5. Receive/review/evaluate/recommend approval of the Master Plan and the Scaled Model of Development as mentioned in Section 2.6 within five (5) calendar days from receipt thereof;

7.6. Give prompt notice to the CONSULTANT, if there is any defect, modification or changes in the project scope;

7.7. Notify the CONSULTANT of its designated contracts;

7.8. Provide the CONSULTANT access to PSHS facilities subject to approval by the Head of Procuring Entity (HOPE) to enable the CONTRACTOR to perform their assigned tasks.

7.9. Provide the consultant with specific information and description about the location, particularly its boundaries and limits.

The HOPE shall:

7.10. Act within Five (5) days on the proposed Conceptual Project Design as recommended by the BAC, for review and evaluation;

7.11. Act within Five (5) days on the proposed detailed work plan, architectural drawings, and engineering plan with the corresponding costs and related documents as mentioned in Sections 2.2 to 2.6 subject for review and evaluation;

VIII. CONFIDENTIALITY OF DATA

8.1. The ownership and all rights thereto of all designs, drawings, specifications and copies thereof including electronic files, prepared and furnished by the CONSULTANT in the performance of the services subject of the Agreement shall be vested with PSHS.
IX. SERVICE LEVEL AGREEMENT

9.1. PSHS shall maintain a Service Level Agreement (SLA) with the CONSULTANT, with provisions for liquidated damages in case of their non-compliance. The Liquidated Damages is equal to one-tenth of one percent (0.1%) of the cost of the unperformed portion for every day of delay. Once the cumulative amount of Liquidated damages reaches ten percent (10%) of the amount of the contract, the procuring entity shall rescind the contract, with prejudice to other courses of action of remedies open to it.

X. WARRANTIES OF THE CONSULTANT

10.1. The CONSULTANT warrants that it shall conform strictly to the terms and conditions of these Terms of Reference.
10.2. The CONSULTANT warrants, represents and undertakes reliability of the service and that their manpower complements are hardworking, qualified/reliable and dedicated to do the service required to the satisfaction of PSHS. It shall employ highly skilled, well-behaved and honest employees with ID displayed conspicuously while working within the compound. The CONSULTANT shall not employ PSHS employees or their relatives to work in any category of the project whatsoever.
10.3. The CONSULTANT shall comply with the laws governing employees compensation, PhilHealth, Social Security and/or labor standards and other laws, rules and regulations applicable to its personnel employed on account of contracted services. The CONSULTANT shall pay its personnel not less than the minimum wage and other benefits mandated by law.
10.4. The CONSULTANT, in the performance of its services, shall secure and maintain at its own expense all registration, licenses or permits required by National or Local Laws and shall comply with the rules, regulations and directives of the Regulatory Authorities and Commissions.
10.5. The CONSULTANT’s personnel shall take all necessary precautions for the safety of all persons and properties at or near their area of work and shall comply with all the standard and established safety regulations, rules and practices.
10.6. The CONSULTANT shall coordinate with any authorized and/or designated PSHS personnel in the performance of their jobs.
10.7. The CONSULTANT shall be liable for loss, damage, or injury that may be due directly through the fault or negligence of its personnel. It shall assume responsibility thereof and the PSHS shall be specifically released from any responsibility arising therefrom.
10.8. The CONSULTANT shall neither assign, transfer, pledge nor subcontract any part or interest therein.
10.9. The CONSULTANT shall render service at no cost to PSHS in case of any extension of the contract duration.
XI. TERMS OF PAYMENT

11.1. The CONSULTANT shall be paid based on the percentage of work completed with a reasonable time from the submission of all the required documents, subject to the required Expanded Withholding Tax (EWT) of two percent (2%) and Final Withholding VAT of five percent (5%).

11.2. Payments shall be made upon completion and acceptance of work in each component:

Component I 40%
Field Study and Investigation, fifteen (15) calendar days

Component II 50%
Architectural and Detailed Engineering Design,
thirty (30) calendar days

Post Warranty Security (refer to RA 9184 and IRR)

Component III 10%
Project Supervision Phase,
Periodic supervision for the duration of the project
construction phase but not more than Seven Hundred Thirty (730)
calendar days from the receipt of the Notice to Proceed (NTP).

XII. PRE-TERMINATION OF CONTRACT

12.1. The contract for the Consultancy Services for the Architectural and Detailed Engineering (A&E) may be pre-terminated by the PSHS for any violation of the terms of the contract. In case of pre-termination, the CONSULTANT shall be informed by the PSHS thirty (30) days prior to such termination.

12.2. In case of pre-termination, the CONSULTANT shall be liable to an additional liquidated damages equivalent to one percent (1%) of the contract price as provided by the Government Accounting and Auditing Manual (GAAM) and forfeiture of the performance security.

12.3. The PSHS shall have the right to blacklist the CONSULTANT in case of pre-termination.