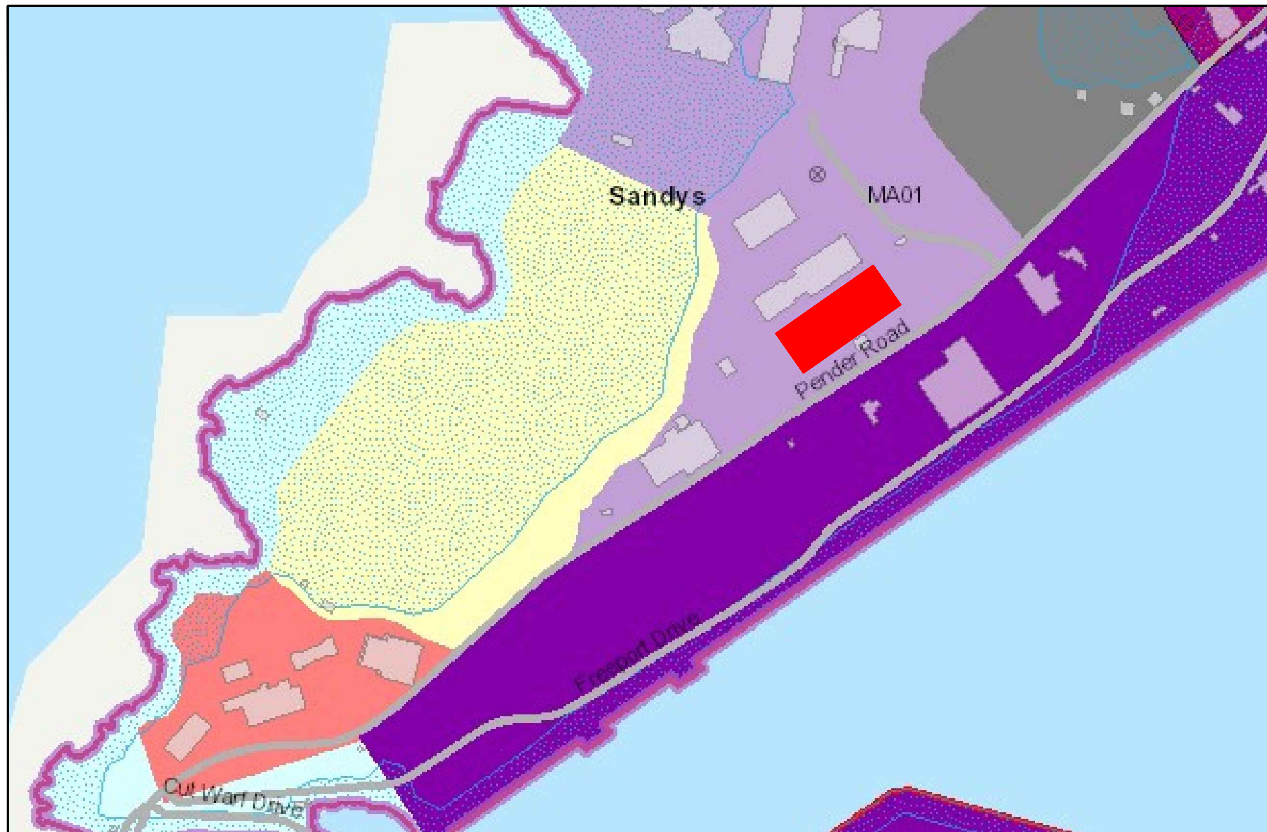
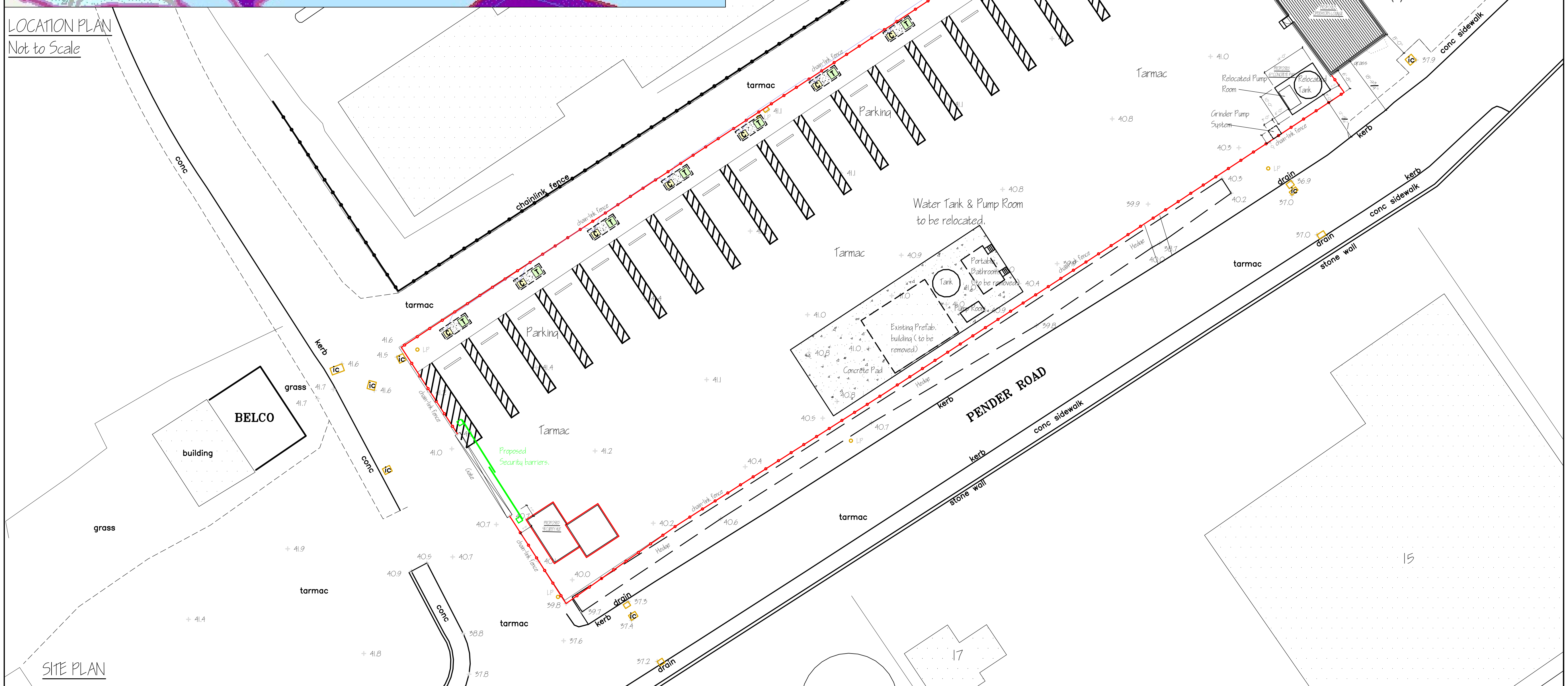


