

# SCOPE AND SPECIFICATION

**PNG POWER LTD**

**TENDER NO: 02 / 2023**

**PNG POWER LTD PLANT & FLEET WORKSHOP FENCE UPGRADE  
AT SECTION 12 LOT 02 – HOHOLA, NCD**

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## **Introduction**

### **Purpose**

The purpose of this procurement is to;

**UPGRADE THE EXISTING BOUNDARY FENCE FOR THE PLANT & FLEET WORKSHOP AREA.**

The procurement objectives are that the suppliers and services selected:

- Are managed under a clear contractual framework.
- Deliver Value for Money
- Are selected following the KCH ACT and PPL Policy

### **Scope**

PNG Power Ltd requires that the existing Plant & Fleet Workshop Fence be properly upgraded to minimise theft of vehicle parts and other equipment on site.

- **Road side perimeter fence to be constructed using Palisade Fence Materials and blockwork walls on site as specified.**
- **Internal fence to be constructed of Spike fence Material as specified.**

### **Specification**

**REFER JOB SPECIFICATION PART A**

### **Mandatory Requirements**

Any Supplier engaged by PPL must meet the following mandatory requirements:

**REFER JOB SPECIFICATION PART A**

Suppliers must comply with the PPL Supplier Code of Conduct

### **Term of Agreement**

PPL is offering a Construction period of 3 Months. All works shall commence after the issue of an official PPL Purchase order.

### **Delivery timetable**

All works to commence and complete within the time frame of 3 months from the issue of Purchase Order.

### **Training, service, support and warranties**

NA

### **Key performance indicators**

As per PPL Guidelines and Policies.

**Reporting Requirements**

A Monthly Progress Report and queries to be forwarded to:

Mr. Ivan Anengo

**Team Leader Property Development Projects**

Phone: 324 3514

Email: [ianengo@pngpower.com.pg](mailto:ianengo@pngpower.com.pg)

END OF DOCUMENT

**TENDER No      02/2023**

**PNG POWER LTD PLANT & FLEET WORKSHOP FENCE UPGRADE AT SECTION  
12 ALLOTMENT 02 – HOHOLA, NATIONAL CAPITAL DISTRICT.**

**INVITATION TO TENDER**

Tenders close with:

PNG POWER LTD,  
P.O. Box 1105,  
BOROKO.  
Papua New Guinea.

at 4pm PNG time on the date as advertised in the newspaper.

There will be no public opening of Tenders.  
Tenders will be opened at 2.30pm two working days after the  
closing date.

The Tender Submission shall consist of the Tender Deposit together  
with the original and one (1) copy of each of the following  
(Section 2), all duly completed;

- Form of Tender.
- Tender Data.
- Schedule of Rates for Variation.
- Any other information/document called for in the  
Specification or subsequent addenda.
- Additional information/documents offered by the Tenderer to  
aid evaluation of the Tender.

Enquiries during the tendering period shall be addressed to:

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

Attention:            Mr. Ivan Anengo  
                              TL Property Development & Projects  
                              Shared Services Business Unit

Telephone:            324 3514  
Email:                 [ianengo@pngpower.com.pg](mailto:ianengo@pngpower.com.pg)

SECTION 1

- (A) CONDITIONS OF TENDERING
- AND
- (B) CONDITIONS OF CONTRACT

(A) CONDITIONS OF TENDERING

FOR

CIVIL WORKS

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(A) CONDITIONS OF TENDERING

FOR

CIVIL WORKS

| T1 | <u>NATURE OF CONTRACT</u> |
|----|---------------------------|
|----|---------------------------|

This is a Lump Sum Contract. All work performed under this Contract shall be in accordance with and subject to the Tender Document as defined in Clause T2.

## T2 TENDER DOCUMENT

The Tender Document shall consist of:-

shall consist of:-

SECTION 1            CONDITIONS OF TENDERING AND  
                         CONDITIONS OF CONTRACT.

- (A) Conditions of Tendering  
(B) Conditions of Contract

SECTION 2 DOCUMENTS TO BE SUBMITTED WHEN TENDERING

- (A) Form of Tender  
(B) Tender Data  
(C) Price Schedule

SECTION 3 TECHNICAL SPECIFICATION

- (A) Job Specification  
(B) Standard Specifications (Supplementary)

SECTION 4 DRAWINGS

AND any Supplementary Notices issued to Tenderers before the closing date for Tenders. Any Reference Information made available to Tenderers, at the same time as and included in the cost of the Tender Document, shall not form part of the Tender Document.



T3 DOCUMENT CHARGES

- (i) A non refundable charge as stated in Clause T22 is applicable for each set of the tender document.

**(NOTE: NOT APPLICABLE FOR THIS CONTRACT)**

- (ii) In the event of a Contract being awarded, the Commission, if requested, will supply free of charge to the Contractor, two (2) copies of the Contract Document.

T4 CONTENTS OF THE TENDER

The Tender shall be in accordance with the following requirements:-

T4.1 Form of Tender

The Tender shall be submitted upon the Form of Tender provided.

The Tenderer shall set forth the full names and addresses of the Tenderer, and when the Tender is in the name of a firm, the full names and addresses of each shareholder of the firm. When the Tender is by a Company, the Tender shall set forth the name of the Company and the address of the registered office of the Company.

Each Tender shall comprise of the following:-

- (i) Completed Form of Tender in duplicate
- (ii) Tender Deposit
- (iii) All schedules, lists and appendices contained in Section 2 - Tender Submission Document, duly completed in duplicate.
- (iv) Any additional information which has been requested in duplicate.
- (v) Any additional information which the Tenderer wishes to submit to enable the Principal to fully assess the offer submitted, in duplicate.

T4.2 Conforming and Alternative Tenders

Tenderers shall submit two complete copies of one Tender hereinafter referred to as the "Conforming Tender" conforming in all respects with the specified requirements. One or more alternative Tenders marked "Alternative Tender" - two complete copies in each case, may be submitted, provided that the Tenderer gives full details in his covering letter, in the same order as the relevant Specification Clauses, of any proposed departures or variations from those Clauses.

#### T4.3 Address for Notices

The tender shall contain an address for the service of any notices in connection with the Tender.

#### T4.4 Tender for Whole Works

The Tender shall be for the whole of the works. Tenders will not be considered for a part only of the works.

#### T4.5 Cost of Tendering

The Tenderer shall bear all costs associated with the preparation and submission of the Tender, and the Principal will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the tendering process.

### T5 TENDERER TO INFORM HIMSELF FULLY

Where a Tender is for the execution of any work, tenderers should visit the site of the work and satisfy themselves of the local conditions and facilities and the accuracy of the drawings. The Principal shall not be held liable for any claim on the grounds of insufficient information.

### T6 LODGEMENT OF THE TENDER

The ORIGINAL and a DUPLICATE copy of the Tender Submission shall be placed in sealed envelopes endorsed with the tender number and description of the Tender and addressed to:-

CHAIRMAN - TENDER OPENING COMMITTEE,  
PNG POWER LTD,  
P.O. BOX 1105,  
BOROKO N.C.D.  
PAPUA NEW GUINEA

and sent by Airmail or Courier service to ensure delivery by the date and time given in the Invitation to Tender, or placed in the box marked "Tenders" located at the Headquarters Office of the Principal at Hohola, Port Moresby, by the date and time given in the Invitation to Tender.

The Principal will take all reasonable precautions to ensure that tenders are placed in the tender box on receipt but accepts no liability for error or omission in this regard. Tenderers are recommended to use courier services for tender delivery allowing a minimum of seven days for transit. Where these time scales cannot be achieved tenderers are to confirm priced offers by facsimile on Fax No. 3250791 which is to arrive at the Headquarter office of the Principal 48 hours prior to the tender closing time. Faxes should have a covering sheet clearly identifying that the fax is a "Tender" and to quote both the tender number and tender description.

A tender not received by the Chairman of the Tender Opening Committee and for which no faxed offer has been received before the closing time is a late tender and will not be considered. Such Tenders will be returned unopened.

## **T7 TENDER DEPOSIT**

### **T7.1 Tender Deposit Required**

- (i) The Tenderer shall lodge with the Principal at the time of lodging a Tender, a deposit in the amount specified in Clause T22.
- (ii) The Tender Deposit may be in the form of Cash, Bank Guarantee or Insurance Bond. The Bank Guarantee or Insurance Bond must be irrevocable and unconditional, be denominated in P.N.G. currency and be issued by a Bank or Insurance Company established, resident or represented in P.N.G. The Bond shall be valid to a date thirty days beyond the validity of the tender.
- (iii) The Tender Bond shall be drawn up in a manner acceptable to the Principal and shall be similar to the appropriate specimen form of Tender Bond included in these documents.

### **T7.2 Non-Receipt of Tender Deposit**

Any Tender which is received without such deposit or with a deposit which does not comply with this Clause may be deemed to be informal and may be rejected.

