

TECHNICAL SPECIFICATIONS

SCOPE OF WORK

The work consists of furnishing labor, materials and tools/equipment and other items necessary for the completion of “**Various Maintenance of Port Physical Facilities at Baseport, Puerto Princesa, Palawan.**” All materials and services not expressly called for in the specifications and not shown in the drawings which may be necessary for the completion of the repair, shall be performed, furnished and installed.

JOB CONDITIONS

The contractor shall clear the site of all obstruction. Demolition, removal and chipping – off the parts of the structures shall be excavated properly. Salvaged materials shall turn-over and or stored as directed by the Authority. Barricade and signboards shall be provided and installed as safety measures and for information of the port users for its convenience. Workers shall wear protective gears or equipment at all times for safety of life purposes. In the event of damaged of adjacent room and or port facilities, immediately make all necessary repairs and replacement to the approval of and at no cost to PPA.

DISMANTLING / DEMOLITION AND EXCAVATION WORKS

All dismantling/removal and chipping-off/demolition or excavation involved in the projects shall be properly coordinated with the Project Engineer to avoid damage to other port facilities.

Demolition and chipping of CHB wall/concrete columns, and concrete pavement within building perimeter shall be properly observed, rest assured it will not cause delay in the operations of the ports.

CONCRETE WORKS:

Cement shall be ordinary Portland cement or equivalent. Calcium chloride shall not be included in any concrete. Concrete shall be placed and fully compacted so as to avoid cold joints, honeycombing and to minimize segregation, excessive blemishes or other defects in the hardened concrete. Compaction shall be carried out without causing damage or displacement of the formwork, reinforcement, etc. Coarse aggregates retained on the 4,75mm (No. 4) sieve shall be crushed stone/rock, crushed slag and unless otherwise stipulated shall conform to the requirements of AASHTO M 79. It shall conform to the applicable requirements of section 703.5.1 coarse aggregates of item 703. Fine aggregates passing the 4.75mm (no.4) sieve shall consist of natural sand, stone, stone screenings or slag screenings or a combination thereof and unless stipulated shall conform to the quality requirements of AASHTO M 29 (ASTM D 1073). It shall conform to the applicable requirements of section 703.5.2, fine aggregates of them 703. Water for mixing and curing concrete shall be clean, fresh and free from injurious amount of oil, acid, salt, organic matter and other deleterious substances. Concrete strength shall be 3,500 psi/24 Mpa and concrete shall be thoroughly mixed to a uniform consistency.

DEFORMED BAR REINFORCEMENTS:

Deformed bar reinforcements shall conform to PNS 49 or ASTM 615, or approved quality to be used for the subject. Bars shall be free from any flaking rust, mill scale, grease or coatings of any type that would tend to reduce or destroy the bond.

WELDING WORKS:

Fabrication and Installation of steelwork materials to be used in canal covers, and in roofing or trussing shall be in accordance with the approved plans (*refer to approved plan*). Installed trusses & canal shall be welded for sturdy connections. Fluxes on welded parts shall be properly removed by sanding. Alignment shall be properly checked.

PAINTING WORKS:

Brand and color of the paint (at least 2 coats) to be used shall be at the choice of PPA.

MAINTENANCE OF LINE CANALS

For the maintenance of concrete drainage/canal cover, including declogging / clearing works along perimeter fence at southwings; and Proposed construction of reinforced concrete curb on top of rip-rap;

In the construction of r.c. canal cover, class A mix shall be observed. Mixing board shall be used at all time to avoid dirt accumulation of any earth materials that may affect the desired strength of concrete.

In the proposed construction of reinforced concrete curb on top of rip-rap, 3" dia. PVC pipes shall be used as draining pipes placed at every 3.0m spacing within the covered perimeter length. One percent (1%) slope of drainage pipes shall be observed. Chipping of concrete side walls should be performed carefully to avoid excessive damage to other parts.

Maintenance of concrete drainage/canal & its cover, including declogging/ cleaning works along exit gate (22 l.m.)

All steel materials to be used shall be cleaned & subject for treating /painting. In the fabrication of steel grating covers of canals, always verify dimensions by accurate field measurement before fabrication whenever work adjoins other work that precedes it in construction.

Weld corners and seams continuously and in accordance with the recommendations of AWS "Structural welding code – steel". Grind exposed welds smooth and flush, to match and blend with adjoining surfaces.

