- Proper welding;
- Smooth grinding where required;
- Correct alignment;
- Proper corrosion protection;
- Watertight construction where applicable;
- Quality-controlled assembly.

Aluminum welding shall be performed by qualified welders using procedures appropriate for the specified alloy.

8. QUALITY CONTROL / SUBMITTALS

Submit to the Architect/Engineer before fabrication:

- Shop drawings.
- Structural calculations.
- Buoyancy calculations.
- Stability calculations.
- Anchorage calculations.
- Gangway slope calculations.
- Material specifications.
- Aluminum/steel certificates.
- Buoyancy module data.
- Decking samples.
- Fastener specifications.
- Corrosion-protection details.
- Manufacturer's installation instructions.
- Warranty.
- Operation and maintenance manual.

ITEM 13 C : HANDRAILS, RAILINGS, AND GUARDRAILS

GENERAL

General Requirements contain provisions and requirements essential to these Specifications; and apply to this section, whether or not referred to herein.

SCOPE OF WORK

The work covered by this section consists of furnishing all labor, materials, equipment, tools, and incidentals necessary to undertake, and complete the installation of handrails, railings, and guardrails as indicated on the drawings and as specified herein.

SUBMITTAL

1. Manufacturer's technical data for products and processed used in handrails, railing, guardrails system, including finishes and grout.

2. Shop Drawings showing details of fabrication and installation for each type and of handrail, railing, and guardrails required including plans, elevations, sections, profiles of rails, fittings, connections, and anchors.

3. Prepare samples of each type of metal handrails & railings stainless steel hairline finish. Where finish involves normal color and texture variations, include sample sets composed of two or more units showing limits of such variations expected in completed works.

- Include 6" long samples of each distinctly different railing member including guardrails, handrails, top rails, posts, and balusters. Include samples of fittings and brackets if requested by Architect.

- Include sample of typical welded connection.

QUALITY ASSURANCE

Single Source Responsibility

Obtain handrails, guardrail and railing systems of each type and material from a single manufacturer.

STORAGE

Store handrails, guardrail and railing systems in clean, dry location, away from uncured concrete and masonry, protected against damage of any kind. Cover with waterproof paper, tarpaulin, or polyethylene sheeting; allow for air circulation inside the covering.

FABRICATION

General

Fabricate handrails and railing systems to design, dimensions and details shown. Provide handrail and railing members in sizes and profiles indicated, with supporting posts and brackets or size and spacing shown, but not less than required to comply with requirements indicated for structural performance.

Shop Assembly

Pre-assembled items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.

Welded Connections

Fabricate handrails, guardrail, and railing systems of materials for interconnections of members of welding. Use welding method, which is appropriate for metal and finish, indicated and develops strength required to comply with structural performance criteria. Finish exposed welds and surfaces smooth, flush, and blended to match adjoining surfaces.

Form changes in direction of railing members by bending members by metering, or as indicated on the drawing, as approved by the Architect.

Furnish inserts and other anchorage devices for connecting handrails, guardrail and railing systems to concrete or masonry work. Fabricate anchorage devices, which are capable of withstanding loading imposed by handrails, guardrails and railing systems.

Coordinate anchorage devices with supporting structure.

a. For railing, and guardrail posts set in concrete provide pre-chiseled openings and insert posts as indicated on drawings. Fill opening with non-shrink, non-metallic grout.

MATERIALS

General

Comply with standards indicated for forms and types of metals indicated or required for handrail and railing system components.

HANDRAIL

A. Guardrail

75mm X 50mm X 3.2mm hot-dip Galvanized steel railing *(Handrail & Bottom Rail)*

75mm X 75mm X 4.5mm hot-dip Galvanized steel *railing (Railpost)*

38mm X 38mm X 2.3mm hot-dip Galvanized steel railing *(Decorative Diagonal Members)*

As indicated on plans.

EXECUTION

PREPARATION

Ensure surfaces to receive panels are structurally sound, even, smooth, clean, dry, and free from defects detrimental to work.

INSTALLATION

a. Safety precaution and procedure shall be observed in determining the sizes and in providing the required clearances by measuring the actual opening to receive the glass.

b. Secure glass with stainless steel brackets.

METAL FINISHES

Comply with NAAMM "Metal Finishes Manual" for recommendations and designations of finishes, except as otherwise indicated.

EXECUTION

PREPARATION

a. Coordinate setting drawings, diagrams, templates, instructions, and directions for installation of anchorages, such as sleeves, concrete inserts, anchor bolts, and miscellaneous items having integral anchors, which are to be embedded in concrete and masonry construction. Coordinate delivery of such items to project site.

b. Field Measurements
Take field measurements prior to fabrication.

INSTALLATION

GENERAL

a. Fit exposed connections accurately together to form tight, hairline joints.

b. Perform cutting, drilling, and fitting required for installation of handrails, guardrail and railing systems. Set work accurately in location, alignment, and elevation,

plumb, level, true, and free of rack, measured from established lines and levels.

c. Field Welding

Comply with applicable AWS specification for procedures of manual shielded metal-arc welding, for appearance and quality of welds made, and for methods used in correcting welding work. Weld connections that are not to be left as exposed joints, but cannot be shop welded because of shipping size limitations. Grind exposed welded joints smooth and restore finish to match finish of adjacent rail surfaces.

d. Prior to anchoring, adjust handrails and railing systems to ensure matching alignment at abutting joints. Space posts at interval indicated but not less than that required by design loading.

ANCHORING POSTS

a. Concrete-Anchored Posts: Provide chiseled opening on concrete base as indicated on the drawings to receive railing posts and required anchoring system. holes of all the loose material, insert posts, and fill annular space between post and concrete with non-shrink, non-metallic epoxy grout, mixed and placed to comply with grout manufacturer's directions.

RAILING CONNECTIONS

a. Welded Connections: Use fully welded joints for permanently connecting railing components by welding. Cope or butt components to provide 100 percent contact or use the manufacturer's standard fittings designed for this purpose.

ANCHORING RAILING ENDS

a. Anchor railing ends to metal surfaces with manufacturer's standard fittings using concealed fasteners, unless otherwise indicated.

b. Anchor Railing Ends to Concrete or Masonry, use drilled-in expansion shields and concealed hanger bolts, unless otherwise indicated.

PROTECTION

a. Protect finishes of railing, handrails, and guardrails system from damage during construction period by use of temporary protective coverings approved by railing manufacturer. Remove protective covering at time of Substantial Completion.

b. Restore finishes damaged during installation and construction period so that no evidence remains of correction work. Return items that cannot be refinished in

the field to the shop; make required alterations and refinish the entire unit, or provide new units as required.

ITEM 13 D : ROOFING AND TINSMITHRY

SCOPE OF WORK

The work shall include but not limited to all labor, materials, tools, equipment and incidentals necessary to furnish and install the roofing sheets including fittings, flashing caps, ridge rolls, gutters and construction of concrete eaves and canopy excluding waterproofing, to provide complete sound watertight roof for the buildings as shown on the Drawings and specified herein.

MATERIAL REQUIREMENTS

ROOFING SHEETS

Metal Roof Panel

Base Metal thickness	:	Cold rolled high grade steel
Zinc Aluminum coating	:	Lock forming quality galvanizing that meets ASTM, JIS and PNS Quality Standard
Total Coated Thickness	:	Available in 0.50 & 0.60 mm
Roof Pitch	:	30 degrees and 60 degrees roof slope
Length	:	up to transportable length

EXECUTION

ROOFING SHEETS

1. Roof

Spacing of purlins safe at 1.0m to 1.2m.

At least 28 days before laying of roofing sheet start, the Contractor shall submit for approval of the Project-In-Charged, shop drawings indicating materials and method of installation. No roofing sheets laying work shall commence without the Project-In-Charged approval of the shop drawings and work method.

Laying shall start from the end opposite the side from where the prevailing monsoon is coming from. The first sheet shall be laid and installed with the turned-down edge towards the outside of the area to be covered. The next sheet shall be overlapped to the previous sheet in such a manner that the exposed edge is turned down and the covered edge is turned up. The overlapped edge in the side shall be with the rib having the anti-capillary groove. End and side laps including

flashing shall be as approved by the Project-In-Charged.

The straps shall be fixed and fastened with the fastener and washer as shown on the Drawings.

HANDLING AND STORAGE

Sheet shall be lifted directly and shall not be dragged over the other sheets or over rough surfaces.

When working on a roof, the workers shall wear flat rubber-soled shoes.

Tool shall be handled carefully to prevent them from sliding over the coated surface.

When installation work is completed, all metal off-cuts, used nails and other metallic scrap shall be removed from the roof area.

When using drills, hacksaws, or files in the roof area, care shall be taken that metal particles and fillings are swept off the roof immediately.

If not required for immediate use, sheets or bundles shall be staked and cleared off the ground. If left in the open, sheets shall be protected by loose tarpaulin or similar covers.

Bundles shall not be left exposed to the weather.

C CHANNEL

Aluminum C-channel is often referred to as architectural angle and channel. Aluminum C-channel has uses in many industries and is often an ideal choice due to its non-corrosive properties and structural strength. Aluminum C-channel is considerably less expensive than wood, is lighter in weight, insect resistant, and resists warping and cracking from water damage.

C-sections
Height: 100, 120, 150, 200, 250, 300 mm
Thickness: 1.0–3.0 mm
Minimum length 1600 mm
Maximum length 18000 mm

ITEM 14 : ELECTRICAL WORKS

GENERAL DESCRIPTION

The work to be done under this Item of Specifications consists of fabrication, furnishing, delivery and installation, complete with all details of electrical work, in the subject area and all work materials related to the proper completion of the installation, except for those parts of the work that are expressly stated to be performed by others. All works shall be in accordance with the governing Codes and Regulations and the Specifications, unless the same are inconsistent with such codes, etc., as may later govern. The requirements regarding the materials and equipment required for the complete installation of the work specified herein and indicated in the drawings. The Specifications are intended to provide a broad outline of the equipment required but are not intended to include all design details and construction specifications.

WORK INCLUDED

The work to be done under this Item shall include the furnishing of all tools, labor, supervision, equipment, fixtures and all necessary materials, each complete and in proper working condition unless one or other is specifically excluded or stated otherwise in these specifications but not limited to the following items of works.

a. All works and material for complete lighting and power systems including cables and conduits, circuit breakers, panel board and connection to all lighting fixtures and power outlets, air conditioning, switches, supports and accessories.

b. All steel support for conduits, wires, panel board, boxes, lighting fixtures, etc. as indicated or as required for the completion of the installation.

c. Termination of all electrical systems and the complete grounding system.

d. A complete testing and commissioning of all electrical and auxiliary systems. The Contractor shall provide all necessary testing instruments.

e. All items incidental to and or required for the proper completion such as painting of boxes, conduits and the likes.

f. Coordination with other companies/offices including handling of all material related to material testing and application of electrical permits at the expense of the Contractor.

g. Preparation of necessary shop drawings required for the proper execution of the works subject to the approval of the Engineer.

SUBMITTALS

Obtain approval before procurement, fabrication or delivery of items to the job site. Partial submittals will not be entertained and will be returned without review. Submittals shall include the manufacturer's name, trade name, place of manufacturer, catalogue model of number, nameplate data, size, layout dimensions, capacity, project specification and paragraph reference and technical society publication references, and other information necessary to establish contract compliance with each item to be furnished.

a. Shop Drawings

In addition to the requirements of the contract clauses, shop drawings shall meet the following requirements:

1. Drawings shall be a minimum of 210 mm x 297 mm in size or in size A3 size, except as specified otherwise.

2. Drawings shall include wiring diagrams and installation details indicating the proposed location layout and arrangement, control panels, accessories, and other items that must be shown to ensure a coordinated installation.

3. Wiring diagrams shall identify circuit termination and the internal wiring for each item of equipment and its interconnection.

4. Drawings shall indicate adequate clearances for operation, maintenance and replacement of equipment devices. If the layout is disapproved, revise the layout and resubmit.

b. Manufacturer's Data

Submittals for each manufactured item shall include manufacturer's descriptive literature, equipment drawings, diagrams, performance and characteristic curves and catalog cuts. Each submittal has the manufacturer's name, trade name, catalogue model or number, name plate data, size, layout dimensions, capacity, specification references and all other information necessary to establish contract compliance.

c. Standard Compliance

When material or equipment must conform to the standards of organizations such as American National Standard Institute (ANSI), American Society for Testing and Materials (ASTM), National Electrical Manufacturer's Association (NEMA) and Underwriters Laboratories (UL), proof of such conformance shall be submitted to the Engineer for approval.

If an organization uses a label or listing to indicate compliance with a particular standard, the label or listing will be acceptable evidence, unless otherwise specified in the individual sections. In lieu of the label or listing, the Contractor shall submit a certificate from an independent testing organization, which is competent to perform acceptable tests and is approved by the Engineer. The certificate shall state that the item has been tested in accordance with specified organization's test methods and that the item conforms to the specified organization's standard. For materials and equipment whose compliance with organizational standards or specifications is not regulated by an organization using its own listing or label as proof of compliance, a certificate of compliance from the manufacturer shall be submitted for approval.

The certificate shall identify the manufacturer, the product and the referenced standard and shall simply state that the manufacturer certifies that the product conforms to all requirements of the project specification and of the referenced standards listed.

DELIVERY AND STORAGE

Equipment and materials should be properly stored and adequately protected and carefully handled to prevent damage before and during installation. Equipment and materials shall be handled, stored and protected in accordance with the manufacturer's recommendations and as approved by the Engineer. Electrical conduits shall be stored to provide protection from the weather and accidental damage. Cables shall be sealed, stored and handled carefully to avoid damage to the outer covering or insulation and damage from moisture and weather. Damaged or defective items shall be replaced with new items at no cost to the Owner.

CATALOGUED PRODUCTS

Materials and equipment shall be catalogued by products of manufacturers regularly engaged in production of such materials or equipment and shall be at manufacturer's latest standard design that complies with the specification requirements. When two or more units of the same type, class and size of equipment are required, these units shall be products of a single manufacturer; however, the component parts of the system need not be the products of the same manufacturer. Each major component of equipment shall have the manufacturer's name, address and the model of the serial number on a nameplate securely affixed in a conspicuous place; the name plate of the distributing agent will not be acceptable.

MANUFACTURERS' RECOMMENDATIONS

Where installation procedures or any parts thereof are required to be in accordance with manufacturer's recommendations, furnish printed copies of the recommendation prior to installation. Installation of the items shall not proceed until recommendations are received. Failure to furnish recommendations shall be cause for rejection of the equipment or materials.

WORKMANSHIP

The work throughout shall be executed in the best and most thorough manner under the direction of the Contractor and to the satisfaction of the Owner and Engineers, who will jointly interpret the meaning of the drawings and specifications and shall have the authority to reject any work materials which, in their judgment, are not in full accordance therewith

The Contractor shall have on file, for ready access and reference, a set of drawings indicating all work as actually installed incorporating in the same all changes and additions. Upon the termination of the Contract, he shall prepare a set of tracings indicating thereon the Electrical Work as actually and finally installed. These drawings shall be turned over to the Engineers.

