

ITEM 29a : FINISHES FOR LAW ENFORCEMENT BUILDING**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 consist of furnishing all labor, materials, equipment, tools and incidentals necessary to undertake, complete all finishing works as indicated on the drawings and as specified herein.

Wall, floor, ceiling and other finishing works shall include but are not limited to the following:

WALLS**Exterior**

- a. Plain cement finished painted with elastomeric paint.
Location as shown in the plans and elevations.

Interior

- a. Plain cement finished painted with elastomeric paint.
- b. 300mm x 600mm Vitrified Glazed Tiles
- c. 12mm thick Fiber cement board on at least Ga. 25 thick uncoated metal galvanized C- shaped studs framing.

Locations are shown in the plans and elevations.

Stud: 76 mm (3 inches)

3.00 meter length

Track: 76 mm (3 inches)

3.00 meter length

Board: 1.20 x 2.40 x 12mm fiber cement

Fiber Cement Surfaces

SUBMITTALS

- a. Manufacturer's product data for each type of product specified.
- b. Samples
 - (1) 300 mm x 300 mm 2 sets of required mock up.
 - (2) Miscellaneous product samples such as joint tapes and compounds.

Application and Finishing

- 1. Apply and finish fiber cement panels as per specifications by manufacturer for flush-jointed.
- b. Install fiber cement panels in manner which minimizes the number of end-butt joints or to avoid where possible.
- c. Install exposed fiber cement panel with face side out. Do not install imperfect, damages or damp boards. Bat boards together for slight contact at edges and ends with not more than 1.5 mm open space between boards. Do not force into place.
- d. Locate either edge or end joints over supports, except in horizontal applications where intermediate support is provided behind end joints. Position boards so that like edges abut, tapered edges against tapered ends. Do no place tapered edges against cut edges or ends. Stagger vertical joints over different studs on opposite sides of partitions.
- e. Attach fiber cement panel for supplementary framing and blocking provided for additional support at openings and cutouts.
- f. Space fasteners in fiber cement boards in accordance with referenced application and finishing standard and manufacturer specifications

Methods Panel Application

- a. Follow specifications by manufacturer.
- b. Install fiber cement panel as follows, and as indicated on the drawings.
- c. Apply fiber cement panels to supports as follows:
 - Fasten to steel framing with adhesive and supplementary screws as per recommendation by manufacturer.

Finishing of Fiber Cement Boards

- a. Apply to joint treatment at fiber cement panels joints (both directions); penetrations; fasteners head, surface defects and

elsewhere as required to prepare works for decoration.

- b. Finish fiber cement panels as per recommendation by manufacturer.

Protection

- a. Provide final protection and maintain conditions, in a manner suitable to installer that ensures, fiber cement panel construction being without damage or deterioration at time of substantial completion.

Plain Cement Finish

- a. **Surface Preparation**

All surfaces shall be cleaned and projections, dust, loose particles and other materials, which would prevent good bond, shall be removed.

Plaster shall not be applied directly to concrete and masonry surfaces coated with bituminous compounds and surfaces previously painted or plastered.

All surfaces shall be thoroughly wetted before plastering.

- b. **Trial Mix**

A trial mix of at least three (3) different water-cement ratios for a proposed mix shall be prepared under full scale conditions and adequate workability. The proportions by weight of cement to the weight of sand shall not be less than one part of Portland cement to two parts of sand.

The proportion of cement-sand and water necessary to produce the cement plaster of the required consistency shall be subject to the approval of the Engineer. Such approval may be withdrawn at any time and a change in proportions may be required. Based on the approved mix proportions, the Contractor shall prepare a list showing the number of kilograms of the various materials to be used in the cement plaster finish mix.

No cement plaster finish shall be started without an approved trial mix by the Engineer.

- c. **Cement Finish Application**

A brown coat with sufficient pressure shall be applied to fill the gaps, and to secure a good bond. Moistened for 48 hours, each coat of cement plaster shall be kept after application and allow to dry.

A finish coat shall be applied after the brown coat has set. The brown coat shall be moistened before application of the finish coat. Finish coat shall be floated to plumb, even planes and surfaces.

Final plaster finishes shall be rubber sponged.

d. Tolerance

The Contractor shall finish plaster work plumb, level, square and true within tolerance of 3mm in 3 meters, without cracks and other imperfections.

e. Patching and Cleaning

Upon completion of the building, and when directed, all loose, cracked, damaged or defective plastering shall be cut out and re-plastered in a satisfactory and approved manner.

Painting Works

a. Surface Preparation

Allow new masonry to dry for 14 days (for exterior surfaces) to 28 days (for interior surfaces) under normal conditions before painting. Surface to be painted should be clean and dry, free from oil, grease, dirt, dust, contaminants, and all loose grit and mortar.

Without mesh:

1st Coat: Elastomeric Wall Covering Sealer

2nd and 3rd Coat: Elastomeric Wall Covering Basecoat

4th Coat: Elastomeric Wall Covering Topcoat

With mesh:

1st Coat: Elastomeric Wall Covering Sealer

2nd Coat: Elastomeric Wall Covering Basecoat

Reinforcing Membrane: Fiberglass Matting

3rd and 4th Coat: Elastomeric Wall Covering Basecoat

5th Coat: Elastomeric Wall Covering Topcoat

Wall Ceramic Tiles

- a. Wall tiles shall be glazed ceramic tiles color as per Architect's approval.
- b. Trimmers and moulding shall be lustrous, glazed with size and color corresponding to wall tiles.
- c. Portland cement, sand, bonding compound, lime and water shall conform with the requirements.

FLOORS**F1 600mm x 600mm Unglazed Ceramic Floor Tiles**

- a. Lobby / Hallway
- b. Conference Room
- c. Interrogation Room
- d. Evidence/ File Room
- e. Investigation Room
- f. Port Police Office
- g. Manager's Office
- h. Armory
- i. File Room
- j. Male & Female Temporary Cell
- k. Clinic / Toilet
- l. Male Toilets
- m. Female Toilets
- n. All Gender Toilets
- o. PWD Toilet
- p. Pantry
- q. Electrical Room
- r. Equipment Room
- s. Janitor's Room
- t. Slop Sink
- u. Fire Exits
- v. Storage
- w. Mid Stairs
- x. Coast Guard Office
- y. PNP Office
- z. PDEA Office

Locations are shown in the plan.

F2 600mm x 600mm Non Slippeed Floor Tiles

- a. Porch
- b. Service Entrance/ Exit
- c. Fire Exits (Left & Right Side Outside)

Locations are shown in the plan.

F3 Non- Skid / Rough Cement Floor Finish

- a. Porch (Ramp)
- b. Parking

Locations are shown in the plan.

F4 Water Proof Finish

- a. Toilets
- b. Roof Deck
- c. Concrete Canopy

Locations are shown in the plan.

F5 300mm X 300mm Ceramic Tactile

- a. Porch
- b. Service Entrance/ Exit
- c. Fire Exits (Left & Right Side Outside)

Locations are shown in the plan

a. Floor tiles shall be color varies and as shown on the drawings or to be designated by the Architect.

b. Portland Cement, sand, water and adhesive shall conform with the requirements.

c. Floor tiles shall be delivered in the manufacturer's original unbroken packages or containers that are labeled plainly with the manufacturer's name and brand. Containers shall be grade scaled. Materials shall be stored in dry weathertight enclosures, and shall be handled in a manner that will prevent the inclusion of foreign materials and damage by water or dampness.

EXECUTION

Floor Tiles

a. Mortar Preparation

Mortar mix proportion and preparation shall be in accordance with the requirements.

b. Surface Preparation

Surfaces to receive the tiles shall be clean, free of dust, dirt, oil, grease, and other deleterious substances. Floor tile operations in spaces receiving wall tile shall not be started until wall tile installation has been completed. Before tile is applied with a dryset mortar bed, the structural floor shall be tested for levelness or uniformity of slope by flooding it with water. Areas where the water ponds shall be filled and leveled with mortar and shall be retested before the setting bed is applied.

c. Placing of Setting Beds and Floor Tile

Mortar setting beds shall have a minimum thickness of 20mm for floors. The structural concrete slab shall be soaked thoroughly with clean fresh water on the day before the setting bed is to be applied. Immediately preceding the application of the setting bed, the structural slab shall again be wetted thoroughly, but no free water shall be permitted to remain on the surface.

A skim coat of neat Portland cement mortar shall then be applied not more than 4mm thick. The mortar shall be spread until its surface is true and even and thoroughly compacted, either level or sloped uniformly for drainage, as the case requires. A setting bed, as large as can be covered with tile before the mortar has reached its initial set, shall be placed on one operation; but in the event that more setting mortar has been placed than can be covered, the unfinished portion shall be removed and cut back to a clean beveled edge.

All mounted tiles shall be soaked in clean water a minimum of one hour before they are set. Absorptive mounted tile shall be dampened by placing sheets on a wetted cloth in a shallow pan before setting. No free water shall remain on the tiles at the time of setting. Before the initial set has taken place in the setting bed, a skim coat of neat Portland cement mortar, 0.7mm to 1.6mm thick, shall be trowelled or brushed over the setting bed and/or the back of the tile, or a thin layer of Portland cement, 0.79mm to 2mm thick, may be hand-dusted uniformly over the setting bed and worked lightly with a trowel or brush until thoroughly damp.

The tiles shall then be pressed firmly upon the setting bed, and beaten into the mortar until true and even with the plane of the finished floor line. Beating and leveling shall be completed within one hour after placing tiles or sheets. Borders and defined lines shall be laid before the field or body of the floor. Where floor drains are provided, the floors shall be sloped to drain properly to the drains. Intersections and returns shall be formed accurately.

Cutting of tile, where necessary, shall be done along the outer edges of the floor. As far as practicable, no tiles of less than half size shall be used. Cutting and drilling of tiles shall be done neatly without marring the tile surfaces. The cut edges of tile against trim, bases, thresholds, pipes, built-in fixtures, and similar surfaces shall be ground and jointed carefully. Tile shall fit closely and neatly at all plumbing fixtures and around electrical outlets, pipes and fittings so that cover plates or escutcheons will overlap the tiles properly. Tiles shall be secured firmly in place and loose tiles or tiles sounding hollow shall be removed and replaced. All lines shall be kept straight, parallel, and true, and all finished surfaces brought to true and even planes. The inner edges of borders shall be kept straight and, where practicable, shall form right angles at all returns. The paper and glue shall be removed from mounted tile, without using excess water, within one hour after installing the tiles.

Joints shall be parallel and uniform in width, plumb, level and in alignment. End joints in broken-joint work shall be made as far as practicable, on the center lines of adjoining tiles. Except in special arrangement and design, as indicated or specified, square tiles shall be set with straight joints, and oblong tiles shall be set with broken joints.

Joint widths shall be uniform and spaced to accommodate the tile in the given spaces with a minimum of cutting. Tiles shall be wetted, if they have become dry, before applying grout. Joints 3.2 mm or less in width shall be grouted with a neat Portland cement grout of the consistency of thick cream. Other joints shall be pointed with mortar consisting of one part Portland cement and two parts pointing sand.

The grout or mortar for joints on floors shall be white Portland cement or as specified by the Engineer. Grout pointing mortar shall be forced into joints by using trowel, brush or finger application. Before the grout or mortar sets, the joints of cushion edge tile shall be struck or tooled to the depth of the cushion, filling all skips or gaps, and the joints of square edged tiles shall be filled completely flush with their surface. Dark cement shall not be seen through grouted white joints.

All surplus mortar or grout shall be removed before it has set or hardened.

d. Cleaning and Curing

Floors shall be covered with waterproofed paper with all joints lapped at least 96 mm and allowed to damp cure for at least 72 hours before foot traffic is permitted thereon.

All completed tile work shall be thoroughly sponged and washed diagonally across joints, and finally polished with clean, dry cloth. Acid cleaning of

unglazed tile, when necessary, shall not be done within ten days after setting the tile. All metal shall be covered with approved grease and the tile shall be wetted with clean water, before tile is cleaned with 10% muriatic acid solution. After acid cleaning, the tile shall be flushed with clean water, and the grease coating on metal shall be removed.

Finished tile floors shall be covered with clean building paper before foot traffic is permitted on them. Board walkways shall be placed on floors that are to be continuously used as passage ways by workmen. Thresholds shall be covered with boards. Tiles vertical outside corners (external angles) shall be protected with board corners strips in areas used as passage by workmen.

Ceiling

1. Interior

1. C1 - 12 mm thick Gypsum Board, painted finish, on 0.40mm thick galvanized steel ceiling suspension system at 0.40 meter on center (furring) 0.60 meter on center (Carrying channel) and 1.20 meters on center both ways (suspension rod) or Approved Equivalent
 - a. Reception
 - b. Male Toilets
 - c. Female Toilets
 - d. Electrical Rooms
 - e. Janitor's Rooms
 - f. Toilet & Baths
 - g. All Gender Toilets
 - h. PWD Toilet
 - i. Toilets
 - j. Pantry
 - k. Electrical Room
 - l. Equipment / Control Room
 - m. Ante Rooms
 - n. Male & Female Temporary Cell
 - o. Receiving Area/ Lounge
 - p. Fire Exits
 - q. Hallway
 - r. Slop Sink
 - s. Service Entry / Exit
 - t. Male & Female Quarters (PDEA, PNP, Port Police, Coast Guards)
 - u. Toilet & Baths

Locations are shown in the plan.

2. C2 - 600mm X 600mm X0.70mm thick Aluminum Clipped - in perforated panels, Bone white or approved equivalent
 - a. Clinic
 - b. Port Police Office
 - c. PNP Office
 - d. PDEA Office
 - e. Coast Guard Office
 - f. Manager's Office
 - g. Pantry
 - h. Conference Room
 - i. Investigation Room
 - j. Evidence / File Room
 - k. Interrogation Room
 - l. File Room
 - m. Armory

Location is shown in the plan.

3. C3 - 50mm x 100mm x 5.80m Lightweight Timber Look uPVC Extruded Material Baffle Ceiling Suspended on Metal Track
 - a. Lobby

Location is shown in the plan.

4. C4 - 4mm thick Aluminum Composite Panel Champagne Silver or approved equivalent
 - a. Porch

Location is shown in the plan.

5. C5 – Painted underside slab
 - a. R.C. Canopy
 - b. Ledge (Front Façade)
 - c. Left & Right Side Fire Exits
 - d. Mid stairs
 - e. Parking

Locations are shown in the plan.

SUBMITTAL

1. Shop drawings for all finishing and painting works for the building shall be submitted in advance to allow twenty eight days for review and approval. Shop drawings shall indicate materials and details of finishing works. The Contractor shall be responsible for all errors of detailing and fabrication, and for the correct finishing work items shown on the shop drawings.

2. The Contractor, before placing order for the finishing materials shall submit to the Engineer for approval representative samples of finishing materials. No placing of orders for material for finishing works shall be made without his approval.
3. Samples of all walls finishes, measuring not less than 1000mm x 1000mm shall be submitted to the Engineer for approval as to its finish texture and workmanship.

