



Scope of Work

Technology

Title: **Upington Strengthening Phase 2 Project: Primary Plant Scope of Work at Upington Substation**

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Compiled by

Functional Responsibility

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Date: 9/10/2023

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1. SCOPE OF WORK

The scope of work for this project includes the civil and electrical work as depicted in project drawings SOLP21P05 stated in section 2. The scope for Upington Substation, based in the Northern province comprises but may not be limited to the following activities:

For a detailed scope see project specific drawings SOLP21P05.

400kV		
Quantity	Bay	Scope of Work
1	Feeder 3	Construct and Equip with 400 kV Mot Isolator, Line traps, CVT and Surge Arrestors as Ferrum 1 bay
1	Diameter GC Bay 1	Equip as a vacant bay with Post Insulators and Connector 1 CVT's.
1	Diameter GC Bay 2	Equip with new Mot Isolators, Current Transformers, Circuit Breaker and Connector 2 CVT's
1	Diameter GC Tie Bay	Equip with new Mot Isolators, Current Transformers and Circuit Breaker
1	All	Tubular busbar, Stringers, droppers & clamps
1	Common Yard	Terrace Extension including Yard Drainage, Trenching and ramps, Access roads, Security Fences & lighting, Yard Stone

2. LIST OF DRAWINGS FOR UPINGTON SUBSTATION

Note that the drawings listed below are “NOT FOR CONSTRUCTION” drawings. The successful contractor will order equipment as per specification and supply Eskom with these outlines in order to amend the drawings and issue them “FOR CONSTRUCTION”. Eskom will require at least 60 days from receiving outlines to issuing for construction.

No.	Drawing Title	Drawing Number
1.	Station Electric Diagram	SOLP21P05-SE-D6
2.	Key Plan	SOLP21P05-SE-D7
3.	Foundation and Trench layout	SOLP21P05-SE-D8
4.	Earthmat Layout Drawing	SOLP21P05-SE-D10
5.	Overhead Earthwire Layout	SOLP21P05-SE-D11
6.	400kV Busbar Layout	SOLP21P05-SE-D12
7.	Steelwork Marking Plan	SOLP21P05-SE-D13
8.	Bay layouts (Sheets 3, 3A, 4, 4A, 4B)	SOLP21P05-SE-D16
9.	Security Lighting	SOLP21P05-SE-E43-01
10.	Operational Flighting Cable route & Mast location	SOLP21P05-SE-E44-01
11.	Operational Flighting Luminaire Orientation	SOLP21P05-SE-E44-02
12.	Operational Flighting AC Schematic & Cable Block	SOLP21P05-SE-E44-03
13.	Stormwater drainage and fire protection	SOLP21P05-SE-E65
14.	Foundation level Schedule	SOLP21P05-SE-E66
15.	Fence Layout	SOLP21P05-SE-E67
16.	Terrace Layout and Details (Phase 2)	SOLP21P05-SE-E68

3. AUTHORISATION

This document has been seen and accepted by:

Name	Designation
S Zulu	Chief Engineer
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4. REVISIONS

Date	Rev.	Compiler/s	Remarks
October 2023	1	M Peffer	First Issue

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