### **T7.3 Return of Tender Deposit**

- (i) The deposit lodged by unsuccessful Tenderers will be returned to them within one month after a Tender has been accepted or after the Principal has decided that no Tender is to be accepted.
- (ii) The successful Tenderer may, if he so desires, apply the Tender Deposit towards the Security Deposit as required in Clause T20 of these Conditions. Otherwise the Tender Deposit will be returned to the successful Tenderer after he has lodged the Security Deposit.

### **T7.4 Forfeiture of Tender Deposit**

The deposit lodged by a Tenderer in accordance with this Clause may be forfeited in the event of:-

- (i) The Tenderer withdrawing his Tender during the validity period of the Tender; or
- (ii) The Tenderer, being successful, fails to lodge the Security Deposit in accordance with the provisions of Clause T20 of these Conditions of Tendering and Clause 5 of the General Conditions of Contract; or
- (ii) The Tenderer, being successful, fails to execute a Formal Agreement in accordance with the provisions in Clause T21.

#### T8 TENDER OPENING PROCEDURE

Tenders will be opened at the PNG Power Ltd Headquarters in the manner, at the time and on the date stated on the Invitation to Tender, or on such other date published by the Principal if an extension of time for the receipt of Tenders has been granted.

For public opening of Tender, the amount of each Conforming Tender will be read aloud and recorded.

Except as may be required by law, no information relating to the examination, clarification and evaluation of Tenders and recommendations concerning awards will be communicated after the opening of Tenders to any person, not officially concerned with these procedures, before the announcement of the award of a contract to the successful Tenderer.

#### T9 INFORMAL TENDERS

Any Tender may be rejected:

- (i) If conveyed by hand and not delivered in a sealed envelope as prescribed on or before the prescribed hour at the place specified for receiving tenders; or
- (ii) If sent by post and not addressed and endorsed as prescribed; or
- (iii) If not signed by the Tenderer and witnessed in all the required places; or
- (iv) If not accompanied by all of the Schedules completed in all respect; or
- (v) If the Tender does not comply with these Conditions of Tendering or any annexed additional Conditions of Tendering ; or
- (vi) If not accompanied by the Tender Deposit or if accompanied by a Tender Deposit which does not comply with Clause T7; or
- (vii) In the case of Corporations, if the Tender is not signed under seal.

#### T10 COMPLIANCE WITH SPECIFICATION

T10.1 A Tenderer, by his act of tendering, guarantees that the materials and/or workmanship offered by him, in his Conforming Tender, complies with the specification and will perform its functions up to the conditions specified.

T10.2 If a Tenderer offers in his Alternative Tender, materials and/or workmanship not fully complying with the Specification, then he shall draw attention to each and every departure from the Specification in his Alternative Tender.

**T11 ALTERATIONS**

All erasures or alterations in the Tender or the Schedules must be initialled by the Tenderer.

**T12 VALIDITY PERIOD OF TENDERS**

Unless otherwise specified in the Specification, all Tenders shall be open for acceptance for a period of not less than the number of days specified in Clause T22 after the closing date for the lodging of Tender.

**T13 EVALUATION OF TENDERS**

In evaluating Tenders, consideration will be given to:-

- (i) Total tender amount including an allowance for variations based on the schedule of rates. (if applicable)
- (ii) Guaranteed completion dates.
- (iii) The Tenderer's experience and technical and financial capability in this type of work.
- (iv) Information submitted in the Schedules forming part of the Tender.
- (v) Other relevant information which the Principal may consider relevant whether submitted by the Tenderer or not.

**T14 COMMUNICATION**

All communications with the Principal shall be forwarded by airmail or facsimile. Verbal communication shall be immediately confirmed in writing.

**T15 INSURANCE**

The cost of all insurances required under the Conditions of Contract shall be included in the Tender Price. All insurance shall be placed with an insurance company registered with the Papua New Guinea Insurance Commissioner.

**T16 ADDITIONAL CONDITIONS OF TENDERING  
(SUPPLEMENTARY NOTICES)**

Any Conditions of Tendering or directions to the Tenderer embodied in any note appearing in the documents hereto annexed, or in any other documents issued by the Principal prior to the date of receipt of Tenders, shall be deemed to be part of these Conditions of Tendering.

**T17 ACKNOWLEDGMENT OF TENDERS AND DEPOSITS**

All Tenders and Deposits received will be acknowledged by letter posted by the Principal within seven days after the closing time for the receipt of Tenders, but such acknowledgment will not necessarily imply that the Tender has been admitted for consideration.

**T18 INTERPRETATIONS**

For the purpose of these Conditions of Tendering, where the context so admits or requires, the word "Tender" shall, if the Tender is submitted by two or more persons, be deemed to include the said persons and each of them, and their executors and administrators.

**T19 ACCEPTANCE OF TENDER**

- (i) The Principal is not bound to accept the lowest or any Tender and no reason will be given for rejecting any Tender. If the Principal decides to accept a Tender a Letter of Acceptance will be issued to the successful Tenderer who shall forthwith enter into a Formal Agreement for the execution of the works in accordance with Clause 6 of the Conditions of Contract. The Letter of Acceptance shall constitute a binding Contract between the Principal and the successful Tenderer, whether such Formal Agreement is or is not subsequently executed.
- (ii) In the event of the successful Tenderer failing to enter into a Formal Agreement with the Principal in accordance with these Conditions of Tendering, the Principal may annul the acceptance of the Tender.
- (iii) No Tender shall be deemed to have been accepted unless and until the fact of such acceptance has been notified in writing to the Tenderer by the Principal. The Letter of Acceptance shall define the basis on which the Tender is accepted.

**T20 SECURITY DEPOSIT**

- (i) The Tenderer whose Tender has been accepted shall, within fourteen days of receipt of the Letter of Acceptance, acknowledge its receipt to the Principal and in accordance with Clause 5 of the Conditions of Contract, deposit with the Principal an amount of Security Deposit as stipulated in the Appendix to the Conditions of Contract.
- (ii) The Principal may by letter to the successful Tenderer, annul the acceptance of the Tender if the said Security Deposit is not lodged in accordance with Clause 5 of the Conditions of Contract.

**T21 FORM OF AGREEMENT**

The successful Tenderer shall within twenty-eight days of being called upon by notice in writing to do so, execute an Agreement in the form hereto annexed. In the event of the Tenderer not executing such Agreement his Tender may be deemed to be rejected, in which event the Principal may without prejudice to any other rights:

- (i) Annul the acceptance of the Tender; and/or
- (ii) Declare the Tender Deposit forfeited and/or
- (iii) Re-advertise or circulate the Specification or any part thereto; and/or
- (iv) Accept another Tender.

T22 PARTICULAR TENDER REQUIREMENTS

Document Charge (Clause T3) N/A

Tender Deposit (Clause T7.1) **K2,000**

Validity Period of Tenders (Clause T12) Ninety (90) days

SAMPLE FORM OF TENDER DEPOSIT  
(Bank Guarantee Format)

TO; The CHIEF EXECUTIVE OFFICER  
PNG POWER LTD,  
P.O. Box 1105,  
BOROKO PAPUA NEW GUINEA.

Tenderer: .....

Address: .....

Tender No: .....

Tender For: .....

THIS IS TO CERTIFY THAT at the request of the above-named Tenderer and in consideration of the Commission's agreement to dispense with the lodgement by the said Tenderer of a Cash Tender Deposit equivalent to K..... the ..... (Bank) of ..... (Branch) hereby unconditionally UNDERTAKES to pay the Commission on demand such sum or sum as shall from time to time be requested by the Commission, up to the total value of K..... This undertaking shall remain in force and the Bank shall be responsible for the above sum until such time as:

- (a) official notification is given by the Commission that this Undertaking is no longer required; or
- (b) the whole of the monies payable hereunder have been paid and Bank's liability is discharged by the Commission.

AND IT IS FURTHER AGREED that the Bank will make payments to the Commission forthwith on demand without further reference to the Tenderer provided that the Bank's liability shall not exceed the aggregate amount equivalent to K..... reserving the right to terminate the Bank's liability by paying the said sum to the Commission at any time without demand.



SAMPLE FORM OF TENDER DEPOSIT  
(Insurance Bond Format)

KNOW ALL MEN BY THESE PRESENTS that we .....  
..... of  
and having our registered office in Papua New Guinea at  
..... (hereinafter) call "the  
Surety" are bound unto the Papua New Guinea Electricity  
Commission in the sum of  
K..... for which  
payment well and truly to be made to the Commission, the  
Tenderer and the Surety bind themselves, their successors and  
assigns jointly and severally by these presents.

THE CONDITIONS of this obligation are such that:

1. If ..... of  
..... hereinafter called "the Tenderer"  
withdraws their Tender dated .....  
20..... within ..... days  
from.....
2. If the Tenderer fails to execute the formal Contract  
Agreement in accordance with the Conditions of Contract as  
required.
3. If the Tenderer fails to comply with a written notice from  
the Superintendent sent to all approved Tenderers.
4. If the Tenderer fails to produce a Performance Bond  
satisfactory in all respects to the PNG Power Ltd.

IN THE EVENT of non-occurrence of all the above conditions,  
this obligation is to be void and of no effect otherwise to  
remain in full force and virtue.