GRANITE TILES

- a. Selected granite slabs for toilet countertops, fascia and splashboard. Dimensions as shown on the drawings.
- b. Shall be sound material with uniform and favorable working qualities and with very limited natural faults.
- c. Color, veining and quality shall be approved by Engineer.
- d. Veining shall run vertically on all vertical surfaces and direction of veining shall continue in same directions over horizontal surfaces except as directed by the Engineer.
- e. Sealer
 - e. 1. Shall be a commercial penetrating type free from harmful alkali or acid content
 1. specially prepared for marble work
 - e. 2. Shall have a Ph factor between 7 and 9
 - e. 3. Shall not discolor
 - e. 4. Shall produce a slip resistant surface
 - e. 5. Shall have a flash point not less than 35 °C
- f. Cleaning fluid
 - f. 1. Shall be commercial neutral liquid type especially prepared for marble work
 - f. 2. Shall have a Ph factor between 7 and 9
 - f. 3. Shall be free from crystallizing salts or water soluble alkaline salts
 - f. 4. Shall be biodegradable and phosphate free

INSTALLATION OF DOORS / GLASS PANELS

1. Surface Preparation

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

DOORS

- D-1 - Frameless 12 mm Thk. Reflective Tempered Glass Double Leaf Door
(1.60m x 2.70m)
- D-2 - Frameless 12 mm Thk. Clear Glass Double Leaf Door
(1.70m x 2.15m)
- D-3 - Frameless 12 mm Thk. Clear Glass Door
(0.90m X 2.15m)
- D-4 - Marine Plywood Painted Finish Double Leaf Flush Door
(1.50m X 2.15m)
- D-5 - Marine Plywood Painted Finish Flush Door with 8mm thk. Fixed Clear
Tempered Glass (0.90m X 2.15m)
- D-6 - Marine Plywood Painted Finish Flush Door
(0.90m X 2.15m)
- D-7 - Marine Plywood Painted Finish Flush Door with Louver
(1.10m X 2.15m)
- D-8 - Marine Plywood Painted Finish Flush Door with Louver
(0.90m X 2.15m)
- D-9 - Marine Plywood Painted Finish Flush Door with Louver
(0.80m X 2.15m)
- D-10 - Coled Rolled Steel Emergency Exit Door in Quick Drying Enamel Finish
With Panic Push Bar Lock (1.1m. x 2.15m.)
- D-11 - Steel Door with 25mm dia. Round Bars
(0.9m. x 2.15m.)
- D- 12 - Powder coated aluminum louvered Double Leaf Door
(0.8m. x 1.2m.)

GLASS PANEL

- GP – 1 - Frameless 12 mm Thk. Clear Tempered Glass Partition
(1.6m. x 2.15m.)
- GP- 2 - Frameless 12 mm Thk. Frosted Tempered Glass Partition
(1.6m. x 2.15m.)
- GP- 3 - Frameless 12 mm Thk. Clear Tempered Glass Partition
(0.475m. x 2.15m.)
- GP- 4 - Frameless 12 mm Thk. Clear Tempered Glass Partition
(0.35m. x 2.15m.)
- GP -5 - Steel Wall with 25mm dia. Round Bars

(2.19m. x 2.15m.)

GP -6 - Steel Wall with 25mm dia. Round Bars
(2.85m. x 2.15m.)

INSTALLATION OF WINDOWS

1. Surface Preparation

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

W-1 - 1.5mm thk. Aluminum Framed Powder Coated Fin. With 10mm Thk. Reflected Tempered Glass Fixed & Awning Window
(3.50m X 2.20m)

W-2 - Frameless 12 mm Thk. Reflective Tempered Glass Fixed Window
(3.25m X 2.70m)

W-3 - Frameless 12 mm Thk. Reflective Tempered Glass Fixed Window
(0.825m X 2.70m)

W-4 - 1.5mm thk. Aluminum Framed Powder Coated Fin. With 10mm Thk. Reflected Tempered Glass Sliding Window
(3.50m X 1.65)

W-5 - 1.5mm thk. Aluminum Framed Powder Coated Fin. With 10mm Thk. Reflected Tempered Glass Sliding Window
(1.60m x 1.65m)

W-6 - 1.5mm thk. Aluminum Framed Powder Coated Fin. With 10mm Thk. Reflected Tempered Glass Sliding Window
(1.1m. x 1.65m.)

W-7 - 1.5mm thk. Aluminum Framed Powder Coated Fin. With 8mm Thk. Reflected Tempered Glass Awning Window
(1.9m. x 0.5m.)

W-8 - 1.5mm thk. Aluminum Framed Powder Coated Fin. With 8mm Thk. Reflected Tempered Glass Awning Window
(1.3m. x 0.5m.)

W-9 - Steel Window with 25mm dia. Round Bars
(1.1m. x 0.5m.)

Mirror Glass

Mirror glass shall be of high quality float glass free from imperfections and impurities, 6.3 mm (1/4 inch) thick. Silvering shall be performed by modern

continuous operation under controlled conditions. The coating shall be of pure silver and of adequate thickness to provide reflectivity of 83% or more of incident light, and shall be without pinholes or other defects visible to the naked eye.

Refer to plans for locations, dimensions and details.

ITEM 29b : INDENT ORDERS**GENERAL NOTES**

The contractor should observe special consideration to indent order items that require longer lead time and checking of material availability under specified conditions of sale, the acceptance of which by the supplier constitutes a contract of sale.

The following are listed as the indent items:

- 20mm thick Phenolic Toilet Partition and accessories
- Roofing
- Aluminum Composite Panels (including Honeycomb design Aluminum panels and Brise soleil)
- Photoluminescent Signs and markings
- Tempered Glass Panels (Low-E Glass)
- Elevator and Escalator
- Gang Chairs
- Green Wall System
- Signages and logos
- UPVC Baffle Ceiling

ITEM 29c : PAINTING**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

This Section covers the surface preparation, coating materials and application of coatings systems required for the Works.

The work shall consist of furnishing of all labor, materials, equipment and other incidentals necessary for the supply of painting materials and the complete painting of surfaces as shown on the drawings in accordance with this Specification and as directed by the Project-In-Charged.

The term paint as hereinafter used includes emulsion paints, varnishes, oils, pigments, thinner and dryers.

All exposed metal surfaces, except metal surfaces embedded in concrete, shall be painted unless otherwise specified.

STANDARD

The following publications listed below, but referred to thereafter by basic designation only, forms a part of these Specifications to the extent indicated by the reference thereto:

Steel Structures Painting Council (SSPC) U.S. Specification JIS K 5628 Red-lead Zinc Chromate Anti-Corrosive Paint.

SUBMITTAL

1. The Contractor shall submit work method statements with lists of materials to the Project-In-Charged for approval twenty eight days before the starting of works. This statement shall include following items:
 - a. Type of paint and manufacturer
 - b. Manufacturer's specifications
 - c. Storage and delivery of materials
 - d. Surface preparation
 - e. Finish painting and drying
 - f. Touch-up painting, if any
 - g. Equipment
2. The Contractor, before placing order for the painting materials, shall submit to the Project-In-Charged for approval samples of materials. No placing of orders for material shall be made without his approval.

STORAGE AND DELIVERY

1. The Contractor shall deliver all material to the site in the original labeled sealed cans and containers, with labels intact and seal unbroken.
 - a. Seals shall remain unbroken until after inspection and acceptance of material by the Project-In-Charged.

- b. The Contractor shall deliver materials in ample quantities sufficiently in advance of the need to avoid any delay or interruptions in the works.
- 2. Paint in thinner shall be stored in accordance with the approved manufacturer's instructions.
 - a. All regulations required for storage of paint shall be observed and all necessary safety signs required by governing codes shall be posted.
 - b. Any damage caused by failure to exercise proper precautions in paint storage shall be repaired.

MATERIAL REQUIREMENTS

PAINT

Paints for the protective coating system shall be the product of a manufacturer approved by the Project-In-Charged.

Paints for exterior finish must be with tile like durability and elegance, fast drying, solvent based acrylic, highly suitable for coastal or polluted areas with excellent anti-fungus properties and alkali resistance.

100% Acrylic, water based, quick-drying, easy to clean-up and environmentally friendly, resist dirt, stains, alkali, water, humidity, algae, mold and mildew growth and highly durable paint for interior finish.

An all-purpose synthetic quick dry paint for all types of wood and metal surfaces. It has high gloss, good color retention and outstanding durability.

For pipes, valves and equipment, galvanized and ungalvanized ferrous metal, use a 100% acrylic gloss paint, has excellent resistance to ultraviolet rays and resists chalking, cracking and color fading, dries fast and environmentally friendly.

SCHEDULE OF PAINTING

Architectural Items	
a. Exterior Finishes	
1. On Concrete Walls	
Three Coats, Concrete Masonry Paint	Elastomeric Paint or approved equal
2. Unprimed Ferrous Metal	
First Coat	Red Oxide Primer, #310 or approved equal
Second & Third Coat	Quick Dry Enamel or approved equal
3. On Concrete Block Wall	
Masonry Neutralizer	Masonry Neutralizer #44 or approved equal
Three Coats	Elastomeric Paint

Concrete Masonry Paint	or approved equal
4. On Wood	
First Coat Exterior Wood Primer	Flatwall Enamel or approved equal
Second & Third Coat Exterior enamel	Quick Drying Enamel or approved equal
b. Interior Finishes Location of the various finishes are listed in the Finish Schedule on the drawings or else will be confirmed by PPA	
1. On primer and coated metal two coats of interior semi-gloss enamel or as indicated in the Schedule finish	Red Oxide Primer #310, Quick Dry Enamel or approved equal
2. On Plaster	
First Coat	Masonry Neutralizer #44 or approved equal
Three Coats	Elastomeric Paint or approved equal
3. On Wood	
First Coat Enamel undercoater	Flatwall Enamel or approved equal
Second & Third Coat Exterior enamel	Quick Drying Enamel or approved equal
4. Wood Stain Finish	
First Coat Second & Third Coats Fourth & Fifth Coats	Oil Wood Stain , Lacquer Sanding Seale #1254 Clear Gloss Lacquer #1250 or approved equal
c. Non – Architectural Items (Piping, valves, equipment, etc.)	
1. Piping, valves, equipment etc. in rooms are to be painted	
2. Galvanized pipes and ducts	
Primer – one coat	Red Oxide Primer, #310 or approved equal
Finish – one coat	Quick Dry Enamel or approved equal
3. Black steel pipes	
Primer – one coat	Red Oxide Primer, #310 or approved equal
Finish – one coat	Quick Dry Enamel or approved equal
4. Mechanical Items	
a. Ungalvanized ferrous metal	
Primer – one coat	Red Oxide Primer, #310 or approved equal
Finish – one coat	Quick Dry Enamel or approved equal or approved

	equal
b. Galvanized ferrous metal Primer – one coat Finish – one coat	Red Oxide Primer, #310 or approved equal Quick Dry Enamel or approved equal or approved equal
c. Submerged galvanized ferrous metal Primer – one coat	Red Oxide Primer, #310 or approved equal
d. Buried miscellaneous ferrous surface valves, & flanged joints (excl. pipe) Primer – one coat	Red Oxide Primer, #310 or approved equal

EXECUTION

SURFACE PREPARATION OF STEEL

1. Steel surfaces shall be cleaned as follows:
 - a. All round welds, burrs and sharp surface projections shall be ground smooth and all weld splatter shall be removed prior to blast cleaning.
 - b. Sand abrasives, if used, shall be clean, and free from salt and extraneous matter. The sand shall pass through a 2.0mm test sieve, and be substantially retained on a 0.18mm test sieve, with at least 25 percent retained on a 0.355mm test sieve.
 - c. Metallic abrasive, if used, shall be sharp, hard and free from dust, and shall pass through a 1.8 mm test sieve.
 - d. Blast cleaning operations shall not be conducted on surfaces that will be wet after blasting and before coating, or when the surfaces are less than 10°C above degree points, or when the relative humidity of the air is greater than 95 percent.
 - e. Any oil, grease, soil, dust or other foreign matter deposited on the cleaned surfaces shall be removed prior to painting. In the event that rusting occurs after completion of the surface preparation, the surfaces shall be cleaned again in accordance with the specified method.
 - f. Particular care shall be taken to prevent the contamination of other corrosive chemicals before the application of the paint. Such contamination shall be removed from the cleaned surface by flash blasting and the paint applied immediately.
 - g. Care shall be taken to prevent contamination of cleaned and painted surfaces by cleaning operations in an adjacent area.
 - h. Surfaces not to be painted shall be suitably protected from the effects of cleaning and painting operations.

SURFACE PREPARATION OF WOOD

1. Wood surfaces shall be sanded to a fresh surface. Surface mould where present, shall be removed by washing, rubbing down and burning off as necessary. Resinous exudation

and large knots shall be removed and replaced with filler or other materials approved by the Project-In-Charged.

2. Parts of timber to be enclosed in walls shall always be primed unless already impregnated. Priming shall be brushed on and a minimum of two coats applied to end grain. When the priming paint is hard, all cracks, holds, open joints, etc. shall be made good with hard stopping and rubbed down with fine abrasive paper. Priming of joinery shall be applied only on site after the Project-In-Charged has approved such joinery and before it is fixed. For internal surfaces primer coats shall be carefully flattened.

SURFACE PREPARATION OF CONCRETE AND PLASTER

Concrete and cement plaster surfaces to be painted shall be prepared by removing efflorescence, dust, dirt, grease, oil, asphalt, tar, excessive mortar and mortar dropping and by roughening to remove glaze. A zinc sulfate solution shall be applied before prime coat.

SURFACE PREPARATION FOR FIBER CEMENT SURFACES

Shall be dry and clean prior to application of the specified first-coat material. Oil, grease, or rust stains shall be carefully removed by the use of suitable solvent. Wire brushing will not be permitted. After the first coat has become dry and prior to application of finish coats, touch-up coats shall be applied to suction spots.

ALUMINUM FRAMES FOR DOORS AND WINDOWS

All metal surfaces shall undergo pre-treatment process which includes: desmutting, water-rinsing, degreasing/etching, water rinsing, zinc phosphating, water rinsing and acid rinsing.

Powder coating application, shall be factory applied and shall be done in one operation using an electro-static powder gun. The materials to be coated should be well connected to earth. Coating thickness should be kept to a minimum of 60 microns for exposed areas. On details which are to be treated mechanically after coating (drilling, sawing, etc.), the coating film must not exceed 100 microns.

The powder coating shall be oven cured in the range of 20 minutes at 220° C (metal temperature measured on the area with greatest metal thickness). The temperature variation in the oven should not exceed +/- 10° C.

Handling

Coated items should be cooled to no less than 40° Centigrade before handling. Precautions should be taken to avoid damages on the finished coating during stacking, storing and transportation.

Storage and Delivery

Inspect materials delivered to the site for damage. Unload and store with minimum handling. Provide storage space in dry location with adequate ventilation, free from dust or water and easily accessible for inspection and handling. Store materials neatly on the floor, properly stacked on non-absorptive strips or wood platforms. Protect finished surfaces during shipping and handling using manufacturer's standard method.

WOOD REPAIR

Badly decayed areas shall be removed and repaired. Areas and pieces decayed beyond repair shall be replaced with new pieces that match originals in all respects. Moderately decayed areas, weathered, or gouged wood shall be patched with approved patching compounds, and shall be sanded smooth. The source or cause of wood decay shall be identified and corrected prior to application of patching materials. Wet wood shall be completely dried to a moisture content not exceeding 12 percent, as measured by a moisture meter, to its full depth before patching, unless otherwise authorized. Wood that is to be patched shall be clean of dust, grease, and loose paint.

1. Epoxy Wood Repair

Epoxy wood repair materials shall be applied in accordance with manufacturer's written instructions. Health and safety instructions shall be followed in accordance with the manufacturer's instructions. Clean mixing equipment shall be used to avoid contamination. Mix and proportions shall be as directed by the manufacturer. Batches shall be only large enough to complete the specific job intended. Patching materials shall be completely cured before painting or reinstallation of patched pieces.

2. Epoxy Consolidant and Epoxy Paste

Epoxy liquid wood consolidant shall be used:

1. To penetrate and impregnate deteriorated wood sections in order to reinforce wood fibers that have become softened or absorbent.
2. As a primer for areas that are to receive epoxy paste filler. Epoxy paste shall be used to fill areas where portions of wood are missing such as holes, cracks, gaps, gouges, and other voids.

MIXING AND THINNING

Mixing and thinning of paint shall be done in accordance with the approved manufacturer's printed instructions. The pot life of each paint as stated by the manufacturer shall not be exceeded.