The Contractor shall be responsible for keeping stocks of material and equipment stored at the premise in a neat and orderly manner. The exposed surfaces of wirings, conduiting system or equipment which have become covered with dirt, plaster or other material during handling and construction shall be thoroughly cleaned by Contractor before such surfaces are prepared for final finish, painting or concealment within the building structure.

The Contractor shall employ skilled craftsmen experienced in installation of the types of electrical materials and equipment specified. Use specialized installation tools and equipment as applicable. Produce acceptance installation free of defects.

MATERIALS / TESTS

All materials to be installed shall be brand new and shall conform to specifications except as otherwise noted on the drawings. All materials where not specified shall be of the best of their respective kind. Samples of said material including its manufacturer's data shall be submitted for approval. Necessary tests on the installations shall be made by the Contractor in the presence of the Engineer. These tests shall include but are not limited to ground test, performance test, phase sequence test, etc. Records of approved tests result shall be relayed to the Engineer in writing. This Contractor shall within ten (10) days after the award of the contract, submit a list of materials he proposes to use. All materials installed without prior approval shall be at the risk of the Contractor.

COORDINATION / GUARANTEES / SUSPENSION OR DELAY

The Contractor shall be familiar with the specifications of the other trades and coordinate with them thoroughly so that he can arrange his work and dispose his materials without interfering the work of other Contractors. The Contractor shall guarantee that the electrical systems shall be free from all defects of workmanship and of materials, and that it will remain so for a period of one year from the date of acceptance by the Engineer. Any remedy to correct defects deemed to be caused by such shall be made at the expense of the Contractor.

The Contractor shall not suspend or delay the work without justifiable cause. Subsequent delays shall be deemed as sufficient cause for penalties or termination of contract in which the Engineer shall have the right to take over the work and all materials on the site and make arrangements necessary to complete the work. It shall be the sole responsibility of the Contractor to ensure that the Electrical sub-contractor conducts coordination of his activities to other trades.

SLEEVES / INSERTS / CUTTING / PATCHING

The Contractor shall provide all openings, sleeves, also inserts in walls, floors, and beams as required for his work. All unused openings should be grouted in. The Contractor shall do all patching requirements necessary, and these shall be done to exactly match the surrounding area without the evidence of alteration or patching.

TEMPORARY LIGHT AND POWER

The Contractor shall make all arrangements and pay for the provisions of the necessary electrical power of the type and capacity required for the performance of the work of all trades engaged in the construction of the building.

CODES, INSPECTION, PERMITS AND FEES

The work under this contract is to be installed according to the requirements of the latest edition of the Philippine Electrical Code, the rules and regulations of the local authorities of Port of General Luna, Siargao Island, Surigao Del Norte and the requirements of local Power Company of Siargao Electric Cooperative. (SIARELCO)

All necessary permits and electrical fees required for this work shall be obtained by and at the expense of the Contractor. The contractor shall furnish the Engineers and the Owner final Certificate of Final Electrical Inspection (CFEI) and approval from the proper government authorities after completion of the work. The Contractor shall prepare all as-built and all forms and documents required by the approving authorities.

Power service application including drawings for the work shall be obtained by and at the expense of the Contractor. The Contractor shall comply with all requirements of the utility company regarding service applications.

ELECTRICAL CHARACTERISTICS

The electrical characteristics for this project shall be 230V, single phase (1Ø) wire, and 60Hz or as per system requirements as shown in the plan.

CLEANING UP

The Contractor shall remove all dirt, debris, and rubbish and waste materials caused by him in the process of his work. He shall also remove all tools, temporary power installation, scaffolding and surplus materials after completion and acceptance of work.

MATERIAL REQUIREMENTS

NAMEPLATES

Provide laminated plastic nameplates for each panel board, switch, and device. Each nameplate inscription shall identify the function and when applicable, the position. Nameplate shall be melamine plastic, 3.2mm thick, white with black center core. Surface shall be matte finish. Corners shall be square. Accurately align lettering and engrave into the black core. Minimum size of nameplates shall be 25mm x 38mm. Lettering shall be a minimum of 6mm, high normal block style.

EXECUTION

NAMEPLATE MOUNTING

Provide number, location, and letter designation of nameplates as indicated. Fasten nameplates to the device with a minimum of two sheet-metal screws or two rivets.

INTERIOR WIRING SYSTEMS

SUBMITTALS

a. Shop Drawings: Submit for the following:

1. Location of panel boards and circuit breaker
2. Conduit support / hanger's installation drawing

b. Manufacturer's data: Submit for the following:

1. Circuit Breakers
2. Switches
3. Conduit and fittings (each type)
4. Device Plates
5. Insulated conductors
6. Utility / Junction boxes

PRODUCTS

CONDUIT AND FITTINGS

a. Conduit shall be polyvinyl-chloride conduit (PVC), where specified, shall be heavy wall, high impact resistant Schedule 40, with factory made bends, couplings and fittings. PVC cement for joints shall be of the same brand as for the PVC pipe.

b. No conduits shall be used in any system smaller than 20mm (1/2") diameter electric trade size, nor shall have more than four (4) 90-degree bends in any one run and where necessary, pull boxes shall be provided as directed.

c. No wire shall be pulled into any conduit until the conduit system is completed in all details, in the case of concealed work until all rough plastering masonry has been completed, and in the case of exposed work until the conduit work has been completed in every detail.

d. The ends of all conduits shall have been tightly plugged to exclude plaster, dust and moisture while the construction of the building is in progress. All conduits shall be reamed to remove all burrs.

OUTLETS, BOXES AND FITTINGS

a. All outlets of whatever kind, for all systems, there shall be provided a suitable fitting, which shall be either a box or other device especially designed to receive the type of fitting to be mounted thereon.

b. The Contractor shall consult with the Engineer as to the nature of the various fittings to be used before installing his outlet fittings, and shall conform strictly in the use of fittings, to the nature of the appliance to be mounted on them, so that the work, when the completed will be a finished design.

c. All outlets on concealed conduit work provide galvanized pressed steel outlet boxes on standard make. These boxes shall be in all cases standard and where such boxes are not available on the market, special boxes shall be secured by the Contractor at his owned expense. In general outlet boxes should be at least 100mm in diameter, 53mm deep and No. 16 minimum gauge.

JUNCTION AND PULL BOXES

a. Junction and pull boxes, of code gauge steel, galvanized shall be provided as indicated or as required for facilitating the pulling of wires and cables. Pull boxes as finished places shall be located and installed with permission and to the satisfaction of the Engineer.

b. All junction and pull boxes on exposed conduit work shall be provided with hubs for threaded pipe entry and covers provided with neoprene gaskets.

WIRES AND CABLES

a. All wires shall be copper, soft-drawn and annealed, shall be 100% conductivity, shall be smooth and true of a cylindrical form and shall be within the actual size called for.

b. All wires and cables shall comply with the requirements of the Underwriters Laboratories, the ASTM and ICEA as they apply for the usage.

c. Wires and cables for power and lighting system shall be plastic insulated for 600 volts working pressure type "THHN/THWN-2" unless otherwise noted on plans or specified.

d. Tag Marking

In general, branch circuit conductors and cables shall be properly marked by means of a printed tag taped on each wire indicating origin/load and or panel(s) where load is connected.

e. Splices and Termination Components

If applicable, for wire connectors and for insulating tape. Connectors for 5.5 mm^2 and smaller diameter wires shall be insulated, pressure-type in accordance with (twist-on splicing connector). Provide solderless terminal lugs on stranded conductors.

DEVICE PLATES

Provide one piece device plates for outlets and fittings to suit the devices installed. Plates on unfinished walls and on fittings shall be of zinc-coated sheet steel or cast metal having round or beveled edges. Plates on finished walls shall be satin finish stainless steel or brushed –finished

aluminum, minimum 0.03 inch thick. Screws shall be machine type with countersunk heads in a color to match the finish of the plate. The use of sectional type device plates will not be permitted. Plates installed in wet locations shall be sealed in gaskets. Device plates for telephone and intercommunication outlets shall have a 3/8-inch bushed opening in center.

WALL SWITCHES AND PLATES

Wall switches in general should be rated 10 amperes at 230 volts or with ampere and voltage ratings as required. Switches shall be flush mounting and of the rocker type, spring operated. The type of switches shall be tumbler operation, and the color, plating and appearance of wall plates shall be as selected by the Engineer. Appropriate samples shall be submitted prior to purchase of wall switches and face plates.

WALL RECEPTACLE AND PLATES

a. Receptacle outlets shall be 15 amperes, 230 volts, 2 pole, 3 wire parallel slot, grounding type. Parallel slot outlet rated 15 amps. 125 v grounded types shall be acceptable for use with 230v system. Locking type and other special purpose outlets shall be as indicated in the plans.

b. Provide weatherproof receptacle plate cover for each convenience receptacle outlet indicated as weatherproof.

PANELS AND CABINETS

a. Standard panels and cabinets, as much as possible shall be used and assembled on job. All panels shall be dead front construction, furnished with trims for flush or surface mounting. Cabinets shall be of code gauge steel with gutters at least 100mm wide and if necessary, it must be made wider. The trim for all panels shall be finished in industrial grey enamel over a rust inhibitor.

b. Lighting panels shall be equipped with branch circuit breakers as required and mains as noted on Plans or Panel Schedule.

c. Panel board main bus work shall be ampacity rated to equal or exceed overcurrent protective device immediately ahead of it. All buss work shall be properly secured to withstand available short circuit forces at the location.

d. Distribution panels shall be of the same type as lighting panels except equipped with one pole, two poles and three poles air circuit breakers of sizes, voltages ratings and interrupting capacity as called for on plans.

INDIVIDUAL BREAKERS

a. Provide individual circuit breakers were indicated on plans. Voltage ratings shall be suitable in each case of service application. Enclosures shall be General Purpose, NEMA type I, except where specifically noted on plans or assembled on panel cabinets.

   All protective devices should meet NEMA and U.L specifications. Short circuit rating shall be as indicated on the plan.

b. Circuit breakers shall consist of a quick-make, quick -break type entirely trip-free operating mechanism with contacts, arc-interrupter, and thermal magnetic trip unit for each pole, all enclosed in a molded-phenolic case. The thermal magnetic trip unit shall provide time-delayed overload protection, and in case of overload or short circuit current in any one pole

the circuit trips instantaneously. Circuit breaker shall be trip indicating, when tripped position of breaker handle midway between "ON" and "OFF" positions.

c. All circuit breakers shall be bolt-on type unless noted otherwise.

d. All circuit breakers rated above 225 amps shall have interchangeable trip units. Unless otherwise specified, minimum interrupting rating for 230 volts circuit breakers shall be 10,000 amperes.

PANELBOARD BUSES

All bus panels shall be copper support bus bars on bases independent of circuit breakers. Main buses and back pans shall be designed so that breakers may be changed without machining, drilling, or lapping. Provide separate ground bus for connecting grounding conductors; bond to steel cabinet.

EXECUTION

INSTALLATION

a. Wiring Methods

Provide insulated conductors installed in conduits, except where specifically indicated or specified otherwise or required by PEC and NFPA to be installed otherwise. Provide grounding equipment in feeder and branch circuits, including lighting circuits. Provide insulated, conductor for grounding conductors installed in conduits or raceways.

b. Conduit Installation

Unless indicated otherwise, conceal conduit within finished walls, ceilings, and floors. Keep conduit a minimum of 150mm away from parallel runs of flues and steam or hot water pipes. Install conduit parallel with or at right angles to ceilings, walls, and structural members were located above accessible ceilings and where conduit will be visible after completion of project. Run conduits in crawl space under slab as if exposed.

1. Where conduits rise through floor slabs, curved portion of bends shall not be visible above finish slab.

2. Conduit Support:

   Conduit shall be supported by pipe straps, wall brackets, hangers, or ceiling trapeze. Fasten by wood screws to wood; by toggle bolts on hollow masonry units; by concrete inserts or expansion bolts on concrete or brick; and by machine screws, welded studs, or spring tension clamps on steelwork. Threaded C-clamps may be used on rigid steel conduits only. Do not weld conduits or pipe straps to steel structures. Load applied to fasteners shall not exceed one-fourth of the proof test load. Fasteners attached to concrete ceilings shall be vibration resistant and shock resistant. Holes cut to depths of more than 40mm in reinforced concrete beams or to depths of more than 20mm in concrete joints shall not cut main reinforcing bars. Fill unused holes. In partitions of light steel construction, use sheet metal screws. In suspended-ceiling construction, run conduit above ceiling. Do not support conduit by ceiling support system. Spring-steel fasteners may be used for lighting branch circuit conduits supports in suspended ceilings in dry locations.

3. Changes in direction of runs with symmetrical bends or cast-metal fittings. Make field-made bends and offsets with hickey or conduit-bending machine. Do not install crushed or deformed conduits. Avoid trapped conduits. Prevent plaster, dirt or trash

from lodging in conduits, boxes, fittings, and equipment during construction. Free clogged conduits of obstructions.

4. The Contractor shall install pull wires in empty conduits in which wire is to be installed by others. The pull wire shall be 2.0mm^2 zinc- coated steel or plastic having not less than 91 kgs tensile strength. Leave not less than 300mm of slack at each end of the pull wire.

5. Fasten conduits to sheet metal boxes and cabinets with two locknuts where required by PEC and NFPA 70, where insulated bushings are used, and where bushing cannot be brought into firm contact with the box; otherwise, use minimum single locknut and bushing. Locknuts shall have sharp edges for digging into walls of metal enclosures. Install bushings at the ends of conduits and provide insulating type where required by PEC and NFPA 70.

6. Flexible Connection:

   Provide flexible connection of short length, 1.8 meters maximum for recessed and semi-recessed lighting fixtures.

c. Boxes, Outlets, and Supports

Provide boxes in wiring or raceway systems wherever required for pulling of wires, making connections, and mounting of devices or fixtures. Boxes for metallic raceways shall be cast-metal, hub-type when located in wet locations, when surface mounted on outside of exterior surfaces, when installed exposed up to 2.1meters above interior floors and walkways, or when installed in hazardous areas. Boxes in other locations shall be sheet steel, except that aluminum boxes may be used with aluminum conduit. Each box shall have the volume required by PEC and NFPA 70 for the number of conductors enclosed in the box. Boxes for mounting lighting fixtures shall not be less than 100 mm2 or octagonal, except that smaller boxes may be installed as required for fixture configurations as approved. Boxes for use in masonry-block or tile walls shall be square-cornered, tile-type, or standard boxes having square-cornered, tile-type covers. Provide gaskets for cast-metal boxes installed flush with outside of exterior surfaces. Provide separate boxes for flush or recessed fixtures when required by fixture terminal operating temperature. Fixtures shall be readily removable for access to boxes unless ceiling access panels are provided. Support boxes and pendants for surface-mounted fixtures on suspended ceilings independently of ceiling supports or make adequate provisions for distributing load over ceiling support members. Fasten boxes and supports with wood screws on wood, with bolts and expansion shields on concrete or brick, with toggle bolts on hollow masonry units, and with machine screws or welded studs on steel. In open overhead spaces, cast boxes threaded to raceways need no separate support except were used for fixture support; support sheet metal boxes directly from building structure or by bar hangers. Where bar hangers are used, attach bar to raceways on opposite sides of box, and support raceway with approved type fastener maximum 600mm from the box. When penetrating reinforced concrete members, avoid cutting reinforcing steel.