Dated this ..... day of ..... 20...

Signed and Sealed on behalf of .....

..... by .....

in the presence of:

.....  
Witness

SAMPLE FORM OF SECURITY DEPOSIT  
(Bank Guarantee Format)

TO: The General Manager,  
PNG POWER LTD,  
P.O. Box 1105,  
BOROKO PAPUA NEW GUINEA.

Contractor: .....

Address: .....

Tender No: .....

Tender For: .....

THIS IS TO CERTIFY THAT at the request of the above-named Contractor and in consideration of the PNG Power LTD's agreement to dispense with the lodgement by the said Contractor of a Cash Security Deposit equivalent to K..... the.....(Bank) of ..... (Branch). hereby unconditionally UNDERTAKES to pay PNG Power LTD on demand such sum or sums as shall from time to time be requested by the Commission, up to the total value of K.....

This undertaking shall remain in force and the Bank shall be responsible for the above sum until such time as:

- (a) official notification is given by the PPL that this undertaking is no longer required; or
- (b) the whole of the monies payable hereunder have been paid and Bank's liability is discharged by PPL.

AND IT IS FURTHER AGREED that the Bank will make payments to the PPL forthwith on demand without further reference to the Contractor provided that the Bank's liability shall not exceed the aggregate amount equivalent to K.....reserving the right to terminate the Bank's liability by paying the said sum to the Commission at any time without demand.

SAMPLE FORM OF PERFORMANCE BOND  
(Insurance Bond Format)

WHEREAS .....

(hereinafter called "the Obligee") has entered into a written agreement with.....(hereinafter called "the Contractor") for the performance of Contract No ..... for .....which Contract is by reference made as part hereof, and is hereinafter called "the said Contract" AND WHEREAS the Contractor is required to submit security for the due performance of the said Contract;  
AND WHEREAS the Obligee has required the Contractor to furnish a Bond in the form and tenor of this instrument as required security.

NOW THESE PRESENTS WITNESS that at the request of the Contractor, ..... of ..... with its registered office in Papua New Guinea at ..... (hereinafter called "the Surety") UNCONDITIONALLY UNDERTAKES to pay on demand any sum which may from time to time be demanded by the Obligee up to a maximum of K.....

THIS UNDERTAKING shall continue in force either until notification has been received by the Surety from the Obligee that this undertaking is no longer required by the Obligee or until payment to the Obligee by the Surety of the whole of the said sum of K.....

Dated this the ..... day of .....20...

Signed and Sealed on behalf of .....  
by .....

in the presence of:

.....  
Witness

PNG POWER LTD

FORM OF AGREEMENT

This Agreement made the ..... day of ..... 20.....  
Between The PNG Power Ltd of corner Wards Road and Cordia  
Street, Hohola, Port Moresby, Papua New Guinea (hereinafter  
called the Principal) of the one part and  
.....  
.....  
(hereinafter called "the Contractor") of the other part.

Whereas the Principal is desirous that certain Works should  
be provided executed by the Contractor, Viz,  
.....and  
has appointed the \_\_\_\_\_  
of the PNG Power LTD the Superintendent for the purposes  
thereof (hereinafter called "the Superintendent") and has  
accepted a Tender by the Contractor for the Provision  
execution and maintenance of such Works under the  
direction and to the reasonable satisfaction of the  
Superintendent in the sum of  
K.....  
(hereinafter called the Contract Sum)

Now this Agreement witnesseth as follows:

1. In this agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz;
  - (a) The Conditions of Tendering
  - (b) The Conditions of Contract
  - (c) The Specification
  - (d) The Drawings
  - (e) Supplementary Notices (if any)
  - (f) The Schedule of Rates and prices (if any)
  - (g) The said Tender
  - (h) Letter of Acceptance
3. In consideration of the payments to be made by the Principal to the Contractor as hereinafter mentioned the Contractor hereby covenants with the Principal to provide execute and complete the Works and to remedy defects therein conformity in all respects with the Provision of the Contract.
4. The Principal hereby covenants to pay the Contractor in consideration of provision execution and completion of the Works and the remedying of defects therein the Contract Sum or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

In Witness whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

|                              |   |       |
|------------------------------|---|-------|
| SIGNED and sealed for and    | ) |       |
|                              | ) |       |
| on behalf of .....           | ) |       |
|                              | ) |       |
| .....                        | ) |       |
|                              | ) |       |
| .....                        | ) |       |
|                              | ) |       |
| By .....                     | ) | ..... |
|                              | ) |       |
| the .....                    | ) |       |
|                              | ) |       |
| .....                        | ) |       |
|                              | ) |       |
| of the said .....            | ) |       |
|                              | ) |       |
| .....                        | ) |       |
|                              | ) |       |
| thereunto Authorized in the  | ) |       |
|                              | ) |       |
| presence of.....             | ) |       |
|                              | ) |       |
| .....                        | ) |       |
|                              | ) |       |
|                              | ) |       |
|                              | ) |       |
| SIGNED and sealed for and on | ) |       |
|                              | ) |       |
| behalf of The PNG Power LTD  | ) |       |
|                              | ) |       |
| By OBED BATIA                | ) | ..... |
|                              | ) |       |
| the CHIEF EXECUTIVE OFFICER  | ) |       |
|                              | ) |       |
| of the said Commission       | ) |       |
|                              | ) |       |
| thereunto Authorized in the  | ) |       |
|                              | ) |       |
| presence of .....            | ) |       |
|                              | ) |       |
| .....                        | ) |       |

(B) CONDITIONS of CONTRACT

FOR

CIVIL WORKS

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(B) CONDITIONS of CONTRACT

FOR

CIVIL WORKS

PART I GENERAL CONDITIONS OF CONTRACT

The Conditions of Contract which shall apply to this Contract shall be the "General Conditions" of Contract AS 2124-1986 except as may be added to or amplified or varied herein together with such other conditions, amplifications or variations as are contained in the Specification and in the other papers incorporated herewith.

The General Conditions of Contract AS2124 referred to above and elsewhere in the Specification are obtainable from the offices of the National Standards Council found in the Central Government Offices, Kumul Ave, Waigani, P.O. Box 3042, BOROKO.

Reference to Annexures to AS 2124 shall be read as referring to the annexure clause appended to the Conditions of Particular Application.

PART II CONDITIONS OF PARTICULAR APPLICATION

The Conditions contained in this part shall supplement or amend conditions contained in Part I of the Conditions of Contract.

CPA 1 Construction of Contract (Clause 1)  
Delete - Unless otherwise provided, prices are in Australian currency and payments shall be made in Australian currency at the place named in the annexure.  
Substitute - Prices are to be made in PNG currency and payments shall be made in PNG currency at the place named in the annexure.

CPA 2 Interpretation (Clause 2)  
The following words and descriptions shall be added to Clause 1:-  
"Approved" shall mean approved by the Superintendent in writing and "approval" shall have a corresponding meaning.  
"Contract Amount" shall be the Contract Sum adjusted from time to time for variations in the Works and variations in the costs as provided for in the Contract and shall constitute the total amount payable to the Contractor at any particular time during the currency of the Contract.

- CPA 3     Form of Security (Clause 5.3)  
            Delete - Clause 5.3 and substitute the following:  
            **5.3 Form of Security.** The security may be in the form of Cash, Bank Guarantee or Insurance Bond. If the security be in the form of a Guarantee or Bond, the Guarantee or Bond must be irrevocable and unconditional, be denominated in Papua New Guinea Currency and be issued by a Bank or Insurance Company established and resident in Papua New Guinea. The format of the unconditional undertakings are included in the Conditions of Tendering as samples for guidance of the Contractor.
- CPA 4     Time for lodgement of Security (Clause 5.4)  
            Delete - 28 days  
            Substitute - 14 days
- CPA 5     Interest on Security and Retention Monies (Clause 5.9)  
            Delete
- CPA 6     Discrepancies (Clause 8.1)  
            Add The drawings will take precedence over the standard specification and the job specification will take precedence over the standard specification and drawings.
- CPA 7     Complying with Statutory Requirements (Clause 14.1)  
            Delete Clause 14.1 (a), (b), (c) and (d) from "The Contractor shall ..... to ..... work under the Contract", and substitute the following:  
            **14.1 Complying with Statutory Requirements**  
            The Contractor shall comply with the requirements of all Acts of Parliament of the Independent State of Papua New Guinea and with the requirements of all ordinances, regulations, by-laws, orders and proclamations made or issued under any such Act or Ordinance and with the lawful requirements of Public, Municipal and other Authorities in any way affecting or applicable to the execution of the Works under the Contract.
- CPA 8     Protection of People and Property (Clause 15)  
            The following shall be added to Clause 15:-  
            When working on the site the Contractor shall at all times exercise all safety precautions appropriate to the nature of the work and the conditions under which the contract is to be performed and in addition as the Superintendent may from time to time direct. The Contractor shall report forthwith to the Superintendent each accident involving death or serious injury that causes time lost to an employee of the Contractor or his Subcontractors.
- When working on the site each Contractor shall in all respects be responsible for providing first aid services in accordance with the appropriate Statutory or other Local Authority requirements.
- CPA 9     Care of the Works Under the Contract (Clause 16.1)  
            The following shall be added to Clause 16.1 after the second paragraph:-



