Office of the President

PHILIPPINE SPORTS COMMISSION

RMSC- P. Ocampo Sr. Street, Malate, Manila

TERMS OF REFERENCE

REHABILITATION OF NORTH AND SOUTH DORMITORIES

I. OBJECTIVE

The basic objective of the project is to rehabilitate the North and South Dormitories located at Rizal Memorial Sports Complex, P. Ocampo Sr. St., Malate, Manila.

II. BASIC INFORMATION

Project Name : Rehabilitation of North and South Tower

Location : Rizal Memorial Sports Complex, Pablo Ocampo Sr. Street, Malate, Manila

III. QUALIFICATION

1.) Contractor must have valid PCAB license and Category General Building/General Building.

2.) Contractor must be in sound financial standing with annual turnover/gross billings of at least 50% of the ABC.

3.) Contractor must have completed construction of a dormitories with at least contract value 50% of the ABC

4.) Contractors must have a licensed Civil Engineer, Electrical Engineer, Material Engineer, Sanitary Engineer, Safety Officers and Mechanical Engineer.

5.) All engineers must have an experience in the construction/rehabilitation of structures such as dormitories and the likes.

6.) The company must have five (5) years of experience in the field of mechanical works specifically in designing fire protection system.

IV. SPECIFICATIONS

Contractors/Supplier will supply of labor, tools, materials, consumables and Technical Supervision for the rehabilitation of North and South Dormitories.

1.0 Carpentry Works

a. Metal Furring: made of hot-dipped zinc-coated commercial forming steel and level on one side or wherever in contact with paneling for 3/4" x 2" metal ceiling joists, nailers, and similar work.
b. Ceiling: ¼ inch thick gypsum board for ceiling with conceal fastenings as far as possible, where not possible, locates them in inconspicuous place. Where nailing is permitted through woodwork fence, conceal nail heads.
c. Nailers shall be in accordance with detail drawings. Where not indicated on the drawings or mentioned herein, furring strips shall be 3/4" x 2" spaced at 16" on centers both ways. Fasten securely by black screw or other approved device at every 2 feet on center.

2.0 Masonry Works

a. Concrete hollow blocks shall be manufactured with an average minimum compressive strength of 6.9Mpa having 40% maximum moisture content.
b. Aggregate for concrete blocks shall consist of sand and evenly graded pea gravel conforming to ASTM C33.
c. Masonry mortar for setting blocks shall be in proportion of 1 part cement to 3 parts sand or as otherwise approved by agency Architect/Engineer. Mortars shall be mixed with water in an amount compatible with workability. Ingredients shall be accurately measured by volume in boxes especially constructed for the purpose by the Contractor.
d. Portland cement shall conform to ASTM C 150, Type I or PNS 07 of an approved brand.
e. Sand shall be natural and shall be retained between No.50 and No. 100 sieves.

3.0 Tile Works

a. Ceramic Floor tiles: shall be 60cm x 60cm and 30cm x 60cm in dimension or approved equivalent.
b. Ceramic Wall tiles: shall be 30cm x 60cm in dimensions or approved equivalent.
c. The surface of Ceramic wall and floor tiles and components can be smooth, profiled, decorated or finished, glossy, matt or semi-matt as indicated.
d. Step Edge Guard: shall be 2" in dimension and made of brass or approved equivalent.

4.0 Finish Hardware

a. Loose Pin Hinges for doors: heavy duty materials, 3" x 3" in size or approved equivalent.
b. Door Locksets: heavy duty materials or approved equivalent.
c. Heavy Duty Door Closer and Panic Hardware shall be installed properly and as per manufacturer's specifications.