LOCATION PLAN
Not to Scale



SITE PLAN
Scale: 1/16" = 1'-0"

All drawings and specifications, as instruments of service are the exclusive property of the agent, Thorne Enterprise & Drafting Services. Any reproduction either in whole or in part is prohibited without prior written consent from the agent.

All drawings and specifications are intended to be read in conjunction with all other drawings and specifications issued in respect of this project.

The contractor shall check and verify all dimensions and levels etc. on site and with all other drawings and specifications. The agent shall be informed immediately of any descrepency.

DO NOT SCALE DRAWINGS

ISSUE
Building Drawings (RFx)

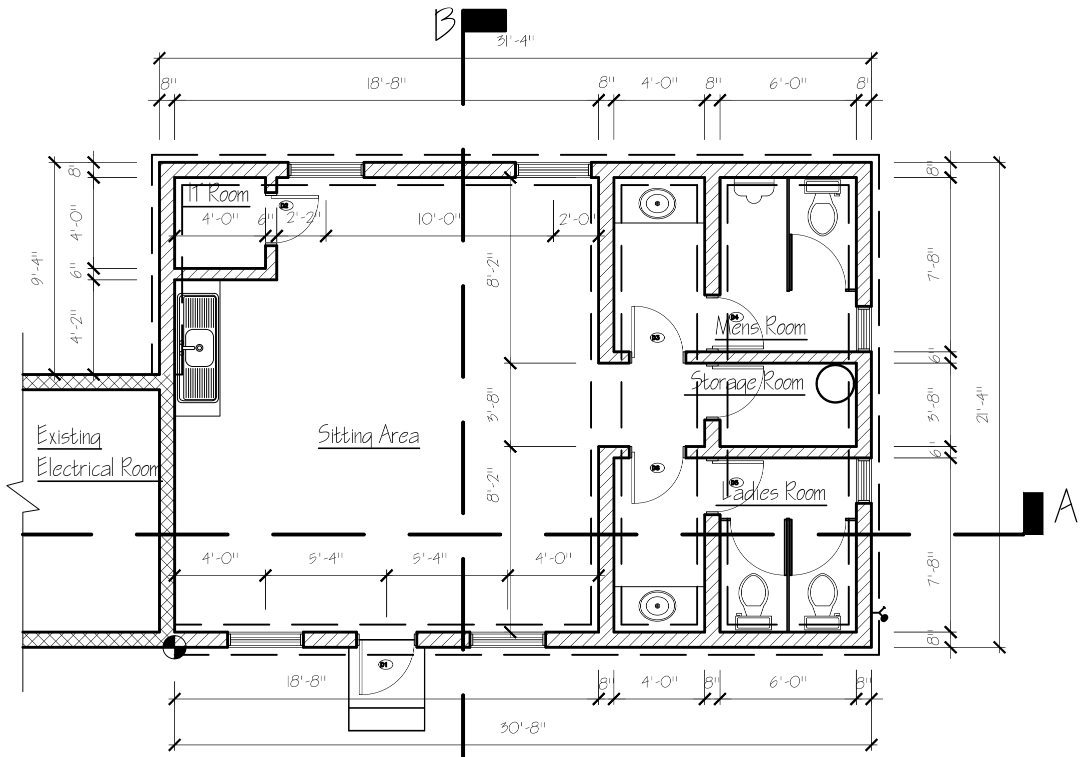
PROJECT NAME
Dockyard Bus Depot,
Department of Public Transport,
#5 Pender Road, Sandys

SHEET TITLE
Site & Location Plan

DRAWING FILE NAME:

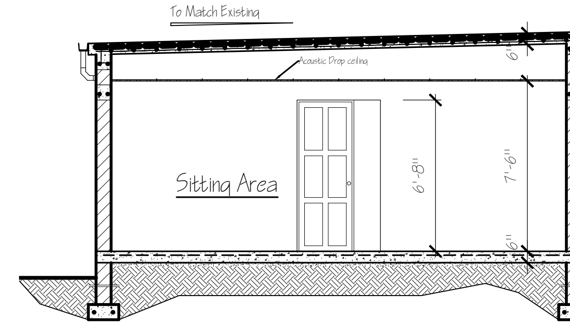
DESIGN/DRAFTSMAN	Ferdy Thorne
CHECKED	
APPROVED	
SCALE	As Shown
JOB NO.	1/2024
DATE	July 2024

DRAWING NO.
SHEET NO.
1



FLOOR PLAN

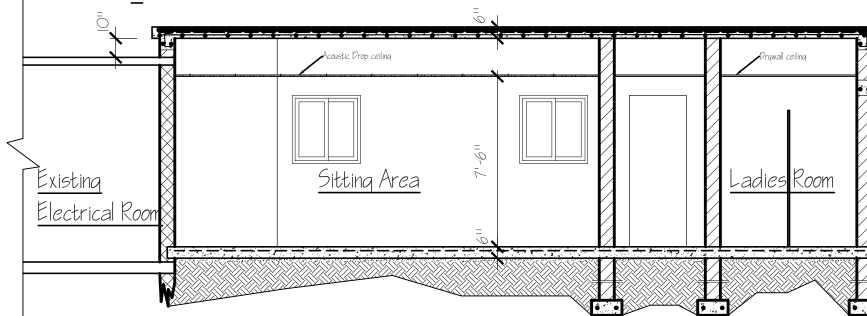
Scale: $\frac{1}{4}$" = 1'-0"



Roof slab to be 6" concrete reinforced with T12 steel bars at 12" in both directions with the main steel (short span direction) 1 $\frac{1}{2}$" from the bottom of the slab. A142 wire mesh to be placed in the top of the slab with 1 $\frac{1}{2}$" cover.
7" long pins with 4" bends on each side and made of T12 bars to be installed in the top beam (as shown) every 4'-0".
4"x PVC guttering with 2 $\frac{1}{2}$ x 2 $\frac{1}{2}$ PVC lead connecting tank to be installed on sloped roof as shown.

SECTION B-B

Scale: $\frac{1}{4}$" = 1'-0"



Drop ceiling with 2'x 2'acoustic tiles to be fitted 7'-6" from the floor in the Sitting Room area. Ceiling in the bathrooms and Storage Room to be $\frac{1}{2}$"dry wall and fitted at 7'-6".

6 x Alluminum ventilation louvers 1'-4"x 8"to be fitted on the outside walls between the underside of the roof and ceiling. 2 x on either side of Sittig Room and 1 x on each bathroom.

SECTION A-A

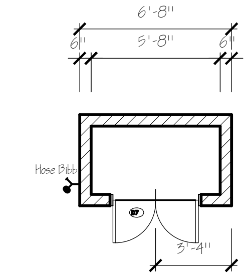
Scale: $\frac{1}{4}$" = 1'-0"

Foundation Notes

Strip footings for 2-storey to be 1'0" deep X 2'0" and reinforced with 2x T16 bars Longitudinal, and T10 transverse bars @ 12".
Single storey strip footings to be 16" x 10" deep and reinforced with 2 x T12 bars longitudinal.

All foundations to bear on solid bedrock. Where the presence of rock is suspected but not detected, the Structural Engineer shall be retained to provide alternative details.

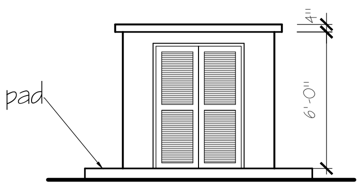
The stability of all excavations and structures are to be assured at all times. Soft areas are to be reported to Engineer for advise before proceeding with work.



PUMP ROOM PLAN

Scale: $\frac{1}{4}$" = 1'-0"

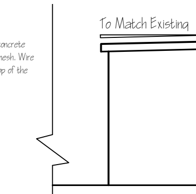
6" concrete pad



PUMP ROOM FRONT ELEVATION

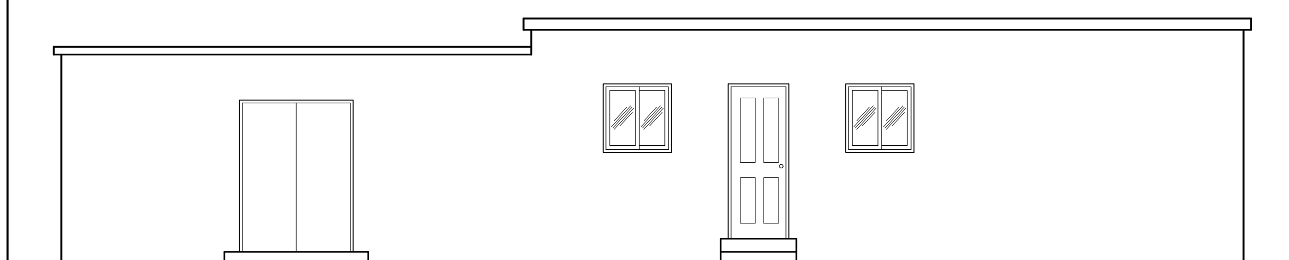
Scale: $\frac{1}{4}$" = 1'-0"

Pump Room roof to be 4" concrete reinforced with A98 wire mesh. Wire mesh to be placed in the top of the slab with 1 $\frac{1}{2}$" cover.