"The Contractor shall during the progress of the works properly cover up and protect each part of the works liable to damage by exposure to the weather and shall take every reasonable, appropriate timely and useful precautions against accident or damage to the Works from any cause whatsoever"

- CPA 10    Insurance of Employees (Clause 20)  
Add Common law liability shall be insured for not less than K1,000,000.
- CPA 11    Quality of Materials and Work (Clause 30.1)  
Add All workmanship and materials shall be not less than that required under the relevant PNG Standards. Where there are no PNG Standards then the relevant Australian Standards must be complied with. Materials which do not comply with either PNG or Australian Standards and which are not fixed and used in accordance with the manufacturer's recommendations and instructions may be rejected.
- CPA 12    Extension of Time for Practical Completion  
 (Clause 35.5)  
Add (C) Extension of Time will not be considered for inclement weather until more than 15% of contract period is exceeded and then only if the rainfall is in excess of 100% of the monthly recorded average for the area over the previous 5 years.
- CPA 13    Liquidated Damages for Delay in Reaching Practical Completion (Clause 35.6)  
 Delete "day" and Substitute "week or part of a week"
- CPA 14    Bonus of Early Practical Completion (Clause 35.8)  
Delete
- CPA 15    Delay Costs (Clause 36)  
Delete
- CPA 16    The Calculation of Payment (Clause 42.2)  
Delete Australia  
Substitute PNG

CPA 17 Nature of Contract (Clause 3)

Delete the following in Sub-Clause 3.2:

"Where otherwise ..... valued under Clause 40.2".

Delete this Sub-Clause 3.3 and insert the following:

"3.3 Omitted Items. If a Bill of Quantities or a Schedule of Rates omits an item which should reasonably have been anticipated by an experienced and competent Contractor at the time of Tender, to be necessary for the satisfactory completion and performance of the Works, the Contractor shall in the Tender insert such omitted item and the Bill of Schedule with a price or rate for such item. In the event of the failure of the Contractor to do so, it will be deemed that the cost of such item is included within other items of the Bill or Schedule."

CPA 18 Bill of Quantities - Pricing (Sub-Clause 4.3)

The following shall be added before paragraph 1:

"The quantities set out in the Bill of Quantities are the estimated quantities of the work, but they are not to be taken as the actual and correct quantities of the Works to be executed by the Contractor in fulfilment of his obligations under the Contract."

CPA 19 Subcontracting (Sub-Clause 4.3)

Paragraph 4 shall be amended to read:

"Within 14 days after a request by the Contractor for approval the Superintendent shall advise the Contractor of approval or rejection".

CPA 20 Designated Selected and Nominated Subcontractors  
(Clause 10)

Amend the first sentence of this Sub-Clause 10.7 as follows:

"The Contractor shall not terminate a subcontract for Designated or Nominated Subcontract Work without the written approval of the Superintendent and as early as possible the Contractor shall notify the Superintendent of the Contractor's request to terminate and the reasons".

CPA 21 Latent Conditions (Clause 12)

Amend Sub-Clauses 12.1, 12.2 and 12.3 to read as follows:

## "21.1 Definition

Latent Conditions are:

- (a) physical conditions on the site or its surroundings, including artificial things but excluding weather conditions which differ materially and substantially from those which should reasonably have been anticipated by an experienced and competent contractor at the time of the tender if the such contractor had:
  - (i) examined all information made available in writing by the Principal to the Contractor for the purpose of tendering; and
  - (ii) examined all information relevant to the risks, contingencies and other circumstances having an effect on the tender and obtainable by making of reasonable enquiries; and
  - (iii) inspected the site and its surroundings; and
- (b) any other conditions which the Contract specifies to be Latent Conditions.

## 21.2 Notification

If during the work under the Contract, the contractor becomes aware of a Latent Condition, the Contractor shall, forthwith and where possible before the Latent Condition is disturbed, give a written notice thereof to the Superintendent. If required by the Superintendent, the Contractor shall provide to the Superintendent a written statement specifying:

- (a) the Latent Condition encountered and in what respects it differs materially and substantially;
- (b) the addition work and additional resources which the Contractor estimates to be necessary to deal with the Latent Condition.
- (c) the time the Contractor anticipates will be required to deal with the Latent Condition and the expected delay in achieving Practical Completion;
- (d) the Contractor's estimate of the cost of the measures necessary to deal with the Latent Condition; and
- (e) other details reasonably required by the Superintendent.

## 12.3 Extension of Time and Costs

Delay caused by a Latent Condition may justify an extension of time under Clause 35.5.

If a Latent Condition causes the Contractor to;.

- (a) carry out additional work;
- (b) use additional Constructional Plant; or
- (c) incur extra cost (including but not limited to the cost of delay or disruption); which an experienced and competent contractor could not reasonably have anticipated at the time of tendering, a valuation shall be made under Clause 40.2".

CPA 22 Examination and Testing (Clause 31)

The following shall be added to Clause 31.1 - Superintendent May Order Tests:-

"Access to the Contractor's and Sub-contractor's works shall be granted to the Superintendent at any reasonable time for the purpose of inspection and ascertaining progress.

The Contractor shall be entirely responsible for providing all necessary inspection services to ensure that the Works supplied are in accordance with the Contract, that is, are in accordance with this Specification regarding quality and design criteria, are dimensionally correct, test specimens are provided, and all other requirements are met. The Contractor shall be responsible for providing adequate inspection of work performed by his Sub-contractors in their works and on site.

Inspection or approval by the Superintendent shall not release the Contractor from his obligations to carry out the Works in accordance with the Contract."

CPA 23 Variations (Clause 40)

Delete Sub Clauses 40.1 and 40.2 and Substitute the following:-

40.1 Variations

- (1) The Superintendent shall make any variation of the form, quality or quantity of the Works or any part thereof that may, in his opinion, be necessary and for that purpose, or if for any other reason it shall, in his opinion be desirable, he shall have power to order the Contractor to do the Contractor shall do any of the following:-
  - (a) increase or decrease the quantity of any work included in the Contract,
  - (b) omit any such work,
  - (c) change the character or quality or kind of any such work,
  - (d) change the levels, lines, position and dimensions of any part of the Works, and
  - (e) execute additional work of any kind necessary for the Completion of Works and no such

variation shall in any way vitiate or invalidate the Contract, but the value, if any, of all such variations shall be taken into account in ascertaining the amount of the Contract Price.

- (2) No such variations shall be made by the Contractor without an order in writing of the Superintendent. Provided that no order in writing shall be required for increase or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this Clause, but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities. Provided also that if for any reason the Superintendent shall consider it desirable to give any such order verbally, the Contractor shall comply with such order and any confirmation in writing of such verbal order given by the Superintendent whether before or after the carrying out of the order, shall be deemed to be an order in writing within the meaning of this Clause. Provided further that if the Contractor shall within seven days confirm in writing to the Superintendent and such confirmation shall not be contradicted in writing within fourteen days by the Superintendent it shall be deemed to be an order in writing by the Superintendent.

#### 40.2 Valuation of Variations

- (1) All extra or additional work done or work omitted by order of the superintendent shall be valued at the rates and prices set out in the Contract if, in the opinion of the Superintendent, the same shall be applicable. If the Contract does not contain any rates or prices applicable to the extra or additional work, then suitable rates or prices shall be agreed upon between the Superintendent and the Contractor. In the event of disagreement the Superintendent shall fix such other rates or prices as shall, in his opinion, be reasonable and proper.
- (2) Provided that if the nature or amount of any omission or addition relative to the nature or amount of the whole of the Works or to any part thereof shall be such that, in the opinion of the Superintendent, the rate or price contained in the Contract for any item of the Works is, by reason such omission or addition, rendered unreasonable or inapplicable, then a suitable rate or price shall be agreed upon between the Superintendent and the Contractor.

