

52ST.305



TENDER FORM

The Chairman – Tender Opening Committee
PNG Power Ltd
P. O. Box 1105
BOROKO 111 NCD
Papua New Guinea
Phone: (675) 324 3381
Fax: (675) 3250791
Email: supplyhelpdesk@pngpower.com.pg

We (Full name of company).....
.....
.....
.....

hereby tender for the undermentioned goods and services subject to the conditions of tendering and at the prices quoted in the scheduled therein

TENDER No. 20/2019

CLOSING AT 4.00 PM FRIDAY 17Th MAY 2019

**FOR CONSTRUCTION OF NEW OFFICE
BUILDING FOR SCADA OPERATIONS AT
SECTION 12 ALLOTMENTS 01- HOHOLA
NCD.**



TENDER NO: 20 / 2019

**CONSTRUCTION OF NEW OFFICE BUILDING
FOR SCADA OPERATIONS AT
SECTION 12 ALLOTMENT 01 – HOHOLA, NCD**

*Property Development Team
Property and Accommodation Group
Corporate Services Business Unit
P. O. Box 1105, BOROKO 111
National Capital District*



TENDER NO: 20 / 2019

**CONSTRUCTION OF NEW OFFICE BUILDING FOR SCADA
OPERATIONS AT SECTION 12, ALLOTMENT 01 - HOHOLA,
NATIONAL CAPITAL DISTRICT**

Prepared By:.....

Checked By:.....

Date:.....

[Handwritten signature]
[Handwritten signature]
20/04/19.

PNG POWER LIMITED

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FRONTISPIECE

BRIEF DESCRIPTION OF QUOTATION

This Quotation is purposely for the Construction of New Office Building for SCADA Operations at Section 12, Allotment 01 – Hohola, National Capital District; and other associated works required under this contract.

PNG POWER LIMITED

SECTION 1

**CONSTRUCTION OF NEW OFFICE BUILDING FOR SCADA OPERATIONS AT SECTION 12,
ALLOTMENT 01 – HOHOLA, NCD.**

(A) INVITATION TO QUOTE

Quotation close with:

PNG Power Limited,
P. O. Box 1105,
BOROKO,
Papua New Guinea

At 4:00 pm _____ 2019.

The Quotation Submission shall consist of the following, all duly completed;

- Form of Tender
- Schedule of Quantities
- GST and Tax Registration Numbers

- ~~Additional information/price offered by the Supplier to aid the evaluation of the Quotation.~~

Enquiries during the Tender period shall be addressed to:

PNG Power Limited,
P. O. Box 1105,
BOROKO,
Papua New Guinea.

ATTENTION: Mr. Ivan Anengo
Senior Property Development Officer
Corporate Services Business Unit

Fax: 323 5239
Telephone: 324 3514
Email: ianengo@pngpower.com.pg

(B) **FORM OF QUOTATION**

**CONSTRUCTION OF NEW OFFICE BUILDING FOR SCADA OPERATIONS AT SECTION 12,
ALLOTMENT 01 – HOHOLA, NCD.**

Companies quoting are required to complete the blank spaces in this Tender Form and complete the Schedules included.

To: PNG Power Limited
P. O. Box 1105,
BOROKO, NCD

Gentlemen,

1. Having examined the Drawings, Specification and Schedules for the execution of the above named Works, we, the undersigned, offer to execute and complete the works accordingly for the sum of (words & figures)
.....
.....
.....(K.....)
2. We undertake, if our quotation is accepted, to complete and deliver the whole of the works within twelve (12) weeks from the date of receiving your Official Order.
3. We agree to abide by this Tender for the period of ninety (90) days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before expiration of that period.
4. This Tender, together with the receipt of your Official Order thereof, shall constitute a binding Contract between us.
5. We understand that you are not bound to accept the lowest or any Tender you may receive.

Signed and sealed for and on behalf of:)
.....)
by)
the)
of the said Company herein)
authorised in the presence of)
Address of Company Quoting:.....

(C) **QUOTATION DATA**

CONSTRUCTION OF NEW OFFICE BUILDING FOR SCADA OPERATIONS AT SECTION 12,
ALLOTMENT 01 – HOHOLA, NCD.

(i) **TENDERER'S ORGANISATION**

1. Name: Nationality:
2. Business Address: Fax:
- P. O. Box No: Phone:
-

(ii) **CONTRACT SUPERVISION**

Tenderers shall list their proposed supervisory staff for this Contract. (number and designation only).

(iii) **STATEMENT OF EXPERIENCE**

The Tenderer shall state hereunder facts in detail describing previous experience and achievements in performing similar or comparable works together with the names of authorities for whom, and the dates when, such works was carried out.

CONSTRUCTION SCHEDULE

**CONSTRUCTION OF NEW OFFICE BUILDING FOR SCADA OPERATIONS AT SECTION 12,
ALLOTMENT 01 – HOHOLA, NCD.**

The Bidder should indicate his proposed program for completing various stages of the work by filling in the schedule below.

ACTIVITY	TIME IN WEEKS											
	1	2	3	4	5	6	7	8	9	10	11	12
Mobilisation / Establishment & Set-Up												
Fencing / Drains & Road Works												
Concrete Works												
Steel & Metal Works												
Carpentry (incl. roof framing)												
Plumbing & Drainage Works												
Tiling and Glazing												
Electrical & Fire												
Painting Works												
Clean Up												

(D) **PRICE SCHEDULES**

CONSTRUCTION OF NEW OFFICE BUILDING FOR SCADA OPERATIONS AT SECTION 12, ALLOTMENT 01 – HOHOLA, NCD.

(i) **LUMP SUM BREAKDOWN**

1.0	Mobilisation, Site Establishment & Set Up	K.....
2.0	Fencing, Drains & Drive Way	K.....
3.0	Concrete Works	K.....
4.0	Metal Works	K.....
5.0	Carpentry Works (incl. roofing)	K.....
6.0	Electrical, Fire and Plumbing	K.....
7.0	Tiling and Glazing	K.....
8.0	Painting	K.....
	Sub-total	K.....
	GST	K.....
	TOTAL LUMP SUM (Carried to Form Quotation)	K.....

(ii) **SCHEDULE OF RATES FOR VARIATION**

The Contractor shall list the rates for performance of the type of work listed below. These rates shall be used for calculating the amount of any variation to the contract involving that type of work.

<u>Item</u>	<u>Description</u>	<u>Unit</u>	<u>Rate</u>
1.	Painting (including preparation)		m ³
2.	Etc.		

Name of Contractor:

Signature:

Date:

Witness:

SECTION 2 TECHNICAL SPECIFICATION

<u>Description</u>	<u>Page No</u>
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2.15 Furnitures	
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(A) JOB SPECIFICATION

1. SCHEDULE OF PRELIMINARIES

1.1 GENERAL

The Contractor shall carryout the works as detailed and/or inferred in the Technical Specification comprising of Trade Schedules and Drawings which takes precedence over the Standard Specification, Part (B).

1.2 STANDARDS

All works shall be carried out to the accepted standard trade practices, Local Authority Regulations and the relevant PNG and Australian Standards.

1.3 NATURE OF CONTRACT

The contract will be Fixed Price Lump Sum Contract. Approved variations shall be paid for at the applicable rates listed in the Schedule of Rates for Variations.

1.4 LOCATION OF SITE

The work site is located within the vicinity of PNGPower National Office at Section 12, Allotment 01 - Hohola, National Capital District.

1.5 DESCRIPTION OF WORK

All works covered in this contract is as stipulated within the scope of works. It basically requires civil works, carpentry, concrete masonry works, electrical and painting.

1.6 SITE INSPECTION

The Contractor shall inspect the site prior to lodging his Tender and satisfy himself with the nature of the site, PNG Power Ltd will not be liable if conditions proved otherwise climatic conditions and services relevant to the contract.

1.7 POSSESSION OF SITE

Possession of Site shall be on the date stated in the Letter of Acceptance to the successful tenderer.

The Contractor shall be given such possession of the site as is considered necessary to carry out these works, but such possession shall not be deemed to mean exclusive possession.