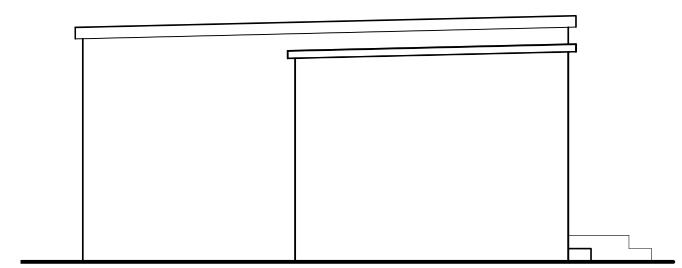
PUMP ROOM SIDE ELEVATION

Scale: $\frac{1}{4}$" = 1'-0"



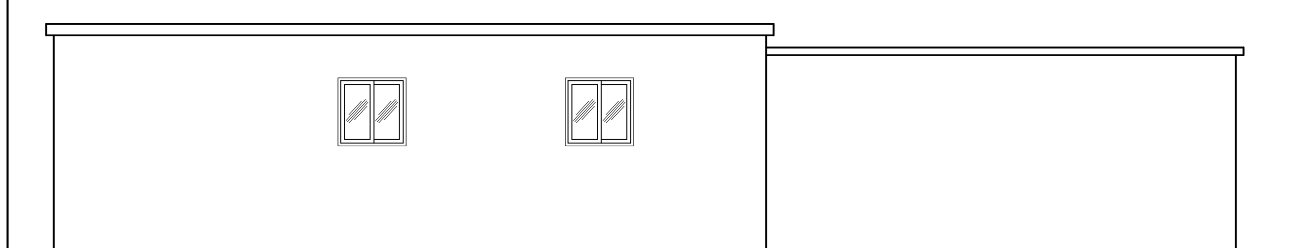
WEST ELEVATION

Scale: $\frac{1}{4}$" = 1'-0"



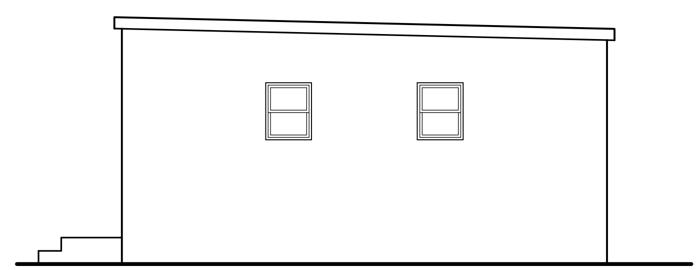
NORTH ELEVATION

Scale: $\frac{1}{4}$" = 1'-0"



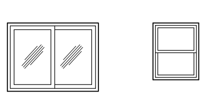
EAST ELEVATION

Scale: $\frac{1}{4}$" = 1'-0"



SOUTH ELEVATION

Scale: $\frac{1}{4}$" = 1'-0"



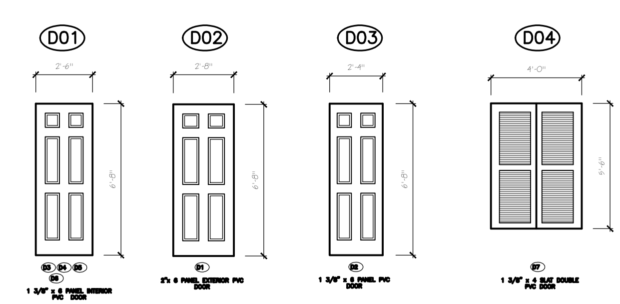
W1 W2

WINDOW SCHEDULE

	SIZE	MATERIAL	FRAME	GLASS	DESCRIPTION
W1	48"x 36"	VINYL	PVC SUB	DOUBLE GLAZE TINTED	HORIZONTAL SLIDING
W2	24"x 30"	VINYL	PVC SUB	DOUBLE GLAZE TINTED	1/1 DOUBLE HUNG

DOOR SCHEDULE

	SIZE	MATERIAL	FRAME	DESCRIPTION
D01	2'–6" x 6'–8" x 1 3/8"	PVC	2" x 6" PVC	6 PANEL PVC DOOR
D02	2'–8" x 6'–8" x 1 3/8"	PVC	2" x 6" PVC	6 PANEL PVC DOOR
D03	2'–4" x 6'–8" x 1 3/8"	PVC	2" x 6" PVC	6 PANEL PVC DOOR
D04	4'–0" x 5'–6" x 1 3/8"	PVC	2" x 6 PVC	SLAT PVD DOUBLE DOOR



GENERAL NOTES

Check all levels and dimensions on site , prior to setting out of new work. All dimensions not provided on drawing are to be verified with the designer.

Provide all required equipment, quality materials and skilled technicians necessary to to completely carry out the work described or that can be reasonably deduced from the drawings supplied and in accordance with the Bermuda Residential Code.

Coordinate all necessary trades and supplies to complete the work in a timely fashion.

Maintain the premises in a good workman like manner, confining the work only to the areas designated as work areas, and shall not allow waste material and trash to accumulate. This should be cleaned up and removed on a daily basis.

At his own expense take all precautions necessary to protect the lives of workers and the property of the owner during the contract as it directly relates to the Health and Safety Act, currently in effect.

MATERIAL SPECIFICATIONS

All structural concrete to be 3000 psi at 28 days minimum.

2000 psi concrete mix may be used in wall voids as concrete rubble fill.