WEATHER CONDITION

The paint shall not be applied when the relative humidity is above 85 percent. The paint shall not be applied in rain, wind, fog, dust or mist.

APPLICATION

Workmanship shall be first class in every respect. All work shall be done in a workmanship manner so that the finished surfaces shall be free from runs, chop, ridges, waves, laps and unnecessary brush marks. All coats shall be applied in such manner as to produce an even film of uniform thickness. Edges, corners, crevices, welds and rivets shall receive special attention to ensure that they receive an adequate thickness of paint.

All painting shall be done by thoroughly experienced workmen.

Safety regulations shall be adhered to at all times, including the wearing of respirators by persons engaged on assisting in spray painting. Adjacent areas and installation shall be protected by the use of cloths or other approved precautionary measures.

Plain enamel and varnish shall be applied carefully with good clean brushes or approved spraying equipment, except that the initial coat on any surface shall be applied with brush.

Sufficient time shall be allowed between coats to assure thorough drying and each coat shall be in proper condition before receiving the next coat.

Sanding and dusting as required shall be performed between coats in varnishing work. Finish coat shall be smooth and free from runs, sags, and other defects. Exterior paint shall not be applied during rainy days.

All paint when applied shall provide a satisfactory film and smooth, even surface. Paint shall be thoroughly stirred and kept at a uniform consistency during application. Powdered metallic pigments added at the time of use shall be mixed by adding the powder in small increments to about one-third of the base paint or vehicle, with thorough mixing to obtain a smooth paste. The remainder of the base paint shall then be thoroughly stirred in.

Different brands of emulsion paints shall not be mixed prior to application of the materials.

Where necessary to suit conditions of surface temperature, weather and method of application, the package paint may be thinned immediately prior to application in accordance with the approved manufacturer's directions, but not in excess of 125 cc of suitable thinner per liter (one pint per gallon). Before using, the paint shall be mixed to a uniform consistency and shall be stirred frequently during application.

Paints other than water-thinned paints shall be applied only to surfaces which are completely free of moisture as determined by sight or touch and only such combinations of humidity to be painted as will cause evaporation rather than condensation.

Surfaces which have been cleaned, pretreated and/or otherwise been prepared for painting shall be primed or painted with one coat of finish paint as soon as practicable after such preparation has been completed, but in any event prior to any deterioration of the prepared surfaces.

The first coat of paint on all exterior surfaces shall be applied by brush. Interior prime coats and all other subsequent coats on either exterior or interior surfaces may be applied by brush or spray. Whenever spraying is permitted all areas inaccessible to spray painting shall be coated by brushing or other suitable means. Brushes to be used for application of water-emulsions shall be soaked in water for a period of 2 hours prior to use.

All cloths and cotton waste which might constitute a fire hazard shall be placed in closed metal containers or destroyed at the end of each day.

Upon completion of the work, all staging, scaffolding, and containers shall be removed from the site or destroyed in a manner approved by the Project-In-Charged. Paint spots, or stains upon adjacent surfaces shall be removed and the entire job left clean and acceptable to the Project-In-Charged.

No smoking shall be permitted in the vicinity where painting is going on.

TOUCH-UP PAINTING

Touch-up painting shall be done with the same paint as used for the original coat. The resulting minimum dry film shall be the same as for the original coat.

Touch-up painting shall include cleaning and painting of field connections, welds and all damaged or defective paint and rusted areas.

During touch-up painting, only loose, cracked, brittle or non-adherent paint shall be removed during cleaning. All exposed edges shall be feathered. Touch-up painting shall be performed in a

manner which will minimize damage to sound paint. Rust spots shall be thoroughly cleaned and edges of the existing paint shall be scraped back to sound material.

DRYING

1. No primer or paint shall be forced to be dried under conditions which will cause cracking, wrinkling, blistering, formation of pores which would detrimentally affect the condition of the paint.
2. No drier shall be added to the paint unless specified in the approved manufacturer's instructions.
3. Painted surfaces shall be protected from dust, dirt, and the elements of the weather until dry to the fullest extent practicable.
4. After drying, any areas of paint damaged from any cause shall be removed, the surface again prepared and then touched-up with the same paint and to the same thickness as the undamaged areas as specified in sub-section 4.14.3.7 above.

HANDLING

1. Precautions shall be taken to minimize damage to paint films resulting from stacking for drying.
2. Paint which is damaged in handling shall be scraped off and touched-up with the same paint and in the same thickness as was previously applied to the damaged area at Contractor's expense.

INSPECTION

1. All works and materials supplied under this Specification shall be subject to inspection by the Project-In-Charged.
2. The Contractor shall correct such works or replace such materials found defective under these Specifications at his own expense.

ITEM 29d : MODULARS, TABLES AND CHAIRS OF VARIOUS TYPE INCLUDING ACCESSORIES**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 consist of furnishing all labor, materials, equipment, tools and incidentals necessary to undertake, complete supply of gang chairs for the buildings as indicated on the drawings and as specified herein.

MODULARS	Unit	Quantity
L-shaped table	set	9.00
Executive L-shaped table	set	4.00
Office partition with table (6pax) Table: 1500mm X 750mm Partition Ht: 1200mm	set	3.00
Office partition with table (3pax) Table: 1500mm X 750mm Partition Ht: 1200mm	set	3.00
Office Partition with glass 3275 mm Length X 1500 mm Height	set	1.00
Office partition with table (2pax) Table: 1500mm X 750mm Partition Ht: 1200mm	set	7.00
Office partition with table (4pax) Table: 1500mm X 750mm Partition Ht: 1200mm	set	7.00
Conference Table 1800mm X 3410mm	set	2.00
Reception Desk 3000mm X 1000mm	set	1.00
Center table	set	4.00
Bunk Bed	set	45.00
Closet (0.50m x 0.80m)	set	41.00

Twin Bed	set	4.00
Bed Side Table	set	8.00
High Back Chair	set	26.00
Kitchen Sink	set	7.00

SUBMITTAL

1. Shop drawings for all gang chair for the building shall be submitted in advance to allow twenty eight days for review and approval. Shop drawings shall indicate materials and details of finishing works. The Contractor shall be responsible for all errors of detailing and fabrication, and for the correct finishing work items shown on the shop drawings.
2. The Contractor, before placing order for the supply shall submit to the Engineer for approval representative samples of finishing materials. No placing of orders for material for finishing works shall be made without his approval.

EXECUTION

All materials will be delivered and installed (if needed to be installed) on site.

ITEM 29e : ALUMINUM PERFORATED CEILING PANEL**GENERAL**

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

SCOPE OF WORKS

This Item covers the use of aluminum panel as perforated ceiling panel and shall consist of furnishing and installing materials, tools, labor and equipment necessary for aesthetic purposes as indicated on the Plans and in accordance with this Specifications.

Material Requirements**Aluminum**

The aluminum shall be high strength, heat-treatable alloy which provides good formability and weldability and good corrosion resistance. It shall be suitable for a wide variety of architectural applications and of commercial quality unless specified in the Plans. It shall conform to the applicable requirements of ASTM B 209M, Standard Specification for Aluminum and Aluminum Alloy Sheet and Plate.

Thickness

Thinner material perforate easier and faster. It shall have a gauge thickness tolerance of + 0.2 mm.

Panel Shape and Size

Panel shape and sizes shall be as indicated in the Plans or as approved by the Engineer.

Aluminum panels shall be equipped with perimeter welded metal frames, return edges, borders mounting holes attachment brackets and clips. It shall be dimensioned as indicated on the Plans and as approved by the Engineer with a width and length tolerances of + 2.0mm and + 4.0 mm respectively.

Perforations**Shape and Size**

The shape of perforations shall be as indicated on the Plans using the standard shapes

Size : 1200mm X 600mm, T = 0.70mm

Hole Diameter : 2.0mm

Weight : 1.94 kg/ sqm

Powder Coated Finish : Bone White Color with Black tissue felt in- fill to prevent penetration of dust.

In any cases that a custom shape perforations is needed for functional requirement spacing and size of perforation shall be provided.

The hole diameter should not be less than the thickness of the aluminum panel.

Pattern

Staggered pattern perforations shall have an unfinished end pattern that appears incomplete at both ends of the sheet.

For staggered perforations both Round and Square the pattern stagger shall be in the short dimension of the sheet. Holes in a straight row pattern shall be parallel to long dimension of sheet.

Slotted Perforation - Slots shall be identified if to be furnished parallel with either the length or width of the sheet.

Margin

The "margin" on a perforated sheet or plate refers to the distance from the edge of the sheet to the first perforation along the same dimension. "No margin" refers to the last row or set of perforations extending off the sheet or plate.

The long side of a sheet shall be supplied with minimum margins. The short side of a sheet will have either minimum margins or no margins.

Construction Requirements

Installation

Install in accordance with manufacturer's installation instructions and approved shop drawings.

1. Level the ceiling height by the use of water level or laser beam.
2. Perimeter trims shall be installed using screw, nails or other applicable fasteners depending on wall type.
3. The ceiling shall be set out from the center to the perimeter wall. The center to center spacing for Triangle Keel shall be 600mm.

4. The maximum distance from the wall to first suspension part shall be 600mm.
5. The Suspension Part Twin Clamps (together with drop –in anchor installed at the concrete slab) shall be spaced 600mm on center

Note :

The end of the threaded bolt shall be spaced on the drop – in anchor and the other end shall be attached to the suspension Party Twin Clamps using nuts.

6. Tringle Keel shall be attached to the Suspension Part Twin Clamps.
7. When the accessories have been installed, adjustment shall be made to ensure that the whole suspension ceiling is leveled.
8. Slightly push the Aluminum Ceiling Panel upward the ends of the panel until it rest with the triangle keel.

Inspection

When items not meeting specification requirements are discovered, their existence shall be called to the attention of the manufacturer prior to installation. Possible use of such items may be adjudicated among the responsible parties involved, based on the nature of the deficiency and the effect on the performance of the ceiling.

When rejection occurs, the manufacturer shall have the right to examine the rejected material. After removal of the portion not conforming to the specification, resubmission of the lot shall be permitted.

The inspection of specific ceiling areas for acceptability shall be made with lighting conditions corresponding to that of final building occupancy. If temporary lighting must be used, care shall be taken to position lights such that temporary conditions will approximate the final lighting condition.

ITEM 29f : SUPPLY AND INSTALL OF PHOTOLUMINESCENT SIGNS AND MARKINGS**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 consist of furnishing all labor, materials, equipment, tools and incidentals necessary to undertake, complete supply and install of photoluminescent signs and markers for the buildings as indicated on the drawings and as specified herein.

PHOTOLUMINESCENT SIGNS AND PATH MARKERS

Signs and markers are designed to be used in and about buildings to identify and ensure visibility escape routes for compliance with the performance based on Codes (Building & Fire Codes). The signs will be clearly visible and readily understandable under all conditions of foreseeable use, including emergency conditions.

SUBMITTAL

1. Shop drawings shall be submitted in advance to allow twenty eight days for review and approval. Shop drawings shall indicate materials and details of finishing works. The Contractor shall be responsible for all errors of detailing and fabrication, and for the correct finishing work items shown on the shop drawings.
2. The Contractor, before placing order for the finishing materials shall submit to the Project- In - Charged for approval representative samples of finishing materials. No placing of orders for material for finishing works shall be made without approval.

MATERIALS

Running Man Arrow Up/Left/Right

Pictogram (392mm X 223mm)

Bracket: Ceiling Mount (420mm X 230mm)

Bracket: Flag Mount (230mm X 133mm)

Double Sided Pictogram Directional (392mm X 223mm) /(480mm X 280mm)

Fire Extinguisher Sign

Fire Hose Sign

Fire Alarm Sign

Break Glass Sign

Evacuation Map

Path Markers

Guidance Strip

Handrail Strip

Step Edging

Exit Down Stairs

EXECUTION

INSTALLATION

For versatility the signs and markers can be installed using fixers (screws) or adhesive tape.

The installation method used should be determined by the condition of installation surface screws should be used if there is any doubt about adhesion.

ITEM 30 : FINISHES FOR GATE AND GUARDHOUSE**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 consist of furnishing all labor, materials, equipment, tools and incidentals necessary to undertake, complete all finishing works and painting for the buildings as indicated on the drawings and as specified herein.

Wall, floor, ceiling and other finishing works shall include but are not limited to the following:

WALLS**Guard House**

1. Exterior
 - a. Plain cement finish painted with elastomeric paint.
2. Interior
 - a. Plain cement finish painted with elastomeric paint.

Guard House

1. 600mm x 600mm ceramic unglazed tiles (F1)
2. Waterproof finish for roof deck (F2).

Guard House

1. 13mm thick gypsum board painted on 0.40mm thick galvanized steel ceiling suspension system at 400mm on center (C1)
2. Painted finish underside of RC Slab (C2)

SUBMITTAL

1. Shop drawings for all finishing and painting works for the building shall be submitted in advance to allow twenty eight days for review and approval. Shop drawings shall indicate materials and details of finishing works. The Contractor shall be responsible for all errors of detailing and fabrication, and for the correct finishing work items shown on the shop drawings.
2. The Contractor, before placing order for the finishing materials shall submit to the Engineer for approval representative samples of finishing materials. No placing of orders for material for finishing works shall be made without his approval.
3. Samples of all walls finishes, measuring not less than 1000mm x 1000mm shall be

submitted to the Engineer for approval as to its finish texture and workmanship.

MATERIAL REQUIREMENTS

WALL FINISHES AND COUNTERTOPS

1. Plain Cement Finish
 - a. Sand shall be clean and hard material. Sand shall be free from deleterious substances and conforming with the requirements of ASTM C 33.
 - b. Cement shall be Portland cement conforming with the requirements of ASTM Designation C 150.
 - c. Water shall be clean and potable.
 - d. Bonding compound shall conform to ASTM C 631.
 - e. Hydrate lime shall conform to ASTM C 206.
 - f. Synthetic fibrous reinforcement shall conform to BS 5139 or ASTM C 1116.
2. Wall Ceramic Tiles
 - a. Wall tiles shall be glazed ceramic tiles color as per Architect's approval.
 - b. Trimmers and moulding shall be lustrous, glazed with size and color corresponding to wall tiles.
 - c. Portland cement, sand, bonding compound, lime and water shall conform with the requirements.
3. Granite Tiles
 - a. Black granite slabs for toilet countertops, fascia and splashboard. Dimensions as shown on the drawings.
 - b. Shall be sound material with uniform and favorable working qualities and with very limited natural faults.
 - c. Color, veining and quality shall be approved by Engineer.
 - d. Veining shall run vertically on all vertical surfaces and direction of veining shall continue in same directions over horizontal surfaces except as directed by the Engineer.
 - e. Sealer
 - e. 1. Shall be a commercial penetrating type free from harmful alkali or acid content specially prepared for marble work
 - e. 2. Shall have a Ph factor between 7 and 9
 - e. 3. Shall not discolor
 - e. 4. Shall produce a slip resistant surface
 - e. 5. Shall have a flash point not less than 35 °C
 - f. Cleaning fluid
 - f. 1. Shall be commercial neutral liquid type especially prepared for marble work
 - f. 2. Shall have a Ph factor between 7 and 9
 - f. 3. Shall be free from crystallizing salts or water soluble alkaline salts

- f. 4. Shall be biodegradable and phosphate free

FLOOR FINISHES

1. **Vitrified Ceramic Unglazed Tiles**
 - a. Vitrified ceramic unglazed floor tiles shall be color varies and as shown on the drawings or to be designated by the Architect.
 - b. Portland Cement, sand and water shall conform with the requirements.
 - c. Vitrified ceramic unglazed floor tiles shall be delivered in the manufacturer's original unbroken packages or containers that are labeled plainly with the manufacturer's name and brand. Containers shall be grade scaled. Materials shall be stored in dry weathertight enclosures, and shall be handled in a manner that will prevent the inclusion of foreign materials and damage by water or dampness.
2. Non-skid floor finished shall be applied to ramps.
3. Waterproof finish for all toilets and baths.