CPA 24 Annexure

This clause takes place of Part A of the Annexure to General Conditions of Contract AS 2124-1986 and lists the information required in the following clauses of AS 2124.

|   |                                     |
|---|-------------------------------------|
| The law applicable is that of the state of: (Clause 1)  | Papua New Guinea                    |
| Payments under the Contract shall be made at: (Clause 1)  | Port Moresby                        |
| The Principal: (Clause 2)   | PNG Power LTD                       |
| The address of the Principal:   | P.O. Box 1105,<br><u>BOROKO</u> PNG |
| The Superintendent (Clause 2)   | GM Shared Services                  |
| The address of the Superintendent:  | P.O. Box 1105,<br><u>BOROKO</u> PNG |
| Limits of accuracy applying to quantities for which the Principal accepted rates: (Clause 3.2)    | 20%                                 |
| Bill of Quantities the Alternative applying: (Clause 4.1)   | Alternative 1                       |
| The time for lodgement of the priced copy of the Bill of Quantities: (Clause 4.2)                 | Not Applicable                      |
| Contractor shall provide security in the amount of: (Clause 5.2)                                  | 5% (TBA)                            |
| Principal shall provide security in the amount of: (Clause 5.2)                                   | Nil                                 |
| The percentage to which the entitlement of security and retention monies is reduced: (Clause 5.7) | 50%                                 |
| Interest on retention monies and security the alternative applying: (Clause 5.9)                  | Not Applicable                      |
| The number of copies to be supplied by the Principal: (Clause 8.3)                                | TBA                                 |

|  |                 |
|--|-----------------|
| The number of copies to be supplied by the Contractor: (Clause 8.4)  | Two (2)         |
| The time within which the Superintendent must give a decision and return the Contractor's copies: (Clause 8.4) | Twenty one days |
| Work which cannot be subcontracted without approval: (Clause 9.2)  | All             |
| The percentage for profit and attendance: (Clause 11)  | 6%              |
| Insurance of the Works the alternative applying: (Clause 18)   | Alternative 1   |
| The assessment for insurance purposes of the costs of demolition and removal of debris: (Clause 18)            | 5%              |
| The assessment for insurance purposes of consultants' fee: (Clause 18)   | 5%              |
| The value of materials to be supplied by the Principal: (Clause 18)  | Nil             |
| The additional amount of percentage: (Clause 18)   | 10%             |
| Public Liability Insurance the alternative applying: (Clause 19)   | Alternative 1   |
| The amount of Public Liability Insurance shall be not less than: (Clause 19)                                   | K1,000,000      |
| The time for giving possession of the site: (Clause 27.1)  | TBA             |
| The time for Practical Completion: (Clause 35.2)   | 90 days         |
| Liquidated Damages Per Week: (Clause 35.6)   | <b>K5,000</b>   |
| Completion: (Clause 35.8)  | Nil             |
| Limit of bonus: (Clause 35.8)  | Not Applicable  |
| Compensation for Delay Costs: (Clause 36)  | Not Applicable  |

|   |  |
|---|--|
| The Defects Liability Period:<br>(Clause 37)  | 26 weeks   |
| The charge for overheads, profit,<br>etc. for Daywork: (clause 41(f))   | 15%  |
| Times for payment claims:<br>(Clause 42.1)  | Monthly  |
| Unfixed plant and materials for<br>which payment may be made<br>notwithstanding that they are<br>not on site: (Clause 42.4) | Nil  |
| Retention monies on: (Clause 42.3)  | (a) work incorporated<br>into the works and any<br>work or items for which a<br>different amount of<br>retention is not provided,<br>value until 10% of the<br>Contract Sum is held; |
| 10% of the  | (b) items on Site but<br>not yet incorporated into<br>the Works; 10%;  |
|   | (c) items off Site but<br>in PNG - Nil.  |
|   | (d) items not in PNG -<br>Nil  |
| for customs   | (e) disbursement<br>incurred by the Contractor<br>duties, freight, marine<br>insurance, primage<br>landing and transport in<br>respect of the work under<br>the Contract - Nil.      |
| Unfixed Plants or Materials -<br>the alternative applying:<br>(Clause 42.4)   | Alternative 2  |
| The rate of interest on overdue<br>payment: (Clause 42.9)   | BSP Prime Lending Rate<br>plus 2%  |
| The delay in giving possession<br>of the Site which shall be a<br>substantial breach: (Clause 44.7)                         | Three months   |
| The person to nominate an<br>Arbitrator: (Clause 46)  | President of the Society<br>of Professional<br>Engineering of PNG.   |



SECTION 2

DOCUMENTS TO BE SUBMITTED  
WHEN TENDERING

- (A) Form of Tender
- (B) Tender Data
- (C) Price Schedules

SECTION 2DOCUMENTS TO BE SUBMITTED WHEN TENDERINGCONTENTS

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(A) FORM OF TENDER

TENDER No      02 /2023

PNG POWER LTD PLANT & FLEET WORKSHOP FENCE UPGRADE AT  
SECTION 12 ALLOTMENT 03 – HOHOLA, NATIONAL CAPITAL  
DISTRICT.

Tenderers are required to complete the blank spaces in this Tender Form and complete the Schedules included in the Tender Documents.

To: PNG POWER LTD,  
P.O. Box 1105,  
BOROKO P.N.G.

Gentlemen,

1. Having examined the Drawings, Conditions of Contract, Specification and Schedules for the execution of the above named Works, we, the undersigned, offer to execute, complete and remedy defects in the whole of the said Works in conformity with the said Drawings, Conditions of Contract, Specification and Schedules for the sum of (words & figures)..... (K.. .....) or such other sum as may be determined in accordance with the said conditions.
2. We undertake, if our Tender is accepted, to complete and deliver the whole of the Works comprised in the Contract within Ten (10) weeks subject to the said conditions.
3. If our Tender is accepted we will, if required, obtain the guarantee of an Insurance Company or Bank or other sureties (to be approved by you) to be jointly and severally bound with us in a sum not exceeding five percent (5%) of the above-named sum for the due performance of the Contract.
4. We agree to abide by this Tender for the period of 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.
5. Unless and until a Formal Agreement is prepared and executed, this Tender, together with your written acceptance thereof, shall constitute a binding Contract between us.

6. 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 thereunto )  
Authorized in the presence of: ) .....  
Address of Tenderer: ..... )

(B) TENDER DATA

(1) SUB-CONTRACTORS

Tenderers shall list the sections of work and the names and address of sub-contractors nominated to carry out any portion of the works.

Portion of works;      Sub-Contractor's Name and Address

(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.

(iv) STATEMENT OF RESOURCES

The Tenderer shall state hereunder facts in detail sufficient to describe his resources, including technical financial, manufacturing and constructional where applicable to indicate his ability to carry out the Contract.

(v) TENDERER'S ORGANIZATION

a. To be filled by a Corporation or Syndicate only

1. Name:.....
2. Business Address:  
P.O. Box No: ..... Phone: .....  
..... Fax: .....
3. Date Organised/Registered: .....
4. Current Authorized Capital: .....
5. Current Subscribed Capital: .....
6. Current Paid-Up Capital: .....
7. Ownership of Company by Nationality: .....
8. Bank/Branch: .....

b. To be filled by a partnership only

1. Name: .....
2. Business Address:  
P.O. Box No: ..... Phone: .....  
..... Fax: .....
3. Date Organised/Registered Capital: .....
4. Type of Partnership: .....
5. Names and Address of Partners:  
a .....  
b .....  
c .....  
d .....  
e .....

6. Current Total Capital showing contribution of individual partners:

Partner a. .... Partner b. ....

Partner c. .... Partner d. ....

Partner e. ....

c. To be filled by an individual licensed contractor only.

1. Name: ..... Nationality: .....

2. Business Address:

P.O. Box No: ..... Phone: .....

..... Fax: .....

3. Date Registered: .....

4. Capital: .....

5. Bank/Branch: .....

d. To be provided by all Tenderers.

1. A declaration stating the proportion of National Ownership.

2. Documentation evidence proving either NIDA Registration (or exemption) or IPA Certification of the Tender.

3. **GST (TIN number)**.



(vi) TECHNICAL INFORMATION

The Tenderer shall provide, if considered necessary, the following information:-

- 
- a)     Clause or                      Departures from the Requirement of  
         Schedule No                this Specification with details  
   of Alternative Proposals.
- 

- 
- b) Details of specific Products when specifically called  
for in the Specification. (This should include Brand  
names and model numbers).
-

(vii) CONSTRUCTION SCHEDULE

**TENDER No 02 /2023**

**PNG POWER LTD PLANT & FLEET WORKSHOP FENCE UPGRADE AT SECTION 12 ALLOTMENT 03 – HOHOLA, NATIONAL CAPITAL DISTRICT.**

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

|                                       | TIME IN WEEKS |   |   |   |   |   |   |   |   |    |
|---------------------------------------|---------------|---|---|---|---|---|---|---|---|----|
| ACTIVITY                              | 1             | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Mobilisation / Establishment & Set-Up |               |   |   |   |   |   |   |   |   |    |
| Concrete Works                        |               |   |   |   |   |   |   |   |   |    |
| Steel & Metal Works                   |               |   |   |   |   |   |   |   |   |    |
| Painting Works                        |               |   |   |   |   |   |   |   |   |    |
| Clean Up                              |               |   |   |   |   |   |   |   |   |    |
|                                       |               |   |   |   |   |   |   |   |   |    |

(C) PRICE SCHEDULE

**TENDER No**      **02 /2023**

**PNG POWER LTD PLANT & FLEET WORKSHOP FENCE UPGRADE AT SECTION 12 ALLOTMENT 03 – HOHOLA, NATIONAL CAPITAL DISTRICT.**

(i) LUMP SUM BREAKDOWN

Your fees shall include the following;

|     |   |        |
|-----|---|--------|
| 1.0 | Mobilisation, Site Establishment & Set Up | K..... |
| 2.0 | Concrete Works                            | K..... |
| 3.0 | Steel & Metal Works                       | K..... |
| 4.0 | Painting                                  | K..... |
| 5.0 | Cleaning                                  | K..... |
|     | Sub-total                                 | K..... |
|     | GST                                       | K..... |
|     | <b>TOTAL LUMP SUM</b>                     | K..... |
|     | (Carried to Form Tender Bid)              |        |

(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.

| No | Description  | Unit | Rates  |
|----|--|------|--------|
| 1. | Supply and construct reinforced concrete block fencing | m3   | K..... |
| 2. | Supply, fabricate and install steel picket fencing     | tone | K..... |
| 3. | Supply, fabricate and install Palisade fencing         | tone | K..... |

Name of Firm: .....

