DRAFT SITE VERIFICATION REPORT

THE EXPANSION OF GROMIS SUBSTATION AND ITS ASSOCIATED INFRASTRUCTURE LOCATED ON PORTION 0 OF FARM DIKGAT NO. 195, WITHIN THE JURISDICTION OF NAMA KHOI LOCAL MUNICIPALITY OF NAMAKWA DISTRICT MUNICIPALITY IN NORTHERN CAPE PROVINCE.

Prepared For:
National Transmission Company South Africa SOC (Ltd)
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Prepared By:
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October 2026

DOCUMENT SYNOPSIS

Item	Description		
Proposed development and location	The expansion of Gromis substation and its associated infrastructure located on portion 0 of farm Dikgat no. 195, within the jurisdiction of Nama Khoi Local Municipality of Namakwa District Municipality in Northern Cape Province.		
Purpose of the study	Site Verification Report for the expansion of Gromis substation and its associated infrastructure located on portion 0 of farm Dikgat no. 195, within the jurisdiction of Nama Khoi Local Municipality of Namakwa District Municipality in Northern Cape Province.		
Municipalities	Nama Khoi Local Municipality		
Predominant land use of the surrounding area	Electricity transmission grid, Mining and Vacant		
Applicant	National Transmission Company South Africa SOC (Ltd)		
Prepared for:	National Transmission Company South Africa SOC (Ltd) 2 Maxwell Drive, Megawatt Park, Sunninghill, Sandton, 2157		
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Date of Report	October 2026		
DRAFT DOCUMENT	**Prepared by:** **Adivhaho Vhulahani**	**Reviewed by:** **Magopa Kholofelo**	**Approved by:** **Dr Patrick Sithole**
Date: 16 October 2026	**Signature:** 	**Signature:** 	**Signature:** 

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SECTION ONE: EXECUTIVE SUMMARY

1.1 INTRODUCTION AND OUTLINE

Quality Environmental and Business Management Solution cc (QEMS) has been appointed by The National Transmission Company South Africa SOC Ltd (NTCSA) to undertake a Basic Assessment Report for the expansion of Gromis substation and its associated infrastructure located on portion 0 of farm Dikgat no. 195, within the jurisdiction of Nama Khoi Local Municipality of Namakwa District Municipality in Northern Cape Province.

Eskom Holdings SOC Ltd, South Africa's state-owned power company, has historically relied on large coal-fired power stations and a few hydro plants for electricity generation. The national grid, primarily consisting of 400 kV and 765 kV overhead lines, transmits power across the country. To enhance grid reliability amid growing renewable energy adoption, the National Transmission Company of South Africa SOC Ltd (NTCSA), a subsidiary of Eskom Holdings SOC Ltd, plans to implement Synchronous Condensers. These devices will provide auxiliary services, increase rotating inertia, and compensate for the decommissioning of coal power stations, improving grid stability. Currently, seven substations have been identified for this initiative. Gromis Substation is one of the identified. To achieve this, National Transmission Company of South Africa SOC Ltd (NTCSA) intends to install Synchronous Condensers, which will require an additional area of land for the condenser infrastructure, extension of 400kV yard, a new access road of 300m in length and a temporary laydown area. The purpose of the SynCons is to provide stability to the transmission grid, thereby enhancing grid performance and enabling the utility to increase the amount of power transmitted through the existing Gromis Substation and its associated infrastructure.

These proposed activities trigger a Basic Assessment in terms of the NEMA EIA Regulations 1998, as amended, and are listed under Listing notice 1 of the NEMA EIA Regulations 2014, as amended. Section 24(5)(h) of the NEMA and regulation 16 (1)(b)(v) of the EIA Regulations of 2014 also requires the submission of a national web-based environmental screening tool report (GNR. 960 / 05 July 2019) when applying for an environmental authorisation in terms of regulation 19 and 21 of the EIA Regulations of 2014. The Screening Tool Report (STR) is generated from the DFFE's national online GIS-based 'National web-based Environmental Screening Tool' and provides details on the environmental sensitivity, restriction, exclusion, or prohibition zones and specific requirements, including specialist studies that are applicable

to a proposed development site, based on the national sector classification and the environmental sensitivity of the site.

Before commencing with the application for an EA amendment and specialist assessments, the current land use and environmental sensitivity of the site under consideration, as identified in the STR, must be confirmed by undertaking site sensitivity verification. A Site Sensitivity Verification Report (SVR) is then required in response to the STR through the 'Protocols for Assessment and Minimum Report Content Requirements for Environmental Themes for Activities requiring Environmental Authorisation published in Government Notice Regulation 320 of 20 March 2020 under Section 24 (5)(a), (h) and 4 of the NEMA.

This is the SVR, which verifies the data contained in the DFFE STR compiled for the proposed development project.

1.2 PURPOSE OF THE REPORT

This report provides an overview of the following:

- Project location, description, and required services;
- DFFE Screening Tool outcomes and identified environmental sensitivity themes related to the project site and type;
- Desktop-based analysis of available GIS Databases;
- Motivation and evidence (photos) of either the verified / different use of the land and environmental sensitivity identified in the STR;
- A confirmation / refute on the need for the various specialist study inputs required by STR; and
- Any potential fatal flaws that may render the development undesirable at the project location.

1.3 TERMS OF REFERENCES

The general requirements for site sensitivity verification for activities requiring environmental authorisation have been published in Government Notice Regulation 320 of 20 March 2020 under Section 24 (5)(a), (h), and 4 of the NEMA.

GNR 320 requires that, prior to commencing with any specialist assessment for the EIA Study, the current land use and the environmental sensitivity of the site under consideration, as

identified by the national web-based environmental screening tool (screening tool), must be confirmed by undertaking a site sensitivity verification. The site sensitivity verification must be undertaken by an environmental assessment practitioner or a specialist.

The site sensitivity verification must be undertaken through the use of:

a) A desktop analysis, using satellite imagery or any available means;

b) A Preliminary on-site inspection; and

c) Any other relevant information.

The outcome of the site verification must be recorded in the form of a report that:

a) Confirms or disputes the current use of land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status, etc.;

b) Contains a motivation and evidence (e.g., photographs) of either the verified or different use of the land and environmental sensitivity; and

c) Is submitted with the relevant assessment report in accordance with the requirements of the EIA Regulations.

1.4 ASSUMPTIONS AND LIMITATIONS

The spatial data contained in the National web-based Environmental Screening Tool, used to generate the STR, according to DFFE, has been collected as accurately as possible. Although the greatest care has been taken to ensure that the data is up to date and spatially accurate, the Department of Forestry, Fisheries and the Environment (DFFE), formerly known as the Department of Environmental Affairs (DEA) and its entities, gives no warranty, express or implied, as to the accuracy, reliability, utility or completeness of this data.

The spatial data used for environmental screening purposes, used to generate the STR, has been collected from various data sets and sources, and its correctness cannot be guaranteed. The database is updated over time and can change without notice. Given the limitation, it is essential to independently verify the data contained in the report on-site. Discrepancies have been identified between the STR and the on-site verification and are detailed in the sections below.