5.0 Doors and Windows

a. Flush Doors: 45mm in thickness with ¼" thick marine plywood on both faces and kiln dried lumber frame.
b. Door jamb: should be 2" x 5" in size, kiln dried with 60cm x 110cm, 90cm x 210cm, 80cm x 210cm, 60cm x 180cm opening.
c. PVC Flush Doors: should be with 2" x 5" jamb with 60cm x 210cm opening.
d. Fire Exit Door: should be metal with metal jamb and hinges and panic device with heavy duty door closer.

e. Fixed Glass Window: shall be 6mm thick glass fitted on powder coated white aluminum tubular frame.
f. Sliding Glass Window: shall be 6mm thick glass fitted on powder coated white aluminum tubular frame.
g. Glass mirror: should be ¼" thick with aluminum frame and ¼" thk marine plywood backing, all in accordance with the detailed drawings.

6.0 Painting Works

a. The use of ready mixed paint may be allowed in the project provided, that such paint is in accordance with the Standard Specifications No. 13 of the Philippine Government.
b. Painting Schedule: as specified hereunder or as per manufacturer's direction.
   1. Interior & Exterior Metal Surfaces

      1st coat - Primer Enamel Paint
      2nd coat - Quick Dry Enamel Paint
      3rd coat - Quick Dry Enamel Paint

      Omit first coat, except for touch-up, if metal has been shop primed.
      Primer touch-up shall be of same composition as shop primer.
   2. Concrete surface of walls, exposed ceiling and block walls.

      1st coat - Flat Latex Paint
      2nd coat - Semi-Gloss Latex Paint
      3rd coat - Semi-Gloss Latex Paint

      All concealed surfaces shall be primed coated with concrete primer.
      For concrete concealed ceilings, use finish paint with thermal insulation properties of approved quality.

   3. Gypsum Board Ceiling

      1st coat - Flat Latex Paint and Sealer
      2nd coat - Flat Latex
      3rd coat - Flat Latex

   4. Dry Wall Partition

      1st coat - Flat Wall Enamel
      2nd coat - Semi-Gloss Enamel
      3rd coat - Semi-Gloss Enamel

7.0 Electrical Works

7.1 Wires and Cables

a. All wire conductors to be used shall be branded.
b. All wires shall be copper, soft-drawn and annealed shall be of 98% conductivity, shall be smooth and true and of a cylindrical form, and shall be within 1% of the actual size called for.
c. All wires and cables shall comply with the requirements of the Underwriters Laboratory, the A.S.T.M. and the I.P.C.E.A. as they apply to the particular usage.
d. Wires larger than 2.0 sq. mm diameter should be stranded.

e. Wires and cables for lighting and power systems shall be plastic insulated for 600 volts working pressure, type THHN or THWN unless otherwise noted on plans or specified below.

7.2 Conduits and Fittings

a. No conduit shall be used in any system smaller than 15 mm (½ inch) 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.
b. No wire shall be pulled into any conduit until the conduit system is completed in all details, in any case of concealed work until rough plastering or masonry has been completed and in the case exposed work until the conduit work has been completed in every detail.
c. The ends of all conduits shall be tightly plugged to exclude plaster, dust and moisture while the building is in progress of construction. All conduits shall be reamed to remove all burns.

7.3 Outlets, Boxes and Fittings

a. At all outlets of whatever kind, for all systems, there shall be provided a suitable fitting which shall be either a box or another device especially designed to receive the type of fitting to be mounted thereon.
b. The Contractor shall consult the Engineers as to the nature of the various fittings to be used before installing the 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 completed will be of finished design.
c. At all outlets on concealed conduit work, provide galvanized pressed steel outlet boxes of Standard make. This boxes shall be in all cases standard.
d. All utility boxes intended for outlet devices shall be especially designed to receive the particular type of device to be mounted and should be deep enough to accept and fit total number of conductors and device required as per drawing.

7.4 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 in finished place shall be located and installed with the permission and to the satisfaction of the architect and Engineers.
b. All junction and pull boxes on exposed circuit work shall be provided with hubs for threaded pipe entry and covers provided with neoprene gaskets.