1. Boxes for use with raceway systems shall be minimum 40mm deep, except where shallower boxes required by structural conditions are approved. Boxes for other than lighting fixture outlets shall be minimum 100mm2, except that 100 by 50mm boxes may be used where only one raceway enters outlet.

2. Pull Boxes:

   Pull boxes shall be constructed of not less than the minimum size required by PEC and NFPA 70 of code-gauge aluminum or galvanized sheet steel, except where cast-metal boxes are required in locations specified herein. Boxes shall be furnished with

screw-fastened covers. Where several feeders pass through common pull boxes, the Contractor shall tag the feeders to indicate clearly electrical characteristics, circuit number, and panel designation.

d. Mounting Heights

The Contractor shall mount panelboards, and circuit breakers, and main disconnecting panel so the height of the operating handle at its highest position is maximum 1.8 meters above floor. Mount lighting switches 1.4 meters above finished floor, receptacles 300mm above finished floor and other devices. The Contractor shall measure mounting heights of wiring devices and outlets to center of device or outlet.

e. Conductor Identification

Provide conductor identification within each enclosure where tap, splice, or termination is made.

f. Splices

Make splices in accessible locations. Make splices in conductors 5.5 mm^2 and smaller diameter with insulated, pressure-type connector. Make splices in conductors 8.0 mm^2 and larger diameter with solderless connector and cover with insulation material equivalent to conductor insulation.

g. Covers and Device Plates

Install with edges in continuous contact with finished wall surfaces without use of mats or similar devices. Plaster fillings are not permitted. Plates shall be installed with alignment tolerance of 3mm. Use of sectional-type device plates is not permitted. Plates installed in wet areas must be gasketed.

h. Electrical Penetrations

Openings around electrical penetrations through fire resistance-rated walls, partitions, floors, or ceilings shall be sealed to maintain fire resistive integrity as tested by ASTM E 814.

i. Grounding and Bonding

In accordance with PEC and NFPA 70. Ground all exposed, noncurrent-carrying metallic parts of electrical equipment, metallic raceway systems, grounding conductor in metallic and non-metallic raceways, and conductor of wiring systems. Make ground connection to driven ground rods on exterior of building. Where ground fault protection is employed, ensure that connection of ground does not interfere with correct operation of fault protection.

1. Grounding Conductor

   Provide grounding equipment in feeder and branch circuits, including lighting circuits. Grounding conductors shall be separated from electrical system neutral conductors. Provide insulated, conductor for grounding conductors installed in conduit or raceways.

2. Resistance

Maximum resistance-to-ground of grounding system shall not exceed 10 ohms under normally dry conditions. Where the resistance obtained exceeds 10 ohms, contact the Engineer for further instructions.

FIELD QUALITY CONTROL

Furnish test equipment and personnel and submit written copies of test results. Give the Engineer five (5) working days notice prior to each test.

a. Devices Subject to Manual Operation

Each device subject to manual operation shall be operated at least five times, demonstrating satisfactory operation each time.

b. Test on 600-volt wiring

Test 600 volt wiring to verify that no short circuits or accidental grounds exist. Perform insulation resistance tests on wiring No. 14mm^2 (6 AWG) and larger diameter using instrument which applies voltage of approximately 500 volts to provide direct reading of resistance. Minimum resistance shall be 25,000 ohms.

c. Grounding System Test

The Grounding system shall be tested to ensure continuity and resistance to ground is not excessive. Test each ground rod for resistance to ground before making connections to rod; tie grounding system together and test for resistance to ground. Make resistance measurements in dry weather, not earlier than 48 hours after rainfall. Submit written results of each test to the Engineer and indicate location of rods as well as resistance and soil conditions at the time measurements were made.

OUTDOOR LIGHTING

SUBMITTALS

Data, shop drawings showing mounting heights, and reports shall employ the terminology, classifications, and methods prescribed by the IES Lighting Handbook, as applicable, for the lighting system specified.

a. Manufacturer's Data

1. Outdoor Lighting Wall Lamp Upward and Downward Illumination
2. Outdoor Solar Lighting Wall Lamp Upward and Downward Illumination
3. Square Outdoor Pillar Solar Lighting Lamp

PRODUCT

OUTDOOR LIGHTING WALL LAMP

a. Outdoor lighting wall lamp upward and downward illumination

LED Wall Lamp provides a beautiful touch as well as a functional necessity to your hallway or walkway, garden walls, or even part in your residential front-line lighting. Transform your outdoor living spaces into inviting havens with our sleek IP65-rated aluminum LED wall lamp. This have been in style since the inception of outdoor lighting. LED wall lamps can do a lot more, not only provide illumination and safety; and they also create an air of sophistication and elegance throughout your home. Incredibly versatile.

OUTDOOR SOLAR LIGHTING WALL LAMP

b. Solar wall lights for outdoors are easy to install and operate. Outdoor solar lights are made up of high-quality materials and IP65 waterproof design. Solar interaction wall lamps which reduce congestion of your space, also illuminating your space. solar lights for compound wall will automatically light up when in darkness or at night and goes out off in the daytime. Typical capacities range from 1,200mAh to 2,600mAh, offering roughly 6 to 8 hours of charging time via direct sunlight and 8 to 15 hours of continuous night illumination Modern outdoor solar wall lights are ideal for fences, gardens, lawns and other public areas.

SQUARE OUTDOOR PILLAR SOLAR LIGHTING LAMP

c. Illuminate your outdoor spaces with this modern solar-powered garden lamp, featuring a sleek square silhouette crafted from a durable black metal frame and striped glass/acrylic panels. Available in three sizes, this lamp offers versatile options to perfectly fit gate pillars, fence posts, and garden pathways. Equipped with warm white LED lighting, it creates a cozy and inviting ambiance for your garden or outdoor walkway.

Easy Installation: Simple ground spikes or wall-mount setup (hardware included). No electrical wiring is required for solar versions. Warm & Inviting Glow: Integrated 3000K warm white LED creates a cozy atmosphere, perfect for gardens, pathways, and outdoor seating areas.

The solar-powered design ensures energy-efficient, ecofriendly. Solar-Powered Efficiency: Built-in high-efficiency solar panel charges during the day and automatically illuminates for 6-8 hours at night, providing eco-friendly lighting without wiring. Low Maintenance: Weather-resistant IP65 rating ensures durability. Just wipe clean occasionally to maintain its sleek appearance.

The Contractor shall provide the type of materials as shown in the plan.

LED BULB

Being the next modern, energy-efficient lighting, it offers brighter lights than both its predecessors, improving on lower wattage at the same brilliance and longer life spans. This is a lot of savings in terms of lower electricity bills and maintenance costs.

Powered by light emitting diodes and circuitry, the advantage is that it eliminates the harmful chemicals found in your typical compact bulb. LED making it non-hazardous and Eco-friendly. With a very low defect rate of 1% a year and lifetime of over 30,000 hours. Therefore, this product will stand the test of time.

Specifically designed that can easily transition to LEDs without necessarily revamping your current lighting setup. LED bulbs have a wide range of applications from lighting households, schools, and offices, illuminating covered parking lots, warehouses.

This LED Bulb provide every household or business in the Philippines access to energy efficient and environmentally friendly lighting alternatives set at reasonably low and affordable prices.

EXECUTION

INSTALLATION

It is the responsibility of the contractor to install, maintain and operate the device in such a manner as to comply with all state and local laws, ordinances and regulations.

Recessed and semi-recessed fixtures may be supported from suspended ceiling support system ceiling tees if the ceiling system support rods or wires are provided at a minimum of four rods or wires per fixture and located not more than 150 mm from each corner of each fixture. Do not support fixtures by ceiling acoustical panels. Where fixtures of sizes are indicated to be centered in the acoustical panel, support such fixtures independently or with at least two 20mm metal channels spanning, and secured to, the ceiling tees. Providing rods or wires for lighting fixture supports under this section of the specifications. Additionally, for recessed fixtures, provide support clips securely fastened to ceiling grid members, a minimum of one at or near each corner of each fixture.

GROUNDING

Ground non-current-carrying parts of equipment as specified in "Interior Wiring Systems." Where the copper grounding conductor is connected to a metal other than copper, provide specially treated or lined connectors suitable for this purpose.

FIELD TESTS

The Contractor will provide electric power and apparatus / instruments required and carry out the field tests.

a. Operating Test

Upon completion of the installation, conduct an operating test to show that the equipment operates in accordance with the requirements of this section.

b Insulation Resistance Test

Perform as specified in "Interior Wiring Systems", both before and after connection of fixtures and equipment.

c. Ground Resistance Tests
Perform as specified in "Interior Wiring System."

ITEM 15 : PROJECT BILLBOARD

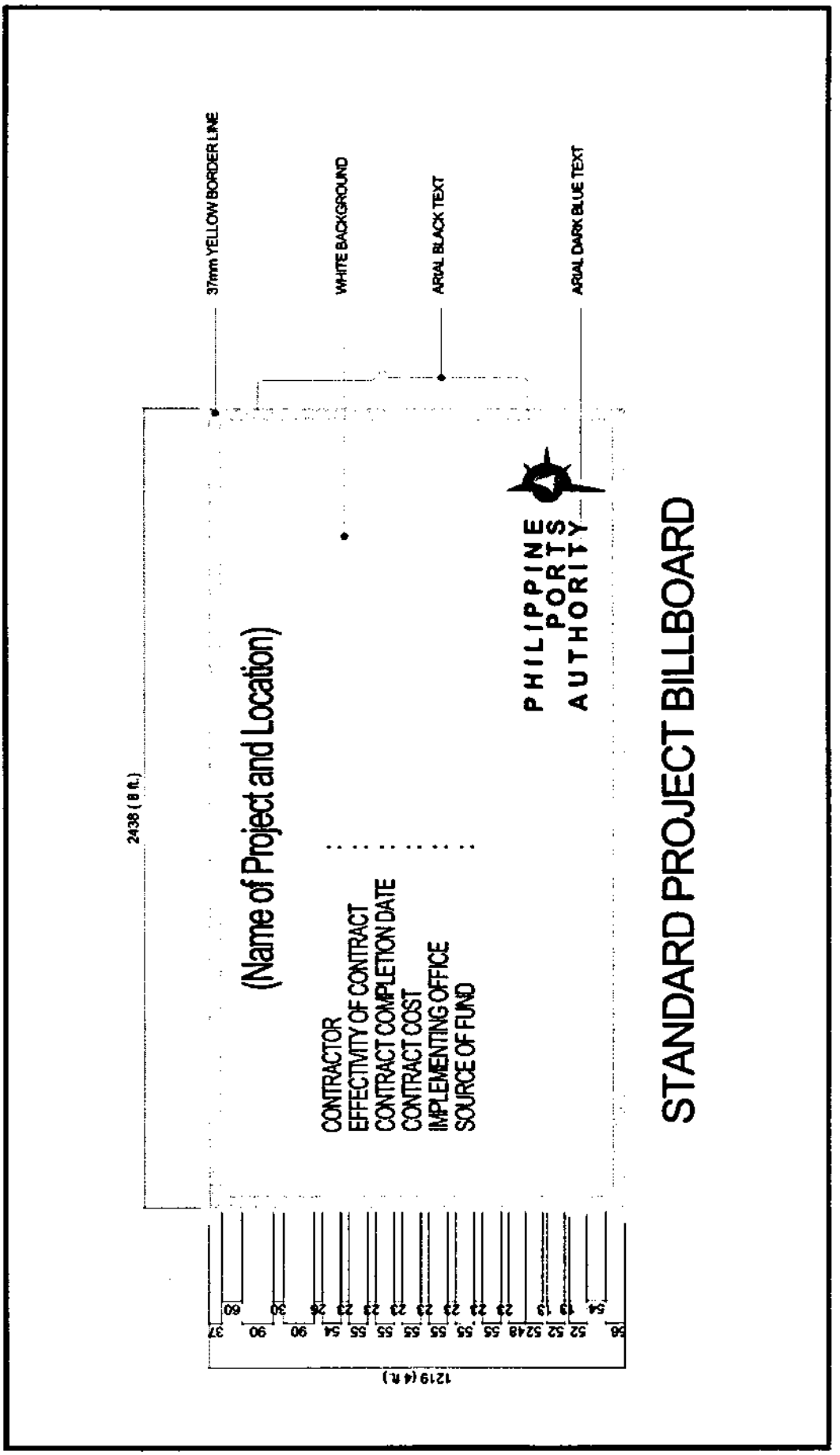
SPECIFICATION

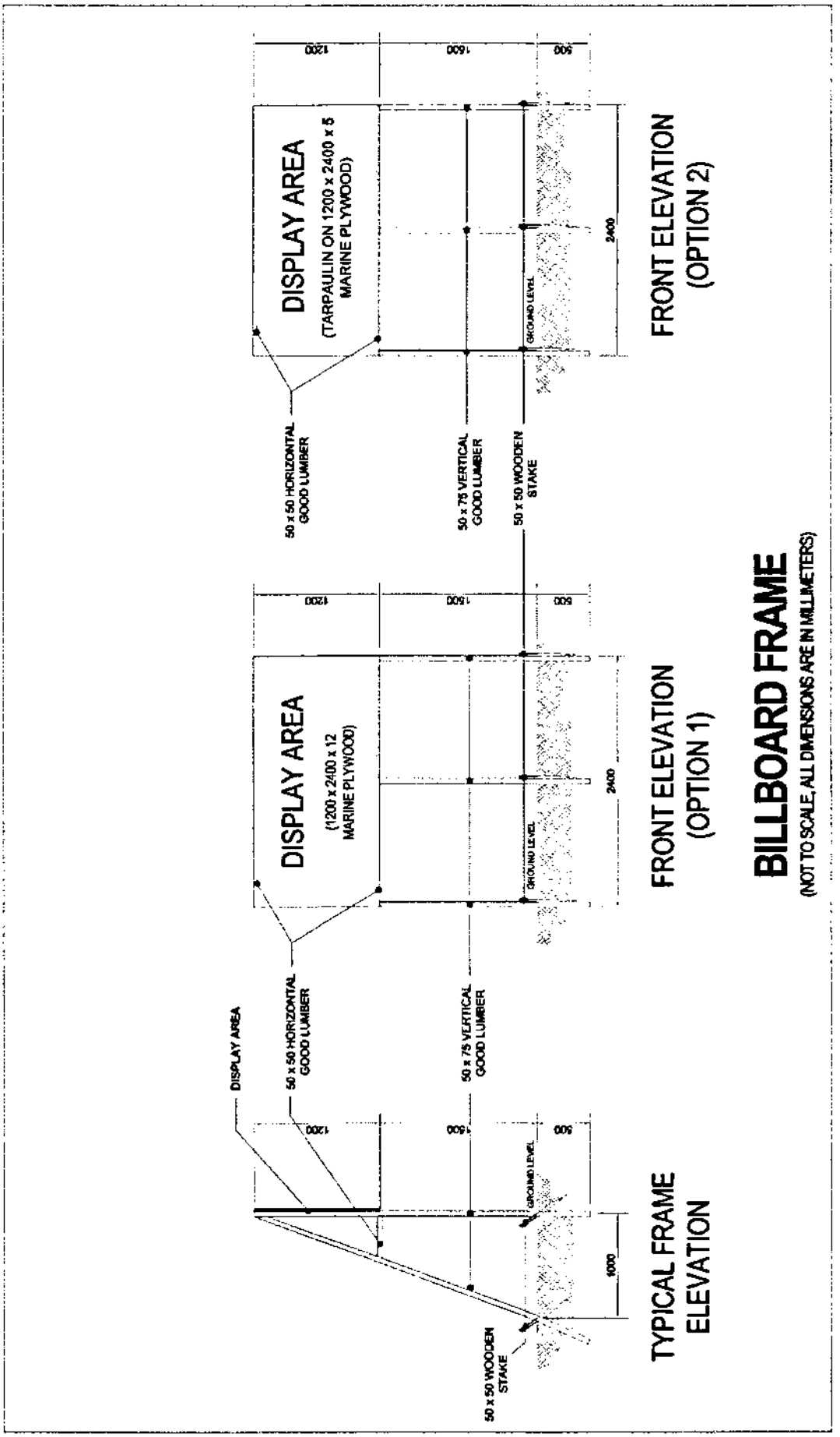
The Project Billboard shall be installed at location(s) designated by the Engineer.