1.5 METHODOLOGY

QEMS conducted a desktop analysis, using satellite imagery of the project site, including the GIS historical vegetation covers for specific years (2012, 2017, and 2021), and generating a STR for the project site. The findings of the STR have been verified through a site inspection on 20 January 2026.

SECTION TWO: ENVIRONMENTAL ASSESSMENT PRACTITIONERS

2.1 DETAILS OF THE EAP

The on-site sensitivity verification was undertaken by Dr Patrick Sithole on 20 January 2026. Adivhaho Vhulahani prepared the Site Verification Report (SVR) for the site. The details are provided below:

QEMS Management and Solutions cc
7 Munnik Avenue, Sterpark
Polokwane, 0699
Tel: 061 535 3141
Email: sitholetp@qems.co.za

2.2 EXPERTISE OF THE EAP

A Registered natural scientific professional (SACNASP – Environmental and Chemical scientist), Registered Environmental Assessment Practitioner (EAPASA), social and sustainability expert with 22 years of experience. Patrick Sithole specialises in Strategic Environmental, Social and Sustainable Development projects, Climate Change and Health, Environmental Management issues, and Construction Supervision of all infrastructural projects. Dr Sithole is also involved in vegetation clearance and pest control projects along infrastructural projects, e.g., roads, railway lines, power lines, golf courses, and buildings like complexes, houses, malls, etc. Patrick has a very strong business development mindset that has seen him win and work on projects across Africa and in Europe. His key experience includes the following areas; Environmental (Natural Resource) Management; Environmental Compliance; Social Facilitation and Consultation; Compensation of Land Claims; Climate Change; Climate (Change) and Human Health; Air Quality Management; Renewable Energy;

Waste Management; Land Rehabilitation; Water Quality/Demand Management; Strategic Environmental Assessment; Waste Water (sewer) Treatment; Project Management; ISO 9001 and ISO14001; Vegetation Control Bush Clearance (Invasive plants).

SECTION THREE: THE PROPOSED DEVELOPMENT/PROJECT

3.1. PROJECT DESCRIPTION

National Transmission Company South Africa SOC Ltd (NTCSA) proposes to expand the Gromis Substation by approximately 5 hectares, increasing the current substation footprint from approximately 12 hectares to 17 hectares. The proposed development will comprise the installation of two Synchronous Condensers (SynCons) and associated infrastructure. The project will involve the extension of the existing 400 kV and 132 kV yards from within the Gromis Substation into the proposed new development area. The extensions will be integrated with the existing substation infrastructure and continue into the new area to accommodate the SynCons and associated infrastructure.

The development will also include two temporary laydown areas, namely Laydown Area 1 (approximately 6 hectares) and Laydown Area 2 (approximately 2 hectares). Additional, the existing access road will be affected by the proposed development, necessitating the construction of a diverted access road approximately 300m in length, which will connect to the existing access road to maintain access to the substation. The proposed access road will be located within the designated laydown 1 area and will provide access to the construction and operational areas of the expanded substation. The proposed expansion is intended to accommodate the installation and operation of the two SynCons and associated infrastructures at the existing Gromis Substation located within the jurisdiction of the Nama Khoi Local Municipality in the Namakwa District Municipality of the Northern Cape Province.

NTCSA plans to implement SynCons to enhance grid reliability and grow renewable energy adoption. SynCons will provide several ancillary energy services, increasing rotating inertia in order to improve grid stability. The SynCons do not generate power; however, through their inertial, rotating mass provide grid stability to the local area of the national transmission grid where they are located. Currently, the only inertial, rotating mass is provided largely by the coal-fired power stations, which are stationed in the north-eastern part of the country