Maintenance of concrete drainage/canal at Operational area including repair of steel grating (40 l.m.) & declogging works (70 l.m.);

In the repair of concrete side wall of canal, the cement shall be free of lumps and properly aged. Water shall be clean and free from oils, acids, salts, or other injurious substances.

In the preparation for the placing of concrete, all water, construction debris and extraneous matter shall be removed from the canal section. The concrete shall be placed as nearly as possible to its final position by means that avoid segregation of the materials and displacement of the reinforcement.

Maintenance of damaged canal in between Warehouse 1 & Warehouse 2, including declogging works;

In the repair of existing concrete canal, additional spike of 12mm deformed bar shall be provided.

Maintenance of Mooring system

Use zinga galvanized paint, (5kgs/can, 60 microns) for painting of mooring systems. Painting shall be applied by brush or spray on surfaces that are inaccessible for brushing. Two (2) coats application shall be provided. Paint shall be applied only on thoroughly clean and dry surfaces. Thinner (zingaSolv) shall be used as cleaning agent. All mooring system shall be subject for cleaning with detergent, then zinga paint applications.

Maintenance of Baseport Terminal Building

Demolition/removal of concrete ground step and removal of CHB wall partition shall be properly handled. It should not cause further damages to other existing facilities inside the building. Floor tiles shall be provided at the affected floorings. All affected columns & walling shall be replaced & re-painted.

Maintenance of PICO building

All ceiling joist & board at office no. 2 shall be removed & replaced. Affected ceiling board at office no. 3 shall be replaced. Damaged wooden base board & cornice shall be replaced (see detailed plans for reference).

In the repair of wooden post cover, existing fixed glass partition shall be removed & replaced during the repair.

Affected flooring for the relocation of hardiflex partition wall & door shall be subject for repair, with cement filler. Glass sealant shall be provided in the installation of fixed glass partitions.

Existing panel board at the proposed PAREM office shall be re-located (*see detailed drawings for reference*).

Existing plain sheets, and fixed glass partition in front of proposed PAREM office shall be re-paired.

Maintenance of Port Police Office

Demolition/removal of existing facilities shall be performed carefully to avoid excessive damaged to other parts.

Two (2) pcs door lock lever type chrome & door stopper shall be provided, in the provision of service back door and in the repair of existing access door to kitchen area.

Affected concrete pavement in the removal of two (2) unit plant boxes shall be subject to repair/re-concreting. Black pebbles shall be mixed with concrete as finished materials on top of PWD ramps & landing 8" PVC pipe with 8" dia. 90 deg. elbow shall be used for the main drainage line connecting to main canal. 1% slope shall be observed from the source to the main canal. In the provision of catch basins see detailed drawings for reference.

Affected area inside Guest house building is subject for repainting (see detailed drawings for reference).

Maintenance of Port Manager's living quarter

Perimeter eave ceiling board & fascia boards shall be subject to re-painting.

Maintenance of Guest house building

Existing roofing and flashing at the kitchen area are for re-sealing. Affected fascia board & ceiling board perimeter area of the building are subject for re-painting.

Maintenance of Warehouse building no.2

All existing connections shall be concealed with vulcaseal, and all existing roofing & flashing shall be applied with sealant.

Maintenance of PPA logo

In the removal & replacement of existing PPA logos, vacated area shall be repaired with plastering & painting.

Maintenance of concrete electrical post

Chipping and tapered concrete electrical post shall be performed carefully to avoid excessive disturbance to its strength. Additional stirrups shall be welded so that no displacement can occur during placing of concrete. Welding of bars and its procedure shall be subject to approval of the project engineer. Chipped surface area or affected area of tapered post shall be subject to re-concreting. The specific clear cover shall be maintained.

Re-painting of Port lamp post

G.I. lamp post (15 units) shall be re-painted with reflectorized (yellow & black) color. Upper part shall be painted with aluminum silver paint. Concrete post two (2 units) shall be re-painted with reflectorized paint (yellow & black) (see detailed drawings for reference).

Maintenance of septic tank & sewer lines

Gasoline in siphoning procedure is required for vacuum cleaning.

Sahara compound shall be provided. Sewer line from septic tank to main canal shall be provided 4" dia. PVC pipe with 4" dia. 90 deg elbow shall be used, with one percent (1%) slope is to be observed in the laying of pipes (see detailed plans for reference).

CLEARING/CLEANING WORKS:

The contractor shall clear the project site from all waste, and excess materials/salvage materials upon completion of the project shall be turned over to PPA.