The size and specifications of materials for the standard billboard shall be 4ft. x 8ft. (1,200mm x 2,400mm) using ½ inch (12mm) marine plywood or tarpaulin poster on 3/16 inch (5mm) marine plywood.

Project billboards shall not contain Name(s) and/or picture(s) of any personages.

See attached drawings for further details of the standard billboard.


STANDARD PROJECT BILLBOARD
PHILIPPINE PORTS AUTHORITY
(Name of Project and Location)
CONTRACTOR
EFFECTIVITY OF CONTRACT
CONTRACT COMPLETION DATE
CONTRACT COST
IMPLEMENTING OFFICE
SOURCE OF FUND
37mm YELLOW BORDER LINE
WHITE BACKGROUND
ARIAL BLACK TEXT
ARIAL DARK BLUE TEXT
2438 (8 ft.)
1219 (4 ft.)


BILLBOARD FRAME
(NOT TO SCALE, ALL DIMENSIONS ARE IN MILLIMETERS)
FRONT ELEVATION
(OPTION 2)
DISPLAY AREA
(TARPAULIN ON 1200 x 2400 x 5
MARINE PLYWOOD)
50 x 50 HORIZONTAL
GOOD LUMBER
50 x 75 VERTICAL
GOOD LUMBER
50 x 50 WOODEN
STAKE
GROUND LEVEL
2400
FRONT ELEVATION
(OPTION 1)
DISPLAY AREA
(1200 x 2400 x 12
MARINE PLYWOOD)
50 x 50 HORIZONTAL
GOOD LUMBER
50 x 75 VERTICAL
GOOD LUMBER
GROUND LEVEL
2400
TYPICAL FRAME
ELEVATION
DISPLAY AREA
50 x 50 HORIZONTAL
GOOD LUMBER
50 x 75 VERTICAL
GOOD LUMBER
GROUND LEVEL
1000
50 x 50 WOODEN
STAKE
1200
1600
500

ITEM 16 : SAFETY SIGNAGES AND BARRICADES

DESCRIPTION

This work includes the furnishing and installing of safety signages and barricades in accordance with the specifications and to the details shown below in the drawings, or as directed by the Engineer.

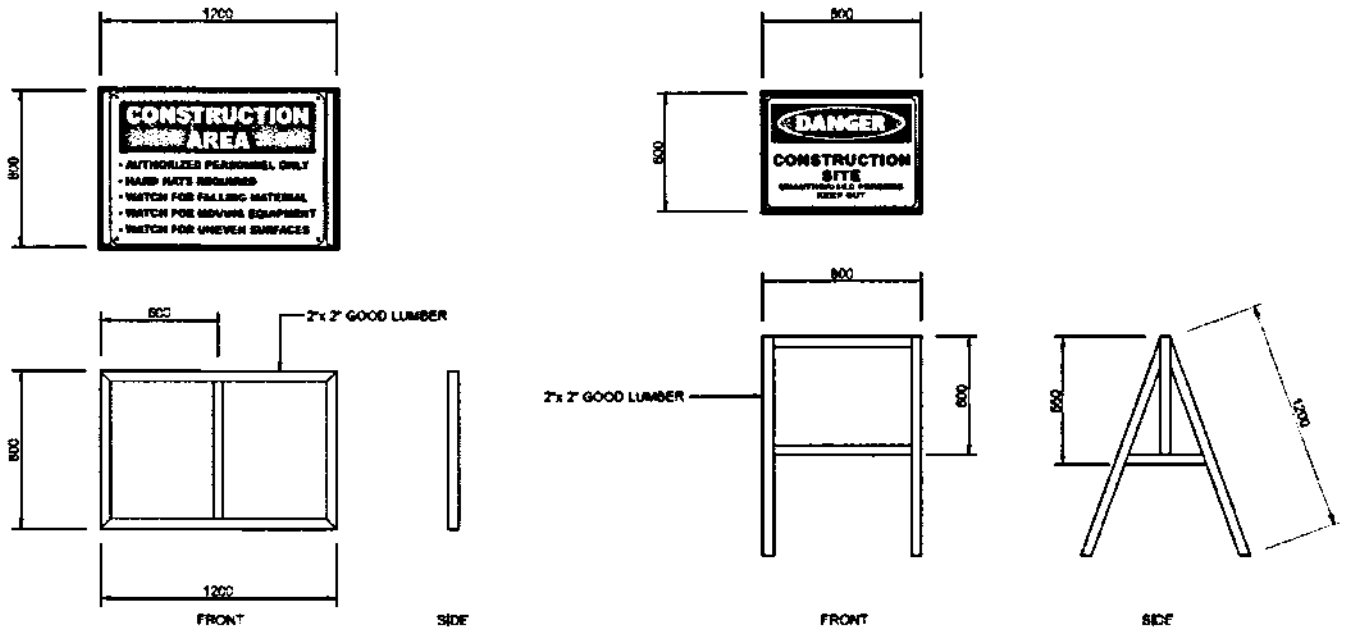
SPECIFICATION

The Signage's and Barricades shall be installed at location(s) designated by the Engineer.

The sizes of the standard signages shall be 2-2/3ft x 4ft (800mm X 1,200mm) for fixed type and 2ft x 2–2/3ft (600mm x 800mm) for mobile type. For barricade standard 2ft x 2–2/3ft (600mm x 800mm) shall be provided.

The materials to be used for signages and barricades are ½ inch (12mm) marine plywood or tarpaulin poster on 2" x 2" (50mm x 50mm) good lumber frame (see drawing below).

The printing or painting shall be the discretion of the Engineer.



STANDARD PLAN FOR SIGNAGES AND BARRICADES

SECTION VII

DRAWINGS
(APPROVED PLANS)

DRAWINGS AND APPROVED PLANS
(SEE ISSUED APPROVED PLANS)

LIST OF DRAWINGS:

• ARCHITECTURAL SHEETS	
• A - 01 of 05	• PERSPECTIVES • TABLE OF CONTENTS
• A - 02 of 05	• AS-BUILT PLAN • SITE DEVELOPMENT PLAN • VICINITY MAP
• A - 03 of 05	• FLOOR PLAN • ROOF PLAN • SIDE ELEVATION • LONGITUDINAL SECTION THRU A-A'
• A - 04 of 05	• FRONT ELEVATION • REAR ELEVATION • SECTION THRU C-C' • SECTION THRU B-B' • BLOW-UP SIDE ELEVATION
• A - 05 of 05	• BLOW-UP RAILING DETAILS • BLOW-UP STAIR DETAILS • LIGHTING ELEVATION DETAILS • WPC BLOW-UP DETAILS • THATCH ROOF DETAILS
• STRUCTURAL SHEETS	
• S - 01 of 02	• TRUSS-1 DETAILS • TRUSS-2 DETAILS • CONNECTION DETAILS A • COLUMN CONNECTION DETAILS • CONNECTION DETAILS B • STRUCTURAL STEEL SCHEDULE
• S - 02 of 02	• ROOF FRAMING PLAN
• ELECTRICAL SHEETS	
• E - 01 of 04	• LIGHTING LAYOUT PLAN • LEGEND
• E - 02 of 04	• DETAIL OF CONCRETE PEDESTAL POST • LOAD SCHEDULE • RISER DIAGRAM
• E - 03 of 04	• SOLAR LIGHTING LAYOUT PLAN • LEGEND
• E - 04 of 04	• SERVICE ENTRANCE LAYOUT PLAN • GENERAL NOTES • LEGEND

• ACCESS TRESTLE	
• AT - 01 of 08	• PLAN FOR DEMOLITION AND CLEARING OF AFFECTED STRUCTURES • LAYOUT PLAN FOR RC TRESTLE • SPOT DETAIL-Y • DETAIL OF PAVEMENT JOINTS • SPOT DETAIL-Z
• AT - 02 of 08	• LAYOUT PLAN FOR CAUSEWAY • SECTION A, B, Z, Y • ISOLATED FOOTING (IF) • SECTION OF IF • DETAIL OF RETAINING WALL-1 • DETAIL OF BASE PLATE CONNECTION @ RETAINING WALL-1 • ACCESS STAIRS DETAILS • RETAINING WALL-2
• AT - 03 of 08	• RC TRESTLE PILING PLAN • SPOT DETAIL-A • SPOT DETAIL-B
• AT - 04 of 08	• TYPICAL SECTION 1 & 2 • SPOT DETAIL- 1, 2, 3
• AT - 05 of 08	• FABRICATED STEEL PLATES (MATERIAL GRADE ASTM A36) • STEEL STRUCTURAL MEMBERS (MATERIAL GRADE ASTM A50) • NOTES FOR PROTECTIVE COATING • NOTES FOR WELDING OF STEEL MEMBERS • STIFFENER PLATES ON MAIN STEEL BEAMS
• AT - 06 of 08	• DETAILED WELDING CONNECTION @ SUPPORT, TOP VIEW, SECTION V • DETAILED WELDING CONNECTION @ INTERMEDIATE BEAM, TOP VIEW, SECTION W • TYPICAL DETAILED CONCRETE FILLER/COVER • SECTION S
• AT - 07 of 08	• TYPICAL SECTION OF VERTICAL PILES • TYPICAL SLAB REINFORCEMENTS 1 • TYPICAL SLAB REINFORCEMENTS 2 • TYPICAL RC CURB REINFORCEMENTS
• AT - 08 of 08	• PRECAST RC SLAB

SECTION VIII

BILL OF QUANTITIES and ATTACHMENTS

SECTION VIII – BILL OF QUANTITIES

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5.	Annex 4 (Construction Safety and Health Requirements)	15
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BID SUMMARY

RECONSTRUCTION OF GENERAL LUNA PORT

Port of General Luna, Siargao Island, Surigao Del Norte

NO.	DESCRIPTION OF WORK	AMOUNT (Pesos)
BILL NO. 1	GENERAL EXPENSES	
BILL NO. 2	REMOVAL, DISPOSAL AND EXCAVATION WORKS	
BILL NO. 3	CONSTRUCTION OF ACCESS TRESTLE ON PILES	
BILL NO. 4	CONSTRUCTION OF CAUSEWAY	
	BID PRICE	

Name of Firm

Name of Bidder/Authorized Representative
(Signatory's Legal Capacity)

Date

BILL OF QUANTITIES
RECONSTRUCTION OF GENERAL LUNA PORT
Port of General Luna, Siargao Island, Surigao Del Norte

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO.	**1 GENERAL EXPENSES**				
1.01	Mobilization, demobilization and cleaning	lot	1		
1.02	Rental of temporary site office and residence for the Engineer and staff	mo.	4		
1.03	Maintain temporary site office and residence for the Engineer and staff	mo.	4		
1.04	Provide Construction Safety and Health Program in the execution of the project	mo.	4		
	TOTAL FOR BILL NO. 1				

Bidder's Name/Authorized Representative
(Signatory's Legal Capacity)

BILL OF QUANTITIES
RECONSTRUCTION OF GENERAL LUNA PORT
Port of General Luna, Siargao Island, Surigao Del Norte

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO.	2 REMOVAL, DISPOSAL AND EXCAVATION WORKS				
2.01	Remove and dispose existing passenger shed and turnover materials with value to the authority	sq.m.	203		
2.02	Remove and dispose of existing RC pier after construction of RC trestle	sq.m.	804		
2.03	Chip off existing RC curb and smoothen with mortar	l.m.	27		
2.04	Excavate existing seabed prior for construction of causeway	cu.m.	47		
2.05	Cut and dispose existing piles up to seabed elevation	no.	178		
2.06	Excavate and backfill existing fill materials for concrete pedestal post	cu.m.	2		
	TOTAL FOR BILL NO. 2				

Bidder's Name/Authorized Representative
(Signatory's Legal Capacity)

BILL OF QUANTITIES
RECONSTRUCTION OF GENERAL LUNA PORT
Port of General Luna, Siargao Island, Surigao Del Norte

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO.	**3 CONSTRUCTION OF ACCESS TRESTLE ON PILES**				
3.01	Supply and deliver to site steel pipe piles	m.t.	177		
3.02	Supply and place polyurethane external coating for steel pipe pipes	sq.m.	801		
3.03	Handle, pitch and drive vertical steel pipe piles, including installation of temporary falsework.	l.m.	1,224		
3.04	Supply and install reinforcing steel cage for steel pipe piles	kg.	15,985		
3.05	Supply and place 3,500 psi concrete filler for steel pipe piles	cu.m.	63		
3.06	Supply, fabricate and install structural steel materials including plates, studs, HDG and other necessary accessories	kg.	276,054		
3.07	Supply and install steel matting including other necessary accessories	sq.m.	2,247		
3.08	Supply and place 3,000 psi concrete filler for steel matting	cu.m.	302		
3.09	Supply and install steel reinforcement for steel matting	kg.	5,406		
3.10	Supply, fabricate and install pre-cast concrete slab including steel reinforcment				
	a) Precast concrete slab -1	no.	181		
	b) Precast concrete slab -2	no.	178		
	c) Precast concrete slab -2A	no.	2		
	d) Precast concrete slab -3	no.	18		
	e) Precast concrete slab -3A	no.	2		
	f) Precast concrete slab - 4	no.	17		

Bidder's Name/Authorized Representative
(Signatory's Legal Capacity)

BILL OF QUANTITIES
RECONSTRUCTION OF GENERAL LUNA PORT
Port of General Luna, Siargao Island, Surigao Del Norte

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
	g) Precast concrete slab -5	no.	4		
	h) Precast concrete slab -6	no.	2		
3.11	Supply and install steel reinforcements for RC curb	kg.	318		
3.12	Supply and place 4,000 psi concrete for RC curb and precast slab gap connections	cu.m.	48		
3.13	Supply and install 2900mm x 218mm x 22mm WPC floor decking (light waltnut) on 30mm thk. Metal floor framing	sq.m.	1,882		
3.14	Supply and application of corrosion protection/metal protective coating and epoxy paint to all welded connections	sq.m.	78		
3.15	Supply, fabrication and installation of covered walkway, including framing, roofing, railings, electrical works and all necessary accessories	lot	1		
3.16	Supply, delivery and installation of pontoon, including gangway and all necessary accessories	lot	1		
	TOTAL FOR BILL NO. 3				

Bidder's Name/Authorized Representative
(Signatory's Legal Capacity)

BILL OF QUANTITIES
RECONSTRUCTION OF GENERAL LUNA PORT
Port of General Luna, Siargao Island, Surigao Del Norte

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO.	4 CONSTRUCTION OF CAUSEWAY				
4.01	Supply and place 3,500 psi concrete for the retaining wall, rc curb, stairs, isolated footing, and concrete pedestal post	cu.m.	43		
4.02	Supply and install steel reinforcement for the retaining wall, rc curb, stairs, isolated footing, and concrete pedestal post	kg.	4,808		
4.03	Supply and place 50-100 kg. of plastered Core rocks	cu.m.	32		
4.04	Supply and place Sand and Gravel fill	cu.m.	15		
4.05	Supply, spread and compact aggregate sub-base course	cu.m.	122		
4.06	Supply, spread and compact aggregate base course	cu.m.	30		
4.07	Construct portland cement concrete pavement (200mm thk) including dowel bars and construction joint	sq.m.	148		
	TOTAL FOR BILL NO. 4				

Bidder's Name/Authorized Representative
(Signatory's Legal Capacity)

BASIS OF PAYMENT FOR WORK ITEMS INCLUDED IN THE PROPOSAL

The work items included in the proposal and the basis of payments are as follows:

BILL NO. 1

GENERAL EXPENSES

Item 1.01 Mobilization, demobilization, and cleaning

The quantity to be paid for shall be the minimum equipment requirement enumerated in the bid documents mobilized, demobilized and cleaning of the site and accepted by the Engineer. The contract lump sum price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary to mobilize and demobilize all the minimum equipment requirement enumerated in the bid documents including cleaning of the site. Fifty percent (50%) of the total amount shall be payable after the mobilization activity while the remaining (50%) payable after demobilization and cleaning.