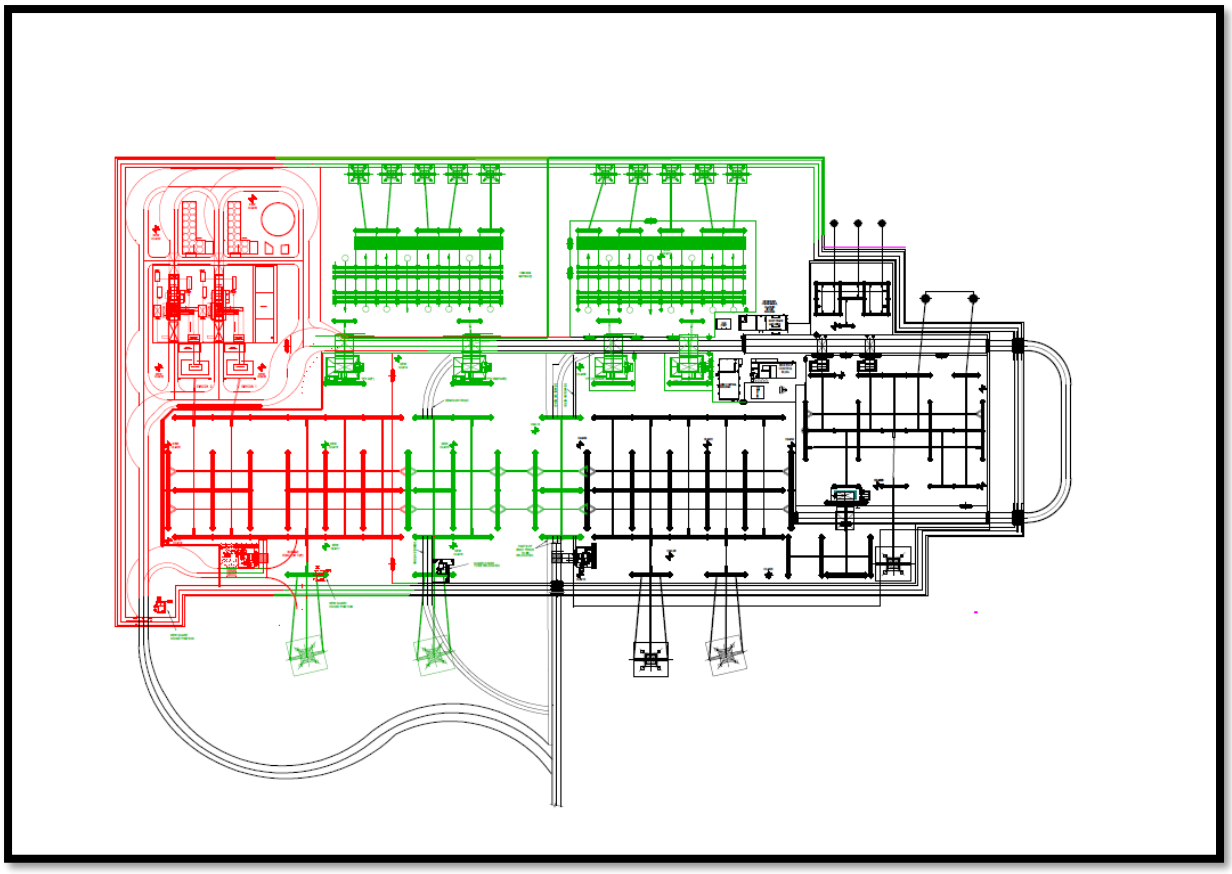


Figure 1: Preliminary Layout Plan

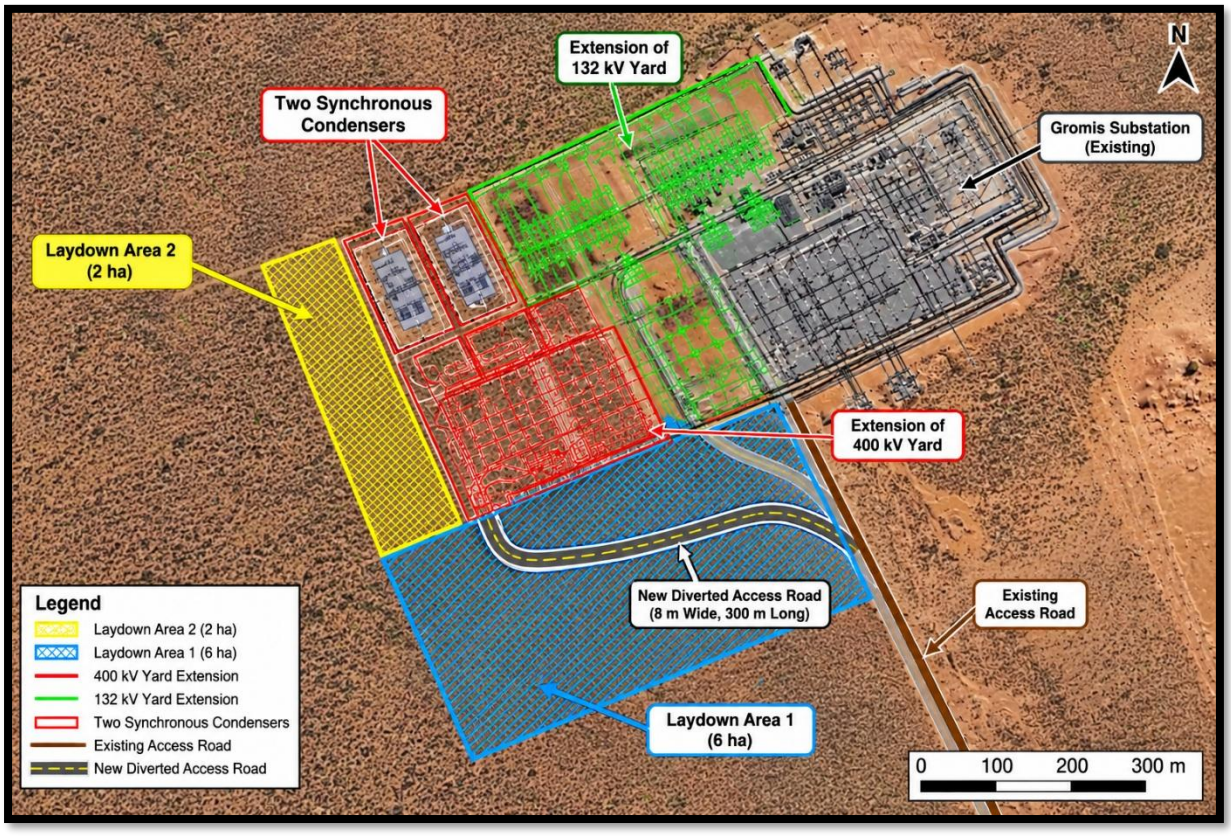


Figure 2: Layout Plan showing the proposed siting of two Synchronous Condensers.

3.2. PROJECT LOCALITY

The proposed expansion site is located on portion 0 of Farm Dikgat No. 195 and covers approximately 5 hectares for the synchronous condenser expansion area and an additional 6 and 2 hectares for the temporary laydown area 1 and 2 respectively. The site is situated near the mine along the R355 Road, approximately 0.95 km north of the existing Gromis Substation and about 68.30 km southwest of Springbok Town within the Nama Khoi Local Municipality, Namakwa District Municipality, Northern Cape Province..

The proposed development falls within the Strategic Transmission Corridor (Figure 5). The central coordinates of the site are 29°36'4.71"S and 17°10'34.48"E. The site falls within the jurisdiction of the Nama Khoi Local Municipality of Namakwa District Municipality in Northern Cape Province. The table below depicts the Surveyor General 21 Digit and corner coordinates of the site.

Table 1: Farm portion and Surveyor General 21 Digit.

Farm portion and No.	Surveyor General 21 Digit code
Portion 0 of Farm DIKGAT No. 195	C05300000000019500000

Table 2: Corner Coordinates of the existing Gromis Substation.

Corner coordinates	Latitude (S)	Longitude (E)
Corner A	29°35'52.25"S	17°10'48.45"E
Coner B	29°36'0.64"S	17°10'54.31"E
Coner C	29°36'7.38"S	17°10'41.70"E
Coner D	29°35'58.65"S	17°10'35.83"E

Table 3: Corner Coordinates of the Expansion Area.

Corner coordinates	Latitude (S)	Longitude (E)
Corner A	29°35'58.54"S	17°10'35.87"E
Coner B	29°36'7.17"S	17°10'41.56"E
Coner C	29°36'9.89"S	17°10'36.50"
Coner D	29°36'1.32"S	17°10'30.50"E

Table 4: Corner Coordinates of the Temporary Laydown Area One (1)

Corner coordinates	Latitude (S)	Longitude (E)
Corner A	29°35'58.54"S	17°10'35.87"E
Coner B	29°36'5.61"S	17°10'44.72"E
Coner C	29°36'11.44"S	17°10'48.32"E
Coner D	29°36'15.89"S	17°10'38.63"E

Table 5: Corner Coordinates of the Temporary Laydown Area Two (2)

Corner coordinates	Latitude (S)	Longitude (E)
Corner A	29°36'11.44"S	17°10'48.32"E
Coner B	29°36'15.89"S	17°10'38.63"E
Coner C	29°36'10.81"S	17°10'34.22"E
Coner D	29°36'2.45"S	17°10'28.39"E

Table 6: Coordinates of the new access Road

Coordinates	Latitude (S)	Longitude (E)
Start Point	29°36'10.79"S	17°10'47.98"E
Middle Point	29°36'11.37"S	17°10'41.94"E
End Point	29°36'9.72"S	17°10'36.66"E