EXECUTION

WALL FINISHES

1. **Plain Cement Finish**
 - a. **Preparation of Surfaces**

All surfaces shall be cleaned and projections, dust, loose particles and other materials, which would prevent good bond, shall be removed.

Plaster shall not be applied directly to concrete and masonry surfaces coated with bituminous compounds and surfaces previously painted or plastered.

All surfaces shall be thoroughly wetted before plastering.
 - b. **Trial Mix**

A trial mix of at least three (3) different water-cement ratios for a proposed mix shall be prepared under full scale conditions and adequate workability. The proportions by weight of cement to the weight of sand shall not be less than one part of Portland cement to two parts of sand.

The proportion of cement-sand and water necessary to produce the cement plaster of the required consistency shall be subject to the approval of the Engineer. Such approval may be withdrawn at any time and a change in proportions may be required. Based on the approved mix proportions, the Contractor shall prepare a list showing the number of kilograms of the various materials to be used in the cement plaster finish mix.

No cement plaster finish shall be started without an approved trial mix by the Engineer.

c. **Cement Finish Application**

A brown coat with sufficient pressure shall be applied to fill the gaps, and to secure a good bond. Moistened for 48 hours, each coat of cement plaster shall be kept after application and allow to dry.

A finish coat shall be applied after the brown coat has set. The brown coat shall be moistened before application of the finish coat. Finish coat shall be floated to plumb, even planes and surfaces.

Final plaster finishes shall be rubber sponged.

d. **Tolerance**

The Contractor shall finish plaster work plumb, level, square and true within tolerance of 3mm in 3 meters, without cracks and other imperfections.

e. **Patching and Cleaning**

Upon completion of the building, and when directed, all loose, cracked, damaged or defective plastering shall be cut out and re-plastered in a satisfactory and approved manner.

2. **Wall Tiles**

a. **Mortar Preparation**

All mortar setting beds shall be mixed by volume in the proportion of 1 part Portland cement and 3 parts dry sand and not more than 1/10 part hydrated lime.

Mortar materials shall be measured in approved containers, which will insure that the specified proportions of materials will be controlled and accurately maintained during the progress of the work. Measuring materials with shovels, "shovel count", will not be permitted. Unless specified otherwise, mortar shall be mixed in proportions by volume, in an approved mortar box.

The quantity of water shall be controlled accurately and uniformly. The aggregates shall be introduced and mixed in such manner that the materials will be distributed uniformly throughout the mass. A sufficient amount of water shall be added gradually and the mass further mixed until a mortar of the elasticity necessary for purpose intended is obtained. Mortar boxes, pans and wall surfaces shall be kept clean and free from debris or dried mortar. The mortar shall be used before the initial set of the cement has occurred. Re-tempering of mortar in which cement has started to set will not be allowed.

b. **Application of Wall Tile**

Interior masonry shall be clean, thoroughly dry, sound and sufficiently rough to provide strong mechanical bond. Surfaces shall be evenly damped immediately prior to the application of the scratch coat.

Scratch coat shall be applied to masonry, as backing for wall tile, not less than 24 hours or more than 48 hours before starting the tile setting. The scratch coat shall not be less than 6 mm from the face of the masonry. The scratch coat shall be applied with sufficient pressure to ensure a proper bond with the base for the setting bed. While the mortar is still plastic, the scratch coat shall be cut with a trowel at all internal vertical angles for the depth of the coat with the full height of the tile

bed and shall be cross-scratched, in 25 mm centers for the extent of the tile bed.

Immediately before the application of mortar setting bed, the scratch coat shall be moistened thoroughly but not saturated. Temporary screeds shall be applied to the scratch coat with mortar to provide a true and plumb surface, the proper distance back from the finished wall line. The setting bed shall be applied, rodded and floated flush with the screeds over an area not greater than the area to be covered with the tile while the bed remains plastic. The thickness of the setting bed shall not exceed 15mm and the mortar shall not be re-tempered. The setting bed shall be cut with a trowel at all internal corners as specified for the scratch coat.

Mounted tiles shall be soaked in clean water a minimum of one hour before they are set. Absorptive mounted tiles shall be damped by placing sheets on a wetted cloth in a shallow pan before setting. A skim coat of neat Portland cement mortar, mixed with water to the consistency of a pasty, thick cream, shall be applied 0.8mm to 1.6mm thick to the mortar setting bed, or to the back of each tile as laid. The tiles shall then be pressed firmly on the setting bed and tamped until flush and in the plane of the other tiles. The tiles shall be applied before the mortar bed has taken its initial set.

Intersections and returns shall be formed accurately. Where cutting of tiles is necessary it shall be done at the internal angles of the walls or wainscots. Cutting and drilling tiles shall be done neatly without marring the surfaces. The cut edges of tiles against trim, built-in fixtures, and similar surfaces shall be ground and jointed carefully. The tiles shall fit closely with plumbing fixtures and around electric outlets, pipes and fittings, so that the plates or escutcheons will properly overlap the tiles. Wainscots shall be within one half of the heights indicated without cutting of the tiles.

Bases, caps, bull-nose corners, and all other trimmers moulded or shaped features, and accessories shall be backed thoroughly with mortar and set firmly into place. All lines shall be kept straight and true, and all finished surfaces brought to true and even planes, straight and plumb, and internal corners squared and external corners rounded.

Horizontal joints shall be maintained level and vertical joints plumb and in alignment. The completed work shall be free of broken, cracked, damaged or otherwise faulty tiles.

Joints shall be parallel and uniform in width, plumb, level and in alignment. End joints in broken-joint work shall be made as far as practicable, on the center line of adjoining tiles. Except in special arrangement and design, as indicated or specified, square tiles shall be set with straight joints, and oblong tiles shall be set with broken joints.

Joint widths shall be uniform and spaced to accommodate the tile in the given spaces with a minimum of cutting. Tiles shall be wetted, if they have become dry, before applying grout. Joints 3mm or less in width shall be grouted with a neat Portland cement grout of the consistency of thick cream. Other joints shall be pointed with mortar consisting of one part Portland cement and two parts pointing sand. The grout for walls and other vertical surfaces shall contain non-staining white Portland cement. Grout and pointing mortar shall be forced into joints by using trowel, brush or finger application.

Before the grout or mortar sets, the joints of cushion edge tiles shall be struck or tooled to the depth of cushion, filling all skips or gaps, and the joints of square edge tiles shall be filled completely flush with their surface. Dark cement shall not show

through grouted white joints. Care shall be taken to avoid scratching glazed finishes. All mortar or grout shall be removed before it has set or hardened.

c. Cleaning and Curing

All completed tile work shall be thoroughly sponged and washed diagonally across joints, and finally polished with clean, dry cloth. Acid cleaning of unglazed tile, when necessary, shall not be done within ten days after setting tile. All metal shall be covered with an approved grease and the tile shall be wetted with clean water, before tile is cleaned with 10% muriatic acid solution. After acid cleaning, the tile shall be flushed with clean water, and the grease coating on metal shall be removed. Acid cleaners shall not be used on glazed tile.

d. Protection

Tiled walls outside corners (external angles) shall be protected with board corner strips in areas used as passage ways by workmen. Extreme care should be taken not to disturb wall tiled until mortar has fully set.

3. Painting Works

a. Surface Preparation

Allow new masonry to dry for 14 days (for exterior surfaces) to 28 days (for interior surfaces) under normal conditions before painting. Surface to be painted should be clean and dry, free from oil, grease, dirt, dust, contaminants, and all loose grit and mortar.

Without mesh:

1st Coat: Elastomeric Wall Covering Sealer

2nd and 3rd Coat: Elastomeric Wall Covering Basecoat

4th Coat: Elastomeric Wall Covering Topcoat

With mesh:

1st Coat: Elastomeric Wall Covering Sealer

2nd Coat: Elastomeric Wall Covering Basecoat
Reinforcing Membrane: Fiberglass Matting

3rd and 4th Coat: Elastomeric Wall Covering Basecoat

5th Coat: Elastomeric Wall Covering Topcoat

FLOOR FINISHES

1. Vitrified Ceramic Tiles

a. Mortar Preparation

Mortar mix proportion and preparation shall be in accordance with the requirements.

b. Surface Preparation

Surfaces to receive the tiles shall be clean, free of dust, dirt, oil, grease, and other deleterious substances. Floor tile operations in spaces receiving wall tile shall not be started until wall tile installation has been completed. Before tile is applied with a dryset mortar bed, the structural floor shall be tested for levelness or uniformity of slope by flooding it with water. Areas where the water ponds shall be filled and leveled with mortar and shall be retested before the setting bed is applied.

c. Placing of Setting Beds and Floor Tile

Mortar setting beds shall have a minimum thickness of 20mm for floors. The structural concrete slab shall be soaked thoroughly with clean fresh water on the day before the setting bed is to be applied. Immediately preceding the application of the setting bed, the structural slab shall again be wetted thoroughly, but no free water shall be permitted to remain on the surface.

A skim coat of neat Portland cement mortar shall then be applied not more than 4mm thick. The mortar shall be spread until its surface is true and even and thoroughly compacted, either level or sloped uniformly for drainage, as the case requires. A setting bed, as large as can be covered with tile before the mortar has reached its initial set, shall be placed on one operation; but in the event that more setting mortar has been placed than can be covered, the unfinished portion shall be removed and cut back to a clean beveled edge.

All mounted tiles shall be soaked in clean water a minimum of one hour before they are set. Absorptive mounted tile shall be dampened by placing sheets on a wetted cloth in a shallow pan before setting. No free water shall remain on the tiles at the time of setting. Before the initial set has taken place in the setting bed, a skim coat of neat Portland cement mortar, 0.7mm to 1.6mm thick, shall be trowelled or brushed over the setting bed and/or the back of the tile, or a thin layer of Portland cement, 0.79mm to 2mm thick, may be hand-dusted uniformly over the setting bed and worked lightly with a trowel or brush until thoroughly damp.

The tiles shall then be pressed firmly upon the setting bed, and beaten into the mortar until true and even with the plane of the finished floor line. Beating and leveling shall be completed within one hour after placing tiles or sheets. Borders and defined lines shall be laid before the field or body of the floor. Where floor drains are provided, the floors shall be sloped to drain properly to the drains. Intersections and returns shall be formed accurately.

Cutting of tile, where necessary, shall be done along the outer edges of the floor. As far as practicable, no tiles of less than half size shall be used. Cutting and drilling of tiles shall be done neatly without marring the tile surfaces. The cut edges of tile against trim, bases, thresholds, pipes, built-in fixtures, and similar surfaces shall be ground and jointed carefully. Tile shall fit closely and neatly at all plumbing fixtures and around electrical outlets, pipes and fittings so that cover plates or escutcheons will overlap the tiles properly. Tiles shall be secured firmly in place and loose tiles or tiles sounding hollow shall be removed and replaced. All lines shall be kept straight, parallel, and true, and all finished surfaces brought to true and even planes. The inner edges of borders shall be kept straight and, where practicable, shall form right angles at all returns. The paper and glue shall be removed from mounted tile, without using excess water, within one hour after installing the tiles.

Joints shall be parallel and uniform in width, plumb, level and in alignment. End joints in broken-joint work shall be made as far as practicable, on the center lines of adjoining tiles. Except in special arrangement and design, as indicated or specified, square tiles shall be set with straight joints, and oblong tiles shall be set with broken joints.

Joint widths shall be uniform and spaced to accommodate the tile in the given spaces with a minimum of cutting. Tiles shall be wetted, if they have become dry, before applying grout. Joints 3.2 mm or less in width shall be grouted with a neat Portland cement grout of the consistency of thick cream. Other joints shall be pointed with mortar consisting of one part Portland cement and two parts pointing sand. The grout or mortar for joints on floors shall be white Portland cement or as specified by the Engineer. Grout pointing mortar shall be forced into joints by using trowel, brush or finger application. Before the grout or mortar sets, the joints of cushion edge tile shall be struck or tooled to the depth of the cushion, filling all skips or gaps, and the joints of square edged tiles shall be filled completely flush with their surface. Dark cement shall not be seen through grouted white joints.

All surplus mortar or grout shall be removed before it has set or hardened.

d. **Cleaning and Curing**

Floors shall be covered with waterproofed paper with all joints lapped at least 96 mm and allowed to damp cure for at least 72 hours before foot traffic is permitted thereon.

All completed tile work shall be thoroughly sponged and washed diagonally across joints, and finally polished with clean, dry cloth. Acid cleaning of unglazed tile, when necessary, shall not be done within ten days after setting the tile. All metal shall be covered with approved grease and the tile shall be wetted with clean water, before tile is cleaned with 10% muriatic acid solution. After acid cleaning, the tile shall be flushed with clean water, and the grease coating on metal shall be removed.

Finished tile floors shall be covered with clean building paper before foot traffic is permitted on them. Board walkways shall be placed on floors that are to be continuously used as passage ways by workmen. Thresholds shall be covered with boards. Tiles vertical outside corners (external angles) shall be protected with board corners strips in areas used as passage by workmen.

3. **Plain Cement Floor Finish with Non-metallic Floor Hardener**

a. **Trial Mix**

No plain cement floor finish work shall be started without the approval of the Engineer of the trial mix.

b. **Application**

The concrete sub-floor shall be cleaned and projection, dust, loose particles and other materials which would prevent good bond shall be removed. The sub-floor surface shall be moistened but not soaked, dry cement shall then be sprinkled over it and the mortar shall be spreaded on the setting bed. The surface shall be tamped to assure a good bond over the entire area and screeded to provide a smooth and level bed at proper height.

Mortar mix shall be one part Portland cement to three parts sand. Following the placing of leveling concrete on the floor and after the concrete is free from excess water, a dry mixture of 2 parts of floor hardener and 1 part Portland cement shall be uniformly dusted over the floor. Three kilograms of floor hardener shall be used for every square meter of flooring or in accordance with approved manufacturer's specifications. The dry mixture shall be floated thoroughly into the surface which shall be finished by steel trowelling and cured by water or curing compound for

seven (7) days.

4. Protection

- a. Before turn over of the building to the Owner, wash pebble surfaces with 1 part muriatic acid to 6 parts clean water.
- b. Apply an overlapping strokes of water shield using brush or by low pressure spraying. Dries to a tack-free surface in 4-6 hours and cures to form an effective water repellant film in approximately 24 hours.
- c. Protect finished surface with specified hardeners and sealants.

INSTALLATION OF DOORS

1. Surface Preparation

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

DOORS AND WINDOWS

Guard House

- D-1 - 1.5mm thk. Aluminum Framed Powder Coated Finish with 8 mm thk. Clear Glass Sliding Door Type (0.85m x 2.50m)
- D-2 - PVC Door with vent louver at the bottom part (0.70m x 2.10m)

INSTALLATION OF WINDOWS

Guard House

- W-1 1.5mm thk. Aluminum Framed Powder Coated Fixed Type Window with 8mm Thk. Reflective Tempered Glass.
(W-1) (1.20m x 1.20m)
- W-2 1.5mm thk. Aluminum Framed Powder Coated Casement Type Window with 8mm Thk. Reflective Tempered Glass.
(0.80m x 1.20m)
- W-3 1.5mm thk. Aluminum Framed Powder Coated Casement Type Window with 8mm Thk. Reflective Tempered Glass.
(0.55m x 1.20m)
- W-3 1.5mm thk. Aluminum Framed Powder Coated Awning Type Window with 8mm Thk. Reflective Tempered Glass.
(0.55m x 1.20m)

GATE

1. MOTORIZED GATE

- a. Trackless Motorized Retractable Gate
- b. Gate Frame Intelligent self –align motor wireless remote control (433.4Mhz)
- c. Multi- Language LED Display Screen
- d. Actual Gate Length = 15.0 meters
- e. Expected Opening Clearance = 11.50 meter
- f. Storage Gate Length = Approximate 3.50 meter

2. PEDESTRIAN GATE

50mm X 50mm X 4mm thick Galvanized Iron steel square tubular for main frame with vertical bars-25mm X 50mm X 3mm thick Galvanized Iron steel square tubular, painted finish.