Item 1.02 Rental of temporary site office and residence for the Engineer and staff

The quantity to be paid for shall be the actual rental of site office and residence for the engineer and staff and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary for the provision of temporary site office and residence for the engineer and staff.

Item 1.03 Maintain temporary site office and residence for the Engineer and staff

The quantity to be paid for shall be the actual services rendered in maintaining the site office and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary to complete the maintenance of the temporary site office and residence as well as other expenses such as provision for electric power, telephone bill, potable water supply, janitorial and security services.

Item 1.04 Provide construction safety and Health Program in the execution of the project

The quantity to be paid for shall be the actual implementation of construction safety and health program and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary to complete the implementation of the Construction Safety and Health Program, as required and approved by the Department of Labor and Employment (DOLE).

BILL NO. 2

REMOVAL, DISPOSAL AND EXCAVATION WORKS

Item 2.01 Remove and dispose existing passenger shed and turnover materials with value to the authority

The quantity to be paid for shall be the actual area in square meter of existing passenger shed to be removed and disposed including turning over of materials with value to the authority in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 2.02 Remove and dispose of existing RC pier after construction of RC trestle

The quantity to be paid for shall be the actual area in square meter of existing RC pier to be removed and disposed, after complete construction of the RC trestle in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 2.03 Chip off existing RC curb and smoothen with mortar

The quantity to be paid for shall be the actual length in linear meter of existing RC curb to be chipped off and smoothen with mortar in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 2.04 Excavate existing seabed prior for construction of causeway

The quantity to be paid for shall be the actual volume in cubic meter of existing seabed to be excavated prior to the construction of causeway in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 2.05 Cut and dispose existing piles up to seabed elevation

The quantity to be paid for shall be the actual number of existing piles to be cut up to seabed elevation including proper disposal of debris in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 2.06 Excavate and backfill existing fill materials for concrete pedestal post

The quantity to be paid for shall be the actual volume in cubic meter of existing fill materials to be excavated and backfilled for concrete pedestal post in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

BILL NO. 3

CONSTRUCTION OF ACCESS TRESTLE ON PILES

Item 3.01 Supply and deliver to site steel pipe piles

The quantity to be paid for shall be the actual weight in metric ton of steel pipe piles to be supplied and delivered to site in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.02 Supply and place polyurethane external coating for steel pipe pipes

The quantity to be paid for shall be the actual area in square meter of polyurethane external coating for steel pipe piles, to be supplied and placed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.03 Handle, pitch and drive vertical steel pipe piles, including installation of temporary falsework

The quantity to be paid for shall be the actual length in linear meter of vertical steel pipe piles to be handled, pitched, and driven, including installation of temporary falsework, in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.04 Supply and install reinforcing steel cage for steel pipe piles

The quantity to be paid for shall be the actual weight in kilogram of reinforcing steel cage for steel pipe piles to be supplied and installed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.05 Supply and place 3,500 psi. concrete filler for steel pipe piles

The quantity to be paid for shall be the actual volume in cubic meter of 3,500 psi. concrete filler to be supplied and set-in-place for steel pipe piles, in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.06 Supply, fabricate, and install structural steel materials including plates, studs, HDG and other necessary accessories

The quantity to be paid for shall be the actual weight in kilogram of structural steel materials including plates, studs, HDG and other necessary accessories to be supplied, fabricated, and installed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.07 Supply and install steel matting including other necessary accessories

The quantity to be paid for shall be the actual area in square meter of steel matting including other necessary accessories, supplied and installed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.08 Supply and place 3,500 psi. concrete filler for steel matting

The quantity to be paid for shall be the actual volume in cubic meter of 3,500 psi. concrete filler to be supplied and set-in-place for steel matting, in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.09 Supply and install reinforcement steel for steel matting

The quantity to be paid for shall be the actual weight in kilogram of reinforcement steel to be supplied and installed for steel matting in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.10 Supply, fabricate and install pre-cast concrete slab including steel reinforcement

a) Precast concrete slab -1
b) Precast concrete slab -2
c) Precast concrete slab -2A
d) Precast concrete slab -3
e) Precast concrete slab -3A
f) Precast concrete slab -4
g) Precast concrete slab -5
h) Precast concrete slab -6

The quantity to be paid for shall be the actual number of pre-cast concrete slabs of various sizes to be supplied and installed including steel reinforcement in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.11 Supply and install reinforcement steel for RC curb

The quantity to be paid for shall be the actual weight in kilogram of reinforcement steel to be supplied and installed for RC curb in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.12 Supply and place 4,000 psi. concrete for RC curb and slab gap connections

The quantity to be paid for shall be the actual volume in cubic meter of 4,000 psi. concrete to be supplied and set-in-place for RC curb and slab gap connections, in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.13 Supply and Install 2900mm x 218mm x 22mm WPC floor decking (light walnut) on 30mm thick Metal floor framing

The quantity to be paid for shall be the actual area in square meter of 2900mm x 218mm x 22mm WPC floor decking (light walnut) to be supplied and installed on 30mm thick Metal floor framing in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.14 Supply and application of corrosion protection/metal protective coating and epoxy paint to all welded connections

The quantity to be paid for shall be the actual area in square meter of corrosion protection/metal protective coating and epoxy paint to be supplied and applied to all welded connections in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.15 Supply, fabrication and installation of covered walkway, including framing, roofing, railings, electrical works and all necessary accessories

The quantity to be paid for shall be the actual lot of all works required in the supply, fabrication, and installation of covered walkway, including framing, roofing, railings, electrical works and all necessary accessories in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 3.16 Supply, delivery and installation of pontoon, including gangway and all necessary accessories

The quantity to be paid for shall be the actual lot of all works required in the supply, fabrication, and installation of pontoon, including gangway and all necessary accessories, in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

BILL NO. 4

CONSTRUCTION OF CAUSEWAY

Item 4.01 **Supply and place 3,500 psi concrete for the retaining wall, rc curb, stairs, isolated footing, and concrete pedestal post**

The quantity to be paid for shall be the actual volume in cubic meter of 3,500 psi. concrete to be supplied and set-in-place for retaining wall, rc curb, stairs, isolated footing, and concrete pedestal post, in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 4.02 **Supply and install steel reinforcement for the retaining wall, rc curb, stairs, isolated footing, and concrete pedestal post**

The quantity to be paid for shall be the actual weight in kilogram of steel reinforcements to be supplied and installed for retaining wall, rc curb, stairs, isolated footing, and concrete pedestal post, in accordance with the plans and specifications and accepted by the Engineers. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 4.03 **Supply and place 50-100 kg. of plastered Core rocks**

The quantity to be paid for shall be the actual volume in cubic meter of 50-100 kg. of plastered core rocks, supplied and set-in-place in accordance with the plans and specifications and accepted by the Engineer. Hydrographic/Topographic Surveys before and after placing of core rocks shall be made to determine the actual elevations along the cross sections and the actual quantities for payment. Volume due to settlement as established using settlement plates shall also be considered for payment. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 4.04 **Supply and place sand and gravel fill**

The quantity to be paid for shall be the actual volume in cubic meter of sand and gravel fill, supplied and set-in-place in accordance with the plans and specifications and accepted by the Engineer. Hydrographic/Topographic Surveys before and after placing of sand and gravel fill shall be made to determine the actual elevations along the cross sections and the actual quantities for payment. Volume due to settlement as established using settlement plates shall also be considered for payment. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 4.05 **Supply, spread, and compact aggregate sub-base course**

The quantity to be paid for shall be the actual volume in cubic meter of aggregate sub-base course to be supplied, spread, and compacted in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 4.06 Supply, spread, and compact aggregate base course

The quantity to be paid for shall be the actual volume in cubic meter of aggregate base course to be supplied, spread, and compacted in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

Item 4.07 Construct portland cement concrete pavement (200mm thick) including dowel bars and construction joint

The quantity to be paid for shall be the actual area in square meter of portland cement concrete pavement (200mm thick) including dowel bars and construction joint, to be constructed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the work.

FACILITIES TO BE PROVIDED FOR THE ENGINEER & HIS STAFF

RENTAL OF SITE OFFICE AND RESIDENCE FOR THE ENGINEER & STAFF

The Contractor shall provide a temporary site office and residence (rental) with an area of at least 48 square meters for use of the Engineer and his staff for the whole duration of the project.

MINIMUM MAJOR EQUIPMENT REQUIREMENTS

1	unit/s	Air Compressor (250 cfm, minimum), owned
1	unit/s	Backhoe (0.50 cu.m., 94.30hp, minimum), owned/leased
1	unit/s	Clamshell, owned
1	unit/s	Concrete cutter, owned
2	unit/s	Concrete Mixer (1 bagger, minimum), owned
1	unit/s	Concrete bucket, owned
1	unit/s	Concrete Screeder, owned
4	unit/s	Concrete Vibrator (3.5 hp, minimum), owned
1	unit/s	Crawler Crane (30T, minimum), owned/leased
1	unit/s	Crawler Crane (20T, minimum), owned/leased
1	unit/s	Pile Hammer (Diesel, 7,500 kg.m. or equivalent), owned/leased
1	unit/s	Diving equipment (complete), owned/leased
1	unit/s	Drop Hammer (2T, minimum), owned
1	unit/s	Dump Truck (10T net Capacity, minimum), owned/leased
4	unit/s	Bar Bender (electric, 25mm dia min.), owned
4	unit/s	Bar Cutter (electric, 25mm dia min.), owned
1	unit/s	Jackhammer, owned
1	unit/s	Jackhammer (U/W), owned/leased
4	unit/s	Oxy/Acetylene cutting outfit, owned
1	unit/s	Payloader (110 hp, minimum), owned/leased
1	unit/s	Road Grader (125 hp, minimum), owned/leased
1	unit/s	Road Roller (10T, vibratory, minimum), owned/leased
4	unit/s	Transit Mixer (10T net cap., minimum), owned/leased
1	unit/s	U/W cutting equipment, owned/leased
1	unit/s	Water Truck with pump (1,000 gal., minimum), owned
4	unit/s	Welding Machine (400 amp., minimum), owned
1	unit/s	Cargo Truck (2T capacity, minimum.), owned
1	unit/s	Pavement Breaker (Backhoe Attachment), owned

CONSTRUCTION SAFETY AND HEALTH REQUIREMENT

The Contractor shall implement the construction safety and health program in accordance with the applicable provisions of the Occupational Safety and Health Standards (OSHS) of the Department of Labor and Employment (DOLE).

The Contractor, subject to the approval of the Engineer shall provide and maintain throughout the duration of the contract a medical room with at least 15 square meters together with all necessary supplies to be sited in the Contractor's main area.

The Contractor shall provide the following minimum requirements:

L A B O R

1	no.	Safety Engineer / Officer
1	no.	Nurse / Health Officer

EQUIPMENT / MATERIALS

Personnel Protective Equipment

39	pcs.	Hard Hats
39	pcs.	Gloves (rubberized)
39	pcs.	Safety Glasses/Goggles (clear)
78	pcs.	Long sleeve T-shirt
8	pcs.	Aprons
4	pc.	Safety Belts
39	pairs	Safety Shoes
4	pc.	Life Lines

Safety Devices

1	lot	Barricades
1	lot	Warning signs (Signages)
2	unit/s	Fire extinguisher (10kg)

Medical and First Aid System - Four (4) mos.

NOTE:

The Contractor shall provide the above-cited minimum construction safety and health requirements or as required by the Engineer.