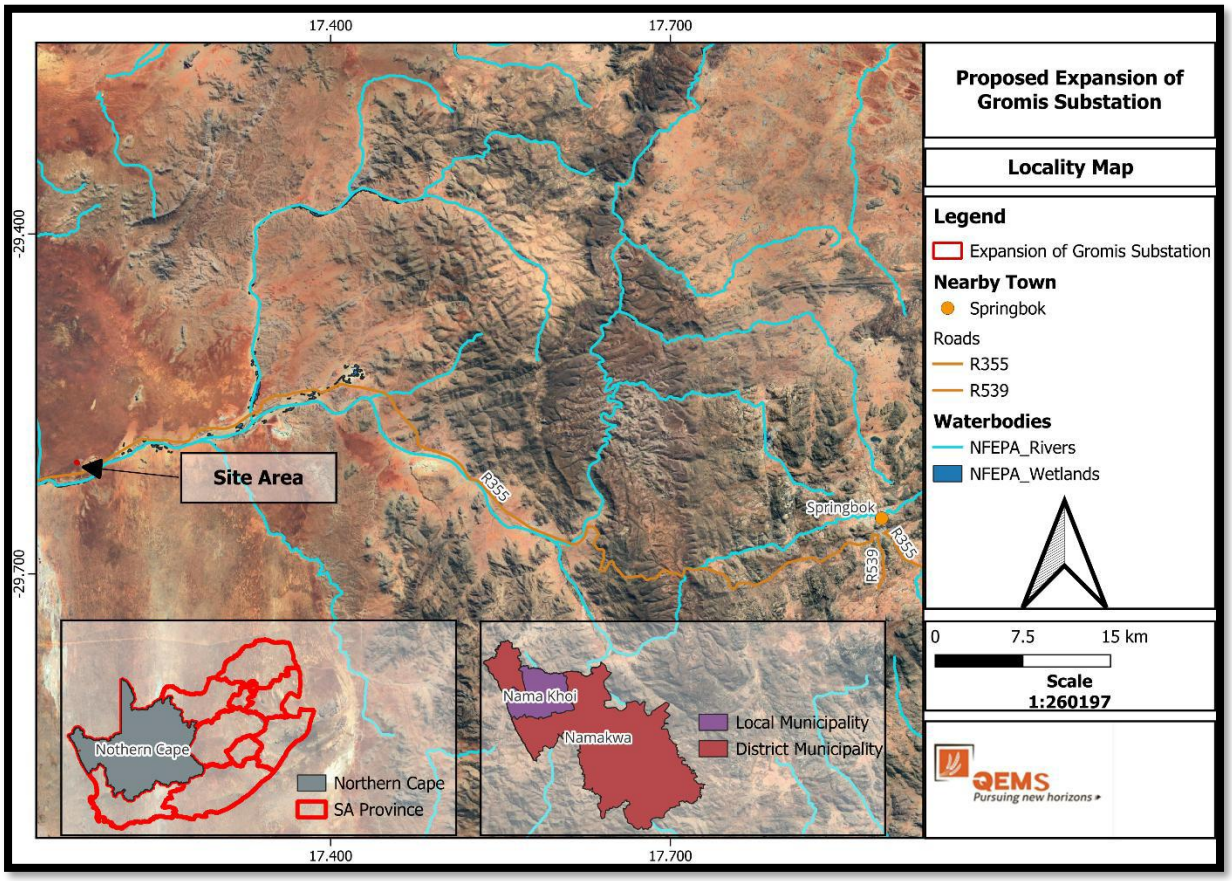


Figure 3: Locality Map

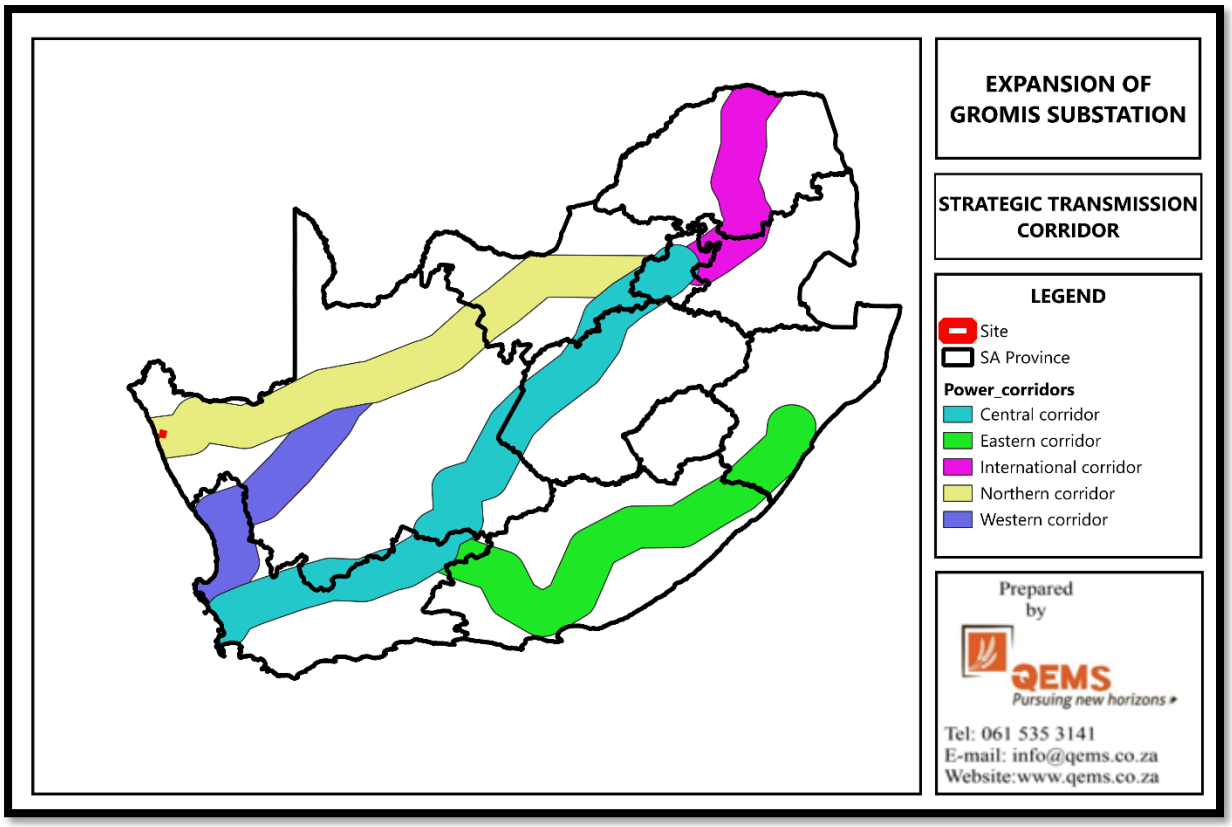


Figure 4: Strategic Transmission Corridor Map

3.3. ENVIRONMENTAL FEATURES

3.3.1 Vegetation

The proposed expansion area and the temporary laydown area are located within the Namaqualand Strandveld vegetation type**,** while the Namaqualand Riviere vegetation type occurs nearby along the river (Figure 6). According to SANBI VEGMAP (2018), Namaqualand Strandveld forms part of the Succulent Karoo Biome and is characterised by low-growing succulent shrubs, dwarf shrubs, and sparse grasses adapted to the arid climate, low winter rainfall, and nutrient-poor soils of the Northern Cape. The expansion does not overlap with the Namaqualand Riviere vegetation, indicating that direct impacts on the more sensitive riverine habitat are unlikely, provided that construction activities remain within the proposed development footprint. Although the Namaqualand Strandveld vegetation is generally considered moderately resilient to disturbance, it remains ecologically important due to its high plant diversity and endemism. Potential threats to this vegetation include habitat disturbance, overgrazing, invasive alien species, and climate change, which may affect vegetation composition and cover over time.