1.8 SITE OPERATIONS

1.8.1 Safety

SAFETY FIRST. The Contractor shall ensure that all of his/her workers must be in full proper attire and proper safety wear before carrying out any work on site.

All matters and conditions regarding safety, health and welfare of persons working on site shall be the responsibility of the Contractor.

1.8.2 Site Facilities

The Contractor shall arrange for and meet all the costs associated with the provisions of his electricity, telephone, water ablution facilities, temporary buildings for his workmen including site security.

1.9 CONSTRUCTION SCHEDULE

The Contractor shall provide a detailed construction schedule expanding on the Tender Construction Schedule within two (2) weeks of acceptance of contract.

1.10 USE OF SECOND HAND MATERIALS

No second hand materials shall be used unless indicated in the specification or shown on the drawing or until they have been inspected and approved by the Superintendent. Any materials reused shall be finished to "as new" condition.

1.11 SETTING OUT

The works shall be located where indicated on the drawings, however, the accurate setting out and adherence to details of levels and squareness of the building will be the sole responsibility of the Contractor.

1.12 TIME FOR COMPLETION

The works shall be Practically Completed within Twelve (12) weeks from the date of Possession of Site given in PNG Power's Letter of Acceptance.

1.13 DEFECT AND LIABILITY PERIOD

The period of 3 months will be allowed for defects and liability after completion of works. The contractor is free when 3 months is over; but if any defects appear within 3 months the contractor will be called to fix at free of charge.

1.14 VARIATIONS

Variations are not tolerated as the contractor must make an attentive assessment of the scope of works and site conditions. The contractor shall allow for the miscellaneous expenses before submitting the quotation as there may be difficulties in sourcing additional funds after the signing of the contract.

The Contractor shall notify the PNG Power Building Supervisor or Project Manager; and a joint inspection shall be scheduled before the signing of the completion certificate (COC).

1.15 CLEANING UP

Upon completion of the works, the contractor shall leave the work areas clean and clear of rubbish. excavated material and access material which is of no use to PNG Power. All rubbish shall be dumped at the local authority's official garbage dump and not at or around the work site.

2.0 DESCRIPTION OF WORKS

2.1 MOBILISATION & SITE ESTABLISHMENTS

- 2.1.1 The Contractor shall organise and mobilise on site upon PNGPower Ltd's instruction or upon receiving of PNGPower Ltd's Official Purchase Order.
- 2.1.2 The contractor shall arrange for temporary services on site including site access, telephone, power and sewerage for use by its workers.
- 2.1.3 The Contractor shall arrange for storage spaces on site to store materials, tools and other plant and equipments.
- 2.1.4 The Contractor shall also arrange for Security on site to safe-guard building materials, plants and equipments.

2.1.5 EXCAVATION AND DEMOLITION

- a. Locate underground services and foundations before any excavation work commences. Make good at no extra cost damages to existing services.
- b. The ground level around the proposed perimeter of the building shall be excavated and levelled properly. Backfill any area that is low with proper soil or road base materials.
- c. The Contractor shall excavate earth at 200mm – 600mm deep for foundation. The topsoil shall be compressed with the Construction Walker Packer Machine.
- d. Demolition of existing part of buildings shall be confirmed by PNG Power inspector and carried out under this contract as agreed upon. Any obstruction (ie; stonewall, trees, stumps etc) shall also be cleared properly to make way for construction.

2.2 FENCING, DRAINS AND ACCESS

2.2.1 FENCING

Supply and install a 900mm – 1100mm high picket fencing where indicated on the drawing, Install picket fencing that matches the existing. A clearance of 150mm from ground must be allowed beneath all fencing panel. The contractor is to redirect the fence by allowing 1metre clearance around any power pole, sign or other item identified by the Project Manager.

2.2.2 DRAINS

- a. The Contractor shall make good existing concrete or stone pitched drains.
- b. All drain waste to connect to proper main drain system.

2.2.3 ACCESS

Contractor shall make good all access and drive ways into the site.
Contractor shall construct footpath to the new building.

2.3 CONCRETE WORKS

- 2.3.1 The Contractor shall supply 40kg cement bag at A-C grade. Supply fine sand washed coarse river sand CSAND/MS1.58 tonnes per/m³. Supply reinforcement bars Y10 standard size 6.0 metres long to with ties. Supply F72 Mesh wire.
- 2.3.2 All concrete mixing shall be by mechanically driven revolving drum. Hand mixing is not permitted unless approved by the Superintendent. Minimum mixing proportions shall be 3:2:1 with a maximum slump of 80mm. All concrete shall have a minimum strength of 20 MPa.
- 2.3.3 All footings, slabs, reinforcing, formwork etc. shall be inspected by the Superintendent before commencement of mixing and placing of concrete.
- 2.3.4 For all slab construction, supply and lay fortecon membrane to underside of slab, lapped 150mm and taped at joints.
- 2.3.5 Supply 75x50mm and 100x25mm timber for timber boxing frames.
- 2.3.6 Supply 300x300x150mm deep precast concrete splash pads to each downpipes.
- 2.3.7 Supply 6x 400x400x2400mm reinforced concrete plinth.

2.4 BLOCK AND MASONRY WORKS

All works under this category shall be undertaken by the experienced concrete blocklayer and comply with all relevant codes of this specifications.

- 2.4.1 BLOCKS
All blocks shall be Class A blocks Monier or equal approved – with a minimum strength of 12MPa.
- 2.4.2 STANDARD 400x200 BLOCKS
Lay stretcher bond, reinforced and core filled.
- 2.4.3 BEAMS
At every second course where horizontal reinforcement is required all round, lay knock out beam blocks and core fill. Also lay and reinforce above all openings.
- 2.4.4 REINFORCEMENTS
Provide and place all bars and ties in blockwork.
Horizontal bars at every second coarse all round.
- 2.4.5 CONDUITS
For electrical wiring the contractor will provide 25 dia. Conduits for embedding as instructed on site. Draw wires shall be left in the conduit runs.
- 2.4.6 LAYING
All blocks shall be laid in stretcher bond to meet acceptable standards.
- 2.4.7 COREFILL
All cores whether reinforced or not shall be core-filled.
- 2.4.8 JOINTING
Joints in blockwork shall be "iron" jointed all through-out.

2.4.9 CHASING

Chasing of blockwork is not permitted. Pipework, conduits etc. shall be built in and concealed in blockwalls.

2.4.10 CLEANING

Clean down all blockwork as work progresses to ensure total removal of mortar droppings and smears.

2.5 STEEL WORKS

Supply, fabricate and erect all aluminium, mild steel, cast iron and other metal works together with fastening and fixings. Carry out work with best materials and workmanship in such time as to coordinate with other trades. Complete with all relevant codes governing this trade.

Where dissimilar metals are in contact, either in fabrications or where fixed on the site, completely separate each by complete coating, every contacting surface with bituminous paint or equal approved method.

2.5.1 The Contractor shall supply all welding gears and machinery.

2.5.2 The Contractor shall supply 2x 40ft container - the main building structure and place over concrete plinth as indicated on the drawing.

2.5.3 Supply Oxyacetylene gears and machinery to cut window and door openings.

2.5.4 Door Jambs and Window Frames:

Supply aluminium window and door frames with fixed security applimesh to all window; and security screen doors to all door openings.

2.6 CARPENTRY

The contractor shall ensure to apply wood primer to exposed timber board surfaces prior to fixing. All timber exposed to view shall be sanded to a perfect smooth finish.

All timber shall be treated with CCA Chemical from the Hardware.

2.6.1 Fasteners

Supply all nails, brads, pearl pin, tacks, clouts, staples, screws, bolts, patent of expanding bolts and power driven fasteners as appropriate for the completion of work.

2.6.2 Barge and Fascia Board

Supply and fix new fascia and barge boards. The size shall be 200x32mm and fascia boards shall be securely fixed at the end of the new jack rafters with appropriate jolt head nails.

2.6.3 Proposed Male and Female Toilet

- a. Refer to drawings for details
- b. Provide 2 x solid core entry doors with 2 x 255 dead bolt locks fitted on doors. Doors shall be fitted on the door jamb with 2x100mm brass butt hinges.

- c. Provide new 150x32mm door jambs for entry doors flushed from the inside and securely fastened to the walls.