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REVISED SCHEDULE OF MINIMUM TEST REQUIREMENTS OF CONSTRUCTION MATERIALS FOR PPA INFRASTRUCTURE PROJECTS

Materials/Items of Work	*Required Tests*	*Minimum Incremental Frequency of Tests*
I. Construction of Pier/Wharf, Platform and Ramp		
Structural Concrete (SC)		
A Portland Cement	Quality Test	For every 2,000 bags (40kg) or fraction thereof
B Fine Aggregate	Quality Test for Grading, Elutriation (wash), Bulk Specific Gravity, Absorption, Mortar Strength, Soundness, Organic Impurities, Unit Weight, % Clay Lumps and Shale	For every 1,500 cubic meter or fraction thereof
C Coarse Aggregate	Quality Test for Grading, Bulk Specific Gravity, Absorption and Abrasion	For every 1,500 cubic meter or fraction thereof
D Water	Certificate from the Engineer or Quality Test for Density and Chloride Content	One per source
E Steel Bars	Mill Certificate and Quality Test for Chemical Composition and Mechanical Properties	For every 10,000 kg or fraction thereof
F Concrete	Compressive Strength on cylinder samples	1 set consisting of 3 concrete cylinder samples shall be taken from each day's pouring and to represent not more than 75 cu m of concrete or fraction thereof
	Slump Test	For every mix
G Admixture and Concrete Curing Materials	Quality Test	One per shipment
Piling (P)		
A Concrete Piles	Fabrication Report	One per fabrication
1 Concrete	Same test as for SC (F)	Same frequency as SC (F)
2 Steel Bars	Same test as for SC (E)	Same frequency as SC (E)
3 High Tension Strand	Test for Chemical Composition and Mechanical Properties	For every 20000kg or fraction thereof

Materials/Items of Work	Required Tests	Minimum Incremental Frequency of Tests
4 Coarse Aggregates	Same Test as for SC (C)	Same frequency as SC (C)
5 Fine Aggregates	Same Test as for SC (B)	Same frequency as SC (B)
B Steel Pipe Piles	Fabrication Report, Mill Certificate and Quality Test for Chemical and Mechanical properties	One per fabrication
1 Steel	Chemical Composition (refer below)	
	- Under 14" (355 60mm) Outside Diameter	2 from 200 pipe of fraction thereof
	- 14" to 36" (355 6 to 914mm) Outside Dia	2 from 100 pipe or fraction thereof
	- Over 36" (914mm) Outside Diameter	2 from 3000ft (914m) or fraction thereof
	Mechanical/Tensile	One (1) tension test shall be made on one length or fraction thereof of each size, or one piece of skelp representing each lot of 200 lengths or fraction thereof of each size
2 Polyurethane Coating	Mill Certificate and Quality Test	One per fabrication
3 Concrete	Same test as for SC (F)	Same frequency as SC (F)
4 Fine Aggregate	Same test as for SC (B)	Same frequency as SC (B)
5 Coarse Aggregate	Same test as for SC (C)	Same frequency as SC (C)
6 Steel Bars	Same Test as SC (E)	Same frequency as SC (E)
7 Water	Same Test as SC (D)	Same frequency as SC (D)
Rubber Dock Fenders (RDF)	Physical Test	All units
	Performance Test for Energy Absorption and Reaction Force	All units
Accessones		
Washer and Fixing Bolt, Anchor Bolt	Physical Test	All units
	Quality Test for Chemical Composition and Mechanical Properties	One per fabrication

Materials/Items of Work	***Required Tests***	***Minimum Incremental Frequency of Tests***
Mooring Bollard (MB) and Accessories (Hexagon Nuts, Plain Washer, Anchor Ring and Anchor Bolt)	Physical Test Quality Test for Chemical Composition and Mechanical Properties	All Units One per fabrication
II. Construction of Back-Up Area, Causeway and Pavement		
Sheet Piling (SP)		
A Concrete Sheet Piles		
1 Concrete	Same test as for SC (F)	Same frequency as SC (F)
2 Steel Bars	Same test as for SC (E)	Same frequency as SC (E)
3 High Tension Strands	Same test as for P (A 3)	Same frequency as P (A 3)
4 Fine Aggregates	Same test as for SC (B)	Same frequency as SC (B)
5 Coase Aggregates	Same Test as for SC (C)	Same frequency as SC (C)
B Steel Pipe Piles		
1 Steel	Same test as for P (B1)	Same frequency as P (B1)
2 Concrete	Same test as for SC (F)	Same frequency as SC (F)
3 Fine Aggregate	Same test as for SC (B)	Same frequency as SC (B)
4 Steel Bars	Same test as for SC (E)	Same frequency as SC (E)

Materials/Items of Work	***Required Tests***	***Minimum Incremental Frequency of Tests***
Rocks	Test for Apparent Specific Gravity and Abrasion	For every 1,500 cubic meter or fraction thereof
Geotextile Filter	Physical and Mechanical Test Mill Certificate	One per batch One per batch
Sand and Gravel Fill	Quality Test for Organic Impurities and Grading	For every 1,500 cubic meter or fraction thereof
Selected Fill	Quality Test for Grading, Plasticity and Laboratory Compaction Test Laboratory California Bearing Ratio (CBR) Field Density Test	For every 1,500 cubic meter or fraction thereof For every 2,500 cubic meter or fraction thereof For every layer of 150mm of compacted depth at least one group of three In-situ density test for every 500 sq m or fraction thereof
Aggregate Base Course	Quality Test for Grading and Plasticity Quality Test for Grading, Plasticity, Abrasion and Laboratory Compaction Test Laboratory California Bearing Ratio (CBR) Field Density Test	For every 300 cubic meter or fraction thereof For every 1,500 cubic meter or fraction thereof Same frequency as Selected Fill Same frequency as Selected Fill
Portland Cement Concrete Pavement (PCCP)		
A Portland Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine Aggregate	Same test as for SC (B)	Same frequency as SC (B)
C Coarse Aggregate	Same test as for SC (C)	Same frequency as SC (C)
D Water	Same test as for SC (D)	Same frequency as SC (D)
E Steel Bars (Dowels)	Same test as for SC (E)	Same frequency as SC (E)
F Joint Filler	Quality Test	One (1) per shipment

Materials/Items of Work	***Required Tests***	***Minimum Incremental Frequency of Tests***
G Admixture and Concrete Curing Material	Same test as for SC (G)	Same frequency as SC (G)
H Concrete	Same test as for SC (F)	Same frequency as SC (F)
	Flexural Test	3 beam samples for every 330 sq m or fraction thereof
I Completed Pavement	Core Test	1 set (3 specimen) for every 2,500 sq m and fraction thereof
Interlocking Concrete Blocks		
A Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine Aggregate	Same test as for SC (B)	Same frequency as SC (B)
C Coarse Aggregate	Same test as for SC (C)	Same frequency as SC (C)
D Water	Same test as for SC (D)	Same frequency as SC (D)
E Admixture & Concrete Curing Materials	Same test as for SC (G)	Same frequency as SC (G)
F Completed Blocks	Physical Test and Compressive Strength	6 blocks per day of fabrication
Cement Treated Base Course (CTB)		
A Portland Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine & Coarse Aggregates	Quality Test for Grading, Abrasion and Soundness	For every 1,500 cubic meter or fraction thereof
C Water	Same test as for SC (D)	Same frequency as SC (D)
D Completed CTB	Field Density Test	For every layer of 150mm of compacted depth at least one group of three in-situ density test every 500 sq m or fraction thereof
Retaining Wall/Coping Wall/RC Curb/RC Ditch/Shear Key/Concrete Blocks\Lean Concrete		
A Portland Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine Aggregate	Same test as for SC (B)	Same frequency as SC (B)

Materials/Items of Work	***Required Tests***	***Minimum Incremental Frequency of Tests***
C Coarse Aggregates	Same test as for SC (C)	Same frequency as SC (C)
D Water	Same test as for SC (D)	Same frequency as SC (D)
E Steel Bars	Same test as for SC (E)	Same frequency as SC (E)
F Admixture and Concrete Curing	Same test as for SC (G)	Same frequency as SC (G)
G Concrete	Same test as for SC (F)	Same frequency as SC (F)
Tie Rod		
A Steel	Same test as for SC (E)	One per batch
B Assembly	Performance Test (Tension)	One per batch
Tie Bars and Dowels	Same test as for SC (E)	For every 10,000 kg or fraction thereof per Tie bars and Dowels
Pipe Culverts and Storm Drains		
A Pipes	Test for Strength, Absorption and Physical	For every 50 pieces
B Mortar or Joint	Same Test as for SC (A,B and D) Alternative Test Same test as for SC (F) and Inspection Report	For every 25 pieces
Concrete Hollow Blocks		
A Portland Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine Aggregates	Same test as for SC (B)	Same frequency as SC (B)
C Water	Same test as for SC (D)	Same frequency as SC (C)
D Concrete	Same test as for SC (F)	Same frequency as SC (F)
E Completed CHB	Quality Test	One for every 500 pieces or fraction thereof
Construction Joints (CJ)		
A Angle Bars	Test for Physical and Mechanical Properties	One per batch
B Steel Bars	Same test as for SC (E)	One per batch
C Zinc (Hot Dip Galvanizing) Coatings	Physical Test for Appearance, Stripping, Weighing, Adherence and Adhesion	All units
	Coating Thickness Magnetic Thickness Measurement	1 set (3 specimen) for every 100,000 sq mm or fraction thereof

Materials/Items of Work	***Required Tests***	***Minimum Incremental Frequency of Tests***
Sacked Concrete		
A Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine Aggregates	Same test as for SC (B)	Same frequency as SC (B)
C Coarse Aggregates	Same test as for SC (C)	Same frequency as SC (C)
D Water	Same test as for SC (D)	Same frequency as SC (D)
E Concrete	Same test as for SC (F)	Same frequency as SC (F)
F Sack (jute)	Physical Test	One for every 50 pieces
Rubble Concrete		
A Cement	Same test as for SC (A)	Same frequency as SC (A)
B Fine Aggregates	Same test as for SC (B)	Same frequency as SC (B)
C Coarse Aggregates	Same test as for SC (C)	Same frequency as SC (C)
D Water	Same test as for SC (D)	Same frequency as SC (D)
E Concrete	Same test as for SC (F)	Same frequency as SC (F)
F Rocks	Same test as for ROCKS	Same frequency as ROCKS
Earthworks		
A Sub-grade preparation	Grading Test Plasticity Test (LL,PL,PI) Laboratory Compaction Test	For every 1,500 cubic meter or fraction thereof
	Density Test	For every layer of 150mm of compacted depth at least one group of three in-situ density test every 500 sq m or fraction thereof
B Structure Excavation	If excavated materials shall be used as Backfill Grading Test Plasticity Test (LL,PL,PI) Laboratory Compaction Test	For every 1,500 cubic meter or fraction thereof
	Density Test	For every layer of 150mm of compacted depth at least one group of three in-situ density test every 500 sq m or fraction thereof

Materials/Items of Work	***Required Tests***	***Minimum Incremental Frequency of Tests***
III Port Operations Building/Passenger Terminal Building/Transit Shed/Warehouse		
STRUCTURAL WORKS	Refer to Structural Concrete (SC) and Piling Works (P)	
ARCHITECTURAL WORKS		
Ceramic – Filled Liquid Membrane / Water Proofing, Hydrophobic Poreblocking Ingredients with Superplasticizer	Physical Property, Mechanical and Chemical Property, Leak Test / Flood Test	One per shipment
Paint	Quality Test	One 4-L can for every 100 cans or fraction thereof
Ceramic Tile	Inspection and Evaluation Report from the Engineer	One per shipment
Stainless Steel	Inspection and Evaluation Report from the Engineer	One per shipment
Roofing Materials	Inspection and Evaluation Report from the Engineer	One per shipment
Ceiling Materials	Inspection and Evaluation Report from the Engineer	One per shipment
ELECTRICAL AND MECHANICAL WORKS		
Wires / Cables	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per shipment
Electrical Devices	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per shipment
Fire Alarm System	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
Wiring Devices	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per shipment

Materials/Items of Work	Required Tests	Minimum Incremental Frequency of Tests
Protective Devices	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per shipment
Telephone System	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
CCTV System	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
CATV System	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
Background Music and Paging System	Inspection and Evaluation Report from the Engineer, Testing and Commissioning	One per item
Air Conditioning Units & Ventilation	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
Conduit Pipes	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
Lighting Fixtures	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
PLUMBING WORKS		
Pipes	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item

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Materials/Items of Work	Required Tests	Minimum Incremental Frequency of Tests
Fixtures	Inspection and Evaluation Report from the Engineer Testing and Commissioning	One per item
Pipe Culverts	Compression Strength Inspection and Evaluation Report from the Engineer	For every size not more than 25 pipes cast in the field
IV Miscellaneous Materials Fencing A Barbed Wire, Cyclone Wire Mesh, Chain Link B Concrete Post	 Physical Test (Dimensions and Coatings) Refer to Superstructure (SC)	 One per Batch Refer to Superstructure (SC)
Lamp Post A Structural Steel B Zinc (Hot Dip Galvanizing) Coatings	Physical Test (Dimensions) Same test as for SC (E) Same test as for CJ (C)	 All units One per batch
Drainage Steel Grating	Same test as for SC (E) Inspection Report	One (1) batch
Metal Pipe (Cast Iron Galvanized, etc)	Physical Test (Dimensions and Coatings)	1 per delivery
Welding Works	Destructive and Non Destructive Test	One (1) per lot

NOTES
1. **Testing of RDF shall be performed only by an independent Testing Laboratory duly accredited by BRS, DOST and PPA**
2. **Testing of other materials shall be performed only by an independent Testing Laboratory duly accredited by BRS and PPA.**
3. **All other issuances which are otherwise inconsistent herewith are hereby revoked or otherwise amended.**

Approved

RAUL T. SANTOS
Officer-In-Charge,
Office of the General Manager

SECTION IX

BID RELATED FORMS

SECTION IX – BID RELATED FORMS

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Bid Form for the Procurement of Infrastructure Projects

[shall be submitted with the Bid]

BID FORM

Date : _____
Project Identification No. : _____

To: **Philippine Ports Authority**
PPA Building, Bonifacio Drive,
South Harbor, Port Area, Manila

Having examined the Philippine Bidding Documents (PBDs) including the Supplemental Bid Bulletin Numbers _____, the receipt of which is hereby duly acknowledged, we, the undersigned, declare that:

a. I/We have no reservation to the PBD, including the Supplemental Bid Bulletins, for the Procurement Project: **Reconstruction of General Luna Port, Port of General Luna, Siargao Island, Surigao Del Norte;**

b. I/We offer to execute the Works for this Contract in accordance with the PBD;

c. The total price of our Bid in words and figures, excluding any discount offered below, is: _____;

d. The discounts offered and the methodology for their application, if any, are: _____;

e. The total bid price in words and figures, after applying the applicable discount, includes the cost of all taxes, such as, but not limited to[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties], which are itemized in the Detailed Estimates.

f. This Bid shall remain valid within a period stated in the PBD, and it shall be binding upon me/us at any time before the expiration of that period;

g. If our bid is accepted, I/we commit to enter to a contract and provide a performance security in the form, amounts, and within the times prescribed in the PBD, and hereby acknowledge the consequences under the IRR of RA No. 12009 on forfeiture of Bid Security or enforcement of Bid Securing Declaration and on Blacklisting;

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your Notice of Award, shall be binding upon the Bidder.

I/We understand that you are not bound to accept the Lowest Calculated Bid or any Bid you may receive.

I/We certify/confirm that we comply with the eligibility requirements pursuant to the PBD.

The undersigned is authorized to submit the bid on behalf of **[Name of the Bidder]** as

evidenced by the attached *[State the Written Authority]*.

I/We acknowledge that failure to sign each and every page of this Bid Form, including the attached Schedule of Prices, shall be a ground for the rejection of our bid.

Duly authorized to sign the Bid for and behalf of:

[Insert Bidder's Name]

[Signature over Printed Name]
[Position/Designation]

[Date]

Contract Form

[not required to be submitted with the Bid, but it shall be submitted within ten (10) days after receiving the Notice of Award]

CONTRACT FOR [INSERT PROJECT TITLE]

THIS CONTRACT executed on the _____ day of _____ 20_____ between:

Philippine Ports Authority, a government agency of the Republic of the Philippines, hereinafter called "the Entity";

-and-

[Name of Contractor], Filipino of legal age or a company duly organized and existing under the laws of **[city and country]**, with principal office at **[name and address of Contractor]**, hereinafter called "the Contractor".

WHEREAS, the Entity invited Bids for certain goods and ancillary services, particularly *[Brief description of Project]*;

WHEREAS, the Contractor submitted a responsive bid and was awarded the contract for the procurement in the total amount of **[contract price in words and figures in specified currency]**, hereinafter referred to as the "Contract Price."

NOW, THEREFORE, for and in consideration of the foregoing premises, the parties hereby agree as follows:

1) Unless otherwise stated, terms and expressions used in this Contract shall have the same meanings as those assigned to them in the Conditions of Contract, which form an integral part of this Contract.