Concrete to cover structural reinforcement at a minimum of : 1 $\frac{1}{2}$" above grade
3" below grade

All reinforcement to be galvanized. Deformed bars and wire mesh to have a minimum stress yield of 60,000 psi. All laps are to be staggered and wire tied as per below;
T6 - 12", T8 - 15"
T10 - 18, T12 - 24"
T16 - 30", T20 - 36"
wire mesh - 12".

All concrete slabs on grade to be on well compacted fill with 2" sand as a leveling bed covered with 6 mil. sheet polyethylene, as a vapour barrier, 6" slabs reinforced with A142 welded wire mesh at top minimum cover 1 $\frac{1}{2}$".

All drawings and specifications are intended to be read in conjunction with all other drawings and specifications issued in respect of this project.

The contractor shall check and verify all dimensions and levels etc. on site and with all other drawings and specifications. The agent shall be informed immediately of any descrepency.

DO NOT SCALE DRAWINGS

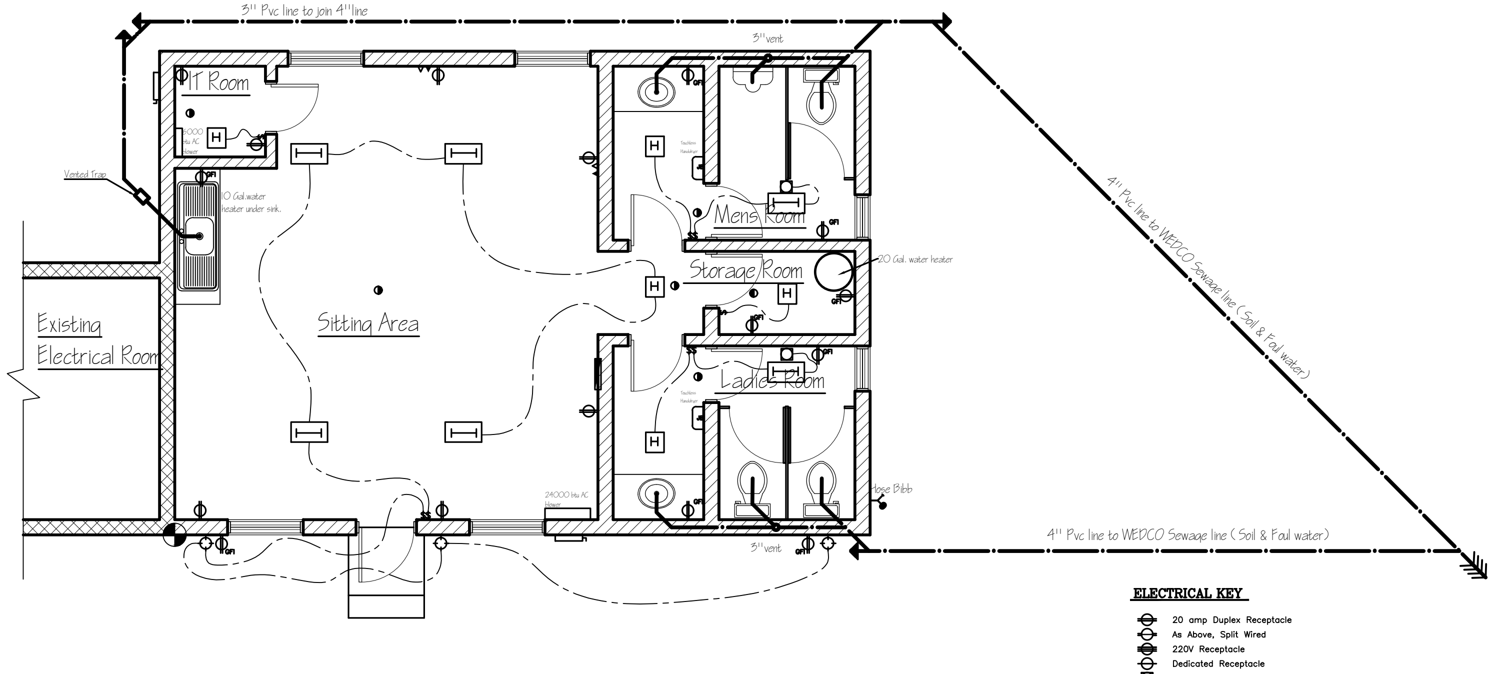
ARCHITECTURAL KEY

- Detail Designation / Drawing Number
- Room Number
- Door Designation
- Window Designation
- Concrete
- Concrete Block
- Concrete Filled Block
- Bermuda Stonework
- Studwork
- To Be Removed
- Existing Masonry

ISSUE	Building Drawings (RFx)
PROJECT NAME	Dockyard Bus Depot, Department of Public Transport, #5 Pender Road, Sandys
SHEET TITLE	Floor Plans, Sections & Elevations
DRAWING FILE NAME:	
DESIGN/DRAFTSMAN	Ferdy Thorne
CHECKED	
APPROVED	
SCALE	As Shown
JOB NO.	1/ 2024
DATE	August 2024

PO Box 3230 Hamilton
HMPX, Bermuda
TELEPHONE (441)537-6211
e-mail: tho539@blessed.bm

DRAWING NO.	SHEET NO.
	2



ELEC/ DRAINAGE FLOOR PLAN
Scale: 1/4'' = 1'-0''

VENTING:
A vented trap to be provided where the kitchen drain exits the building and connects to the kitchen sewer pipe (3''pvc) .