7.5 Wall Switches and Plates

a. Wall switches shall be rated with ampere and voltage ratings as required. Switches shall be flush mounting type and of the quiet 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 Architect. Appropriate samples shall be submitted prior to the purchase of wall switches and faceplates.

b. All utility boxes intended for receptacle outlet devices shall be especially designed to receive the particular type of receptacle outlet to be mounted and should be deep enough to accept and fit total number of conductors and device required as per drawing.
c. All switches and receptacle plates shall be of plastic finish B.L. plate or as directed by the Architect/Engineer.
d. One gang switch with LED (1 WAY / 10A / 250V)
e. Two gang switch with LED (1 WAY / 10A / 250V)
f. One gang switch with LED (3 WAY / 10A / 250V)

7.6 Wall Receptacle and Plates

a. Receptacle outlets in general shall be for flush mounting, duplex type rated at 16 amperes, 250 volts, 2-pole, 3-wire parallel slots, grounding type unless otherwise indicated on drawings. Type and color of receptacles outlets and plates shall be as selected by the Engineer or Architect. Appropriate samples of outlets and plates shall be submitted prior to purchase of devices. Receptacles shall be approved equal.
b. All utility boxes intended for receptacle outlet devices shall be especially designed to receive the particular type of receptacle outlet to be mounted and should be deep enough to accept and fit total number of conductors and device required as per drawing.
c. Receptacle with Ground Fault Circuit Interrupter (GFCI) Shall be rated 15A,2P
3wire grounding type, 240 V, Parallel slot with 15 milliampere current sensitivity.
d. One gang convenience outlet (10A / 250 V)
e. GFCI outlet (20A / 250 V)
f. Duplex Universal Convenience Outlet w/ ground(16A / 250 V)

7.7 Lighting Fixtures

a. The Contractor shall submit samples of all type of lighting fixtures for the approval of the Architect and the Engineer.

Specifications:

1. **Fluorescent Light, Recessed Type with Aluminum Reflector**

   Dimension : 1200 mm X 300 mm X 80 mm
   Operating Voltage : 220 Volts
   Lamp : 2 X 40 Watts
   Lamp Color : Daylight
   Lamp Fitting : G13 (T8)

2. **Fluorescent Light, Recessed Type with Aluminum Reflector**

   Dimension : 1200 mm X 300 mm X 80 mm
   Operating Voltage : 220 Volts
   Lamp : 1 X 40 Watts
   Lamp Color : Daylight
   Lamp Fitting : G13 (T8)

3. **Box Type Fluorescent Light**

   Dimension : 1250 mm X 54 mm X 80 mm
   Operating Voltage : 220 Volts
   Lamp : 1 X 40 Watts

Lamp Color : Daylight
Lamp Fitting : G13 (T8)

4. **Recessed Type Vertical Downlight**

Dimension : 6 Inch Diameter
Operating Voltage : 220 Volts
Lamp : 1 X 15 W CFL
Lamp Color : Daylight
Lamp Fitting : E27

5. **Surfaced Type Vertical Downlight**

Dimension : 6 Inch Diameter
Operating Voltage : 220 Volts
Lamp : 1 X 15 W CFL
Lamp Color : Daylight
Lamp Fitting : E27

6. **Rechargeable Twinhead Emergency Lamp**

Operating Voltage : 220-240volts Ac 50/60hz
Lamp : 1 Head -12 Pcs. Bright Led
2 Head -24 Pcs. Bright Led
Battery Type : 6 Volts,4.5ah Sealed Lead Acid Battery
Charging Time : 20 – 24 Hours
Usage Duration : 17 Hours - 1 Head
32 Hours - 2 Heads
Response Time : < 0.1 Second

7.8 Circuit Breakers

a. All individual circuit breakers to be use shall be branded.
b. Provide individual circuit breakers, safety switches and disconnect switches where 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 shall meet NEMA and Underwriter's Laboratories, Inc. specifications.
c. 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. Circuit breaker shall be trip indicating, with the tripped position of breaker handle midway between "ON" and "OFF" positions. A common internal trip mechanism shall be provided to all pole tripped operation of circuit breakers. Tie handle of circuit breakers for common trip is not acceptable.
d. Circuit breaker shall be molded case bolt-on and plug-in type complying with NEMA and UL standards.