Details and locations are shown in the plan.

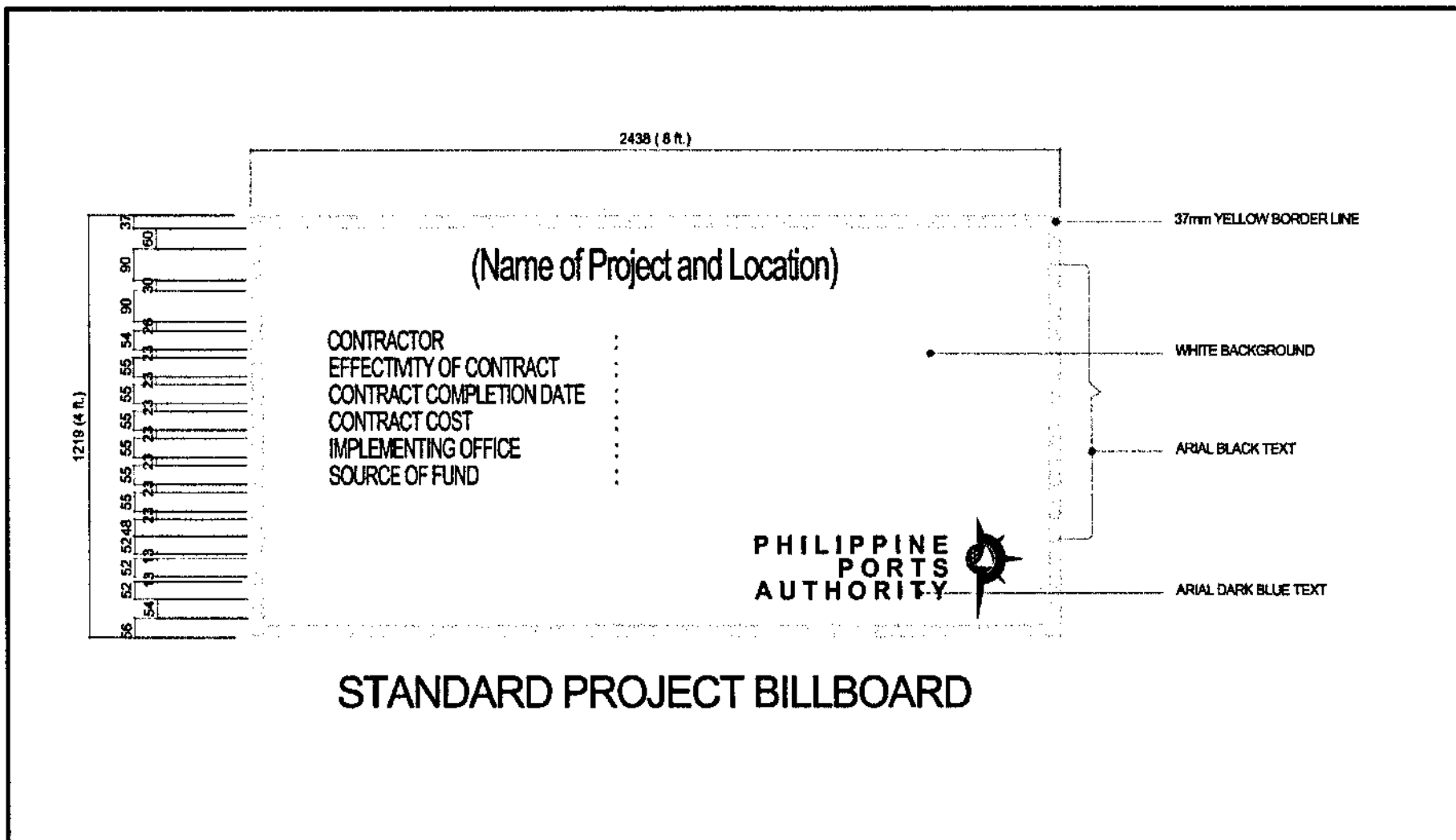
ITEM 31 : PROJECT BILLBOARD**SPECIFICATION**

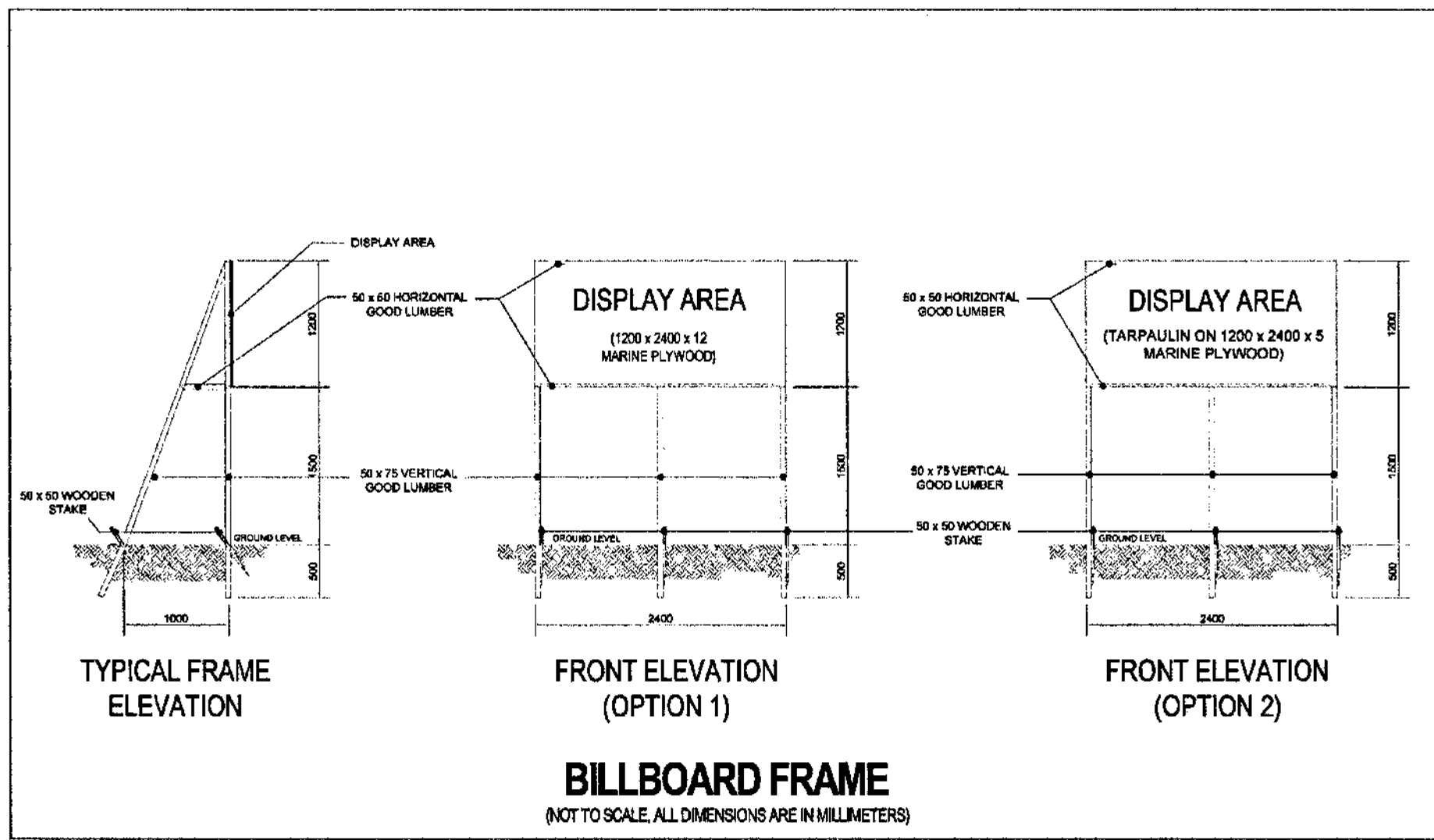
The Project Billboard shall be installed at location(s) designated by the Engineer.

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.





“To all our contractors, suppliers, and service providers, all we ask is for you to

SPEED UP

your contracts and **FINISH**

AHEAD of schedule,

WITHOUT SACRIFICING

QUALITY

of work, and **REASONABLENESS OF COST** agreed upon. Gawin niyo ‘yan at hindi tayo maghihiwalay ng landas (Do that and we will not part ways).”

A Message from
DOTr Secretary Arthur Tugade



@DOTrPH



@DOTrPH

www.dotr.gov.ph

ITEM 32 : 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.

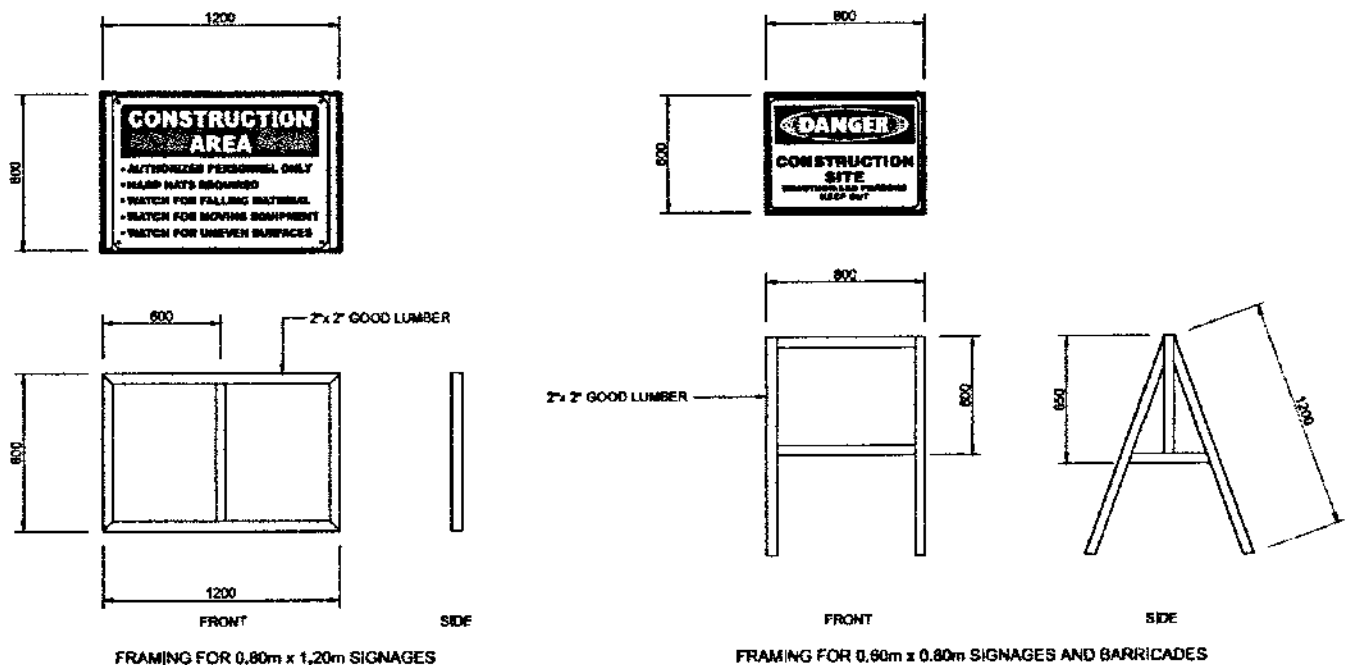
SPECIFICATION

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)

SECTION VII

DRAWINGS AND APPROVED PLANS (SEE ISSUED APPROVED PLANS)

LIST OF DRAWINGS:

STAFF QUARTERS:

ARCHITECTURAL

A - 01 of 21	<ul style="list-style-type: none"> PERSPECTIVES VICINITY MAP 	<ul style="list-style-type: none"> TABLE OF CONTENTS
A - 02 of 21	<ul style="list-style-type: none"> SITE DEVELOPMENT PLAN 	
A - 03 of 21	<ul style="list-style-type: none"> GROUND FLOOR PLAN LEGEND 	
A - 04 of 21	<ul style="list-style-type: none"> SECOND FLOOR PLAN LEGEND 	
A - 05 of 21	<ul style="list-style-type: none"> ROOF DECK PLAN LEGEND 	
A - 06 of 21	<ul style="list-style-type: none"> ROOF PLAN 	
A - 07 of 21	<ul style="list-style-type: none"> FRONT ELEVATION REAR ELEVATION LEFT SIDE ELEVATION 	<ul style="list-style-type: none"> RIGHT SIDE ELEVATION SECTION THRU B-B'
A - 08 of 21	<ul style="list-style-type: none"> SECTION THRU A-A' SCHEDULE OF DOORS SCHEDULE OF WINDOWS AND GLASS PANELS 	
A - 09 of 21	<ul style="list-style-type: none"> GROUND FLOOR REFLECTED CEILING PLAN COVE LIGHT DETAILS LEGEND 	
A - 10 of 21	<ul style="list-style-type: none"> SECOND FLOOR REFLECTED CEILING PLAN LEGEND 	
A - 11 of 21	<ul style="list-style-type: none"> ROOF DECK REFLECTED CEILING PLAN LEGEND 	
A - 12 of 21	<ul style="list-style-type: none"> GROUND FLOOR WALLS AND PARTITION LAYOUT PLAN FIRE HOSE CABINET DRYWALL DETAIL LEGEND 	

A - 13 of 21	<ul style="list-style-type: none"> • SECOND FLOOR WALLS AND PARTITION LAYOUT PLAN • LEGEND
A - 14 of 21	<ul style="list-style-type: none"> • ROOF DECK WALLS AND PARTITION LAYOUT PLAN • LEGEND
A - 15 of 21	<ul style="list-style-type: none"> • TYPICAL TOILET & BATH BLOW-UP PLANS FOR FEMALE & MALE'S QUARTERS • TYPICAL TOILET & BATH BLOW-UP PLANS FOR GUEST ROOM, DIVISION MANAGER'S ROOM, & PM'S QUARTERS
A - 16 of 21	<ul style="list-style-type: none"> • TYPICAL TOILET & BATH BLOW-UP PLANS FOR PM'S BEDROOM • FEMALE / MALE / P.W.D C.R. BLOW-UP PLANS • ALL GENDER C.R. @ GROUND FLOOR BLOW-UP PLANS • FLIP-UP BAR DETAILS (TYP.) • GRAB BAR DETAIL • MIRROR DETAILS (TYP.)
A - 17 of 21	<ul style="list-style-type: none"> • ALL GENDER C.R. @SECOND FLOOR BLOW-UP PLANS • CANTEEN'S KITCHEN & PANTRY BLOW-UP PLANS • PORT MANAGER'S KITCHEN BLOW-UP PLANS
A - 18 of 21	<ul style="list-style-type: none"> • STAIR 1 BLOW-UP PLANS • STAIR 2 BLOW-UP PLANS
A - 19 of 21	<ul style="list-style-type: none"> • STAIR 3 BLOW-UP PLANS • STAIR RAILING DETAIL • DRYWALL PARTITION DETAILS
A - 20 of 21	<ul style="list-style-type: none"> • RAMP 1 BLOW-UP DETAILS • RAMP 2 BLOW-UP DETAILS • HANDRAIL CONNECTION DETAILS • PLANT BOX BLOW-UP DETAIL • PPA LOGO DETAIL
A - 21 of 21	<ul style="list-style-type: none"> • FRONT FACADE BAY SECTION • REAR FACADE BAY SECTION • COLUMN FRAMING DETAILS • PARAPET WALL COPPING DETAILS • GUTTER DETAILS