All Venting to conform with The Bermuda Residential Code.

SMOKE ALARMS

Hard wired audible smoke detectors to be installed as shown on the drawing, and interconnected so that the activation of one will activate all the others in the dwelling unit. The alarms to receive power directly from the building wiring without a disconnect switch. The alarms to also have a battery backup.

BATHROOM VENTALATION

Mechanical ventilation to be installed in Bathroom and must provide at least 50 cubic feet per minute of outdoor ventilation air.
The exhaust system must be switched with the corresponding bathroom light and be activated when the light is illuminated.

The exhaust to be vented directly to the outside.

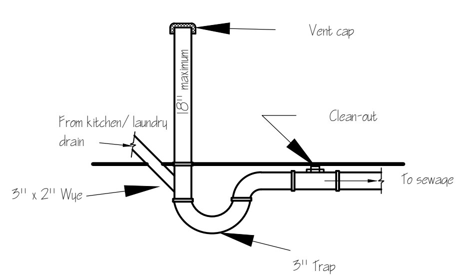
DRAINAGE

All Drainage lines to be schedule 40 PVC and installed according to the Bermuda Residential Code.

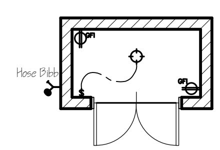
Soil lines to be 4'' PVC with required venting located as shown on the drawings.

Foul water lines to be 4'' PVC with venting as shown.

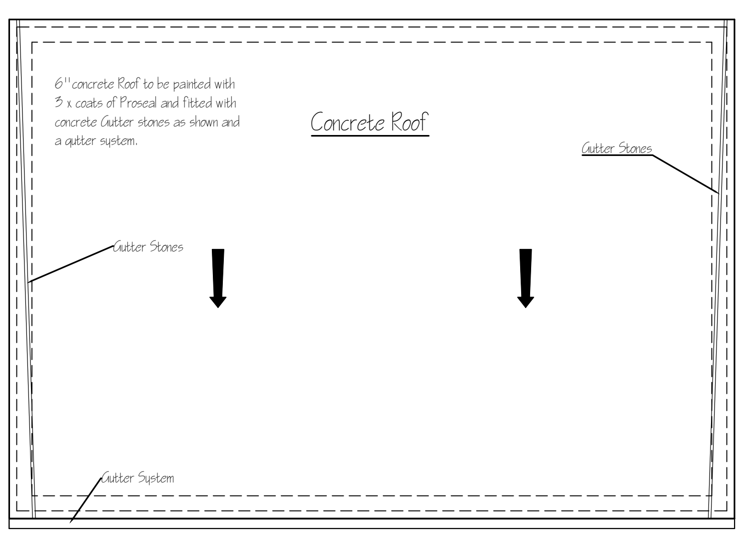
Kitchen and Laundry lines to be 3'' PVC with venting as shown.



VENTED TRAP DETAIL
Scale: 1'' = 1'-0''



PUMP ELECTRICAL ROOM PLAN
Scale: 1/4'' = 1'-0''



ROOF PLAN
Scale: 1/4'' = 1'-0''

ELECTRICAL KEY

- 20 amp Duplex Receptacle
- As Above, Split Wired
- 220V Receptacle
- Dedicated Receptacle
- Floor Receptacle
- GFI — Ground Fault Interrupter
- $ — Single Pole Switch
- $3 — 3 Way Switch
- $D — Dimmer Switch
- $L — Lighted Switch
- Ganged Devices
- Ceiling Mounted Fixture
- Wall Mounted Fixture
- Recessed Light Fixture
- Fluorescent Light Fixture
- Telephone Outlet
- Cable Outlet
- JB — Junction Box
- Breaker Panel
- Disconnect
- Meter
- MH — Mounting Height
- Smoke Detector
- Heater, Light, Vent
- Heater, Vent
- Sensor Operated Light
- Light Fixture To Be Removed
- Electrical Outlet To Be Removed
- Electrical Switch To Be Removed
- LED Ceiling Mounted Fixture 2'x4'
- LED Ceiling Mounted Fixture 2'x2'

TOILET STALL NOTES

MATERIALS: Stainless Steel #301/304 series in #4 finish

THICKNESS:
Doors............ 22 Gauge, Finished to 1" (25.4mm) at 58" (1473) high
Panels............ 22 Gauge, Finished to 1" (25.4mm) at 58" (1473) high
Pilasters.......... 20 Gauge, Finished to 1¼" (31.75mm) at 70" (1778) high

CONSTRUCTION:

Doors:
Finished to 1" (25.4) thick, constructed of two sheets of 22-gauge stainless steel formed and cemented under pressure to a honeycomb core. Door face sheets are welded at intervals around the entire perimeter. All edges to be finished with a 20-gauge stainless steel interlocking molding. Corners are finished with pre-formed stainless steel reinforcements. Doors shall have internal steel reinforcements to secure hardware items.

Panels:
Finished to 1" (25.4) thick, constructed of 2 sheets of 22-gauge stainless steel, formed and cemented under pressure to a honeycomb core. All partition edges are finished with a 20-gauge stainless steel interlocking molding. Corners will be finished with pre-formed stainless steel reinforcements.