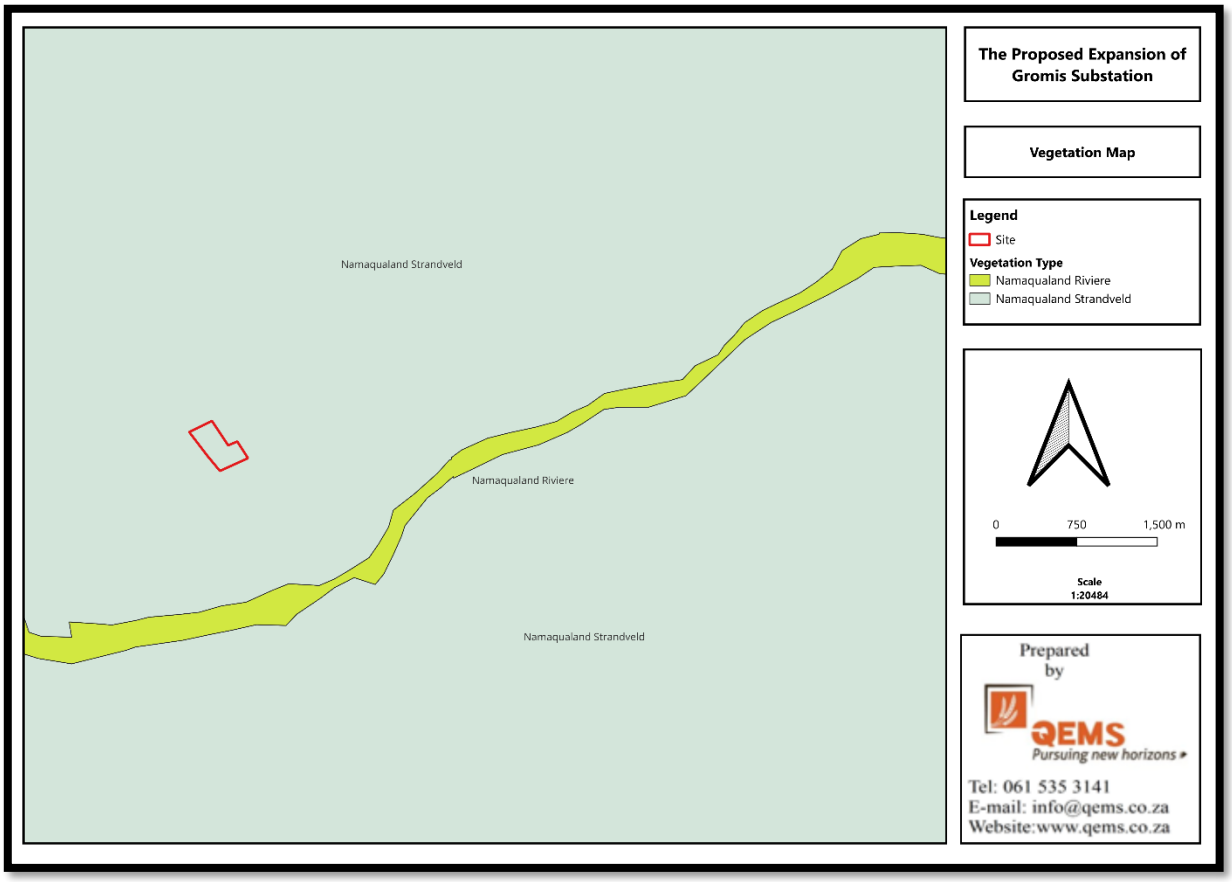


Figure 5: Vegetation map of the site.

3.3.2 Geology and Soils

The proposed expansion area and the temporary laydown area are predominantly situated within the West Coast Group, while the Gladkop Suite occurs immediately south of the site along the Buffels River, and the Richtersveld Suite is located further to the west (Figure 7). The West Coast Group comprises predominantly unconsolidated to semi-consolidated Cenozoic sediments, including sands, gravels, calcrete and silcrete deposits, which have been shaped by fluvial, marine and aeolian processes. These deposits generally give rise to sandy to gravelly soils with good drainage but variable bearing capacity depending on the degree of consolidation. The expansion does not extend into the Gladkop Suite or Richtersveld Suite, indicating that the development will remain within the West Coast Group geology.

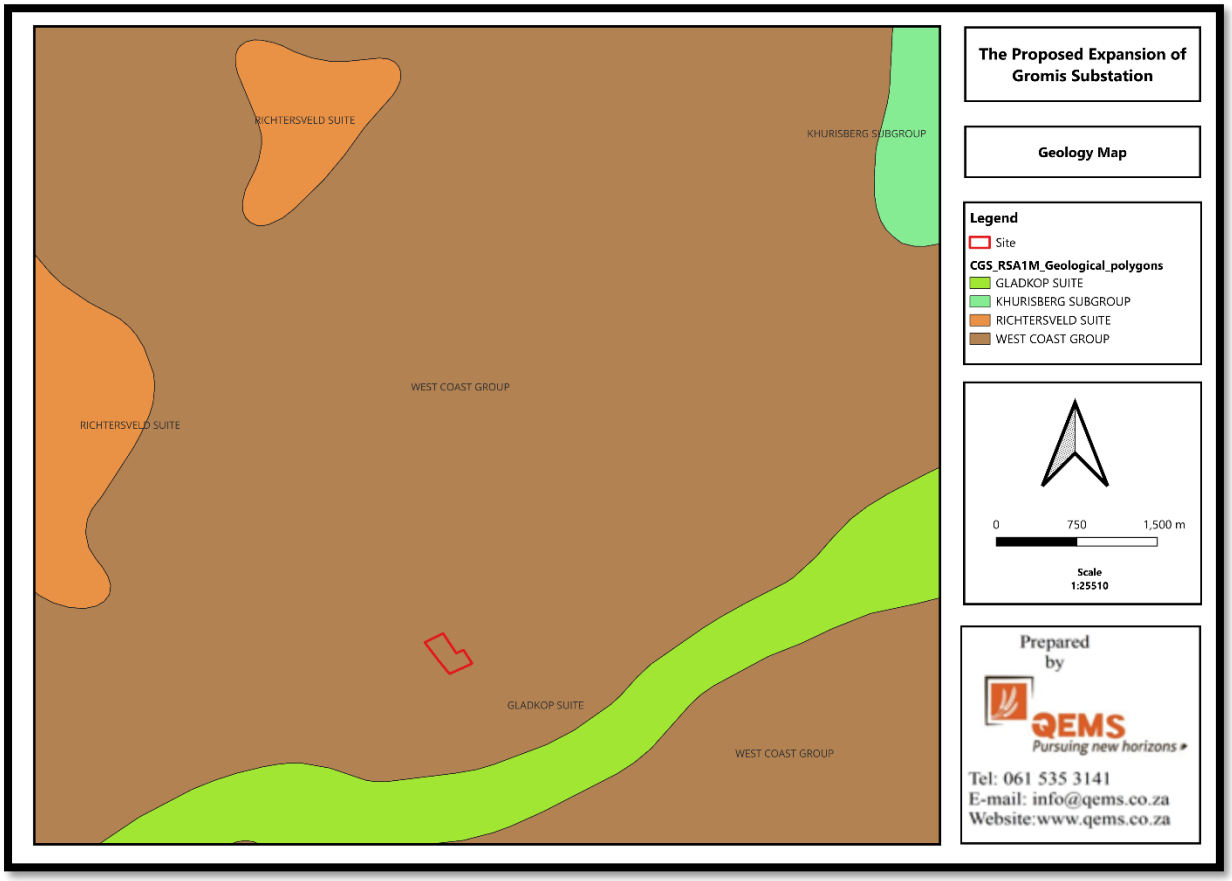


Figure 6: Geology Map

3.3.3 Climate

The Gromis Substation is situated in the Northern Cape province of South Africa, a region characterized by an arid to semi-arid climate. The area receives minimal rainfall, averaging less than 300 millimeters per annum. This scarcity of precipitation contributes to the province's arid conditions. Temperature variations are notable, with summer highs frequently exceeding 30°C (86°F) and occasionally surpassing 40°C (104°F). Winters are typically frosty and clear, with southern areas sometimes experiencing bitter cold.