STRUCTURAL

S - 01 of 16	<ul style="list-style-type: none"> • GENERAL NOTES
S - 02 of 16	<ul style="list-style-type: none"> • PLAN SHOWING BOUNDARY OF REMOVAL OF CONC. BLOCKS
S - 03 of 16	<ul style="list-style-type: none"> • PLAN SHOWING BOUNDARY OF REINSTALLATION OF CONC. BLOCKS • INTERLOCKING CONCRETE BLOCK PAVEMENT TYPICAL CROSS SECTION • INTERLOCKING CONCRETE BLOCK PAVEMENT TYPICAL DETAIL • DETAIL OF SHEAR KEY
S - 04 of 16	<ul style="list-style-type: none"> • PILE LAYOUT PLAN • PILE CAP & COLUMN LAYOUT • DETAIL OF PILE CAP 1 (PC-1) • DETAIL OF PILE CAP 2 (PC-2)
S - 05 of 16	<ul style="list-style-type: none"> • WALL FOUNDATION AND SLAB ON FILL PLAN • EXTERIOR WALL FOOTING (WF-1) • INTERIOR WALL FOOTING (WF-2)
S - 06 of 16	<ul style="list-style-type: none"> • GROUND FLOOR FRAMING PLAN • SLAB DETAILS • TYPICAL DETAIL OF CONCRETE EDGING • TYPICAL DETAIL OF STEP-UP • TYPICAL DETAIL OF RAMP REINFORCEMENT
S - 07 of 16	<ul style="list-style-type: none"> • SECOND FLOOR LEVEL BEAM LAY-OUT • SLAB DETAILS • TYPICAL DETAIL OF CANOPY WITH PARAPET WALL
S - 08 of 16	<ul style="list-style-type: none"> • THIRD FLOOR LEVEL BEAM LAY-OUT • ROOF PLAN BEAM LAY-OUT • SLAB DETAILS • DETAIL OF CANOPY (FRONT FACADE BAY) • SLAB DETAIL AT OVERHEAD WATER TANK • OVERHEAD WATER TANK SUPPORT FRAME
S - 09 of 16	<ul style="list-style-type: none"> • BEAM SCHEDULE

S - 10 of 16	<ul style="list-style-type: none"> TYPICAL BEAM REINFORCEMENT AT COLUMN SUPPORT TYPICAL INTERMEDIATE BEAM REINFORCEMENT AT BEAM SUPPORT TYPICAL GIRDER REINFORCEMENT TYPICAL SLAB REINFORCEMENT DETAIL
S - 11 of 16	<ul style="list-style-type: none"> COLUMN SCHEDULE TYPICAL COLUMN ELEVATION LINTEL BEAM DETAILS STIFFENER COLUMN DETAIL
S - 12 of 16	<ul style="list-style-type: none"> TYPICAL CANOPY FRAMING PLAN (LOWER SEGMENT) TYPICAL CANOPY FRAMING PLAN (UPPER SEGMENT) TYPICAL CONNECTION DETAIL OF CANOPY
S - 13 of 16	<ul style="list-style-type: none"> DETAIL OF 400mm x 400mm PSC PILES
S - 14 of 16	<ul style="list-style-type: none"> DETAIL OF STAIR-1 DETAIL OF STAIR-2
S - 15 of 16	<ul style="list-style-type: none"> DETAIL OF STAIR-3
S - 16 of 16	<ul style="list-style-type: none"> EXISTING BULKHEAD SECTION

ELECTRICAL

RCL - 01 of 03	<ul style="list-style-type: none"> GROUND FLOOR REFLECTED CEILING LIGHTING LAYOUT PLAN LEGEND
RCL - 02 of 03	<ul style="list-style-type: none"> SECOND FLOOR REFLECTED CEILING LIGHTING LAYOUT PLAN LEGEND
RCL - 03 of 03	<ul style="list-style-type: none"> ROOF DECK REFLECTED CEILING LIGHTING LAYOUT PLAN LEGEND
E - 01 of 08	<ul style="list-style-type: none"> GROUND FLOOR LIGHTING LAYOUT PLAN LEGEND
E - 02 of 08	<ul style="list-style-type: none"> SECOND FLOOR LIGHTING LAYOUT PLAN LEGEND
E - 03 of 08	<ul style="list-style-type: none"> ROOF DECK LIGHTING LAYOUT PLAN LEGEND
E - 04 of 08	<ul style="list-style-type: none"> GROUND FLOOR POWER LAYOUT PLAN LEGEND
E - 05 of 08	<ul style="list-style-type: none"> SECOND FLOOR POWER LAYOUT PLAN LEGEND
E - 06 of 08	<ul style="list-style-type: none"> ROOF DECK POWER LAYOUT PLAN LEGEND
E - 07 of 08	<ul style="list-style-type: none"> ROOF DECK LIGHTNING PROTECTION LAYOUT PLAN LEGEND
E - 08 of 08	<ul style="list-style-type: none"> SCHEDULE OF LOADS RISER DIAGRAM

BGM/PA - 01 of 02	<ul style="list-style-type: none"> GROUND FLOOR BGM / PA LAYOUT PLAN NOTES ON BGM/PA SYSTEM BGM/PA SINGLE LINE DIAGRAM LEGEND
BGM/PA - 02 of 02	<ul style="list-style-type: none"> SECOND FLOOR BGM / PA LAYOUT PLAN LEGEND
FDAS - 01 of 02	<ul style="list-style-type: none"> GROUND FLOOR FDAS LAYOUT PLAN NOTES ON FDAS FIRE DETECTION ALARM SYSTEM SINGLE LINE DIAGRAM LEGEND
FDAS - 02 of 02	<ul style="list-style-type: none"> SECOND FLOOR FDAS LAYOUT PLAN LEGEND
CATV - 01 of 02	<ul style="list-style-type: none"> GROUND FLOOR CATV LAYOUT PLAN LEGEND
CATV - 01 of 02	<ul style="list-style-type: none"> SECOND FLOOR CATV LAYOUT PLAN LEGEND
TEL - 01 of 02	<ul style="list-style-type: none"> GROUND FLOOR TELEPHONE LAYOUT PLAN TELEPHONE SINGLE LINE DIAGRAM LEGEND
TEL - 02 of 02	<ul style="list-style-type: none"> SECOND FLOOR TELEPHONE LAYOUT PLAN LEGEND
ME - 01 of 03	<ul style="list-style-type: none"> GROUND FLOOR AIRCONDITION LAYOUT PLAN LEGEND
ME - 02 of 03	<ul style="list-style-type: none"> SECOND FLOOR AIRCONDITION LAYOUT PLAN LEGEND
ME - 03 of 03	<ul style="list-style-type: none"> MECHANICAL EQUIPMENT SCHEDULE (SPLIT- TYPE WALL MOUNTED INVERTER AIR CONDITION) GENERAL NOTES

FIRE PROTECTION

FP - 01 of 11	<ul style="list-style-type: none"> GENERAL NOTES MATERIAL SPECIFICATIONS ABBREVIATIONS SCHEDULE OF EQUIPMENT LEGEND DETAIL OF FLUSHING CONNECTION DETAIL OF PIPE HANGER DETAIL OF PIPE SLEEVE
FP - 02 of 11	<ul style="list-style-type: none"> GROUND FLOOR SPRINKLER LAYOUT
FP - 03 of 11	<ul style="list-style-type: none"> SECOND FLOOR SPRINKLER LAYOUT
FP - 04 of 11	<ul style="list-style-type: none"> ROOF DECK SPRINKLER LAYOUT
FP - 05 of 11	<ul style="list-style-type: none"> GROUND FLOOR FIRE EXTINGUISHER LAYOUT
FP - 06 of 11	<ul style="list-style-type: none"> SECOND FLOOR FIRE EXTINGUISHER LAYOUT
FP - 07 of 11	<ul style="list-style-type: none"> ROOF DECK FIRE EXTINGUISHER LAYOUT
FP - 08 of 11	<ul style="list-style-type: none"> FIRE PROTECTION SYSTEM RISER DIAGRAM FIRE PUMP ROOM BLOW-UP PLAN FIRE PUMP ROOM LONGITUDINAL SECTION

FP - 09 of 11	<ul style="list-style-type: none"> • DETAIL OF INSPECTOR TEST CONNECTION • DETAIL OF FIRE HOSE CABINET • DETAIL OF ALARM CHECK VALVE ASSEMBLY (WET TYPE) • DETAIL OF FIRE HOSE VALVE 	<ul style="list-style-type: none"> • DETAIL OF SUPERVISORY FLOOR CONTROL VALVE ASSEMBLY • DETAIL OF FIRE DEPT. INLET CONNECTION • DETAIL OF ALARM MOTOR GONG
FP - 10 of 11	<ul style="list-style-type: none"> • DETAIL OF ROOF MANIFOLD OUTLET (SIAMESE TWIN) • SPOT DETAIL • MOTOR SWITCH DETAIL • PORTABLE FIRE EXTINGUISHER MOUNTING DETAIL 	<ul style="list-style-type: none"> • WATERFLOW SWITCH DETAIL • POSITION OF DEFLECTOR WHEN LOCATED ABOVE & BELOW OF BEAM • UPRIGHT TYPE SPRINKLER HEAD DET. • PENDANT TYPE SPRINKLER HEAD DETAIL
FP - 11 of 11	<ul style="list-style-type: none"> • SITE DEVELOPMENT PLAN 	

PLUMBING

P - 01 of 10	<ul style="list-style-type: none"> • DETAILS OF SEPTIC TANK • DETAILS OF CATCH BASIN • CLEANOUT DETAILS • PIPE TRENCH BEDDING • DETAILS OF WATER METER • GENERAL NOTES AND SPECIFICATIONS 	<ul style="list-style-type: none"> • MATERIAL SPECIFICATIONS • SCHEDULE OF PIPE (SEWER LINE) • SCHEDULE OF PIPE (WATER LINE)
P - 02 of 10	<ul style="list-style-type: none"> • SITE DEVELOPMENT PLAN 	
P - 03 of 10	<ul style="list-style-type: none"> • GROUND FLOOR SANITARY SEWAGE LAYOUT • SECOND FLOOR SANITARY SEWAGE LAYOUT 	<ul style="list-style-type: none"> • GREASE TRAP DETAIL • SCHEDULE OF PIPE (SEWER LINE) • LEGENDS
P - 04 of 10	<ul style="list-style-type: none"> • ISOMETRIC SANITARY SEWAGE LAYOUT • SCHEDULE OF PIPE (SEWER LINE) • LEGENDS 	
P - 05 of 10	<ul style="list-style-type: none"> • GROUND FLOOR WATER LINE LAYOUT • SECOND FLOOR WATER LINE LAYOUT • DETAIL OF AIR CHAMBER 	<ul style="list-style-type: none"> • SCHEDULE OF PIPE (WATER LINE) • LEGENDS
P - 06 of 10	<ul style="list-style-type: none"> • ROOF DECK WATER LINE LAYOUT • ISOMETRIC WATER LINE LAYOUT 	<ul style="list-style-type: none"> • SCHEDULE OF PIPE (WATER LINE) • LEGENDS
P - 07 of 10	<ul style="list-style-type: none"> • GROUND FLOOR STORM DRAINAGE LAYOUT • SECOND FLOOR STORM DRAINAGE LAYOUT • LEGENDS 	
P - 08 of 10	<ul style="list-style-type: none"> • ROOF DECK STORM DRAINAGE LAYOUT • ROOF STORM DRAINAGE LAYOUT • LEGENDS 	
P - 09 of 10	<ul style="list-style-type: none"> • ISOMETRIC STORM DRAINAGE LAYOUT • DETAILS OF DOWNSPOUT LAYOUT 	
P - 10 of 10	<ul style="list-style-type: none"> • ELEVATION VIEW • PLAN VIEW • CROSS SECTION WITH COVER • CROSS SECTION WITHOUT COVER 	<ul style="list-style-type: none"> • DETAILS OF LATER CANAL • DETAILS OF CATCH BASIN MANHOLE • DETAIL X (TYPICAL)

PUMP HOUSE

PH - 01 of 06	<ul style="list-style-type: none"> FLOOR PLAN ROOF PLAN REFLECTED CEILING PLAN 	<ul style="list-style-type: none"> LOCATION PLAN SCHEDULE OF DOORS AND WINDOWS LEGEND
PH - 02 of 06	<ul style="list-style-type: none"> FRONT ELEVATION RIGHT SIDE ELEVATION REAR ELEVATION LEFT SIDE ELEVATION SECTION THRU X-X' SECTION THRU Z-Z' 	<ul style="list-style-type: none"> SECTION THRU Y-Y'
PH - 03 of 06	<ul style="list-style-type: none"> FOUNDATION PLAN (PUMP HOUSE) GROUND FLOOR FRAMING PLAN (PUMP HOUSE) ROOF FRAMING PLAN (PUMP HOUSE) 	
PH - 04 of 06	<ul style="list-style-type: none"> RETAINING WALL DETAIL DETAIL OF WALL FOOTING DETAIL OF MANHOLE COVER 	<ul style="list-style-type: none"> COLUMN SCHEDULE PUMP HOUSE BEAM SCHEDULE DETAIL OF STEP-UP
PH - 05 of 06	<ul style="list-style-type: none"> LIGHTING & POWER LAYOUT PLAN SCHEDULE OF LOAD LEGEND 	
PH - 06 of 06	<ul style="list-style-type: none"> PUMP HOUSE PLUMBING PLAN WATER SUPPLY SCHEMATIC DIAGRAM SCHEDULE OF EQUIPMENT 	<ul style="list-style-type: none"> LEGEND AND SYMBOLS APPROXIMATE DIMENSIONS STAINLESS TANKS

GATE

G - 01 of 08	<ul style="list-style-type: none"> PERSPECTIVE FLOOR PLAN ROOF PLAN 	<ul style="list-style-type: none"> SIGNAGE FRAMING DETAIL PPA LOGO DETAIL SCHEDULE OF GATES
G - 02 of 08	<ul style="list-style-type: none"> FLOOR PLAN (GUARD HOUSE) REFLECTED CEILING PLAN (GUARD HOUSE) 	<ul style="list-style-type: none"> ROOF PLAN (GUARD HOUSE) ELEVATIONS (GUARD HOUSE) SECTIONS (GUARD HOUSE)
G - 03 of 08	<ul style="list-style-type: none"> SCHEDULE OF DOORS AND WINDOWS BLOW-UP DETAIL 3 BLOW-UP DETAIL 4 	<ul style="list-style-type: none"> DRIP MOLD PLAN DRIP MOLD SECTION
G - 04 of 08	<ul style="list-style-type: none"> MISCELLANEOUS STRUCTURES LOCATION TAG CROSS SECTION & FRONT ELEVATION OF GATE 	<ul style="list-style-type: none"> C-1 SECTION B-1 SECTION B-2 SECTION DETAIL A CS-1 SECTION
G - 05 of 08	<ul style="list-style-type: none"> FOUNDATION PLAN (F-1, F-2, F-3) C-1 SECTION C-2 SECTION SECTION A 	<ul style="list-style-type: none"> F-2 DETAIL WF-1 DETAIL F-3 DETAIL
G - 06 of 08	<ul style="list-style-type: none"> FOUNDATION PLAN (GUARD HOUSE) STEP-UP SECTION DETAIL OF CONCRETE CURB FRAMING ELEVATION 	<ul style="list-style-type: none"> FRAMING PLAN ROOF LAYOUT PLAN TYP. DETAIL OF CONCRETE EDGING WALL FOOTING -1
G - 07 of 08	<ul style="list-style-type: none"> REFLECTED CEILING LIGHTING LAYOUT PLAN REFLECTED LIGHTING & POWER LAYOUT PLAN SCHEDULE OF LOAD / RISER DIAGRAM LEGEND 	
G - 08 of 08	<ul style="list-style-type: none"> GENERAL NOTES AND SPECS MATERIAL SPECS DETAILS OF SEPTIC TANK TYPICAL SECTION OF CATCH BASIN 	<ul style="list-style-type: none"> WATER LINE LAYOUT PLAN SEWER LINE LAYOUT PLAN WATER LINE ISOMETRIC PLAN SEWER LINE ISOMETRIC PLAN