Signature: .....

Date: .....

Witness: .....

SECTION 3

TECHNICAL SPECIFICATION

(A) JOB SPECIFICATION

PART A

(B) SUPPLEMENTARY SPECIFICATION

## SECTION 3

### JOB SPECIFICATION - PART A

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## SECTION 3

### TECHNICAL SPECIFICATION

#### PART A

#### **(A) JOB SPECIFICATION**

##### **1.0 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 on Section 12 Allotment 02 - Hohola, National Capital District and within the vicinity of PNG Power Ltd.

###### **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 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 QUOTATION / TENDER**

The contractor after inspection shall finalise his bid or quotation and forward to Tenders & Vetting Team thru Tender Link.

### **1.8 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.

### **1.9 SITE OPERATIONS**

#### **1.9.1 Safety**

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

#### **1.9.2 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.

### **1.10 TERMS OF PAYMENT**

90% of progress claim shall be paid on each claim submitted with 10% retain for retentions. The contractor shall take note that payment shall be made after thirty (30) days. The full Contract Price will be paid at Final Completion of the Contract.

Part payment (Monthly Progress Payments) shall be allowed in this contract. And the contractor must provide copies of receipts of materials purchased with part payment invoice including labour and transport cost.



#### **1.11 PROJECT SUPERVISION**

Any queries arising in relating to this contract shall be forwarded to Senior Property Development Officer and the PNG Power Inspector to be dealt with. All matters shall be resolved within a minimum of seven (7) days period.

#### **1.12 CONSTRUCTION SCHEDULE**

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

#### **1.13 QUALITY OF WORKMANSHIP**

The contractor shall employ experienced and skilled welders, concrete block layers, plumbers and painters. The workers shall be supervised by a tradesman supervisor for all trade related work as PNG Power expects a high standard of workmanship when carrying out the work.

#### **1.14 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.

#### **1.15 WORK COMMENCEMENT AND COMPLETION DATE**

Upon receiving of this official order, the successful contractor shall liaise with the PNG Power Inspector to set commencement and the completion date. The works shall be Practically Completed within Ten (10) weeks from the date of Possession of Site given in PNG Power's Letter of Acceptance.

The PNG Power Inspector shall ensure that the contractor must complete all work in the given period. However, if the contractor shall not meet the completion target date, then he shall inform the PNG Power Inspector one week in advance and must provide good reasons for doing so.

#### **1.16 LIQUIDATED DAMAGES**

The Contractor's attention is drawn to Clause 35.6 of the General Conditions of Contract. Pre-estimated Liquidated Damages will be applied at the rate of **K3,000** per week for each uncompleted week until the work is finished.

#### **1.17 RETENTIONS**

The employer shall retain 10% from the total contract amount for some form of protection against incorrect or substandard workmanship and materials.

At the end of the stated period it is paid to the contractor provided that any faults discovered are corrected or substandard materials are replaced. The stated period shall be one month from the completion date of the contract work.

#### **1.18 ONLINE TENDER/BIDDING REQUIREMENTS**

Tenderers or bidders are now required to submit their bids through the E-Tender process. The link to register online and obtain tender documents and submit the bids is:

[www.tenderlink/pngpower.com](http://www.tenderlink/pngpower.com).

Please refer attached notice/circular for clarification. Please liaise with Ms Danae Pala on telephone: 324 3433 or email: [dpala@pngpower.com.pg](mailto:dpala@pngpower.com.pg) should you require further assistance on tender requirements.

## **2.0 DESCRIPTION OF WORKS**

### **2.1 MOBILISATION & SITE ESTABLISHMENTS**

- 2.1.1 The Contractor shall organise and mobilise on site upon PPL instruction or upon receiving of PPL 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 equipment.
- 2.1.4 The Contractor shall also arrange for Security on site to safe-guard building materials, plants and equipment.
- 2.1.5 The existing ground level around the perimeter of the fence shall be excavated and levelled properly. Backfill any area that is low with proper soil or road base materials. The new fence foundation shall be 900mm below ground level.
- 2.1.6 Locate underground services and foundations before any excavation work commences. Make good at no extra cost damages to existing services.
- 2.1.7 Demolition of existing part of nearby 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 CONCRETE WORKS**

The Contractor shall supply all required materials and install as per works required in this contract as per relevant standards.

- 2.2.1 All concrete shall have a minimum strength of 20 MPa.
- 2.2.2 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.

- 2.2.3 All footings, slabs, reinforcing, formwork etc. shall be inspected by the Superintendent before commencement of mixing and placing of concrete.

2.2.4 Strip Footing

- a. 600mm wide x 300mm thickness concrete strip footing shall be constructed with Y12 bars top and bottom reinforced bars, ligs and starter bars placed as per drawing. All tie wires to be of black steel 1.6mm thickness to tie the reinforcement in place.
- b. Concrete to be 20Mpa strength pre-mix, strength test to be carried out and results provided for proof check as confirmation to client.

2.2.5 Column

- a. 400x400mm square concrete column constructed by boxing. Reinforcement cage to be constructed to suit detail provided. Y16 top and bottom bar for the vertical cage, Y12 ligs at 400ctrs and strictly as per the drawings.
- b. Mortar mix to be a ratio of (1:4) 1 part cement to 4 parts fine sand.
- c. Core fill mix to be 20Mpa strength premix, strength test to be carried out and results provided for proof check as confirmation to client.
- d. Design the pyramid at the head point of the concrete column. The pyramid design must be presented to the project manager and approved by the superior.
- e. Concrete column to be rendered and paint finish with PNG Power colour.

2.2.6 Reinforced Concrete Block Wall

Lay four courses of concrete block above ground level; reinforced and core-filled.

#### 2.2.7 Amendments of Defects

Any newly constructed concrete that has cracks shall be removed and replaced with new concrete construction.

### 2.3 **METAL & STEEL WORKS**

The Contractor shall remove existing steel materials and store them neatly in an appropriate storage area. All steel and associated materials used for this work shall be of higher grade. No second grade steel and other materials shall be used. If the Contractor shall or may want to use second graded materials, the Contractor must seek the PPL Inspector's approval.

- 2.3.1 Remove the existing spike panels marked out on the site plan; refine and store well for re-use elsewhere.
- 2.3.2 External/Internal: Fabricate and install standard spike fencing. Install spike steel panels made of 25x25mm SHS at 120mm centres to all fencing frames as shown.
- 2.3.2 Provide and fix 75x75mm SHS spike steel at 2800 centres to all fencing frames to provide support between concrete columns.
- 2.3.3 Provide and fix 50x25mm SHS steel brace horizontally welded along the fence bay toward the top and bottom as well, install 50x25mm SHS brace as shown on the drawings.
- 2.3.4 Bars shall be continuous in length; and where bolts and nuts are used must have washers welded to each end to prevent bars from being pulled out.
- 2.3.5 All new Palisade fence materials to be installed along Wards Road and Vitex Street. Internal boundary fence to be constructed of metal spikes.
- 2.3.6 Fabrication and fixing of palisade fence shall be in accordance with the manufacturers brochures and guidelines.

## **2.4 PAINTING SPECIFICATION**

### **2.4.1 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.

### **2.4.2 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.

### **2.4.3 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.

### **2.4.4 Drop Sheet**

A drop sheet shall be used by the Contractor during the course of the painting work to protect any nearby structure.

### **2.5.5 Under Coats**

An oil 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.

#### 2.5.6 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.

#### 2.5.7 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.

#### 2.5.8 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.

#### 2.5.9 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. Any 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 the metal primer is applied.
- 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.