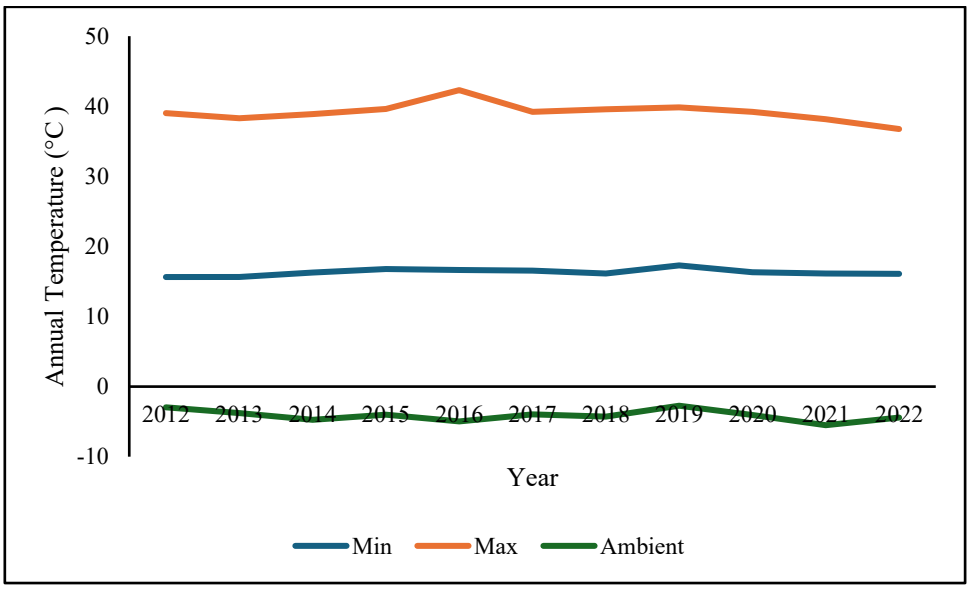


Figure 7: Gromis Substation site temperatures and rainfall between 2012 and 2022 (NASA).

3.3.4. Land use

The proposed expansion area and associated temporary laydown area are predominantly located within an area classified as low shrubland (Succulent Karoo), which is the dominant land cover type in the project area (Figure 9) (DFFE South African National Land Cover, 2022). The surrounding landscape also includes areas associated with mines: extraction pits and quarries to the east of the proposed sites, as well as small patches of other bare surfaces, roads, and bare riverbed material associated with nearby drainage features. The proposed development is therefore situated within an already transformed landscape characterized by natural shrubland interspersed with existing mining and infrastructure activities, indicating that the project will be located within an area of relatively low land-use sensitivity.