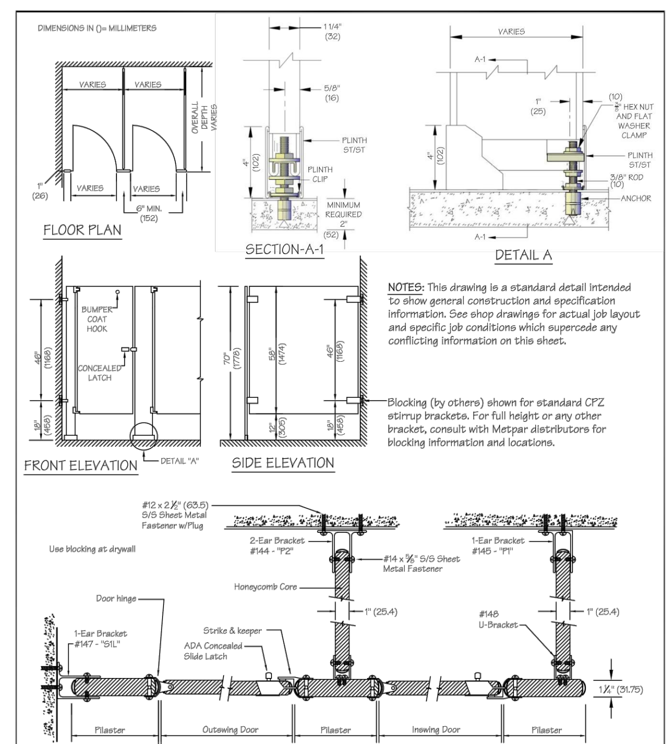
Pilasters:
Finished to 1¼" (31.75) thick, constructed of two sheets of 20-gauge stainless steel, formed and assembled with a honeycomb core. Face sheets are electrically welded at intervals around the entire perimeter. All pilasters will have a 4" (101.6) high #4 finish stainless steel plinth and have straight, flat sides profile with rounded edges to match the pilaster profile. Mounting channels are 12-gauge steel electrically welded to the pilaster face sheets. Zinc plated 3/8" (9.525) diameter studs, lock washers, nuts and lead expansion shields are provided.

BRACKETS:
Attachment brackets are die cast chrome plated stirrup brackets. Minimum of two (2) fittings at each connection.

DOOR HARDWARE:
Each compartment will be complete with two door hinges, latch, stop and keeper, coat hook, as well as all necessary fittings and fastenings for a complete installation. Hinges are fastened by means of tamper-proof Torx Pin Head through bolts, which are polished chrome plated. All other screws to be tamper-proof Torx Pin Head chrome plated. Doors are to be hung on a concealed, *"stay-set"*, fully adjustable, non-rising door mechanism. Upper hinge pin shall be 3/8" (9.525) diameter steel. All hinges will have wrap-around flanges with a minimum of 5/8" (15.875) wrap onto pilaster. All doors will have a concealed ADA approved slide latch with external *"in-use"* indicator.

FINISH:
All stainless steel partitions are supplied with high strength 300 series alloys in a #4 finish. Optional 2B leathergrain and 5SM diamond pattern textured finishes are also available.

OPTIONS:
A continuous anodized Privacy Strip aluminum extrusion, provided for both strike & hinge sides to eliminate gaps between the door & pilaster. Full height bright dip anodized aluminum brackets or stainless steel angles & U-Channels. Stainless steel MutliCam® hinges. Cast S/S wraparound hinges with matching surface latch, S&K.



METPAR CORP
95 State Street, Westbury, NY 11590
Tel: 516-333-2600 Fax: 516-333-2618
www.Metpar.com ~ Sales@Metpar.com

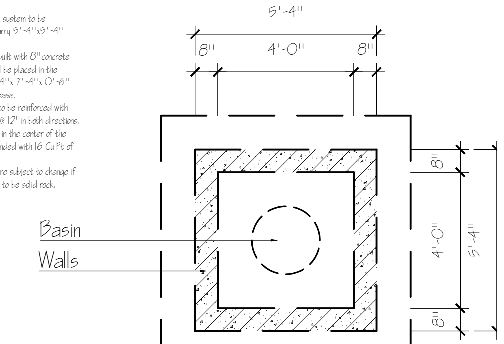
STAINLESS STEEL
Standard Detail Floor Mounted
FT700 - The Luxor

FT700SS.DWG 09-07-2017

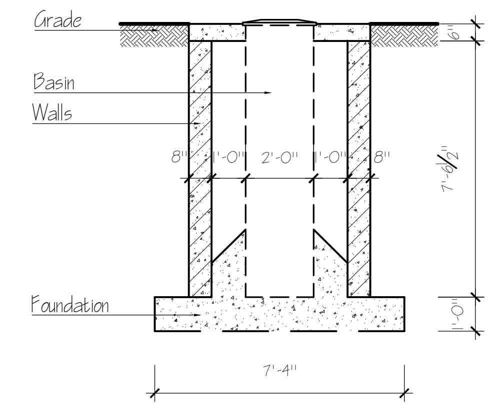
TOILET STALL DETAILS
Not To Scale

GRINDER PUMP SYSTEM

Location for the system to be excavated to carry 5'-4''x5'-4'' surround.
Surround to be built with 8'' concrete filled blocks and be placed in the center of a 7'-4''x 7'-4''x 0'-6'' deep concrete base.
Concrete base to be reinforced with T12 steel bars @ 12'' in both directions.
Basin to be set in the center of the base and surrounded with 16 Cu Ft of concrete.
Specifications are subject to change if location is found to be solid rock.