## **2.6 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.



(B) TECHNICAL DRAWINGS

DRAWING LIST

| <b>DRAWING NO</b> | <b>DESCRIPTION</b>                    | <b>REMARKS</b> |
|-------------------|---------------------------------------|----------------|
| M11937-00         | Cover Page/Drawing Index              |                |
| M11937-01         | Site & Locality Plan                  |                |
| M11937-02         | Spike Fence & Concrete Column Details |                |
| M11937-03         | Spike Fence Details                   |                |
| M11937-04         | Palisade Fence Arrangement            |                |

**END OF DOCUMENT**



PLANT & FLEET WORKSHOP FENCE UPGRADE AT  
SECTION 12, LOT 02 - HOHOLA, NCD

ARCHITECTURAL DRAWING

A00 - COVER SHEET

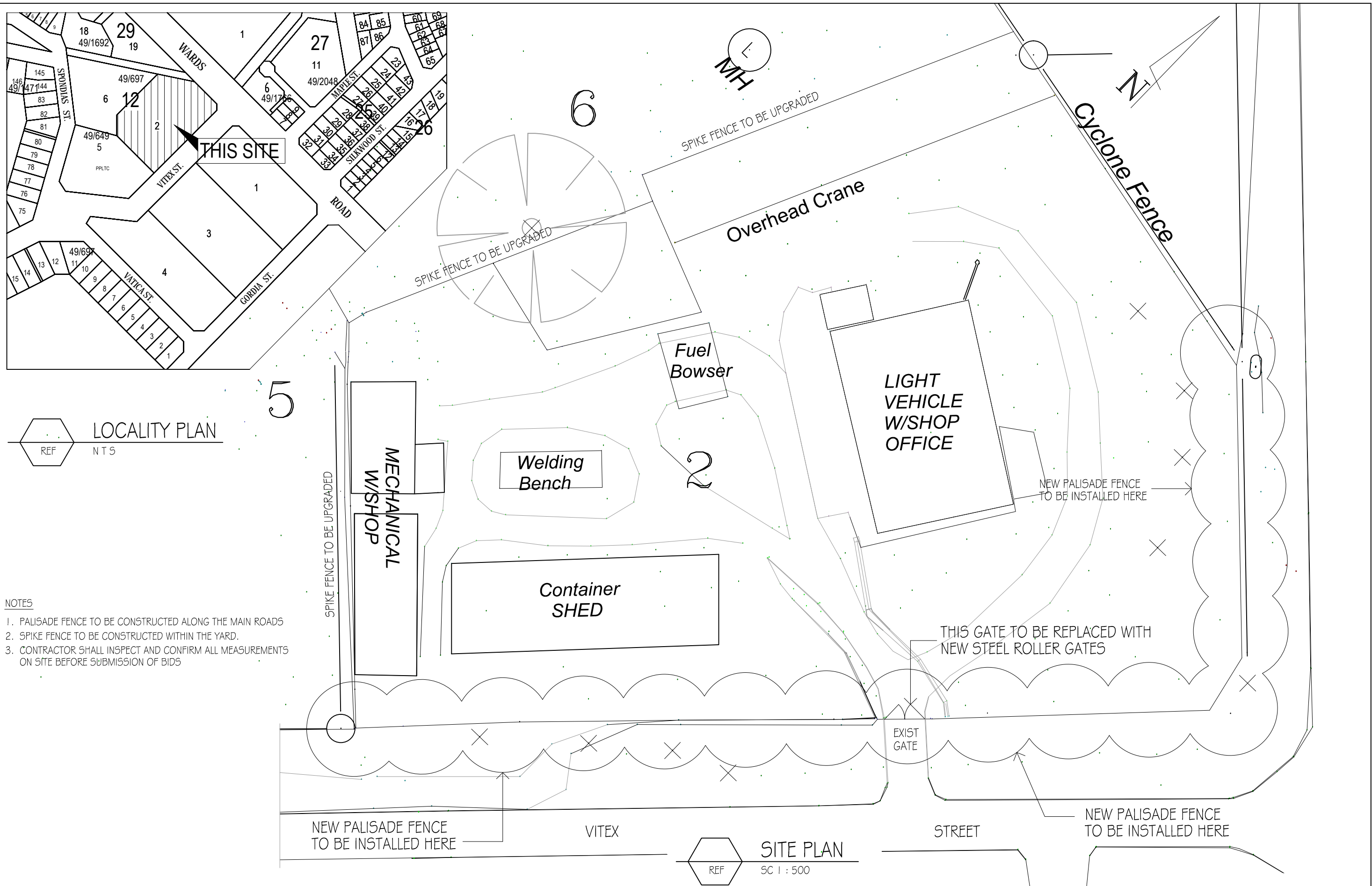
A01 - SITE & LOCALITY PLAN

A02 - SPIKE FENCE & CONCRETE COLUMN DETAILS

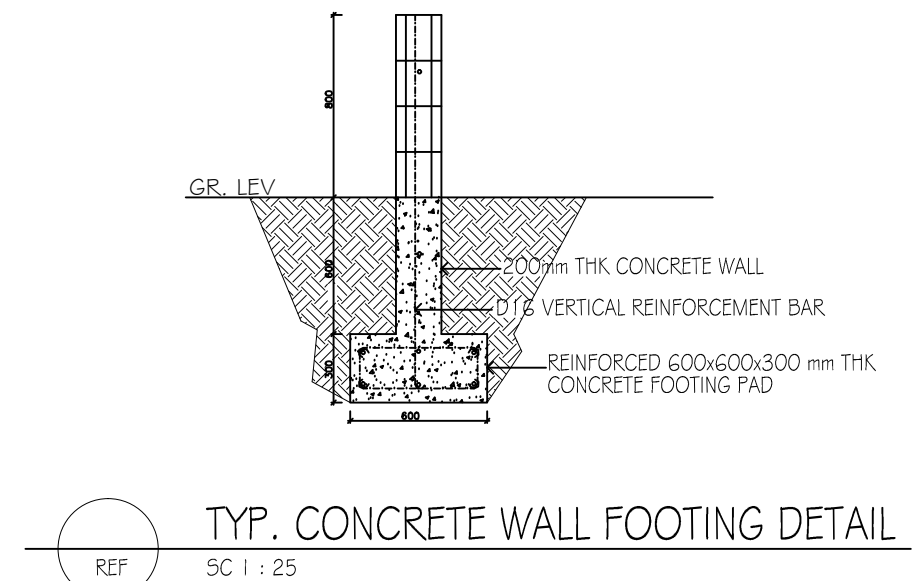
A03 - SPIKE FENCE DETAILS

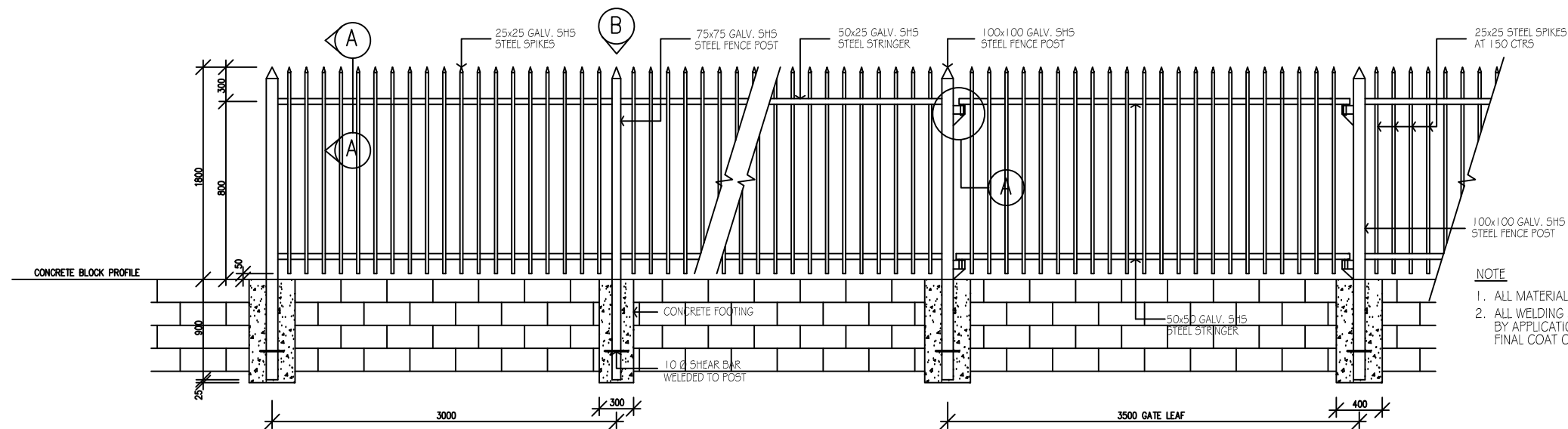
A04 - PALISADE FENCE ARRANGEMENT

M11937-00



- NOTES
- 1. PALISADE FENCE TO BE CONSTRUCTED ALONG THE MAIN ROADS
  - 2. SPIKE FENCE TO BE CONSTRUCTED WITHIN THE YARD.
  - 3. CONTRACTOR SHALL INSPECT AND CONFIRM ALL MEASUREMENTS ON SITE BEFORE SUBMISSION OF BIDS