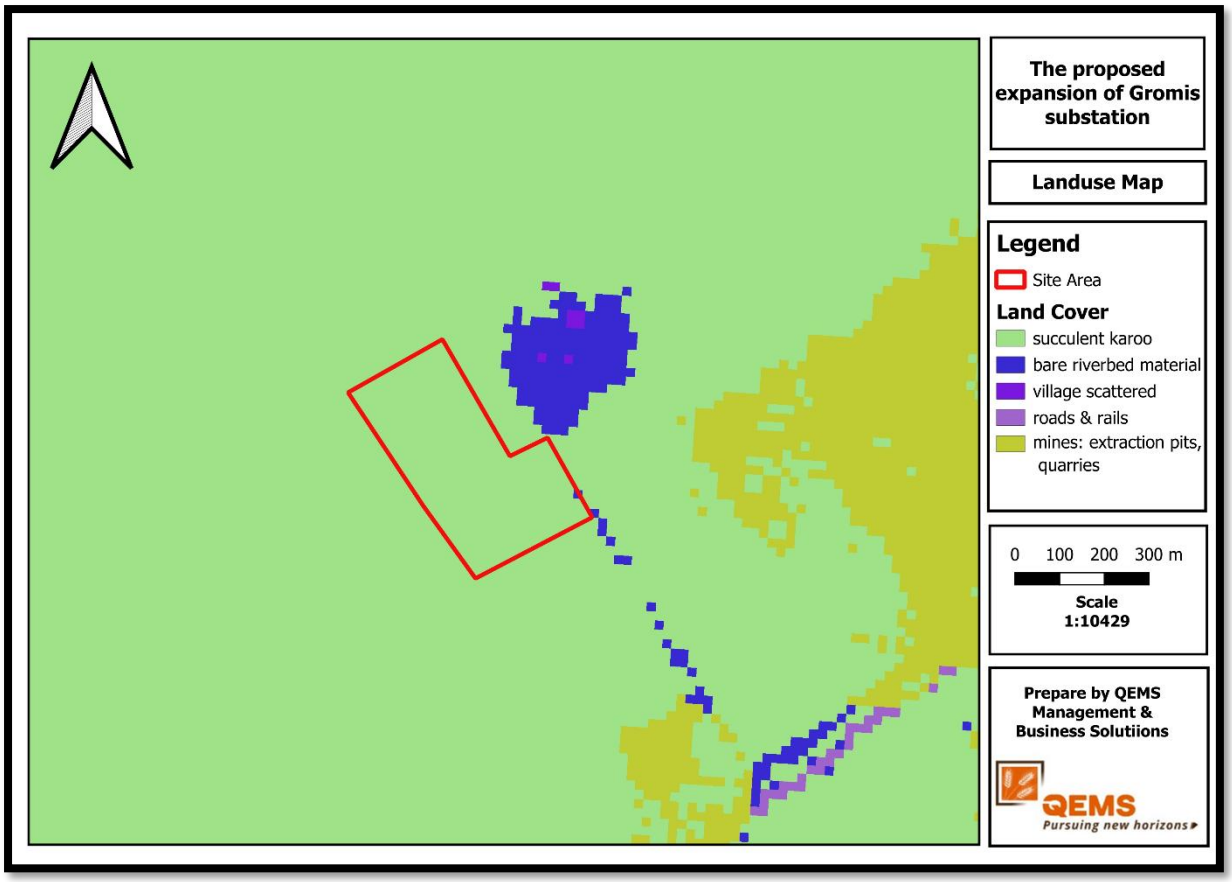


Figure 8: Land Use Map

3.4. HISTORICAL IMAGES

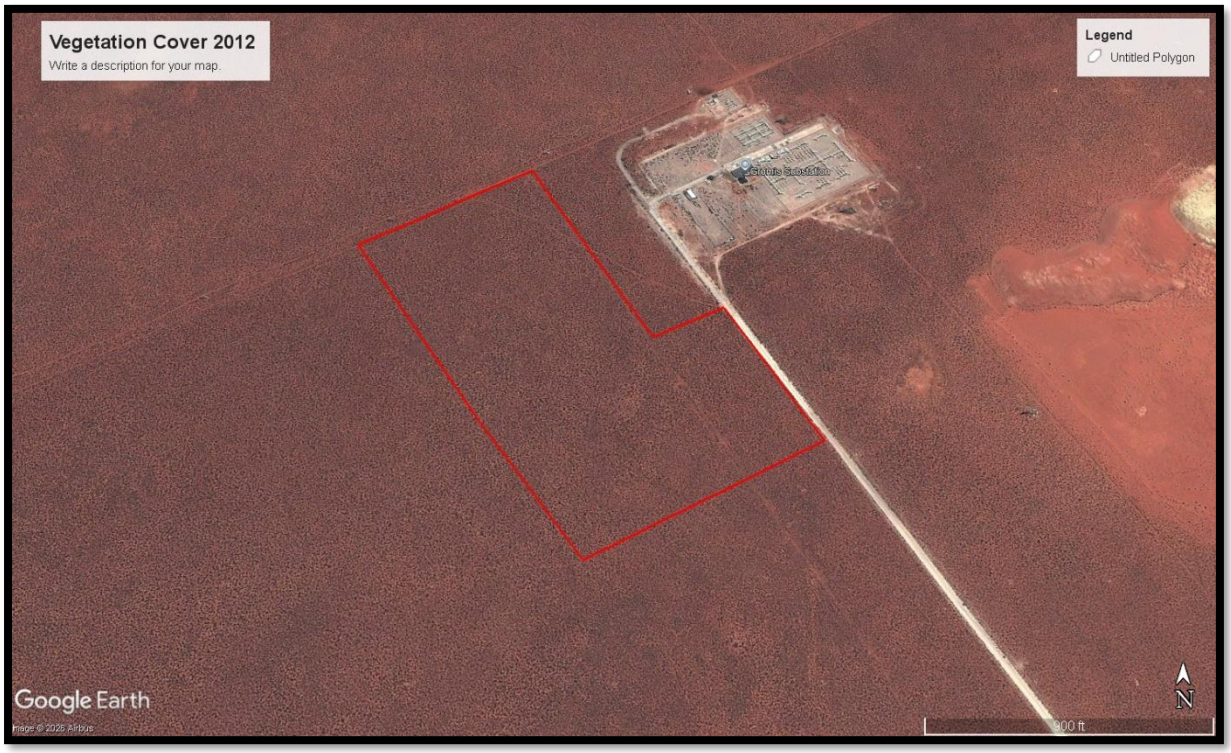


Figure 9: Historical image showing vegetation cover during 2012.

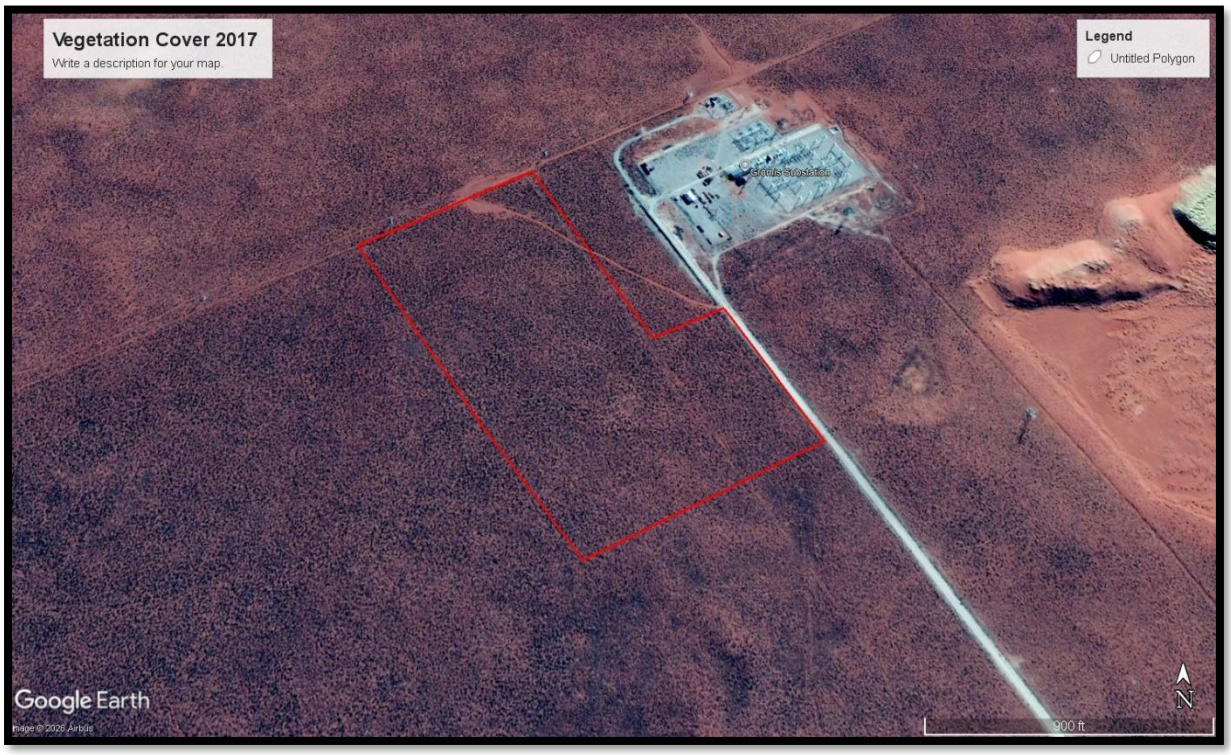


Figure 10: Historical image showing vegetation cover during 2017.