GRINDER PUMP SYSTEM PLAN
Scale: 3/8'' = 1'-0''



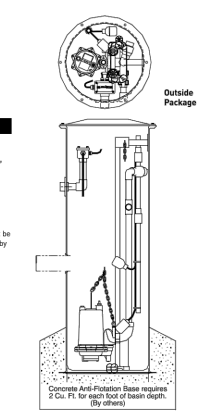
GRINDER PUMP SYSTEM SECTION
Scale: 3/8'' = 1'-0''

FEATURES

Everything is Included
Completely pre-engineered, pre-packaged, pre-assembled* systems ready for installation. Eliminate guesswork of selecting components – no mismatched or improperly fitting parts.

Easy Installation
Installer only has to excavate, secure, connect discharge lines, locate and mount inlet hub, locate and mount panel, install pump in basin and connect electrical wiring.

*Pump and inlet hub shipped separately – must be field installed. Wiring connections to be made by qualified electrician.



GRINDER PUMP SYSTEM DETAILS
Not To Scale

MYERS® MRG20 SERIES

SPECIFICATIONS

Pump Model – Pump shall be of the centrifugal type, Myers model MRG20 Series, with an integrally built-in grinder unit and submersible type motor. The grinder unit shall be capable of macerating all material in normal domestic and commercial sewage, including reasonable amounts of foreign objects such as small wood, sticks, plastic, thin rubber, sanitary napkins, disposable diapers and the like, to a fine slurry that will pass freely through the pump and 1¼" discharge pipe. Discharge shall be 1¼" NPT.

Operating Conditions – Pump shall have a capacity of ________ GPM at a total head of ______ feet and shall use a 2 hp motor operating at 3450 RPM.

Motor – Pump motor shall be of the submersible type rated 2 hp at 3450 RPM. Motor shall be for 60 Hz, single phase, 230 volts. Motor shall be capacitor start, capacitor run type for high starting torque.

Stator winding shall be of the open type with Class F insulation, good for 155° C (311° F) maximum operating temperature. Winding housing shall be filled with a clean, high dielectric oil that lubricates bearings and seals and transfers heat from windings and rotor to outer shell. Air-filled motors which do not have the superior heat dissipating capabilities of oil-filled motors shall not be considered equal.

Motor shall have two heavy-duty ball bearings to support pump shaft and take radial and thrust loads. Ball bearings shall be designed for 50,000 hours B-10 life. Stator shall be bolted to seal plate for easy motor replacement.

The motor shall have a heat sensor thermostat and overload attached to the top end of the motor windings to stop the motor if the motor winding temperature reaches 284° F. The high temperature shutoff will cause the pump to cease operation, should a control failure cause the pump to run in a dry wet well. The thermostat shall reset automatically when the motor cools to a safe operating temperature.

The common motor pump and grinder shaft shall be of #416 stainless steel threaded to take pump impeller and grinder impeller.

Seals – Motor shall be protected by one rotary mechanical seal. Seal face shall be carbon and ceramic and lapped to a flatness of three light bands. Optional tungsten and carbonate.

Pump Impeller – The pump impeller shall be of the recessed Myers type to provide an open unobstructed passage through the volute for the ground solids. Impeller shall be engineered thermoplastic and threaded onto stainless steel shaft.

Grinder Construction – Grinder assembly shall consist of grinder impeller and shredding ring and shall be mounted directly below the volute passage. Grinder impeller to be threaded onto stainless shaft and shall be locked with screw and washer. The shredding ring shall be pressed into an iron holding flange for easy removal. The flange shall be provided with tapped back-off holes so that screws can be used to push the shredding ring from housing.
All grinding of solids shall be from action of the impeller against the shredding ring.

Both grinder impellers and shredding ring shall be of 440C stainless steel hardened to 58-60 Rockwell C.

Corrosion Protection – All iron castings shall be pre-treated with phosphate and chromic rinse and to be painted before machining, and all machined surfaces exposed to the sewage water to be re-painted. All fasteners to be 300 series stainless steel.

Power Cord – The motor power cord shall be 14 GA AWG (3 PHASE) OR 166A AWG (1 PHASE). The cable jacket shall be sealed at the motor entrance by means of a rubber compression washer and compression nut. A heat shrink tube filled with epoxy shall seal the outer cable jacket and the individual leads to prevent water from entering the motor housing.

Level Control – An automatic control is provided by a heavy-duty float switch tethered to the side of the pump, having a piggyback plug on one end. This piggyback float switch operates the pump directly without need of control panel.

All drawings and specifications are intended to be read in conjunction with all other drawings and specifications issued in respect of this project.

The contractor shall check and verify all dimensions and levels etc. on site and with all other drawings and specifications. The agent shall be informed immediately of any descrepency.

DO NOT SCALE DRAWINGS

ISSUE
Building Drawings (RFx)

PROJECT NAME
Dockyard Bus Depot,
Department of Public Transport,
#5 Pender Road, Sandys

SHEET TITLE
Roof,Drainage & Elec. Plans, Details

DRAWING FILE NAME:

DESIGN/DRAFTSMAN	Ferdy Thorne
CHECKED	
APPROVED	
SCALE	As Shown
JOB NO.	1/ 2024
DATE	August 2024

PO Box 3230 Hamilton
HMPX, Bermuda
TELEPHONE (441)537-6211
e-mail: tho539@blessed.bm

DRAWING NO.

SHEET NO.
3