2.7 JOINERY AND HARDWARE

2.7.1 Doors

All external doors shall be new Solid Core Door; Aluminum framed with tinted fix glass panel door for the interior.

2.7.2 Door Locks

- a. Provide new Tubular Dead bolts, 777 series with 56x100mm x 75mm "D" handle fixed on both sides of all external doors.
- b. Provide mortice lock with handle on both sides of the internal door.
- b. Provide magnetic door stoppers to all office door and entry doors where appropriate.

2.7.3 Hinges and Catches

- a. All door hinges shall have a new 100mm butt steel hinges. Mark out for fitting of the butt steel hinges shall be 150mm from the top of the door and 200mm up from the bottom edge of the door

2.8 ROOFING WORKS

All roofing works to be carried out according to Manufacturers relevant codes and practices.

2.8.1 Roofing Sheets

Roofing shall be corrugated roofing Bon decking standard size.

2.8.2 Overhangs

Overhang length shall be 500mm - 750mm as shown on drawings.

2.8.3 Roof Fasteners

60mm long tekscrews shall be used as roof fasteners and the contractor shall use three(3) number of tekscrews on roof sheets and securely fastened as per roof battens.

2.8.4 Sisalation

The sisalation shall be placed with new 1.2m wide double sided insulation blanket and allow 150mm lap over on each joints.

2.8.5 Gutter

- a. Supply new gutterings with a new trim line gutter and shall be fixed at the full length of lower side of the roof.

- b. The contractor shall allow a fall a 2° slope starting from the front side of the building and runs towards the end of the building as indicated on the drawing.

2.8.6 Gutter Brackets

An appropriate trim line gutter brackets shall be used prior to fixing of the gutter. The gutter brackets shall be fixed at 1.0 meters spacings with an appropriate fixer or fasteners.

2.8.7 Down Pipes

- a. Down pipes shall be 100x100mm square and shall be filtered tightly where the drops are. All joints shall be neatly fitted to avoid appearing of gaps.
- b. A 50x50mm light metal hollow section pipes shall be used for down pipes supports especially from the under side of the floor joists down to the ground level.

2.8.8 Flashings

An appropriate metal flashing shall be provided at the edges of the roofing and securely fasten with appropriate fasteners on to the Barge Board. Ensure to seal off screw heads properly with approved sealant.

2.9 TILING WORKS

2.9.1 Standards and Workmanship

The tiler shall supply and install 600x600mm white ceramic tiles on all floor coverings for the general office, including storage floor area.

2.9.2 Splashback shall be formed along the back of the hand basin using 150x100mm bull-nosed edge ceramic tiles at 300mm high. Seal off gaps with appropriate sealant.

2.9.3 The ceramic tiles shall be firmly bedded on a beads of adhesive and shall be properly grouted. All excess grout shall be completely cleaned off. Colour: Splashback - grey. Floor Tiles – white.

2.9.4 Allow 3mm spacing for ceramic tile joints and shall be filled with appropriate grouting. Ensure also that same size ceramic tiles are fitted at the edges. For door ways, proper edging ceramic tiles shall be used.

2.10 GLAZING WORKS

2.10.1 Provide and fix 8mm thick clear and obscure glass to windows as specified on the drawings.

2.10.2 Mirrors shall be 6mm thick silvering quality polished plates glass with silver applied and guaranteed tropical quality. Edges shall be ground and polished.

2.10.3 Supply and install rubber strips for all glass fittings.

2.11 MECHANICAL WORKS

- 2.11.1 Supply and install new air condition for Team leader x1
- 2.11.2 Supply and install new air condition for Control room x1
- 2.11.3 Supply and install new air condition for General staff room x2
- 2.11.4 Supply and install new air condition for store room x1

2.12 PLUMBING WORKS

2.12.1 General

All plumbing shall be carried out by competent Tradesmen who hold current Sanitary Plumbers licences issued by the authorised Public Health Authority.

2.12.2 Cold Water Supply

Provide cold water supply to the following fittings:-

- Hand basin
- WC cistern

2.12.3 Traps and Wastes

Supply and provide 32mm dia. uPVC to hand basin. 50mm dia. to shower and floor wastes. 100mm dia. to water closet.

2.12.4 Soil Waste Vent Pipes

Supply and install 100mm uPVC vent pipes. All bends, junctions and elbows, excepting those in vent pipes shall have inspection openings. All vents shall be fitted with PVC vent cowls. Cement grout waste pipes into drains and disconnecter traps.

2.12.5 Sanitary Fittings

Supply and fix the following fittings and connect up to services and wastes.

b. Water Taps

Supply and install required water taps to hand basins and toilets.

c. Hand Basin

Provide and install firmly wall mounted hand basin complete with barred waste and plug. Colour: White.

d. Water Closets (WC)

Provide and install approved WC full flush toilet suite with low level cistern and standard seat. Colour: TBA.

Connect to soil waste, provide bituminous felt strip between pan and floor and fix with 75mm brass screws.

2.13 FIRE AND ELECTRICAL

All electrical works to be undertaken by a Licensed Electrician according to the relevant codes and practices. All materials shall be of the best quality and workmanship shall be accordingly to the best trade practice of the workmanship in accordance with the PNG Power requirement.

2.13.1 Fire

a. Standards and Workmanship

Comply with all relevant Fire Authority rules, codes and requirements.

b. Provide and install portable fire extinguisher of the types and capacities shown below. Install fixings, brackets and position indicating signs and labels for each extinguisher.

c. Provide extinguisher as;

Type 1 4.5kg Dry Chemical Powder (DCP)

2.13.2 Electrical

a. Standards and Workmanship

Comply with all the relevant PNG Power Limited rules, codes and requirements.

b. Distribution Board

The contractor shall upgrade the existing distribution board.

c. Meter Box

Supply and install a new meter box 12x12x10 galvanised or pad install.

Supply and install new main switch board; new circuit breaker 9 pole; and new earth wire.

d. Wiring

All wiring shall be concealed inside the ceiling and in conduits embedded in the walls.

Supply new 1.5m² and 2.5m² cable drums.

e. Power Outlets

Supply and install new single and double GPOs where necessary.

f. Light Switch

Supply and install 10A light switches where necessary. Switches shall be mounted 1.2m – 1.4m above floor level.

g. Lights and Fittings

Supply and install new 18 watts and/or 36 watts fitting opal diffuser where required.

h. Daylight Switch

Supply and install a daylight switch; and 18-36 watts weatherproof light tube where required.

2.14 PAINTING SPECIFICATION

2.14.1 Quality of Materials

The contractor shall supply all painting materials and store them neatly in an appropriate area free from dust, moisture or anything that may have an immediate effect on painting materials.

All materials used for this painting work shall be of higher grade. No second grade materials shall be used, if the contractor shall or may want to use second graded materials, the contractor must seek Inspector's approval.

2.14.2 Brand

The contractor shall supply materials such as, undercoat, turps, final coat etc, from the same Manufacturer. Mixtures of painting materials from different brand of manufactures shall not be allowed.

2.14.3 Wash down

All painting surfaces shall be thoroughly washed down with approved detergent or sugar soap prior to commencement of any painting work. The contractor shall seek approval from PNG Power supervisor after thorough wash down all surfaces before commencing of painting work.

2.14.4 Drop Sheet

A drop sheet shall be used by the Contractor during the cause of the painting work to protect the floor of the building.

2.14.5 Under Coats

A water base Acrylic under coat or similar approved type under coat that can quickly settled and dried shall be used. The Contractor shall apply one (1) coat on old surfaces. 2 coats of under coats on new surfaces.

2.14.6 Putty

The contractor shall use sparkfilla and polyfilla or similar approved putty to fill holes, gaps or any uneven surfaces. Puttied areas shall be left for a day before any sanding is carried out. This putting work shall be carried out after painting of first coat of under coat.

2.14.7 Final Coat

After completion of the sanding work to all painting surfaces, the contractor shall carry out the painting of the final two (2) coats. Colours shall be preferred by the PNG Power Supervisor.

2.14.8 Turpentine

The Contractor shall only use turpentine to wash paintbrushes or to soften paint so that paints are flexible and easy to use. Kerosene shall not be used when carrying out the painting work.