2) The following documents as required by the Implementing Rules and Regulations of Republic Act No. 12009 shall be deemed to form and be read and construed as integral part of this Contract, *viz.*:

   a) Philippine Bidding Documents (PBD);

      i. Drawings/Plans;
      ii. Scope of Work;
      iii. Invitation to Bid;
      iv. Instructions to Bidders;
      v. Bid Data Sheet;
      vi. Bid Form, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents submitted (e.g., Bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;
      vii. Bill of Quantities;
      viii. General and Special Conditions of Contract;
      ix. Supplemental Bid Bulletins, if any; and
      x. Other contract documents that may be required by existing laws and/or the Entity.

   b) Winning bidder's bid, including the Eligibility Requirements, Technical and Financial Proposals, and all other documents or statements submitted;

c) Performance Security;

d) Notice of Award of Contract; and the Bidder's Conforme thereto; and

e) Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBD, such as but not limited to the Notice to Proceed and Warranty Security.

3) In consideration of the Contract Price of **[total contract price in words and figures]**, or such other sums as may be determined in accordance with the terms of the Contract, the Supplier agrees to deliver and perform the items and related services for the **[Project Title]** described herein in accordance with the terms and conditions specified in the Contract and its annexed documents.

4) The **Philippine Ports Authority** agrees to pay the above-mentioned sum to the Supplier in accordance with the schedule and manner provided in the Bidding Documents and its annexes.

5) Any dispute, difference, or claim arising out of or relating to this Contract, including its existence, validity, interpretation, breach, or termination thereof, may be submitted to arbitration or other form of alternative dispute resolution in accordance with the applicable law, such as Republic Act (RA) No. 9285 (Alternative Dispute Resolution Act of 2004) or Executive Order No 1008, series 1985 (Construction Industry Arbitration Law).

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be executed in accordance with the laws of the Republic of the Philippines on the day and year first above written

For the Procuring Entity Head of the Procuring Entity or Duly Authorized Representative	*For the Bidder* Duly authorized to sign the Contract for and behalf of *[Bidders Name]*:
[Signature over Printed Name][Position/Designation] *[Date]*	*[Signature over Printed Name]* *[Position/Designation]* *[Date]*
[Name and Signature] *Witness – Procuring Entity*	*[Name and Signature]* *Witness- Supplier*

ACKNOWLEDGMENT

BEFORE ME, A Notary Public for and in the _____, City/Province of _____, this _____ day of _____, 20_____, personally appeared the above-named persons who have satisfactorily proven to me their identity, through their identifying documents written below their names and signatures, that they are the same persons who executed and voluntarily signed the foregoing instrument consisting of ____ pages, including this page where this Acknowledgement is written, which they acknowledged before me as their free and voluntary act and deed.

WITNESS MY HAND AND SEAL this ___ day of *[month] [year].*

NAME OF NOTARY PUBLIC
Notarial Commission No. _____
Notary Public for _____ until _____
Roll of Attorneys No. _____
PTR No. __, *[date issued], [place issued]*
IBP No. __, *[date issued], [place issued]*

Doc. No. _____
Page No. _____
Book No. _____
Series of _____

Omnibus Sworn Statement for Sole Proprietorship

[Note: The duly accomplished form shall be submitted with the Bid]

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S.S.

OMNIBUS SWORN STATEMENT

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

1. I am the sole proprietor or authorized representative of _____ with office address at _____;

2. As the owner and sole proprietor or authorized representative of _____, I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for **Reconstruction of General Luna Port, Port of General Luna, Siargao Island, Surigao Del Norte** of the **Philippine Ports Authority**, [insert "as supported by the attached duly notarized Special Power of Attorney" for authorized representative];

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

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

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

6. The **[Name of Bidder]** and its spouse are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;

7. It is understood that failure to faithfully disclose its relationship with the HoPE, members of the BAC, the TWG, and the BAC Secretariat, the head of the PMO or the end-user unit or implementing unit, and the project consultants of the Procuring Entity, or of the procurement agent by consanguinity or affinity up to the third civil degree, as well as its submission of beneficial ownership information containing false entries shall be subject to blacklisting under Section 100 of the IRR of RA No. 12009, without prejudice to criminal and civil liabilities under applicable laws, including their accessory penalties, if any.

8. **[Name of Bidder]** complies with existing labor laws and standards; and

9. **[Name of Bidder]** is aware of and has undertaken the following responsibilities as a Bidder:

a. Carefully examine all of the Bidding Documents;
b. Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
c. Made an estimate of the facilities available and needed for the contract to be bid, if any; and
d. Inquire or secure Supplemental Bid Bulletin(s) issued for the [Project Title].

10. *[**Name of Bidder**]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

11. In case advance payment was made or given to **[Name of Bidder]**, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability under existing laws.

IN WITNESS WHEREOF, I have hereunto set my hand this __ day of ___, 20__ at _____, Philippines.

Duly authorized to sign the Bid for and behalf of:

_____
[Bidder's Name]

[Affiant's Signature over Printed Name]
[Position/Designation]
[Date]

JURAT

SUBSCRIBED AND SWORN to before me this _____ day of *[month] [year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. _____.

WITNESS MY HAND AND SEAL this ___ day of *[month] [year]*.

NAME OF NOTARY PUBLIC
Notarial Commission No. _____
Notary Public for _____ until _____
Roll of Attorneys No. _____
PTR No. __, *[date issued], [place issued]*
IBP No. __, *[date issued], [place issued]*

Doc. No. _____
Page No. _____
Book No. _____
Series of _____.

Omnibus Sworn Statement for Partnership, Corporation, Cooperative, or Joint Venture

[Note: The duly accomplished form shall be submitted with the Bid]

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S.S.

OMNIBUS SWORN STATEMENT

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

1. I am the duly authorized and designated representative of _____ with office address at _____;

2. I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for **Reconstruction of General Luna Port, Port of General Luna, Siargao Island, Surigao Del Norte** of the **Philippine Ports Authority**, as supported by the attached duly notarized Special Power of Attorney, Board/Partnership Resolution, or Secretary's Certificate, whichever is applicable;

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

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

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

6. Select one, delete the others:

    - *If partnership*: The partnership itself and the partners of [Name of Bidder] are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;

    - *If cooperative:* The cooperative itself and members of the board of directors, general manager, or chief executive officer of [Name of Bidder] are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;

    - *If corporation, or joint venture:* The corporation or joint venture itself, and officers, directors, and controlling stockholders of [Name of Bidder] are not related by

consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;

7. It is understood that failure to faithfully disclose its relationship with the HoPE, members of the BAC, the TWG, and the BAC Secretariat, the head of the PMO or the end-user unit or implementing unit, and the project consultants of the Procuring Entity, or of the procurement agent by consanguinity or affinity up to the third civil degree, as well as its submission of beneficial ownership information containing false entries shall be subject to blacklisting under Section 100 of the IRR of RA No. 12009, without prejudice to criminal and civil liabilities under applicable laws, including their accessory penalties, if any.

    - *In case of corporations:* **[Name of Bidder]** declares its beneficial ownership information consistent with its updated General Information Sheet or Beneficial Ownership Declaration Form or any other document duly submitted to the SEC and has maintained a valid and updated file therein in compliance with Sections 20.2.9.1, 81, and 82 of the IRR of Republic Act (RA) No. 12009.

8. **[Name of Bidder]** complies with existing labor laws and standards; and

9. **[Name of Bidder]** is aware of and has undertaken the following responsibilities as a Bidder:

    a. Carefully examine all of the Bidding Documents;
    b. Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
    c. Made an estimate of the facilities available and needed for the contract to be bid, if any; and
    d. Inquire or secure Supplemental Bid Bulletin(s) issued for the [Project Title].

10. **[Name of Bidder]** did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

11. In case advance payment was made or given to **[Name of Bidder]**, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability under existing laws.

IN WITNESS WHEREOF, I have hereunto set my hand this __ day of ___, 20__ at _____, Philippines.

Duly authorized to sign the Bid for and behalf of:

[Insert Bidder's Name]

[Affiant's Signature over Printed Name]
[Position/Designation]
[Date]

JURAT

SUBSCRIBED AND SWORN to before me this _____ day of *[month] [year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. _____.

WITNESS MY HAND AND SEAL this ___ day of *[month] [year]*.

NAME OF NOTARY PUBLIC
Notarial Commission No. _____
Notary Public for _____ until _____
Roll of Attorneys No. _____
PTR No. __, *[date issued], [place issued]*
IBP No. __, *[date issued], [place issued]*

Doc. No. _____
Page No. _____
Book No. _____
Series of _____.

Bid Securing Declaration Form

[The duly accomplished form shall be submitted with the Bid if bidder opts to provide this type of bid security]

REPUBLIC OF THE PHILIPPINES)
CITY OF _____) S.S.

BID SECURING DECLARATION

Project Identification No.: _____

To: **Philippine Ports Authority**
PPA Building, Bonifacio Drive,
South Harbor, Port Area, Manila

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid Securing Declaration.

2. I/We accept that:

   a. I/We shall enter into contract with the Procuring Entity and furnish the required performance security within ten (10) calendar days as indicated in the Bidding Documents, from receipt of the Notice of Award;

   b. I/we will be automatically disqualified from bidding for any procurement contract with any Procuring Entity upon receipt of your Blacklisting Order; and

   c. I/We will pay the applicable fine within fifteen (15) days from receipt of the written demand by the Procuring Entity for the commission of acts resulting to the enforcement of the Bid Securing Declaration under Sections 52.2 (a), 63.2, 69.1 and 100, except 100.3 (c), of the IRR of RA No. 12009; without prejudice to other legal action the government may undertake;

	Applicable Fine
a) in the case of a single bidder	i) two percent (2%) of the Approved Budget for the Contract (ABC); or ii) the difference between the evaluated bid price and the ABC whichever is higher
b) in the case of multiple bidders	i) two percent (2%) of the ABC; or ii) the difference between the evaluated bid prices with the bidder with Lowest Calculated/Highest Rated Bid and the bidder with the next Lowest Calculated/Highest Rated Bid,

	and so on whichever is higher
c) in case of violations committed prior to the opening of the financial envelope	i) a fixed amount of two percent of the ABC,

3. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:

   a. Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
   b. I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right; and
   c. I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

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

Duly authorized to sign the Bid for and behalf of:

[Insert Bidder's Name]

[Signature over Printed Name]
[Position/Designation]
[Date]

JURAT

SUBSCRIBED AND SWORN to before me this _____ day of *[month] [year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her *[insert type of government identification card used]*, with his/her photograph and signature appearing thereon, with no. _____.

WITNESS MY HAND AND SEAL this ___ day of *[month] [year]*.

NAME OF NOTARY PUBLIC
Notarial Commission No. _____
Notary Public for _____ until _____
Roll of Attorneys No. _____
PTR No. __, *[date issued], [place issued]*
IBP No. __, *[date issued], [place issued]*

Doc. No. _____
Page No. _____
Book No. _____
Series of _____

STATEMENT OF THE BIDDER'S ALL ONGOING GOVERNMENT AND PRIVATE CONTRACTS, INCLUDING CONTRACTS AWARDED BUT NOT YET STARTED

I hereby declare that all ongoing contracts, including awarded contracts yet to be started coinciding with the contract to be bid are listed below:

Name of outstanding Contracts 1]	Owner's Name and Address	Scope of Work 2]	Contractor's Role and Percentage of Participation 3]	Total Contract Amount or Value 4]	Date of Contract and NOA 5]	Value of Outstanding Works 6]	Accomplishment (in percentage, %) 7]		Contract Duration 8]	
							Planned	Actual	Start of Project	Estimated Completion Date
A) Government Contracts										
i. On-going										
ii. Awarded but not yet started										
B) Private Contracts										
i. On-going										
ii. Awarded but not yet started										

NOTE:

1] As appearing in the contract executed by the parties.
2] With special reference to the Scope of Works of the Project as described/enumerated in the Contract.
3] Indicate the percentage of participation and whether as Sole Contractor, Sub-Contractor or Member in a Joint Venture / Consortium.
4] Indicate the FOREX used if Contract Value is expressed in a currency other than the Philippine Peso.
5] As appearing in the Contract and Notice of Award (NOA).
6] Amount or value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started coinciding with the contract to be bid.
7] Percentage of Accomplishment as of the preceding month which should not be earlier than two (2) months from the date of bid submission.
8] As appearing in the Notice to Proceed and Contract.

This Statement shall be supported by:

a) Notice of Award
b) Notice to Proceed and Contract

Name of Firm	Name of Bidder/Authorized Representative (Signatory's Legal Capacity)	Date

Revised: September 2021

STATEMENT OF THE BIDDER'S SINGLE LARGEST COMPLETED CONTRACT (SLCC) SIMILAR TO THE CONTRACT TO BE BID

Name of the completed Contract 1]	Owner's Name and Address	Scope of Work 2]	Contractor's Role and Percentage of Participation 3]	Total Contract Value At 4]			Date of Award 5]	Contract Duration 6]	
				Award	Completion	Escalated Value to Present Prices		Start	Completed

NOTE :

1] As appearing in the contract executed by the parties.
2] With special reference to the Scope of Works of the Project as described/enumerated in the Contract.
3] Indicate the percentage of participation and whether as Sole Contractor, Sub-Contractor or Member in a Joint Venture / Consortium.
4] Indicate the FOREX used if Contract Value is expressed in a currency other than the Philippine Peso. Attached the computation for the escalated contract value.
5] As appearing in the Notice of Award.
6] As appearing in the Notice to proceed and Certificate of Completion.

A. The Bidder must have completed an SLCC that is similar to the procurement project to be bid, and whose value must be equivalent to at least fifty percent (50%) of the ABC, adjusted to current prices using the Philippine Statistics Authority (PSA) consumer price indices. A contract is considered to be "similar" to the contract to be bid if it has the same Major Categories of Work as stated in the Bid Data Sheet (BDS).
B. This Statement shall be supported by:
   a. Notice of Award, Notice to Proceed and Contract.
   b. Project Owner's Certificate of Final Acceptance issued by the owner other than the Contractor or Constructors Performance Evaluation System (CPES) Final Rating, which must be at least Satisfactory. The said Certificate of Acceptance shall contain the following: 1) Name of project owner that issued the certificate, 2) Name of Contractor/ Constructor, 3) Name of Contract, and 4) Contract Duration.
   c. Recapitulation or Final Bill of Quantities.

Name of Firm	Name of Bidder/Authorized Representative (Signatory's Legal Capacity)	Date

Revised: September 2026

STATEMENT OF THE BIDDER'S EXPERIENCE ON SIMILAR CATEGORIES OF WORK INCLUDING OTHER COMPLETED CONTRACTS SIMILAR TO THE CONTRACT TO BE BID

Work Description	Unit of Measure	Quantity	SLCC similar to the contract to be bid 1]	Other completed contracts similar to the contract to be bid 1]			Unit of Measure 1]	Quantity 1]
			Name of the contract	Name of the contract	Name of the contract	Name of the contract		
Similar Category of Work:								
1. Pile Driving works (Offshore)	l.m.	612						
2. Supply and Installation of Structural Steel	kg.	307,776						
Other Qualifying Experience Requirement:								
1. Reinforced Concrete works	cu.m.	228						

NOTE:
1] As appearing in the Recapitulation and/ or Final Bill of Quantities.
This statement shall be supported by:

a. Notice of Award, Notice to Proceed and Contract.
b. Project Owner's Certificate of Final Acceptance issued by the project owner other than the Contractor or Constructors Performance Evaluation System (CPES) Final Rating, of at least satisfactory. The said Certificate of Acceptance shall contain the following: 1) Name of project owner that issued the certificate, 2) Name of Contractor/Constructor, 3) Name of Contract, and 4) Contract Duration.
c. Recapitulation and/ or Final Bill of Quantities.