7.9 Panelboards

a. Standard panelboard as much as possible shall be used and properly assembled base on plans or load schedule. All panels shall be dead front construction, furnished with trims for flush or surface mounting as required.
b. All panelboards shall be composed of only one brand of circuit breaker.
c. Circuit breaker shall be molded case bolt-on and plug-in type complying with NEMA and UL standards.
d. Panelboard main bus work shall be ampacity rated to equal or exceed overcurrent protective device immediately ahead of it. All buswork shall be properly secured to withstand available short circuit forces at the location.
e. Distribution panels shall be equipped with two or three poles circuit breakers of sizes, voltages ratings and interrupting capacity as called for on plans. All circuit breakers shall be molded case and plug-in type circuit breakers.

7.10 Fire Alarm and Detection System

Five (5) Zone System Fire Alarm Control Panel

Specifications:

Initiating Device Circuit (IDC) : 5 Class B
Notification Appliance Circuit (NAC) : 2 Class B
Power Supply : 4.25 Amperes Total
AC Input : 230VAC, 50hz/60hz
Panel Battery Charge Capacity (Sealed Lead Acid Only) : Up to 24 Ah, 10 Ah max in cabinet
Auxiliary Current : 0.5 amps max. May be programmed as resettable.
Auxiliary Output : 24 Vdc regulated
IDC Alarm Current : 3.0 mA (Consult detector compatibility list p/n 3100468 for maximum detectors per circuit)
IDC Circuit : Maximum loop resistance: 13 Ohms; Maximum loop capacitance: 0.03 µF
IDC Operating Voltage : 16.9 to 29 Vdc
UL Detector ID : 100
Alarm Contact (normally open Form C) : 30 Vdc @ 1 A (resistive load)
Trouble Contact (Form C) : 30 Vdc @ 1 A (resistive load)
Supervisory Contact (normally open Form C) : 30 Vdc @ 1 A (resistive load)
Operating Environment : Temperature: 32 - 120° F (0 - 49° C); Humidity: 5 - 93% RH, non-condensing
Terminals (wire gauge) : 18 - 12 AWG (0.75 mm² - 2.5 mm²)
Asynchronous Serial Communications : Maximum resistance: 13 Ohms; Maximum capacitance: 0.03 µF

Photoelectric Smoke Detector

Features:

- Self-diagnostic capability continually monitors operation
- Built-in drift compensation
- Field-replaceable optical chamber
- Low-profile design blends into the ceiling
- Advanced nuisance alarm immunity
- Meets NFPA 72 field sensitivity testing without the need for external meters
- Extensive two-wire compatibility listings
- White head and base

• Operating temperature range: 32°F to 120°F (0°C to 49°C)

Specifications:

Description : Two-wire Self-Diagnostic Smoke Detector
Operating Voltage : 12/24V DC
Current(Standby) : 0.00007 amperes
Current(Alarm) : 0.06 amperes
Operating Voltage : 12/24V DC
Photoelectric Sensitivity : 2.85 % ,+ 0.37 , -1.00 %
Reset Time : 1 sec

Manual Pull Station

Specifications:

Description : Single Action – One stage
Addressing Requirements : Uses 1 Module Address
Operating Current : Standby: 250 micro ampere
Activated: 400 micro ampere
Construction & Finish : Diecast Zinc = Red Epoxy w/ aluminum markings
Operating Voltage : 15.2 to 19.95VDC(19 VDC nominal)
Storage & Operating Environment : Operating Temp: 32° F to 120° F
Storage temp: -4 deg. F to 140 deg. F
Humidity: 0 to 93% RH

Fire Alarm Bell

Specifications:

Operating voltage : 24 VDC
Operating Current : 0.085 ampere
Gong Size : 6 Inches
Lead Length : 10 Inches
Noise Level at 10 ft : 82 decibels