2.14.9 Scaffolding

The Contractor's responsibility to provide necessary scaffolds and securely fixed to avoid accidents. PNG Power shall not be responsible for any accident created due to negligence.

2.14.10 Painting and Varnishing

- a. The contractor shall use Taubmans paints only when carrying painting works.
- b. Do not apply under coat without the approval of the PNG Power Inspector.
- c. All existing paint surface shall be cleaned and washed down properly with sugar soap or detergents prior to applying of any under coat.
- d. Apply masonry filler under coat for all masonry surfaces prior to painting of final coats.
- e. All rusted metal surface shall be cleaned and scraped off properly before applying of metal primer.
- f. Colours scheme shall be provided by PNG Power Inspector.
- g. New surfaces shall have 2 coats of under before applying of 2 final coats.

2.15 FURNITURES

All furnitures to be supplied shall be approved by the Project Manager. Contractor shall acquire and present samples of furnitures prior to purchasing.

2.15.1 Supply new 8x general staffs workstation.

2.15.2 Supply new 1x Team Leader's table

2.15.3 Supply 2x Control Room workstation

2.15.4 Supply Shelvings at Store Room

2.16 CLEANING UP

Upon completion of the works, the contractor shall leave the work areas clean and clear of rubbish and excess material which is of no use to PNG Power Ltd.

All rubbish shall be dumped at the Local Authority's official dump site and not at or around the work site.

*****END OF SCOPE*****

SECTION 3 LIST OF DRAWINGS

The Contractor shall undertake the works for Tender in accordance with the Drawings listed below and as appended. The drawings form part of the Contract Documents and all notes on the drawings are considered to be part of the drawings and the Contract. If the drawings conflict with any other part of the Contract Documents, the drawings will take precedence.

Drawing Ref. No.	Drawing Title	Date of Issue
M11925	CONSTRUCTION OF SCADA OFFICE AT SECTION 12, ALLOTMENT 01 – HOHOLA, NCD.	APRIL 2019
Sheet 00	- Drawing Index Sheet	
Sheet 01 of 08	- Locality & Site Layout	
Sheet 02 of 08	- Proposed Office Layout	
Sheet 03 of 08	- Typical Elevations	
Sheet 04 of 08	- Proposed Electrical & Plumbing Layout	
Sheet 05 of 08	- Cross Section A-A	
Sheet 06 of 08	- Door and Window Schedule & Details	
Sheet 07 of 08	- Light Gauge Steel Framing Detail	
Sheet 08 of 08	- Roofing and Concrete Plinth & Slab Detail	



PHOTOGRAPH

LOCATION: NATIONAL OFFICE, PNG POWER LTD, SECTION 12, ALLOTMENT 01, HOHOLA, NATIONAL CAPITAL DISTRICT.

CONTRACTOR: _____

PERIMETER AREA: 86.4m²
BUILDING: SCADA OFFICE
TYPE: NEW OFFICE BUILDING

SITE SUPERVISOR: Geosmond G
ARCHITECT: Etonia Vuli Paru

DATE INSPECTED: 8/03/ 2019



Fig 1.0 This photo shows where SCADA Office will be located.



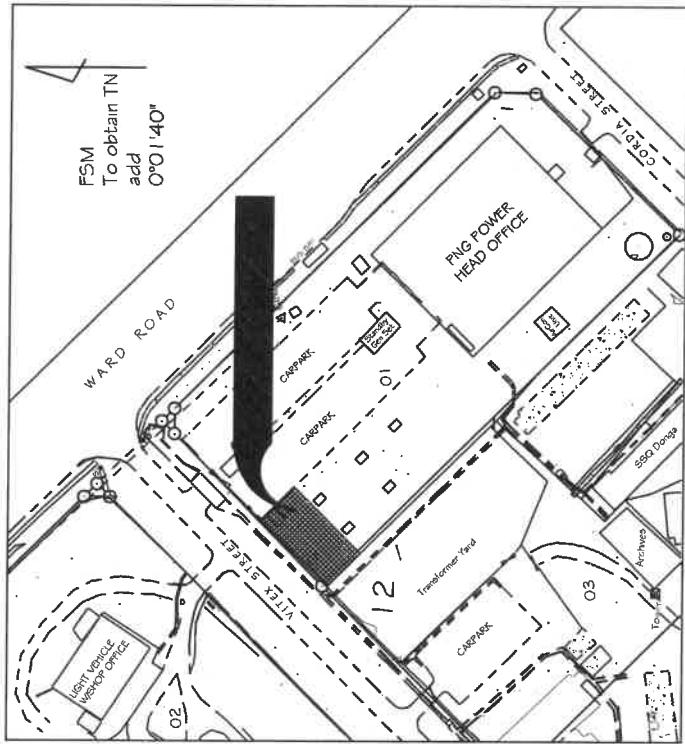
Fig 2. 0 This is where the SCADA Office will be located.



