



PROJECT SPECIFICATION AND BILL OF QUANTITY

FOR:

**SUPPLY AND INSTALLATION OF SUBSTATION SAFETY BARRIER FENCE, GATES,
SAFETY WARNING NOTICES AND DANGER WARNING SIGNS IN THE SUBSTATIONS
BETWEEN PRETORIA AND MABOPANE CORRIDOR**



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1. INTRODUCTION

This project covers the supply and installation of barrier fences, gates, warning notices and danger warning signs in the Substations between Pretoria and Mabopane. The barrier fence supports (poles) and other fence accessories to be used as part of the barrier fence and warning notices/signs must comply with Engineering Instructions S.016, Electrical Safety Instructions and relevant drawings as indicated in section 2 of this document.

2. DESCRIPTION OF WORKS/SCOPE OF WORKS

A safety barrier fence and gate/s of 1.2m high must be installed between the incoming AC disconnecting the earth switch and the rest of the HV yard in compliance with Engineering Instruction S.016.

An appropriate safety barrier must be installed around the exposed 3kV DC wall bushings and aerial feeder jumpers on the outside of the building. Safety Warning Signs WW23 must be installed on the barrier.

A warning notice with the wording "CAUTION-HIGH VOLTAGE. DO NOT WORK ON APPARATUS UNLESS THE HIGH VOLTAGE EQUIPMENT IS ISOLATED AND EARTHED" in compliance with drawing CEE-TWN-0035 together with a hazard warning notice of exposed live high voltage equipment (SABS 1186: WW23) must be installed on the access gate to the busbars behind the HSCB cells.

The required type and number of safety warning notices and danger warning signs must be installed on all fences and gates in compliance with the Transnet / PRASA Electrical Safety Instructions.

all faded and illegible danger warning notices and signs must be replaced with new warning notices and signs.

2.1 SUBSTATIONS TO BE COVERED BY THIS PROJECT

- 1) Hercules Substation
- 2) Mitchell Street Tie Station
- 3) Tshepo Petla Substation
- 4) Wolmerton Substation
- 5) Wintersnest Substation
- 6) Kruis Substation
- 7) Poort Substation
- 8) Mabopane Substation
- 9) Sjambok Substation
- 10) Develtdt Substation
- 11) Rosslyn Substation



2.2 SPECIFICATIONS AND DRAWINGS

All installations must comply with the following Specifications and Drawings:

- Engineering Instruction S.016
- Drawing CEE-TWN-0035 together with a hazard warning notice of exposed live high voltage equipment (SABS 1186: WW23)
- Drawing CEE-TBD-7
- Drawings CEE-TBD-7 and BBB 3620
- Perimeter security fences and gates must comply with specification BBB 5452

3. DURATION

The project contract will be for **6 months** from the date of award. i.e., Tenderer having acknowledged the receipt of award letter.

4. GUARANTEE

4.1 PRASA reserves the right to visually inspect the material during /after installation for any defects or damages.

4.2 The works shall be subjected to a guarantee period of one year. The guarantee period shall commence the day it is formally handed over to and accepted by PRASA.

4.3 Any defects that may become apparent during the guarantees period shall be rectified to the satisfaction of the client at a free cost.

4.4 Should the contractor fail to comply with the above, the contractor must reimburse PRASA the total cost paid towards the contractor.

5. PENALTY

Should the Contractor fail to complete the works on/before the stipulated completion dates, a penalty fee of R5000 per week will be charged.

6. DELIVERY

It remains the responsibility of the contractor to supply and install the materials as the scope suggest.

7. BILL OF QUANTITIES

Substation			
Item	Qty	Rate	Total
Fence (1,2m high)	368m		
Fence (2,4m high)	270m		
Gate (2,4m high and 1m wide)	9		



Gate (1,2m high and 1m wide)	12		
Gate (2,4m high and 4,6m wide)	1		
Warning Notices (WW23)	60		
Warning Notices (WW7)	105		
EL 20 Substation Warning Sign	25		
		Total (Exc.)	
		VAT (15%)	
		Total	

Requester: Act Reginal Engineer

Supported: Substation Manager

Name: Cecil Nene

Name: Kabelo Modipane

Designation: Act RE Electrical GN

Designation: Substation Manager

Date: 12/02/2024

Date: 09/02/2024

Signature: 

Signature: 