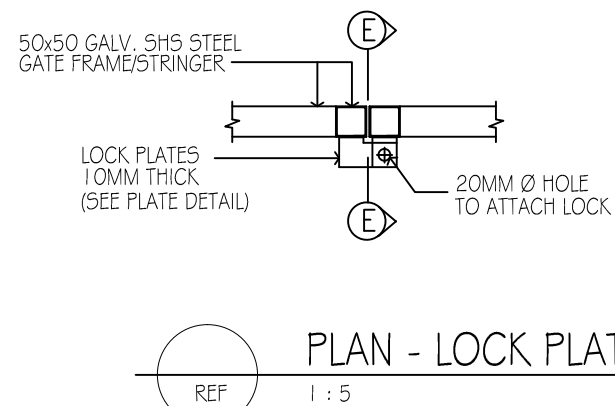
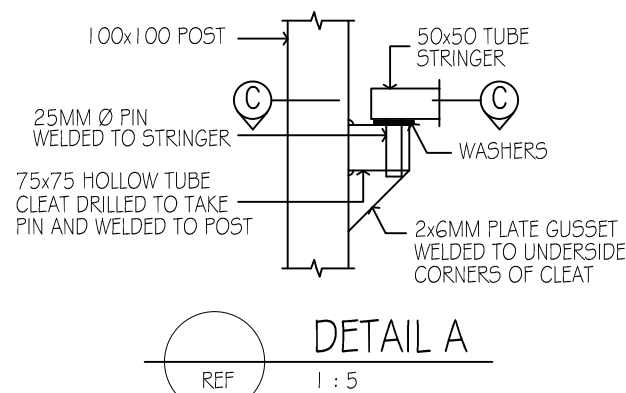
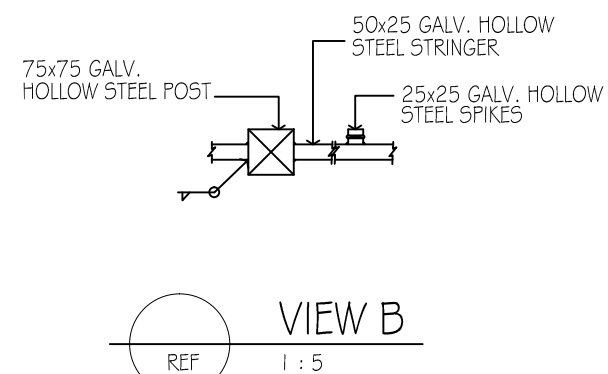
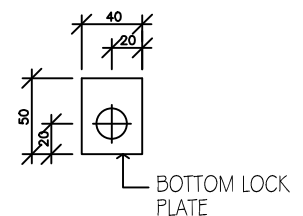
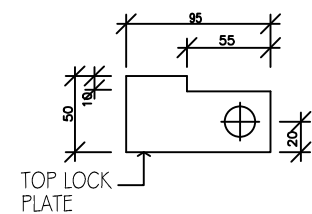




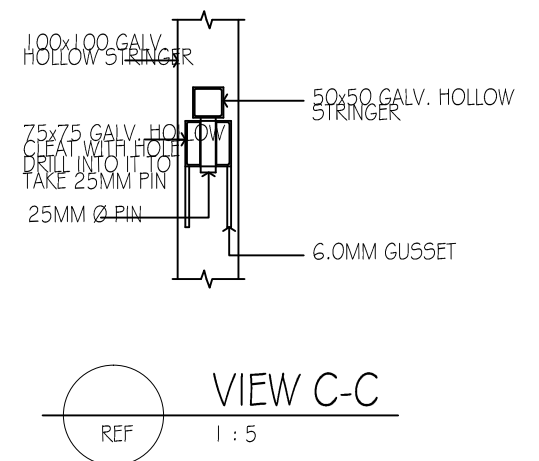
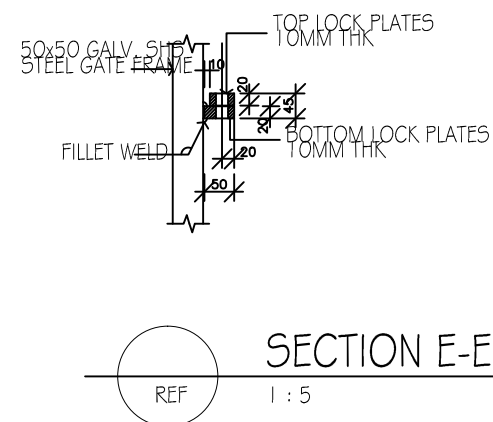
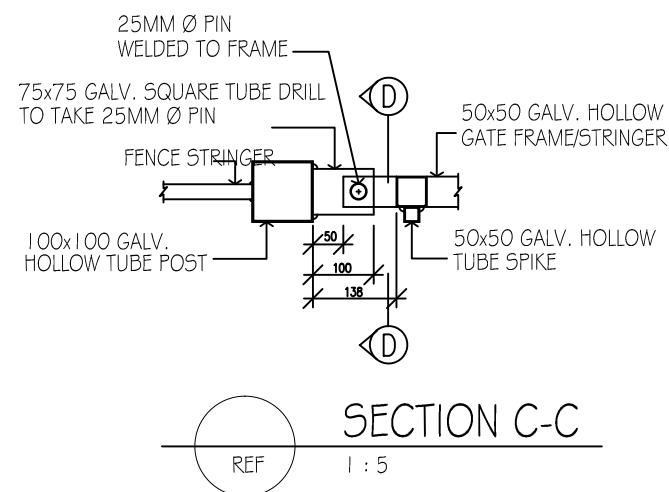
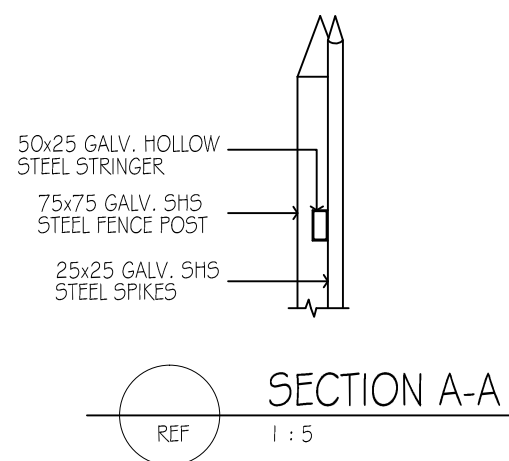
**NOTE**

1. ALL MATERIALS USED SHALL BE GALVANISED STEEL
2. ALL WELDING JOINTS SHALL BE PROTECTED FROM RUST BY APPLICATION OF METALIC PRIMER PAINT BEFORE A FINAL COAT OF GALVANISED PAINT IS APPLIED

**FENCE GENERAL ARRANGEMENT**  
REF 1 : 20



**PLATE DETAIL**  
REF 1 : 2



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CAD Filename: p&f-fence-03.dwg  
Scales: 1 : 100 / AS SHOWN  
Date Plotted: 04.12.22  
Time Plotted: 15:00PM

| Rev. | By | Chk'd | Date |
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| Drawn    | ia | NOV '22 |
| Designed | ia |         |
| Checked  |    |         |
| Endorsed |    |         |
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| Location | SECTION 12 LOT 02 – HOHOLA, NCD   |  |  |  |  |  |  |  |  |  |
| Title    | PLANT & FLEET WORKSHOP FENCE UPGRADES SPIKE FENCE ARRANGEMENT & DETAILS |  |  |  |  |  |  |  |  |  |
| Number   | M 11937   |  |  |  |  |  |  |  |  |  |
| Revision |   |  |  |  |  |  |  |  |  |  |

Sheet 03 OF 04



|   |                    |               |          |  |    |       |      |  |          |    |         |          |                                       |  |  |  |  |  |  |  |       |          |  |  |  |
|---|--------------------|---------------|----------|--|----|-------|------|--|----------|----|---------|----------|---------------------------------------|--|--|--|--|--|--|--|-------|----------|--|--|--|
| COPYRIGHT: This document is and shall remain the property of PNG Power LTD. The document shall ONLY be used for it's intended purpose as commissioned by PNG Power LTD. Any unauthorised use of this document in whatever forms is rightfully prohibited. |                    | Rev.          |          |  | By | Chk'd | Date | <div></div> <div><b>PNG POWER Ltd</b><br/>P. O. Box 1105, BOROKO 111. NCD. Papua New Guinea.<br/>Telephone: (675) 324 3200<br/>Facsimile: (675) 325 0072 Website: www.pngpower.com.pg</div> | Drawn    | ia | NOV '22 | Location | SECTION 12 LOT 02 – HOHOLA, NCD       |  |  |  |  |  |  |  |       |          |  |  |  |
|   |                    |               |          |  |    |       |      |  | Designed | ia |         | Title    | PLANT & FLEET WORKSHOP FENCE UPGRADES |  |  |  |  |  |  |  |       |          |  |  |  |
|   |                    |               |          |  |    |       |      |  | Checked  |    |         | A3       | PALISADE FENCE ARRANGEMENT            |  |  |  |  |  |  |  |       |          |  |  |  |
| CAD Filename:   | gkawhseblgd.dwg    | Date Plotted: | 04.02.22 |  |    |       |      |  | Endorsed |    |         | Number   | M 11937                               |  |  |  |  |  |  |  | Sheet | 04 OF 04 |  |  |  |
| Scales:   | 1 : 100 / AS SHOWN | Time Plotted: | 15:00PM  |  |    |       |      |  | Approved |    |         | Revision |                                       |  |  |  |  |  |  |  |       |          |  |  |  |
|   |                    |               |          |  |    |       |      |  |          |    |         |          |                                       |  |  |  |  |  |  |  |       |          |  |  |  |
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