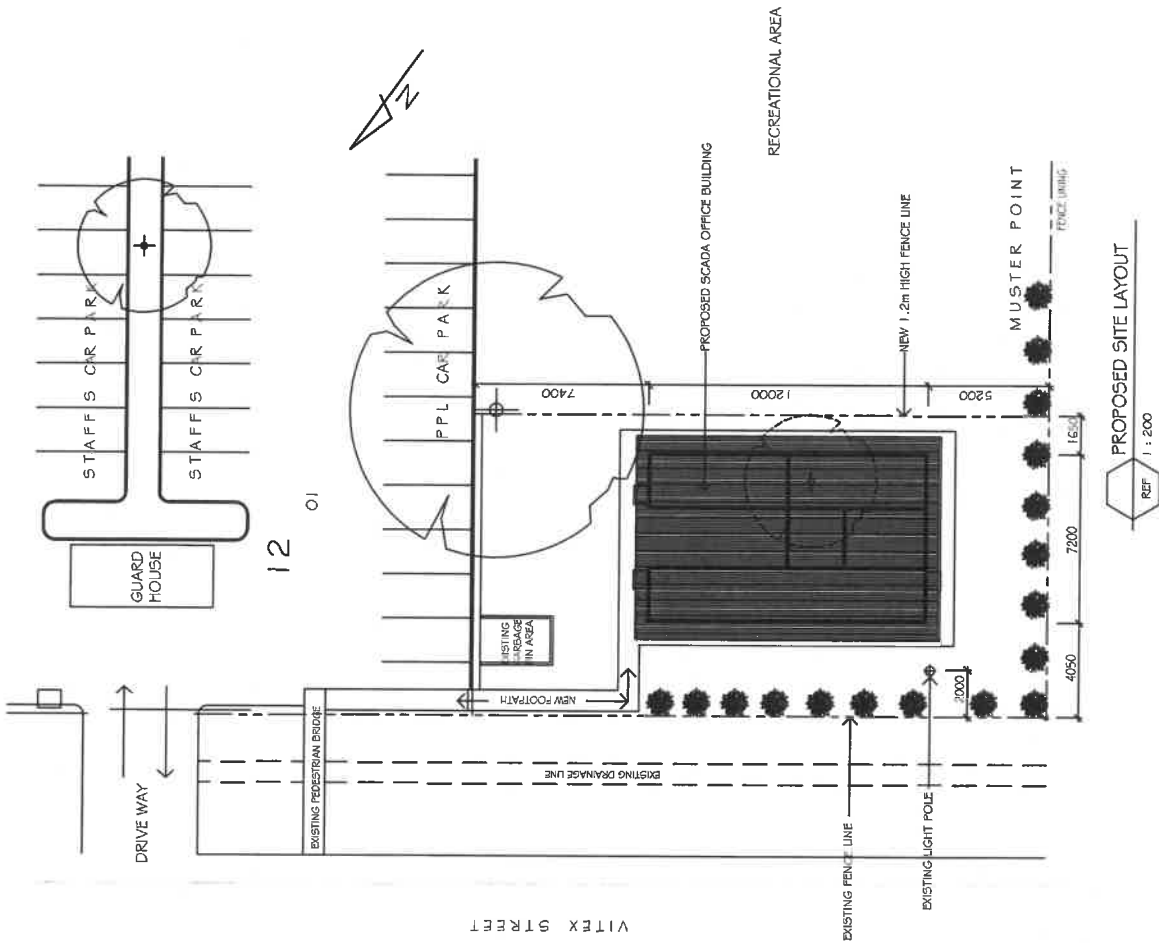
Fig 3.0 Photos...continue



Fig 4.0 Photos...continue



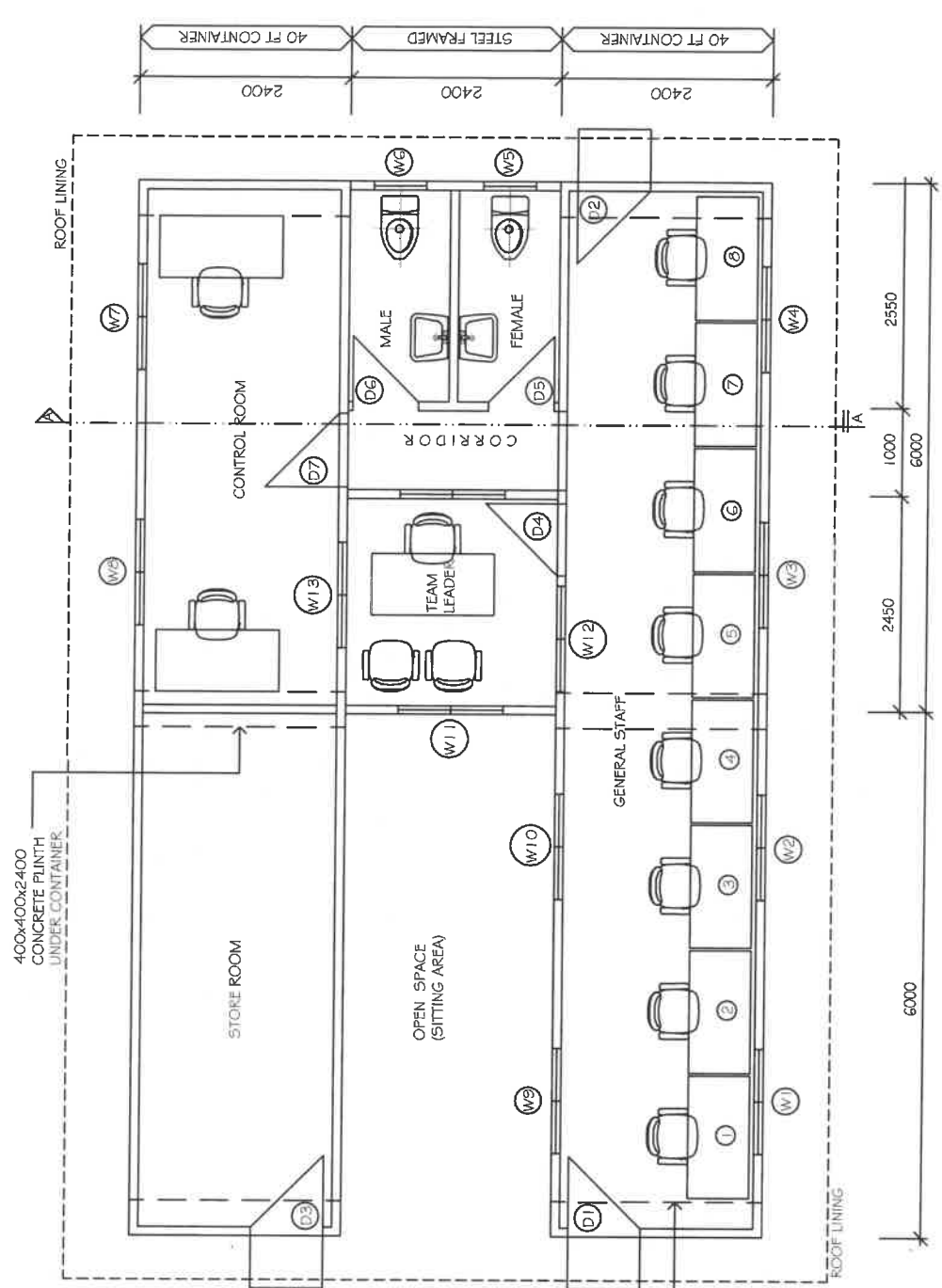
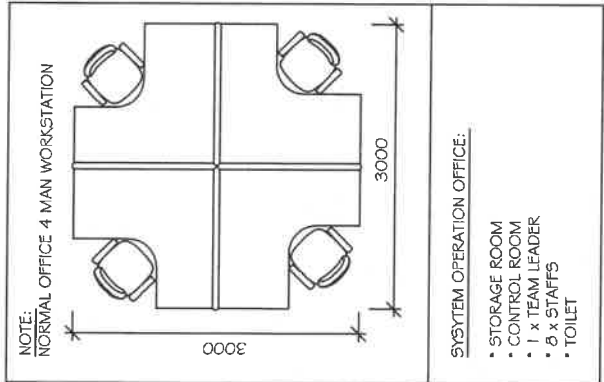
SITE LOCALITY PLAN
REF / NTS



PROPOSED SITE LAYOUT
REF / 1 : 200

<p>PROPOSED SITE LAYOUT</p> <p>REF / 1 : 200</p>		<p>Drawn: [] Designed: [] Checked: [] Endorsed: [] Approved: []</p>	<p>Location: APRIL 19 Title: A3 Number: M11925 Revision: []</p>	<p>PNG POWER LTD, SECT 12, LOT 01 - HOHOLA, NCD PNG POWER SCADA OFFICE LOCALITY & SITE LAYOUT</p>
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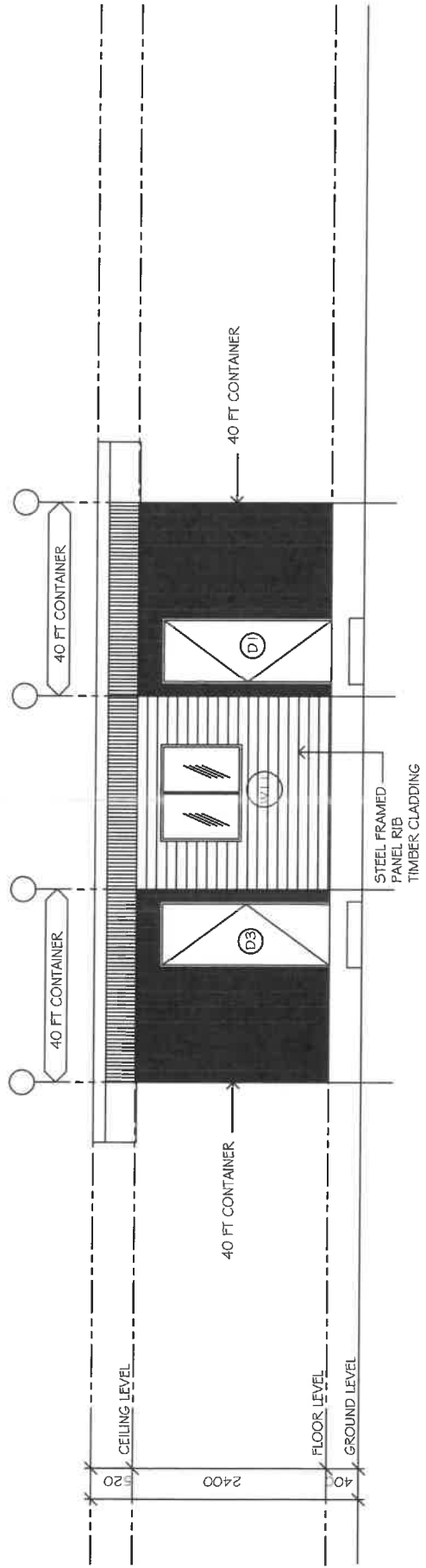
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PROPOSED OFFICE LAYOUT