CEILING TYPE EXHAUST FAN

Dimension: 10 in. x 10 in.
Wattage: 30 Watts
Air Delivery: 424 cu. Ft/min

8.0 Plumbing Works

8.1 Lavatory, Urinal, Water Closet, Faucets, Shower Bar, Bidet, and Floor Drain:

a. Material shall be of approved equivalent.
b. Floor Drains & Valves: shall be made of high grade-strong, tough and even grained metals. No floor drains and valves must be on the way of people who may step on them.
c. Water Closet: Manual Piston Type Flush Valve Toilet or approved Equivalent
d. Lavatory: 53cm x 44cm Porcelain Under Counter Lavatory or Approved Equivalent
e. Shower Head: Stainless steel Shower Head
f. Lavatory Faucet: Single-Hole Lavatory Faucet

9.0 Waterproofing

a. The required waterproofing material shall be “SHELL FLINTKOTE” and “RECEGROUT SL10” brand or its approved equivalent. Test waterproofed area by twenty-four (24) hours and check for any seepages.
b. Areas not stated above but requiring waterproofing by Procuring Entity shall be included in the scope of work. Thickness should be as per Manufacturers Specifications and Installation depending on the Areas to be applied with.

10.0 Architectural Works

a. TOILET PARTITIONS: Use 12mm thick Cherry Compact Phenolic Board Toilet Partitions with Stainless Type Accessories as manufactured by Aurora (O.A.) Philippines, Inc. or approved equivalent. Component material shall be High Pressure Laminates (HPL). All exposed edges shall be PVC with color matching face. Color as approved by the Architect.
b. Submit sample corner sections of phenolic board partition for approval of the Architect/Engineer.

11.0 Mechanical Works

a. The design and construction of the fire protection system including but not limited to piping configuration, supports, controls, bracing, fasteners and anchors shall conform to applicable seismic construction and design requirements set out in NFPA 13 (Standard for the Installation of Sprinkler Systems).
b. All pipings and fittings must be ductile iron, galvanized brass or stainless steel.
c. The fire protection systems to be implemented includes the aboveground and underground piping, sectional valves, valve pit, supports and accessories.
d. The fire protection system shall be provided with controls including all necessary items or accessories to run the system as per design intent.

Piping Requirements

FPS Pipe (Aboveground) – ASTM A53 ERW SCH40, black iron pipe and mechanical coupling (grooved) connection, complete with not limited to corrosion and cathodic protection or approved equivalent.
Pipe shall be painted by spray thru air compressor.

FPS Pipe (Underground) – ASTM A53 ERW SCH40, Galvanized iron pipe, and welded connection for all underground connection, complete with not limited to corrosion and cathodic protection or approved equivalent.

Pipes shall be new, designed for 10 bar working pressure, conforming to ASTM specifications and have the manufacturer’s name or brand along with the applicable ASTM standard, marked on each length of pipe.

All ASTM A53 and ASTM A120 pipe and fire loop piping must be hydrostatically tested at the mill per the ASTM standard.