ANNEX

ANNEX - 01 of 03	<ul style="list-style-type: none"> GROUND FLOOR CCTV LAYOUT
ANNEX - 02 of 03	<ul style="list-style-type: none"> SECOND FLOOR CCTV LAYOUT
ANNEX - 03 of 03	<ul style="list-style-type: none"> ROOF DECK CCTV LAYOUT

LAW ENFORCEMENT BUILDING:

ARCHITECTURAL

A - 01 of 27	<ul style="list-style-type: none"> PERSPECTIVE VICINITY MAP 	<ul style="list-style-type: none"> TABLE OF CONTENTS
A - 02 of 27	<ul style="list-style-type: none"> SITE DEVELOPMENT PLAN 	
A - 03 of 27	<ul style="list-style-type: none"> GROUND FLOOR PLAN 	
A - 04 of 27	<ul style="list-style-type: none"> SECOND FLOOR PLAN 	
A - 05 of 27	<ul style="list-style-type: none"> THIRD FLOOR PLAN 	
A - 06 of 27	<ul style="list-style-type: none"> ROOF DECK PLAN 	
A - 07 of 27	<ul style="list-style-type: none"> ROOF PLAN 	
A - 08 of 27	<ul style="list-style-type: none"> FRONT ELEVATION REAR ELEVATION LEFT SIDE ELEVATION 	<ul style="list-style-type: none"> RIGHT SIDE ELEVATION SECTION THRU B-B'
A - 09 of 27	<ul style="list-style-type: none"> SECTION THRU A-A' ROUND BARS BLOW-UP DETAILS SCHEDULE OF DOORS, WINDOWS AND GLASS AND GRILLE PARTITION 	
A - 10 of 27	<ul style="list-style-type: none"> GROUND FLOOR REFLECTED CEILING PLAN COVE LIGHT DETAILS LEGEND 	
A - 11 of 27	<ul style="list-style-type: none"> SECOND FLOOR REFLECTED CEILING PLAN LEGEND 	
A - 12 of 27	<ul style="list-style-type: none"> THIRD FLOOR REFLECTED CEILING PLAN LEGEND 	
A - 13 of 27	<ul style="list-style-type: none"> ROOF DECK REFLECTED CEILING PLAN LEGEND 	
A - 14 of 27	<ul style="list-style-type: none"> GROUND FLOOR WALL PARTITION LAYOUT PLAN FIRE HOSE CABINET DRYWALL DETAIL LEGEND 	
A - 15 of 27	<ul style="list-style-type: none"> SECOND FLOOR WALL PARTITION LAYOUT PLAN LEGEND 	
A - 16 of 27	<ul style="list-style-type: none"> THIRD FLOOR WALL PARTITION LAYOUT PLAN LEGEND 	
A - 17 of 27	<ul style="list-style-type: none"> ROOF DECK WALL PARTITION LAYOUT PLAN LEGEND 	
A - 18 of 27	<ul style="list-style-type: none"> STAIR 1 BLOW-UP PLANS 	
A - 19 of 27	<ul style="list-style-type: none"> STAIR 2 BLOW-UP PLANS 	
A - 20 of 27	<ul style="list-style-type: none"> BLOW-UP DETAILS OF FEMALE & MALE COMMON TOILET @ GROUND FLOOR 	

A - 21 of 27	<ul style="list-style-type: none"> BLOW-UP DETAILS OF PWD TOILET @ GROUND FLOOR BLOW-UP DETAILS OF ALL GENDER TOILET @ GROUND FLOOR BLOW-UP DETAILS OF CLINIC TOILET @ GROUND FLOOR
A - 22 of 27	<ul style="list-style-type: none"> BLOW-UP DETAILS OF FEMALE COMMON TOILET @ SECOND FLOOR BLOW-UP DETAILS OF MALE COMMON TOILET @ SECOND FLOOR
A - 23 of 27	<ul style="list-style-type: none"> BLOW-UP DETAILS OF PWD TOILET @ SECOND FLOOR BLOW-UP DETAILS OF ALL GENDER TOILET @ SECOND FLOOR
A - 24 of 27	<ul style="list-style-type: none"> BLOW-UP DETAILS OF TYPICAL TOILET & BATH OF PDEA & COAST GUARD MALE QUARTERS @ THIRD FLOOR BLOW-UP DETAILS OF TYPICAL TOILET & BATH OF PNP & PORT POLICE MALE QUARTERS @ THIRD FLOOR BLOW-UP DETAILS OF TYPICAL TOILET & BATH OF PORT POLICE FEMALE QUARTERS @ THIRD FLOOR
A - 25 of 27	<ul style="list-style-type: none"> BLOW-UP DETAILS OF TYPICAL TOILET & BATH OF FEMALE & MANAGER'S QUARTERS @ THIRD FLOOR TYPICAL TOILET OF TEMPORARY DETENTION CELL FLIP-UP BAR DETAILS (TYP.) GRAB BAR DETAIL MIRROR DETAILS (TYP.)
A - 26 of 27	<ul style="list-style-type: none"> FRONT FACADE BAY SECTION REAR FACADE BAY SECTION
A - 27 of 27	<ul style="list-style-type: none"> RAMP BLOW-UP DETAILS HANDRAIL CONNECTION DRYWALL PARTITION DETAILS PARAPET WALL COPPING DETAIL GUTTER DETAIL PLANT BOX BLOW-UP DETAIL PPA LOGO DETAIL LEB SIGNAGE DETAILS

STRUCTURAL

S - 01 of 17	<ul style="list-style-type: none"> GENERAL NOTES
S - 02 of 17	<ul style="list-style-type: none"> PLAN SHOWING BOUNDARY OF REMOVAL OF CONCRETE BLOCKS
S - 02A of 17	<ul style="list-style-type: none"> PLAN SHOWING BOUNDARY OF REINSTALLATION OF CONC. BLOCKS INTERLOCKING CONCRETE BLOCK PAVEMENT TYPICAL CROSS SECTION INTERLOCKING CONCRETE BLOCK PAVEMENT TYPICAL DETAIL DETAIL OF SHEAR KEY
S - 03 of 17	<ul style="list-style-type: none"> DRIVEN PILES LAYOUT PLAN DRIVEN PILES SCHEDULE DETAIL OF PILE CAP 1 (PC-1)
S - 03A of 17	<ul style="list-style-type: none"> PILE CAP & COLUMN LAYOUT PLAN DETAIL OF PILE CAP 2 (PC-2)
S - 04 of 17	<ul style="list-style-type: none"> DETAIL OF 400X400MM PSC PILES
S - 05 of 17	<ul style="list-style-type: none"> WALL FOUNDATION & SLAB-ON-FILL PLAN EXTERIOR WALL FOOTING (WF-1) DETAIL INTERIOR WALL FOOTING (WF-2) DETAIL WALL SUPPORTED BY FTB
S - 06 of 17	<ul style="list-style-type: none"> GROUND FLOOR FRAMING PLAN SLAB DETAILS TYPICAL DETAIL OF CONCRETE EDGING TYPICAL DETAIL OF STEP-UP TYPICAL DETAIL OF RAMP REINFORCEMENT
S - 07 of 17	<ul style="list-style-type: none"> TYPICAL FOOTING TIE BEAM ELEVATION FOOTING TIE BEAM SCHEDULE EXISTING BULKHEAD SECTION EXISTING FLOOD LIGHT POLE SECTION
S - 08 of 17	<ul style="list-style-type: none"> SECOND FLOOR FRAMING PLAN SLAB DETAILS TYPICAL DETAIL OF R.C. CANOPY WITH PARAPET WALL (2ND & 3RD FLOOR) TYPICAL DETAIL OF R.C. CANOPY @ FRONT FACADE (2ND & 3RD FLOOR)
S - 09 of 17	<ul style="list-style-type: none"> THIRD FLOOR FRAMING PLAN SLAB DETAILS TYPICAL DETAIL OF R.C. CANOPY @ FRONT FACADE (ROOF DECK)
S - 10 of 17	<ul style="list-style-type: none"> ROOF DECK FRAMING PLAN TYPICAL DETAIL OF R.C. CANOPY WITH PARAPET WALL (ROOF DECK) TYPICAL DETAIL OF R.C. CANOPY @ FRONT FACADE (ROOF DECK)

S - 11 of 17	<ul style="list-style-type: none"> • TOP OF PARAPET WALL-1 FRAMING PLAN • ROOF FRAMING PLAN • TYPICAL DETAIL OF R.C. CANOPY
S - 12 of 17	<ul style="list-style-type: none"> • TYPICAL COLUMN ELEVATION • COLUMN SCHEDULE • LINTEL BEAM DETAILS • STIFFENER COLUMN DETAIL
S - 13 of 17	<ul style="list-style-type: none"> • TYPICAL R.C. BEAM ELEVATION • BEAM SCHEDULE
S - 14 of 17	<ul style="list-style-type: none"> • TYPICAL SLAB REINFORCEMENT DETAIL • SLAB SCHEDULE • CORNER SLAB DETAIL • SLAB OPENING DETAIL
S - 15 of 17	<ul style="list-style-type: none"> • STEEL CANOPY FRAMING PLAN • STEEL CANOPY SECTION • STEEL CANOPY CONNECTION DETAILS • PURLINS CONNECTION DETAIL • SAGROD DETAIL
S - 16 of 17	<ul style="list-style-type: none"> • STAIR 1 DETAIL • LANDING BEAM SECTION
S - 17 of 17	<ul style="list-style-type: none"> • STAIR 2 DETAIL • LANDING BEAM SECTION

ELECTRICAL

RCL - 01 of 04	<ul style="list-style-type: none"> • GROUND FLOOR REFLECTED CEILING PLAN • LEGEND
RCL - 02 of 04	<ul style="list-style-type: none"> • SECOND FLOOR REFLECTED CEILING PLAN • LEGEND
RCL - 03 of 04	<ul style="list-style-type: none"> • THIRD FLOOR REFLECTED CEILING PLAN • LEGEND
RCL - 04 of 04	<ul style="list-style-type: none"> • ROOF DECK REFLECTED CEILING PLAN • LEGEND
E - 01 of 13	<ul style="list-style-type: none"> • GROUND FLOOR LIGHTING LAYOUT PLAN • LEGEND
E - 02 of 13	<ul style="list-style-type: none"> • SECOND FLOOR LIGHTING LAYOUT PLAN • LEGEND
E - 03 of 13	<ul style="list-style-type: none"> • THIRD FLOOR LIGHTING LAYOUT PLAN • LEGEND
E - 04 of 13	<ul style="list-style-type: none"> • ROOF DECK LIGHTING LAYOUT PLAN • LEGEND
E - 05 of 13	<ul style="list-style-type: none"> • GROUND FLOOR POWER LAYOUT PLAN • LEGEND
E - 06 of 13	<ul style="list-style-type: none"> • SECOND FLOOR POWER LAYOUT PLAN • LEGEND
E - 07 of 13	<ul style="list-style-type: none"> • THIRD FLOOR POWER LAYOUT PLAN • LEGEND
E - 08 of 13	<ul style="list-style-type: none"> • ROOF DECK POWER LAYOUT PLAN • LEGEND
E - 09 of 13	<ul style="list-style-type: none"> • ROOF DECK LIGHTNING PROTECTION LAYOUT PLAN • LEGEND
E - 10 of 13	<ul style="list-style-type: none"> • SCHEDULE OF LOADS

E - 11 of 13	<ul style="list-style-type: none"> • SCHEDULE OF LOADS • SINGLE LINE DIAGRAM
E - 12 of 13	<ul style="list-style-type: none"> • UNDERGROUND DUCT BANK • ELECTRICAL HANDHOLE • PEDESTAL POST (POWER, CATV/ TELEPHONE)
E - 13 of 13	<ul style="list-style-type: none"> • SITE DEVELOPMENT OF SERVICE • ENTRANCE LAYOUT PLAN • GENERAL NOTES • LEGEND • RECOMMENDATION
BGM/PA -01 of 03	<ul style="list-style-type: none"> • GROUND FLOOR BGM /PA LAYOUT PLAN • LEGEND • NOTES ON BGM / PA SYSTEM
BGM/PA -02 of 03	<ul style="list-style-type: none"> • SECOND FLOOR BGM / PA LAYOUT PLAN • LEGEND
BGM/PA -03 of 03	<ul style="list-style-type: none"> • THIRD FLOOR BGM / PA LAYOUT PLAN • LEGEND
FDAS - 01 of 03	<ul style="list-style-type: none"> • GROUND FLOOR FDAS LAYOUT PLAN • LEGEND • NOTES ON FDAS
FDAS - 02 of 03	<ul style="list-style-type: none"> • SECOND FLOOR FDAS LAYOUT PLAN • LEGEND
FDAS - 03 of 03	<ul style="list-style-type: none"> • THIRD FLOOR FDAS LAYOUT PLAN • LEGEND
CATV - 01 of 03	<ul style="list-style-type: none"> • GROUND FLOOR CATV LAYOUT PLAN • LEGEND
CATV - 02 of 03	<ul style="list-style-type: none"> • SECOND FLOOR CATV LAYOUT PLAN • LEGEND
CATV - 03 of 03	<ul style="list-style-type: none"> • THIRD FLOOR CATV LAYOUT PLAN • LEGEND
TEL - 01 of 03	<ul style="list-style-type: none"> • GROUND FLOOR TELEPHONE LAYOUT PLAN • LEGEND • SINGLE LINE DIAGRAM
TEL - 02 of 03	<ul style="list-style-type: none"> • SECOND FLOOR TELEPHONE LAYOUT PLAN • LEGEND
TEL - 03 of 03	<ul style="list-style-type: none"> • THIRD FLOOR TELEPHONE LAYOUT PLAN • LEGEND
ME - 01 of 04	<ul style="list-style-type: none"> • GROUND FLOOR AIRCONDITION LAYOUT PLAN • LEGEND
ME - 02 of 04	<ul style="list-style-type: none"> • SECOND FLOOR AIRCONDITION LAYOUT PLAN • LEGEND
ME - 03 of 04	<ul style="list-style-type: none"> • THIRD FLOOR AIRCONDITION LAYOUT PLAN • LEGEND
ME - 04 of 04	<ul style="list-style-type: none"> • MECHANICAL EQUIPMENT SCHEDULE (SPLIT- TYPE WALL MOUNTED INVERTER AIR CONDITION) • GENERAL NOTES