REF 1 : 50

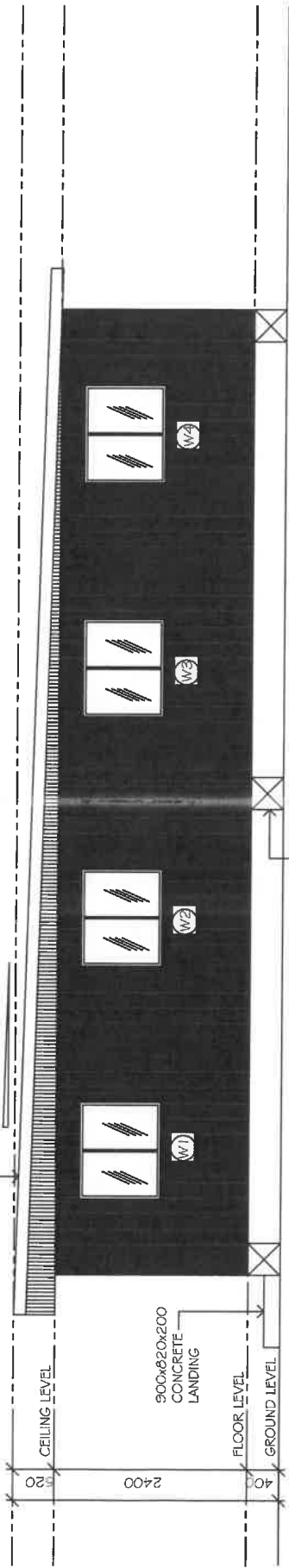
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CAD Filename: .jwg Scale: 1:50 / AS SHOWN	Date Plotted: 09.04.19 Time Plotted: 12:00PM	Drawn: [Signature] Checked: [Signature] Entered: [Signature] Approved: [Signature]	Location: APRIL 19 Title: 03 Number: M11925 Revision:
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TYPICAL FRONT ELEVATION

REF 1 : 50

CORRUGATED ROOFING
2° SLOPE



TYPICAL SIDE ELEVATION

REF 1 : 50

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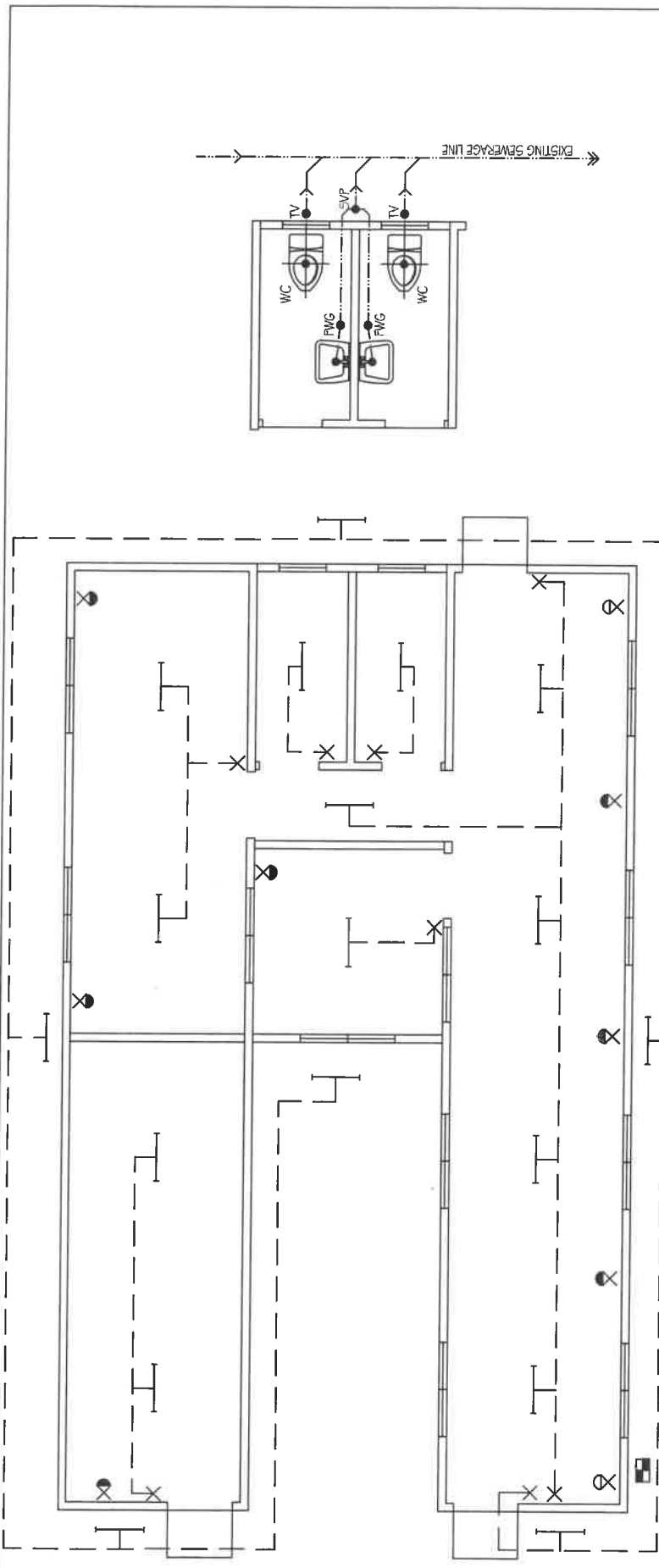
Date Plotted: 09.04.19
Time Plotted: 12:00PM

Rev.	By	CHK'D	Date

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		APRIL 19
Designed	ut_cnp	Title
		A3
Checked		
Endorsed		Number
		M11925
Approved		Revision

PNP POWER LTD, SECT 12, LOT 01 - HOHOLA, NCD
 PNP POWER SCADA OFFICE
 TYPICAL ELEVATIONS



PLUMBING LAYOUT

ELECTRICAL LAYOUT

PLUMBING LEGEND	
SYMBOLS	DESCRIPTION
1	FMG FLOOR WASTE GULLY
2	WC WATER CLOSET
3	TV TOILET AIR VENT
4	SVP SOIL VENT PIPE
5	500 PVC WASTE PIPE CONNECTION

ELECTRICAL LEGEND	
SYMBOLS	DESCRIPTION
1	FLUORESCENT LIGHT FITTING (1 x 1.8W)
2	SWTCH, ONE WAY (10 Amps)
3	G.P.O. (10 Amps)
4	DOUBLE G.P.O.
5	METER BOX

REF 1 : 50

PROPOSED ELECTRICAL & PLUMBING LAYOUT

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By: [Signature] **Check/Date:** [Signature]