V. SCOPE OF WORKS

1. Mobilization of manpower and equipment.
2. Stripping of the dilapidated paint of interior and exterior walls.
3. Plastering/restoration of cracked and damaged interior and exterior walls.
4. Repainting of interior and exterior walls.
5. Stripping of paint of interior and exterior railings and window grills.
6. Repainting/Restoration of interior and exterior railings and window grills.
7. Repainting of existing steel double deck beds.
8. Demolition of existing concrete lavatories located at the fifth floor.
9. Chipping and removal of existing tiles on athletes' rooms, comfort rooms, and stairs.
10. Demolition of existing masonry partition walls at the comfort rooms.
11. Construction of new CHB wall partition and plastering for new comfort rooms located at 2nd to 5th floor.
12. Restoration of chipped-off/damaged stairs.
13. Supply and installation of 60cm x 60cm ceramic floor tiles at ground floor lounge area, athletes' rooms from 2nd to 5th floor and at the balcony.
14. Supply and installation of 30cm x 60cm anti-slip ceramic floor tiles at the stairs including the supply and installation of brass step edge guard.
15. Supply and installation of 60cm x 60cm anti-slip ceramic floor tiles and 30cm x 60cm ceramic wall tiles for all the comfort rooms from ground to 5th floor.
16. Application of waterproofing in all comfort rooms, above the extension room at 2nd floor and at the roof deck.
17. Installation of phenolic board partition at the comfort rooms of lounge area.
18. Replacement and extension of G.I. roof including the trusses, purlins and all its other accessories.
19. Removal of all existing ceiling boards and nailers.
20. Supply and installation of ¼" thk gypsum board for ceiling and 3/4" x 2" metal furring nailers @ 0.40m o.c.
21. Plastering and painting of newly installed ceiling.
22. Removal of all existing dry wall partition from ground to 5th floor.
23. Installation of new dry wall partition from ground to 5th floor.
24. Removal of all existing wooden flush doors, PVC flush doors and fire exit steel doors.
25. Supply and installation of wooden flush doors including 2" x 5" jamb including all its accessories.

26. Supply and installation of PVC flush doors at the comfort rooms including 2” x 5” jamb including all its accessories.
27. Supply and installation of metal fire exit door with metal jamb, hinges and panic device for all athletes’ rooms.
28. Removal of all existing operable and fixed windows.
29. Supply and installation of 6 mm thick frosted glass, weather sealed, swing type, white powder coated aluminum casement window.
30. Supply and installation of 6 mm thick frosted glass, weather sealed, awning type, white powder coated aluminum casement window.
31. Supply and installation of 6 mm thick frosted glass, weather sealed, fixed white powder coated aluminum frame window.
32. Supply and installation of ¼” thk. glass mirror with frame and plywood backing for the comfort rooms from ground to 5th floor.
33. Removal of all existing plumbing fixtures including all water and sewer lines.
34. Supply and installation of plumbing fixtures such as water closet, urinal, lavatory, shower bar, bidet, floor drain, etc.
35. Supply and installation of PPR Pipes for new water lines and PVC pipes for sewer lines.
36. Removal of existing fire exit steel barricades and fire escape ladder.
37. Fabrication and installation of new fire exit steel barricades and fire escape ladder.
38. Removal of existing water tank.
39. Supply and installation of new stainless steel, 500 gallons, cylindrical water tank.
40. Removal of existing canopy at the windows from Ground to 5th floor.
41. Supply and installation of new canopy at the windows from Ground to 5th floor.
42. Design, Supply and Installation of Fire Protection System.
43. Removal of all existing roughing-ins, wiring materials, outlets, and panel boards.
44. Supply and installation of new roughing-in and wiring materials.
45. Supply and installation of panel boards.
46. Supply and installation of all lighting fixtures and receptacle outlets as indicated in the electrical plans.
47. Supply and installation of Enclosed Circuit Breakers for air-conditioning units.
48. Supply and Installation of grounding system.
49. Supply and installation of Fire Alarm Control Panel (FACP) with smoke detectors, manual pull station, fire alarm bell and wires including all accessories.

50. Supply and installation of Power Panel Fire Protection (PPFP) for Fire pump and Jockey pump with wires including all controls and accessories.

51. Conduct insulation testing on all wires, cables, and panel boards.

52. Conduct ground resistance reading.

53. Testing and Commissioning.

54. Clearing, hauling and disposal of all debris.

VI. GENERAL NOTES

The contractor shall be responsible in securing the necessary permits/ licenses (Building, Electrical, Mechanical, Sanitary/Plumbing, Electronics & Communication and Fire Safety) from the Local Government Units (LGU's) and other government agencies in connection with the implementation of the Proposed Rehabilitation of North and South Towers.

Other materials and workmanship not included on the above list but found necessary to complete the work shall be for the account of the contractor.