FIRE PROTECTION

FP - 01 of 13	<ul style="list-style-type: none"> GENERAL NOTES MATERIAL SPECIFICATIONS ABBREVIATIONS SCHEDULE OF EQUIPMENT 	<ul style="list-style-type: none"> LEGEND DETAIL OF FLUSHING CONNECTION DETAIL OF PIPE HANGER DETAIL OF PIPE SLEEVE
FP - 02 of 13	<ul style="list-style-type: none"> GROUND FLOOR SPRINKLER LAYOUT 	
FP - 03 of 13	<ul style="list-style-type: none"> SECOND FLOOR SPRINKLER LAYOUT 	
FP - 04 of 13	<ul style="list-style-type: none"> THIRD FLOOR SPRINKLER LAYOUT 	
FP - 05 of 13	<ul style="list-style-type: none"> ROOF DECK SPRINKLER LAYOUT 	
FP - 06 of 13	<ul style="list-style-type: none"> GROUND FLOOR FIRE EXTINGUISHER LAYOUT 	
FP - 07 of 13	<ul style="list-style-type: none"> SECOND FLOOR FIRE EXTINGUISHER LAYOUT 	
FP - 08 of 13	<ul style="list-style-type: none"> THIRD FLOOR FIRE EXTINGUISHER LAYOUT 	
FP - 09 of 13	<ul style="list-style-type: none"> ROOF DECK FIRE EXTINGUISHER LAYOUT 	
FP - 10 of 13	<ul style="list-style-type: none"> FIRE PROTECTION SYSTEM RISER DIAGRAM FIRE PUMP ROOM BLOW-UP PLAN FIRE PUMP ROOM LONGITUDINAL SECTION 	
FP - 11 of 13	<ul style="list-style-type: none"> DETAIL OF INSPECTOR TEST CONNECTION DETAIL OF FIRE HOSE CABINET DETAIL OF ALARM CHECK VALVE ASSEMBLY (WET TYPE) DETAIL OF FIRE HOSE VALVE 	<ul style="list-style-type: none"> DETAIL OF SUPERVISORY FLOOR CONTROL VALVE ASSEMBLY DETAIL OF FIRE DEPT. INLET CONNECTION DETAIL OF ALARM MOTOR GONG
FP - 12 of 13	<ul style="list-style-type: none"> DETAIL OF ROOF MANIFOLD OUTLET (SIAMESE TWIN) SPOT DETAIL MOTOR SWITCH DETAIL PORTABLE FIRE EXTINGUISHER MOUNTING DETAIL 	<ul style="list-style-type: none"> WATERFLOW SWITCH DETAIL POSITION OF DEFLECTOR WHEN LOCATED ABOVE & BELOW OF BEAM UPRIGHT TYPE SPRINKLER HEAD DET. PENDANT TYPE SPRINKLER HEAD DETAIL
FP - 13 of 13	<ul style="list-style-type: none"> SITE DEVELOPMENT PLAN 	

PLUMBING

P - 01 of 12	<ul style="list-style-type: none"> DETAILS OF SEPTIC TANK DETAILS OF CATCH BASIN CLEANOUT DETAILS PIPE TRENCH BEDDING DETAILS OF WATER METER GENERAL NOTES AND SPECIFICATIONS 	<ul style="list-style-type: none"> MATERIAL SPECIFICATIONS SCHEDULE OF PIPE (SEWER LINE) SCHEDULE OF PIPE (WATER LINE)
P - 02 of 12	<ul style="list-style-type: none"> SITE DEVELOPMENT PLAN 	
P - 03 of 12	<ul style="list-style-type: none"> GROUND FLOOR SANITARY SEWAGE LAYOUT SECOND FLOOR SANITARY SEWAGE LAYOUT 	
P - 04 of 12	<ul style="list-style-type: none"> THIRD FLOOR SANITARY SEWAGE LAYOUT GREASE TRAP DETAIL 	<ul style="list-style-type: none"> SCHEDULE OF PIPE (SEWER LINE) LEGENDS
P - 05 of 12	<ul style="list-style-type: none"> ISOMETRIC SANITARY SEWAGE LAYOUT SCHEDULE OF PIPE (SEWER LINE) LEGENDS 	
P - 06 of 12	<ul style="list-style-type: none"> GROUND FLOOR WATER LINE LAYOUT SECOND FLOOR WATER LINE LAYOUT 	
P - 07 of 12	<ul style="list-style-type: none"> THIRD FLOOR WATER LINE LAYOUT ROOF DECK WATER LINE LAYOUT DETAIL OF AIR CHAMBER 	<ul style="list-style-type: none"> SCHEDULE OF PIPE (WATER LINE) LEGENDS
P - 08 of 12	<ul style="list-style-type: none"> ISOMETRIC WATER LINE LAYOUT SCHEDULE OF PIPE (WATER LINE) LEGENDS 	
P - 09 of 12	<ul style="list-style-type: none"> GROUND FLOOR STORM DRAINAGE LAYOUT SECOND FLOOR STORM DRAINAGE LAYOUT LEGENDS 	
P - 10 of 12	<ul style="list-style-type: none"> THIRD FLOOR STORM DRAINAGE LAYOUT ROOF DECK STORM DRAINAGE LAYOUT LEGENDS 	
P - 11 of 12	<ul style="list-style-type: none"> ISOMETRIC STORM DRAINAGE LINE LAYOUT DETAIL OF DOWNSPOUT LAYOUT 	
P - 12 of 12	<ul style="list-style-type: none"> ELEVATION VIEW PLAN VIEW CROSS SECTION WITH COVER CROSS SECTION WITHOUT COVER 	<ul style="list-style-type: none"> DETAILS OF LATER CANAL DETAILS OF CATCH BASIN MANHOLE DETAIL X (TYPICAL)

ANNEX

ANNEX - 01 of 04	<ul style="list-style-type: none"> GROUND FLOOR CCTV LAYOUT
ANNEX - 02 of 04	<ul style="list-style-type: none"> SECOND FLOOR CCTV LAYOUT
ANNEX - 03 of 04	<ul style="list-style-type: none"> THIRD FLOOR CCTV LAYOUT
ANNEX - 04 of 04	<ul style="list-style-type: none"> ROOF DECK CCTV LAYOUT

SECTION VIII

BILL OF QUANTITIES
and
ATTACHMENTS

BILL OF QUANTITIES
CONSTRUCTION OF STAFF QUARTERS, LAW ENFORCEMENT BUILDING AND GATE
 Port of Currimaos, Ilocos 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.	16		
1.03	Maintain temporary site office and residence for the Engineer and staff	mo.	16		
1.04	Provide Construction Safety and Health Program in the execution of the project including stringent Covid-19 protocols per Engineering circular No. 01-2020, and Construction Guidelines for Project Implementation during the period of Public Health Emergency, approved by PDCB and CIAP (as indicated in the Bid Documents)	mo.	16		
TOTAL FOR BILL NO. 1					

Bidder's Authorized Signature

BILL OF QUANTITIES
CONSTRUCTION OF STAFF QUARTERS, LAW ENFORCEMENT BUILDING AND GATE
Port of Currimao, Ilocos Norte



NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 2	STAFF QUARTERS, LAW ENFORCEMENT BUILDING, PUMPHOUSE, GUARDHOUSE & GATE				
2.01	Extraction/removal of existing interlocking paving blocks	sq.m	4,419		
2.02	Demolish and dispose existing drainage canal	l.m.	63		
2.03	Demolish and dispose existing fence prior to the construction of gate	l.m.	5		
2.04	Excavation and backfilling works for building foundations, drainage, septic vault, electrical and pile driving works	cu.m.	1,434		
2.05	Extraction and re-installation of existing rock bulkhead prior to the driving of PSC piles	cu.m.	130		
2.06	Scraping of existing sand cushion, cement treated base course and gravel base course	cu.m.	1,547		
2.07	Supply and deliver to site 400mm x 400mm PSC Piles	l.m.	2,095		
2.08	Handle, pitch and drive 400mm x 400mm Vertical PSC Piles	l.m.	2,095		
2.09	Cut/chip and dispose newly driven PSC Piles up to required elevation	no.	110		
2.10	Subgrade Preparation	sq.m.	4,419		
2.11	Supply and apply soil treatment	sq.m.	1,583		
2.12	Supply, place and compact aggregate sub-base course	cu.m.	728		

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BILL OF QUANTITIES
CONSTRUCTION OF STAFF QUARTERS, LAW ENFORCEMENT BUILDING AND GATE
Port of Currimaog, Ilocos Norte



NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
2.13	Supply, place and compact gravel bedding for building foundation, ramps, step-up, drainage & septic vault.	cu.m.	217		
2.14	Supply and place lean concrete for pile caps	cu.m.	9		
2.15	Supply & place 4,000 psi. concrete for building structure and shear key	cu.m.	1,610		
2.16	Supply & install steel reinforcement for building structure and shear key	kg.	375,478		
2.17	Construct 4,000 psi. concrete slab and ramp on-fill including reinforcement	sq.m.	1,390		
2.18	Construct 150mm thick CHB wall including reinforcement	sq.m.	3,575		
2.19	Construct 100mm thick CHB wall including reinforcement	sq.m.	535		
2.20	Supply, fabricate and install structural steel materials including accessories	kg.	11,799		
2.21	Supply and apply anti-rust paint for metal surfaces	sq.m.	175		
2.22	Supply, deliver and install 0.60mm thk. PPGL Pre-Painted Hi-rib main roofing- single metal (rib-type) w/ 25mm thk. UPI Board including roof gutter, flashing ridge roll and other accessories.	sq.m.	94		
2.23	Supply and install dry wall partition	sq.m.	254		
2.24	Supply and place 13mm thick cement Plaster finish	sq.m.	11,001		
2.25	Supply and apply Elastomeric paint (2-coats)	sq.m.	12,192		

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BILL OF QUANTITIES
CONSTRUCTION OF STAFF QUARTERS, LAW ENFORCEMENT BUILDING AND GATE
Port of Currimaos, Ilocos Norte



NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
2.26	Supply and apply Quick dry enamel paint finish (2-coats)	sq.m.	584		
2.27	Supply and apply Flat latex paint finish (2-coats)	sq.m.	1,130		
2.28	Supply and apply water proofing for toilets, footbaths, stair wells, roof deck and canopies	sq.m.	2,408		
2.29	Supply and install Aluminum Composite Panels and accessories	sq.m.	587		
2.30	Supply and install 0.60m x 0.60m Unglazed Ceramic Floor Tiles (F1)	sq.m.	3,176		
2.31	Supply and install 0.60m x 0.60m Non-slip Floor Tiles (F2)	sq.m.	61		
2.32	Supply and place Non-skid / Rough Cement Floor Finish (F3)	sq.m.	719		
2.33	Supply and install tactile strip for ramp	sq.m.	11		
2.34	Supply and install 0.30m x 0.60m Wall Tiles	sq.m.	1,223		
2.35	Supply and install Granite tile splash board and countertop	sq.m.	47		
2.36	Supply and install PVC ceiling including accessories	sq.m.	62		
2.37	Supply and install Acoustic ceiling panel (600mm x 600mm) & accessories	sq.m.	32		
2.38	Supply and install 12mm thk. Gypsum board on 0.40mm thk galvanized steel ceiling suspension system at 0.40m O.C. (furring carrying channel) and suspension rod	sq.m.	2,222		

Bidder's Authorized Signature

BILL OF QUANTITIES
CONSTRUCTION OF STAFF QUARTERS, LAW ENFORCEMENT BUILDING AND GATE
Port of Currimaog, Ilocos Norte



NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
2.39	Supply and install 12mm thk. Gypsum board, Wood veneer finish on 0.40mm thk galvanized steel ceiling suspension system at 0.40m O.C. (furring) carrying channel) and suspension rod	sq.m.	5		
2.40	Supply and install Aluminum Clip-in Perforated Panel including accessories (0.60m x 0.60m x 0.70mm)	sq.m.	655		
2.41	Supply and Install PVC Baffle Ceiling (50mm x 100mm) & accessories	sq.m.	40		
2.42	Supply and install stainless steel materials, buffed finish of various sizes including accessories	lot	1		
2.43	Supply and install fabricated glass doors, windows, and glass panel including glass partitions for showers and other accessories for Staff Quarters	lot	1		
2.44	Supply and install fabricated glass doors and windows including glass partitions for showers and other accessories for Law Enforcement Building	lot.	1		
2.45	Supply and install fabricated Glass partition for Law Enforcement Building	lot.	1		
2.46	Supply and install fabricated Cold rolled steel emergency exit Doors with panic bar lock including jumbs and accessories	set	16		
2.47	Supply and install fabricated Solid Door and Marine Plywood Finish Flush Doors including clear glass, door jambs, hinges and locksets	lot	1		
2.48	Supply, fabricate and install Steel doors, windows and grille partition for Law Enforcement Building	lot	1		

Bidder's Authorized Signature

BILL OF QUANTITIES
CONSTRUCTION OF STAFF QUARTERS, LAW ENFORCEMENT BUILDING AND GATE
Port of Currimao, Ilocos Norte



NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
2.49	Supply and install fabricated powder coated aluminum louvered double leaf door including accessories	set.	1		
2.50	Supply and install Photoluminescent signs & path marking for emergency route including accessories	lot.	1		
2.51	Supply, fabricate and install Phenolic anti-bacterial water proof Toilet partition 20mm thk, including stainless hinges, lock indicators, bottom support door knobs and coat hooks	lot	1		
2.52	Supply and install Toilet Fixtures and accessories	lot	1		
2.53	Supply and install water line pipes and fittings	lot	1		
2.54	Supply and install sewerage pipes and fittings	lot	1		
2.55	Supply and install drainage pipes and fittings	lot	1		
2.56	Construct septic vault including fittings and accessories	no.	4		
2.57	Construct catch basin including accessories	no.	32		
2.58	Construct drainage manhole including accessories	no.	4		
2.59	Construct drainage canal including accessories	l.m.	118		
2.60	Supply, spread and compact aggregate base course	cu.m.	418		
2.61	Supply, spread and compact cement treated base course	cu.m.	363		

Bidder's Authorized Signature

BILL OF QUANTITIES
CONSTRUCTION OF STAFF QUARTERS, LAW ENFORCEMENT BUILDING AND GATE
Port of Currimao, Ilocos Norte



NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
2.62	Supply, spread compact leveling course, sand cushion	cu.m.	121		
2.63	Re-install newly removed interlocking concrete paving blocks	sq.m.	2,423		
2.64	Supply, deliver and install wires and cables of various sizes	lot	1		
2.65	Supply, deliver and install conduit pipe including fittings of various sizes	lot	1		
2.66	Supply, deliver and install wiring devices	lot	1		
2.67	Supply, deliver and install protective devices	lot	1		
2.68	Supply, deliver and install lighting fixtures	lot	1		
2.69	Supply, deliver and install lightning protection and accessories	lot	1		
2.70	Supply, deliver and install auxiliary system & accessories:				
	a) Community Antenna Television (CATV)	lot	1		
	b) Background Music / Paging Alarm (BGM/PA)	lot	1		
	c) Fire Detection Alarm System (FDAS)	lot	1		
	d) Telephone System	lot	1		
2.71	Supply, deliver and install airconditioning unit & accessories	lot	1		
2.72	Construct Pumphouse including domestic water tank, fire tank overhead water tank, pumps, pressure tank and other apurtenances	lot	1		
2.73	Construct Reinforced Concrete for Duct bank, Handhole, & Pedestal post	lot	1		
2.74	Supply and deliver bedroom furnitures and appliances for Staff Quarters	lot	1		

Bidder's Authorized Signature

BILL OF QUANTITIES
CONSTRUCTION OF STAFF QUARTERS, LAW ENFORCEMENT BUILDING AND GATE
 Port of Currimao, Ilocos Norte



NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
2.75	Supply and deliver office furnitures for Law Enforcement Building	lot	1		
2.76	Supply and install PPA Logo and signages for Staff Quarters, Law Enforcement Building and gate including accessories	lot	1		
2.77	Supply, deliver and install distribution transformer including accessories and other incidental expenses	lot	1		
2.78	Supply and install fire protection system including testing, commisioning, fire extinguishers and other accessories	lot	1		
2.79	Supply deliver and install wastewater treatment facility including accessories	lot	1		
2.80	Construct Guardhouse and gate including septic vault and other apurtenances	lot.	1		
TOTAL FOR BILL NO. 2					

Bidder's Authorized Signature

BILL OF QUANTITIES
CONSTRUCTION OF STAFF QUARTERS, LAW ENFORCEMENT BUILDING AND GATE
Port of Currimao, Ilocos Norte



NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 3	REIMBURSABLE ITEMS				
3.01	Provide reimbursable items necessary in the implementation of the project as determined by the Authority				
	a) Office furnitures and appliances	lot	1		
	b) Computers and Accessories	lot	1		
TOTAL FOR BILL NO. 3					

Bidder's Authorized Signature

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 including stringent Covid-19 protocols per PPA Engineering Circular No. 01-2020 and, construction guidelines for the project implementation during the period of public health emergency approved by PDCB and CIAP (as indicated in the bid documents)

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).