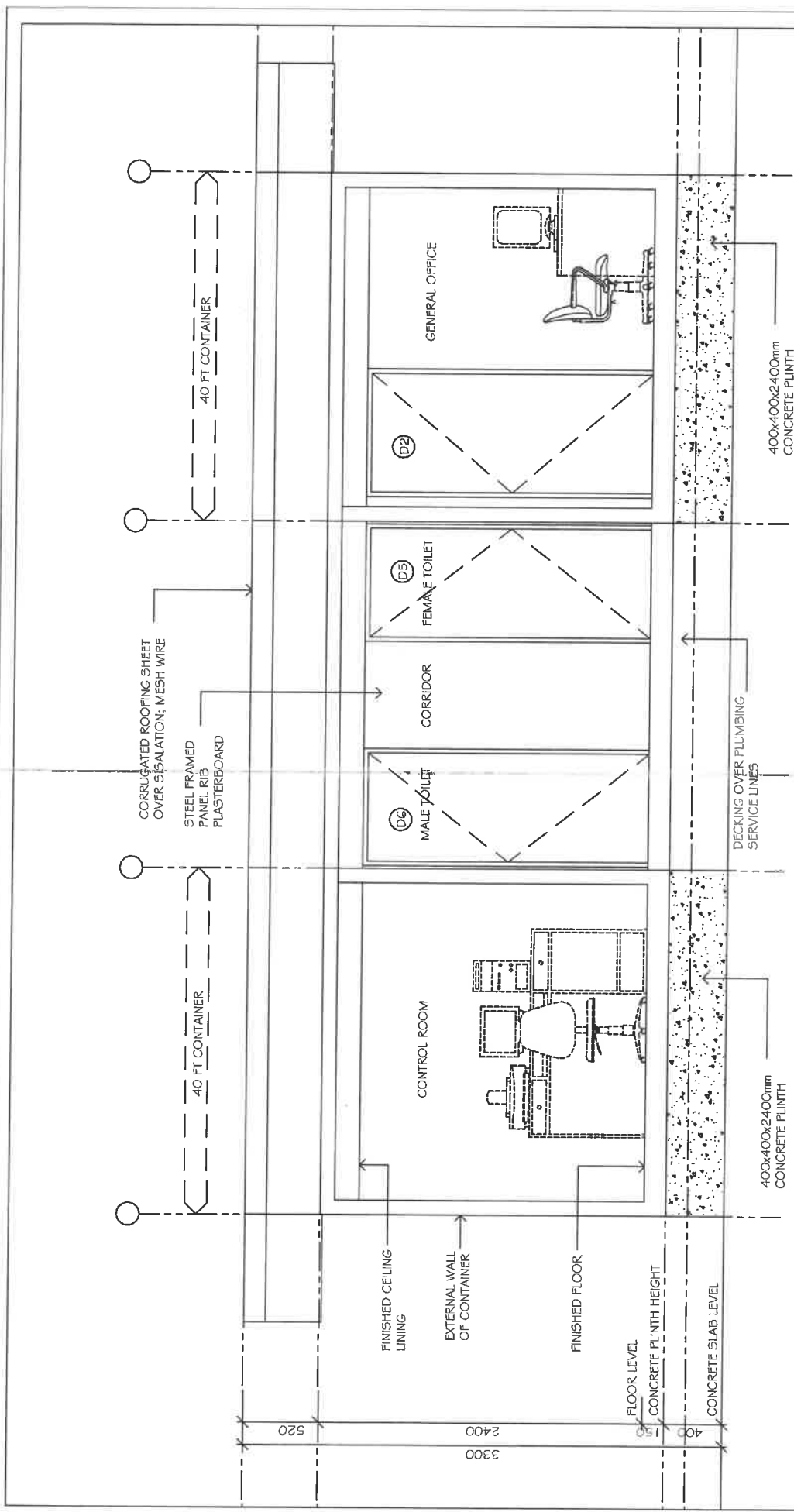
Drawn: [Signature] **at: cnp** **APRIL 19** **at: eyp**

Designed: [Signature] **Checked:** [Signature] **Estimated:** [Signature] **Approved:** [Signature]

Location: PNG POWER LTD, SECT 12, LOT 01 - HOHOLA, NCD
Title: PNG POWER SCADA OFFICE
Number: M11925
Revision: 04 OF 08

Proposed Electrical & Plumbing Layout

Logo: PNG POWER LTD
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CROSS SECTION A-A

REF 1 : 25

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Date Plotted: 05.04.19
 Time Plotted: 12:00PM

Rev.	Revision	By	Check	Date

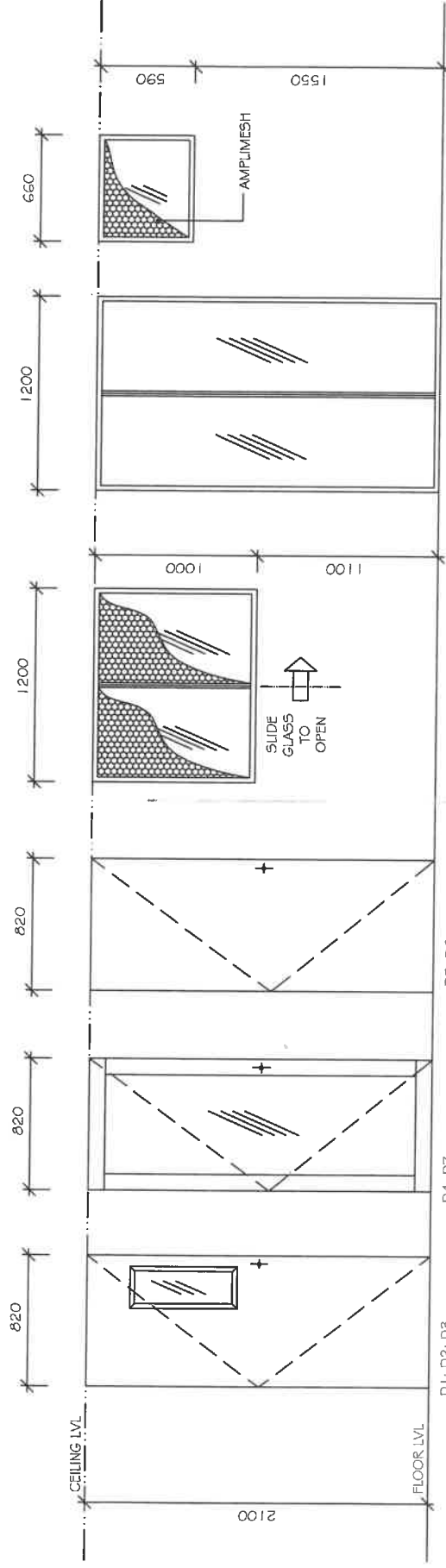
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Title	Number	Revision
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 PNG POWER SCADA OFFICE
 CROSS SECTION A-A

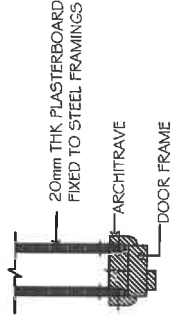
Sheet 05 OF 08



- D1; D2; D3
-EXTERNAL DOORS
-STEEL FRAMED
-CORE DOOR
-8.0mm OPAQUE GLASS
- D4; D7
-INTERNAL DOORS
-ALUMINUM FRAMED DOOR
-8.0mm GREY LAMINATED GLASS
- D5; D6
-LAVATORY DOORS
-ALUMINUM FRAMED SOLID DOOR
- W1; W2; W3; W4; W7; W8; W9;
W10; W11
-EXTERNAL WINDOWS
-ALUMINUM FRAMED FIXED GLASS
-ALUMINUM FRAMED FIXED GLASS
-ALUMINUM FRAMED FIXED GLASS
-8.0mm GREY LAMINATED GLASS
-WHITE STEEL AMPLIMESH
- W12; W13
-INTERNAL OFFICE WINDOWS
-ALUMINUM FRAMED FIXED GLASS
-ALUMINUM FRAMED FIXED GLASS
-ALUMINUM FRAMED FIXED GLASS
-8.0mm GREY LAMINATED GLASS
- W5; W6
-LAVATORY EXTERNAL WINDOWS
-ALUMINUM FRAMED FIXED GLASS
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-ALUMINUM FRAMED FIXED GLASS
-8.0mm GREY LAMINATED GLASS
-WHITE STEEL AMPLIMESH

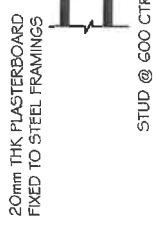
DOOR & WINDOW SCHEDULE

REF 1 : 25



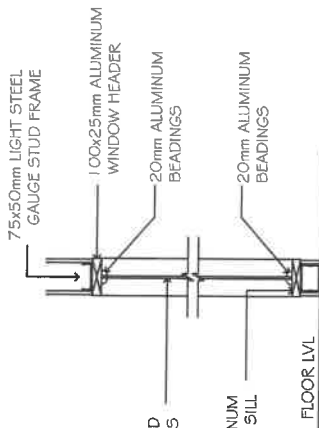
DOOR HEAD SECTION

REF 1 : 5



DOOR JAMB SECTION

REF 1 : 5



TYPICAL PARTITION GLASS WINDOW SECTION

REF 1 : 5

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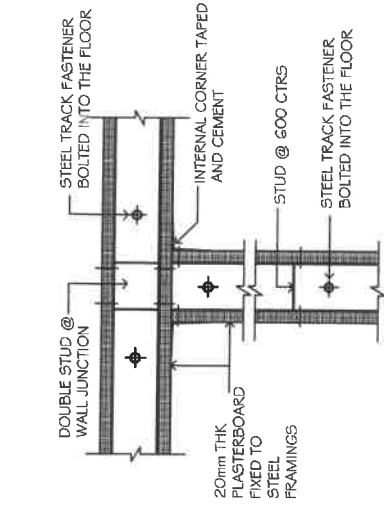
Date Plotted: 05/04/19
Time Plotted: 12:00PM