Sub-contractor/ suppliers of major finishing materials (ceiling panel, tile, glass, waterproofing, paint, etc) shall be a local or multi-national company with wholly owned Philippine subsidiary and shall have a similar local project of supply and installation of the above stated materials.

Sub-contractor of major finishing materials (ceiling panel, ceramic tiles, etc.) shall be a ***member of association of specialists on cleaning and restoration.***

The contractor shall be responsible for the safety measures during the implementation of the project and ***must submit methodologies*** in every finishing materials required in the project.

Branded materials stated in the plans and specifications is the designer's reference of quality standards.
These products can be replaced provided that the replacement are approved of the same or higher quality.

Restoration of floors, walls, ceiling affected by the Mechanical, Electrical and Communication works outside the area shall be the sole responsibility of the contractor.

The contractor shall ***coordinate with PSC Project Architects, Engineers and Coordinators*** in connection with the implementation of the project so as not to hamper with PSC operations. The contractor is required to have the necessary and appropriate tools, instruments and equipment for the proper implementation of the project.

The contractor shall submit the as built plans to PSC after the completion of the project.
It is assumed that the bidder shall have full knowledge of the work and site condition, shall have reviewed the plans and specifications and bid documents, and thus warrants the availability of the work and materials upon submission of his bid proposal.

The contractor shall coordinate all aspects of the works in order to ensure a harmonious progress without interruptions, delays of modifications to work already completed.
The prospective bidder/ contractor shall possess and submits with the eligibility documents a valid track record in undertaking related works.

All electrical (lighting systems, etc), mechanical (duct facilities, etc.) and electronics and communications facilities and other related facilities/ equipment not included in the program of works that will be affected during the implementation of the project should be restored to their original operating condition/s at no additional cost to PSC authority.

VII. PREVENTION OF ACCIDENT AND PUBLIC NUISSANCE

General

The Contractor shall formulate adequate control measures in accordance with the relevant local laws and regulations regarding prevention of accidents, fires and public nuisances during the execution of the work.

The Contractor shall ensure that his workmen are aware, and shall so instruct the workmen, of good and safe working practices.

The Contractor's safety plan shall take into account, among other items, working in Restricted Areas, Contractor's Equipment; hand held power tools; percussion guns; air compressors and hoses; electrical equipment; fuels; use of dust masks, ear protectors, safety helmets and safety lines.

Prevention of Accidents

The Contractor shall formulate a safety plan for work at the Site to provide proper protection, especially at such places in the airfield Restricted Areas.

Pollution Control

The Contractor shall take all necessary steps to minimize noise, vibration, dust, soot, and other pollution resulting from the execution of the work.

VIII. PERIOD OF WORK

The Contractor shall complete the work within ninety (90) calendar days upon receipt of the Notice to Proceed.

IX. WARRANTY PERIOD

The Contractor shall submit a surety bond for a warranty period of one (1) year on materials and workmanship.

Any item found to be defective within the aforementioned period, the contractor shall immediately replace the said item/s at their own expense and no cost to PSC.

Any damage to life and property caused by the contractor operation within the vicinity of the facility covered by the project shall be the sole responsibility of the contractor.

X. CONTRACTORS RISK AND WARRANTY SECURITY

1. The Contractor shall assume full responsibility for the works from the time of construction commenced up to final acceptance by the Procuring Entity's Representative/s and shall be held responsible for any damage or destruction of the works except those occasioned by force majeure. The Contractor shall be fully responsible for the safety, protection, security and convenience of his personnel, third parties and public at large, as well as the works, equipments, fabrication and installation and the like to be affected by his construction works and deliveries.

2. The defects liability period shall be one (1) year from the contract completion. The certificate of acceptance shall be issued by PSC after all defects have been corrected.

XI. ACCEPTANCE OF THE PROJECT

Certificate of Acceptance will be issued upon approval of the END USER and the Head of the Procuring Entity.

Prepared by the Technical Working Group (TWG)

ENGR. VICTORIA T. MOYA **ENGR. PEDRO I. PINEDA**

ATTY. MARIBEL RODRIGUEZ