Name of Firm	Name of Bidder/Authorized Representative Signatory's Legal Capacity	Date

Revised: September 2026

FINANCIAL DATA

A. The prospective bidder's audited Financial Statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "RECEIVED" by the Bureau of Internal Revenue (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.

	Year
1. Total Assets	
2. Current Assets	
3. Total Liabilities	
4. Current Liabilities	
5. Net worth (1-3)	
6. Net Working Capital (2-4)	

B. The computation of the bidders Net Financial Contracting Capacity (NFCC) must be at least equal to the ABC to be bid, as follows:

NFCC = [(Current assets minus current liabilities) (15)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started, coinciding with the procurement project to be bid.

NFCC = _____

Attached herewith are certified true copies of the audited financial statements stamped received by the BIR or BIR authorized collecting agent for the latest/immediately preceding calendar year.

_____
Name of Firm/Applicant

_____
Authorized Signing Official

Date:_____

NOTES:

If Partnership or Joint Venture, each Partner or Member Firm of Joint venture shall submit separate financial statements.

STATEMENT OF THE BIDDER'S KEY PERSONNEL PLEDGED FOR THE CONTRACT TO BE BID

I hereby declare that the following key personnel are qualified and available for the duration of the contract to be bid:

Position of Key Personnel 1]	Name	No. of Key Personnel	Similar Experience in the Position (Years) 2]	Total Experience in the Position (Years)	Attachment(s)	Annex(es)
Project Manager					PRC License (CE Preferred) Complete Qualification and Experience Data Certificate of Commitment	Annex "_"
Project Engineer					PRC License (CE Preferred) Complete Qualification and Experience Data Certificate of Commitment	Annex "_"
Project Architect					PRC License Complete Qualification and Experience Data Certificate of Commitment	Annex "_"
Materials Engineer II					PRC License (CE Preferred) Submit Valid and Renewed DPWH Certificate of Accreditation Submit Accreditation Identification Card as Materials Engineer Complete Qualification and Experience Data Certificate of Commitment	Annex "_"
Construction Safety and Health Officer					Certificate in Construction Occupational Safety and Health (COSH) training course issued by DOLE Accredited Trainings Complete Qualification and Experience Data Certificate of Commitment	Annex "_"
Foreman					Complete Qualification and Experience Data Certificate of Commitment	Annex "_"
Other Position(s)					Complete Qualification and Experience Data Certificate of Commitment	Annex "_"

NOTE: 1] As stated in the Bid Data Sheet
2] The number of years of experience of the key personnel shall be as indicated in the qualification and experience data or curriculum vitae.

Minimum qualification requirements: The key personnel must have a work experience that is similar in nature and complexity to the contract to be bid.

Project Manager - Five (5) years
Project Engineer - Three (3) years
Project Architect - Three (3) years
Foreman - Five (5) years
Materials Engineer – One (1) year
Materials Engineer I – for projects costing up to 100M
Materials Engineer II – for projects costing more than 100M
Construction Safety and Health Officer – One (1) year

Name of Firm	Name of Bidder/Authorized Representative (Signatory's Legal Capacity)	Date

Revised: September 2026

STATEMENT OF THE BIDDER'S EQUIPMENT PLEDGED FOR THE CONTRACT TO BE BID

I hereby declare that the following equipment are in good operating condition and available for the duration of the contract to be bid:

DESCRIPTION (Type, Model, Make)	No. of Unit(s)	Capacity/ Output 1]	Owned, Leased, and/or under purchased agreement 2]	Proof of Ownership/ Leased/ Under Purchase Agreement (Mark as Annex "A.....Z") 3]	OTHER INFORMATION (As Applicable)				
					Manufacturer	Engine Serial No.	Chassis No./ Name of Vessel	Location	Status

NOTE:

1] The unit of capacity of the pledged equipment shall be as indicated in the Proof of Ownership, i.e. GW (for crane barge), DWT (for deck barge and hopper barge), Ton (for crane, road roller and drop hammer), kg.-m/blow (for diesel hammer), Ton. (for dump truck), hp (for tugboat, road grader, bulldozer and concrete vibrator), cfm (for compressor), gal (for water truck with pump), amp (for welding machine), bagger (for concrete mixer). If the capacity of the pledged equipment is not indicated in the Proof of Ownership/Lease Contract/Purchased Agreement, submit other proof of capacity such as specifications, brochures or other verifiable printouts indicating the model name, model number and other details of the equipment.

2] Indicate if the pledged equipment are owned, leased or under purchase agreement.

3] If the pledged equipment is owned, it should be in the name of the bidder. Submit proof of ownership, i.e. deed of sale, sales invoice, official receipt; For owned Water Truck, Dump Truck, Cargo Truck and Transit Mixer submit LTO Certificate of Registration and valid Official Receipt; For owned barge/tugboat, submit Marina Certificate of Ownership and valid Cargo Ship Safety Certificate.

If the pledged equipment is leased/under purchase agreement, submit the following:

For equipment under lease agreement:

a. certification of availability of equipment from the equipment lessor for the duration of the project
b. duly Notarized copy of lease contract
c. For Water Truck, Dump Truck, Cargo Truck and Transit Mixer submit LTO Certificate of Registration and valid Official Receipt

For equipment under purchase agreement:

a. certification of availability of equipment from the equipment vendor
b. duly Notarized copy of purchase agreement
c. For Water Truck, Dump Truck and Transit Mixer submit LTO Certificate of Registration and valid Official Receipt or copy of conduction sticker, whichever is applicable.

If the pledged barge/tugboat is leased/under purchase agreement, submit certification of availability of barge/tugboat from the equipment lessor/vendor for the duration of the project, and duly Notarized copy of lease contract/purchased agreement together with a copy of the Marina Certificate of Ownership and valid Cargo Ship Safety Certificate.

The Minimum Major Equipment Requirements are listed in Section 8, Annex 3.

Name of Firm	Name of Bidder/Authorized Representative (Signatory's Legal Capacity)	Date

Revised: April 2025

CONSTRUCTION METHODOLOGY

Name of Project : _____

Project Description : _____

Location : _____

MINIMUM SCOPE OF CONSTRUCTION METHODOLOGY

A. REMOVAL, DISPOSAL AND EXCAVATION WORKS

1. Removal and disposal of existing passenger shed including turn-over of materials with value to the authority
2. Removal and disposal of existing rc pier
3. Chipping of existing RC curb and smoothen with mortar
4. Excavation of Existing seabed
5. Cutting & disposal of existing piles up to seabed elevation
6. Excavation and backfilling works

B. CONSTRUCTION OF ACCESS TRESTLE ON PILES

1. Supply & driving of Steel Pipe pile (500mm dia.) including protective coating
2. Handling, pitching & driving of Steel Pipe piles
3. Supply & placing of concrete filler for SPP
4. Supply & installation of reinforcing steel cage for SPP
5. Supply, fabricate & install structural steel materials including HDG
6. Supply & placing of steel matting including concrete filler and reinforcement
7. Supply & placing of precast concrete slab
8. Supply & placing of 4,000 psi. concrete for rc curb & slab gap connections
9. Supply & installation of reinf. steel bar for rc curb
10. Supply, fabricate & install WPC floor decking complete with metal floor framing and other accessories
11. Supply & apply corrosion protection/metal protecting coat and epoxy paint for all welded connections
12. Supply, fabricate & install covered walkway complete with framings, railings, roofings, electrical works and other necessary accessories
13. Supply, fabricate & install pontoon complete with gangways and other necessary accessories

C. CONSTRUCTION OF CAUSEWAY

1. Supply & placing of 3,500 psi. concrete
2. Supply & installation of reinforcing steel bar
3. Supply & placing of 50 to 100 kg. of plastered core rocks
4. Supply & placing of fill materials
5. Supply & placing of aggregate base course
6. Construction of PCC Pavement

NOTES:

The narrative construction method will guide and familiarize the contractor and the PPA on how the project shall be carried out in accordance with the highest standard of workmanship.

The construction method shall be consistent with the Bar Chart / S-Curve Schedule, Equipment Schedule and Manpower Schedule.

_____
Name of Bidder/Authorized Representative
(Signatory's Legal Capacity)

Revised: September 2021

MANPOWER SCHEDULE

Name of Project : _____

Project Description : _____

Location : _____

MANPOWER (Minimum)	CONTRACT DURATION (_____ Calendar Days)			
	MONTHLY			
	1	2	3	4
Project Manager				
Project Engineer				
Project Architect				
Materials Engineer II				
Construction Safety and Health Officer				
Foreman				
Specify other applicable positions, ie.:				
- Carpenter				
- Steelman				
- Mason				
- Electrician				
- Rigger				
- Others				

_____
Name of Bidder/Authorized Representative
(Signatory's Legal Capacity)

Revised: September 2021

EQUIPMENT UTILIZATION SCHEDULE

Name of Project : _____

Project Description : _____

Location : _____

EQUIPMENT (Minimum)	No. of Units	CONTRACT DURATION (_____ Calendar Days)			
		MONTHLY			
		1	2	3	4

_____
Name of Bidder/Authorized Representative
(Signatory's Legal Capacity)

Revised: September 2021

CASHFLOW BY QUARTER AND PAYMENT SCHEDULE

Name of Project: : _____

Project Description : _____

Location : _____

Project Duration (days or months)	Payment Schedule (Monthly, in Pesos)	Cash flow (Quarterly, in Pesos)
TOTAL		

NOTES

- The cash flow by quarter and payment schedule should be consistent with the Bar Chart and S-curb.
- Payment schedule shall not be more than once a month.

_____
Name of Bidder/Authorized Representative
(Signatory's Legal Capacity)

Revised: September 2021

H.O. - BIDS AND AWARDS COMMITTEE - EP
CHECKLIST OF BIDDING DOCUMENTS
RECONSTRUCTION OF GENERAL LUNA PORT
PORT OF GENERAL LUNA, SIARGAO ISLAND, SURIGAO DEL NORTE
ABC - Php 193,829,570.42

	REQUIREMENTS
I.	TECHNICAL COMPONENT ENVELOPE (1 orig. and 6 copies)
	CLASS "A" DOCUMENTS
	LEGAL DOCUMENTS
	(a) Valid PhilGEPS Registration Certificate
	(Platinum Membership) (all pages)
	TECHNICAL DOCUMENTS
	(b) Statement of the prospective bidder of all its ongoing government and
	private contracts, including contracts awarded but not yet started, if any,
	whether similar or not similar in nature and complexity to the contract to
	be bid;
	(c) Statement of the Bidder's Single Largest Completed Contract (SLCC)
	similar to the contract to be bid, except under conditions provided under the
	rules;
	a. Same Major Categories of Work
	1. Supply, delivery and driving of piles (Offshore)
	2. Supply and installation of Structural Steel
	b. Experience Record on Similarity Completed Projects
	1. Similar Category of Work
	i. Pile Driving works (Offshore) (612 l.m.)
	ii. Supply and Installation of Structural Steel (307,776 kg.)
	2. Other Qualifying Work
	i. Reinforced Concrete works (228 cu.m.)
	(d) Special PCAB License in case of Joint Ventures;
	and registration for the type and cost of the contract to be bid; and
	(e) 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
	(f) Project Requirements, which shall include the following:
	a. Organizational chart for the contract to be bid;
	b. List of contractor's key personnel to be assigned to the contract to be
	bid, with their complete qualification and experience data:
	Project Manager
	Project Engineer
	Project Architect
	Materials Engineer II
	Construction Safety and Health Officer
	Foreman
	c. List of contractor's major equipment units, which are owned, leased, and/
	or under purchase agreements, supported by proof of ownership or
	certification of availability of equipment from the equipment lessor/vendor
	for the duration of the project, as the case may be:
	1 unit/s Air Compressor (250 cfm, minimum), owned
	1 unit/s Backhoe (0.50 cu.m., 94.30hp, minimum), owned/leased
	1 unit/s Clamshell, owned
	1 unit/s Concrete cutter, owned
	2 unit/s Concrete Mixer (1 bagger, minimum), owned
	1 unit/s Concrete bucket, owned
	1 unit/s Concrete Screeder, owned
	4 unit/s Concrete Vibrator (3.5 hp, minimum), owned
	1 unit/s Crawler Crane (30T, minimum), owned/leased
	1 unit/s Crawler Crane (20T, minimum), owned/leased
	1 unit/s Pile Hammer (Diesel, 7,500 kg.m. or equivalent), owned/leased
	1 unit/s Diving equipment (complete), owned/leased
	1 unit/s Drop Hammer (2T, minimum), owned
	1 unit/s Dump Truck (10T net Capacity, minimum), owned/leased
	4 unit/s Bar Bender (electric, 25mm dia min.), owned
	4 unit/s Bar Cutter (electric, 25mm dia min.), owned

H.O. - BIDS AND AWARDS COMMITTEE - EP
CHECKLIST OF BIDDING DOCUMENTS
RECONSTRUCTION OF GENERAL LUNA PORT
PORT OF GENERAL LUNA, SIARGAO ISLAND, SURIGAO DEL NORTE
ABC - Php 193,829,570.42

	REQUIREMENTS
	1 unit/s Jackhammer, owned
	1 unit/s Jackhammer (U/W), owned/leased
	4 unit/s Oxy/Acetylene cutting outfit, owned
	1 unit/s Payloader (110 hp, minimum), owned/leased
	1 unit/s Road Grader (125 hp, minimum), owned/leased
	1 unit/s Road Roller (10T, vibratory, minimum), owned/leased
	4 unit/s Transit Mixer (10T net cap., minimum), owned/leased
	1 unit/s U/W cutting equipment, owned/leased
	1 unit/s Water Truck with pump (1,000 gal., minimum), owned
	4 unit/s Welding Machine (400 amp., minimum), owned
	1 unit/s Cargo Truck (2T capacity, minimum.) , owned
	1 unit/s Pavement Breeker (Backhoe Attachment), owned
	(g) Original duly signed Omnibus Sworn Statement (OSS); and
	if applicable, Original Notarized Secretary's Certificate in case of a
	corporation, partnership, or cooperative; or Orginal 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
	(h)The prospective bidder's computation of Net Financial Contracting Capacity
	(NFCC).
	CLASS "B" DOCUMENTS
	(i) If applicable, duly signed joint venture agreement (JVA) in accordance which
	R.A. No.4566 and its IRR in case the joint venture is already in existence;
	or
	duly notarized statement 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**
	(j) Original of duly signed and accomplished Financial Bid Form; and
	Other documentary requirements under RA No. 12009
	(k) Original of duly signed Bid Prices in the Bill of Quantities; and
	(l) Duly accomplished Detailed Estimates Form, including a summary sheet
	indicating the unit prices of construction materials, labor rate, and
	equipment rentals used in coming up with the bid; and
	(m) Cash Flow by Quarter.