Rev.	Revision	By	Chkd	Date

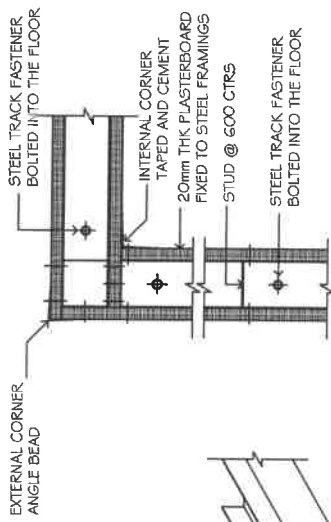
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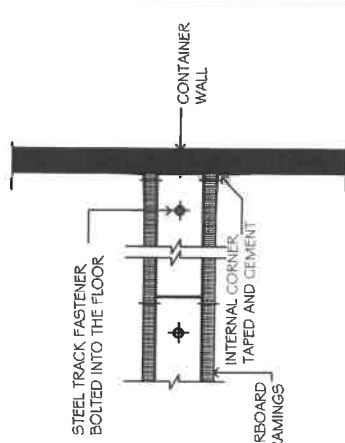
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PNP POWER SCADA OFFICE
DOOR AND WINDOW SCHEDULE & DETAILS
M11925
Sheet 06 OF 08



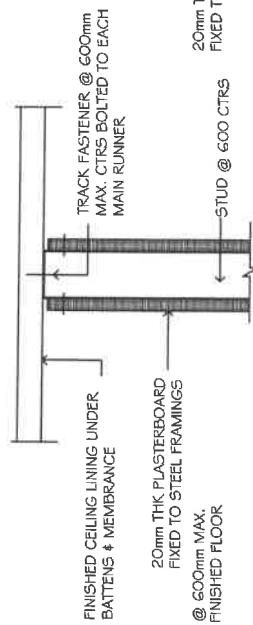
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JUNCTION DETAIL: PLASTERBOARD TO STEEL FRAME



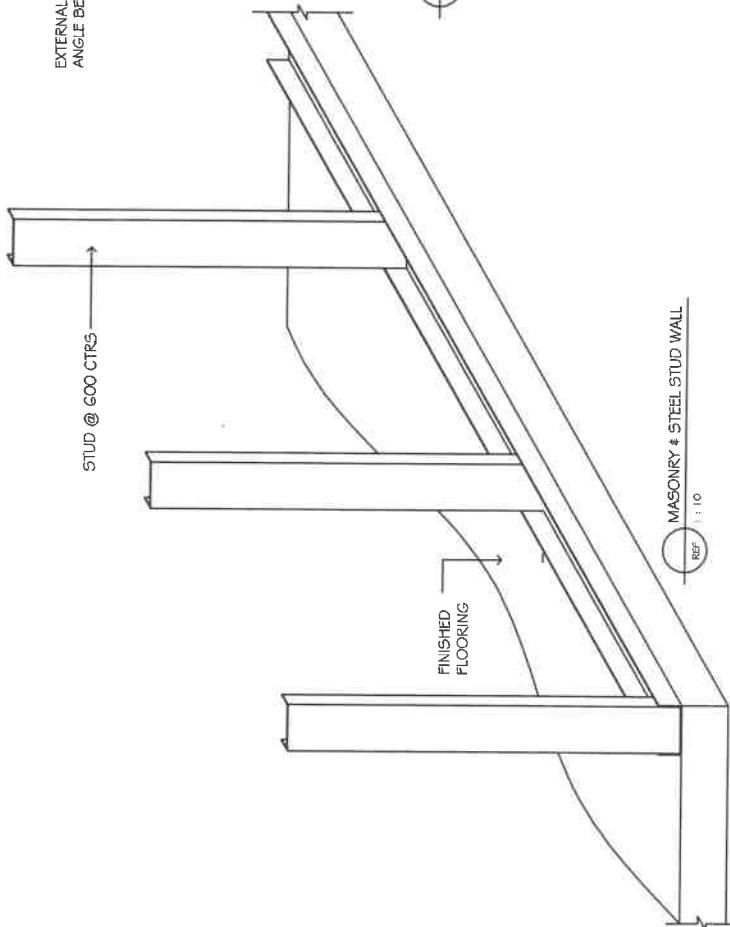
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CORNER DETAIL: PLASTERBOARD TO STEEL FRAME



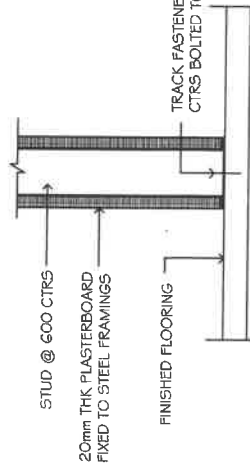
REF 1:10
STUD TO WALL CONNECTION



REF 1:10
WALL & HEAD CONNECTION



REF 1:10
MASONRY & STEEL STUD WALL



REF 1:10
WALL & BASE CONNECTION

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 PNG POWER SCADA OFFICE
 LIGHT GAUGE WALL FRAMING DETAIL
 Sheet 07 OF 08

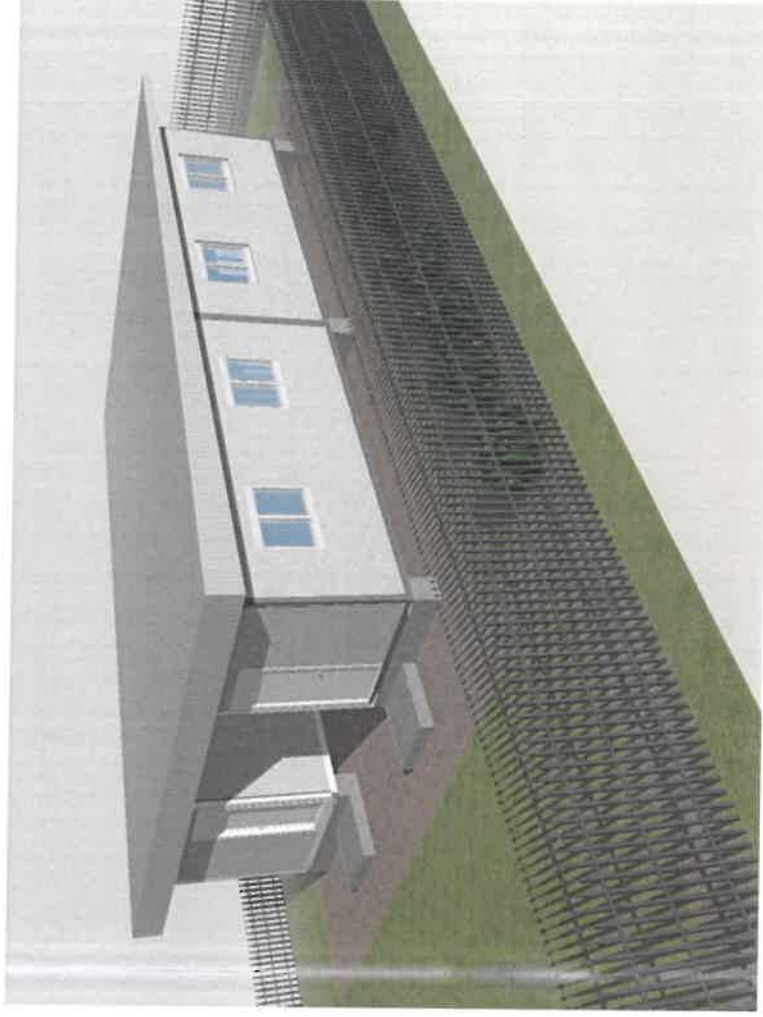


**PROPERTY SERVICES TEAM
FINANCE & SHARED SERVICES BU
HOHOLA, NCD**

**PROPOSED NEW OFFICE BUILDING FOR SCADA OPERATION @ SECTION 12, ALLOTMENT 01 -
HOHOLA, NATIONAL CAPITAL DISTRICT**



Perspective 01



Perspective 02

DESIGNED BY: PROPERTY DEVELOPMENT TEAM