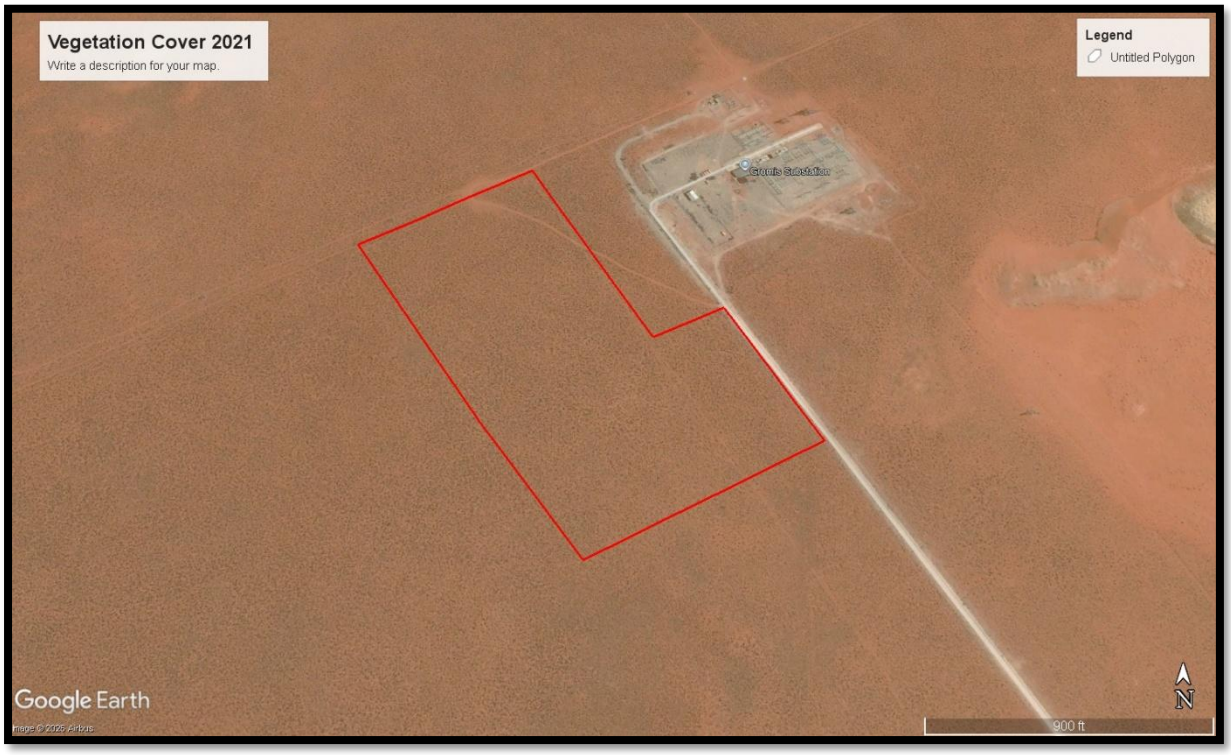


Figure 11: Historical image showing vegetation cover during 2021.

3.5. SITE PHOTOGRAPHS



Figure 12: Gromis substation.



Figure 13: Current vegetation on site.



Figure 14: Access Road

SECTION FOUR: PROJECT LEGAL REQUIREMENTS

4.1 NEMA

The Basic Assessment process is a comprehensive, independent assessment of all identified and potential environmental impacts. The aim of a Basic Assessment process is to ensure that the proposed development occurs in a sustainable manner and that its negative impacts are reduced and mitigated to the best extent possible while its positive social benefits are enhanced. The findings and mitigation measures are recorded in the EMPr, which becomes a legally binding document upon approval.

In order to obtain authorization for this project, a specific procedure must be followed as stipulated in the Environmental Impact Assessment Regulations, 2014 (as amended), which requires specific documentation (Basic Assessment Report) to be submitted. Once all the required documentation has been submitted and the environmental process completed, the responsible authority will make a decision on the application. The environmental decision-making authority for this application is the DFFE.

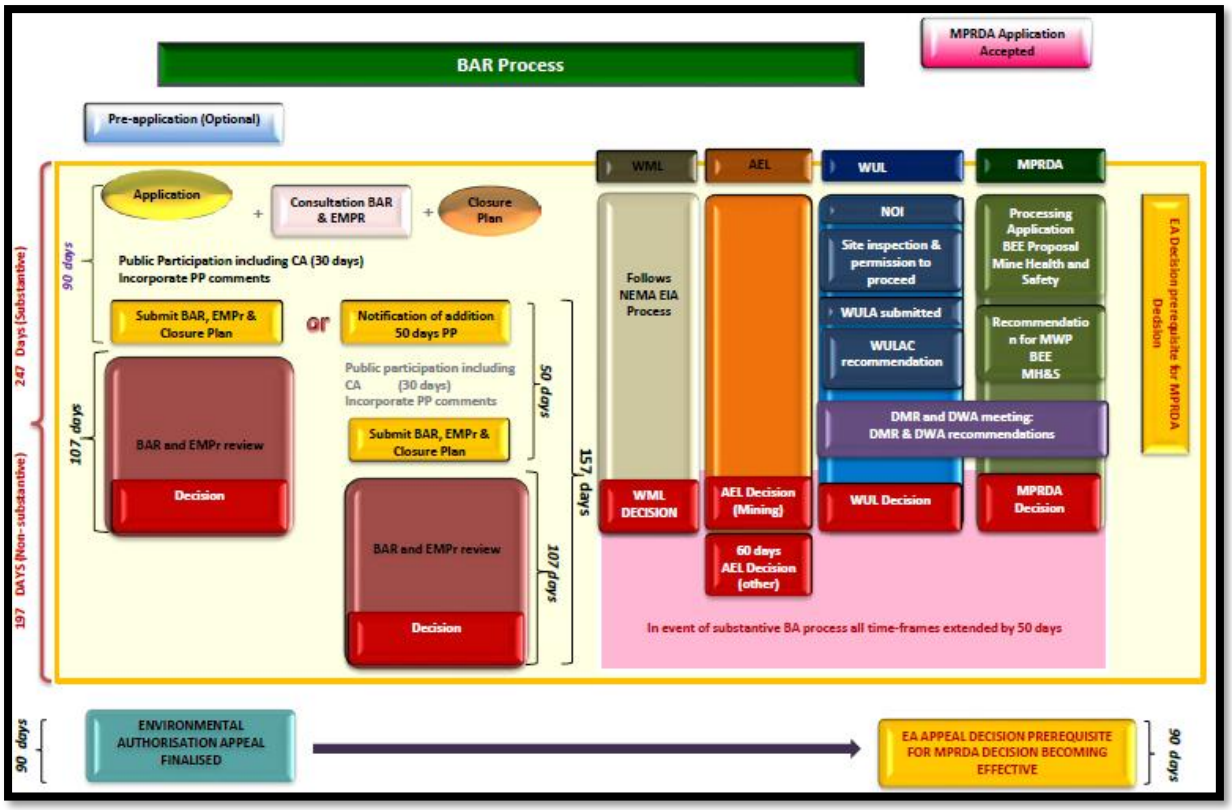


Figure 15: Basic Assessment Process.

4.2 LISTED ACTIVITIES TRIGGERED

The following table provides the listed activities triggered.

Table 7: Trigged listed activities

Listing Notice and Activity Number	Description	Relevance
Listing Notice 1 Activity 27.	The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for— i) the undertaking of a linear activity; or	The project will include the clearance of vegetation for 13 ha for the construction/ installation of Synchronous and laydown areas. However, it is anticipated that the entire 6-hectare laydown area (1) will not be cleared.

	(ii) maintenance purposes undertaken in accordance with a maintenance management plan.	
Listing Notices 1 Activity 47.	The expansion of facilities or infrastructure for the transmission and distribution of electricity where the expanded capacity will exceed 275 kilovolts and the development footprint will increase.	The extension of the 400kV yard.

4.3 NWA

The developer intends to drill a borehole; a formal water use license application (WULA) will be lodged to the Department of Water and Sanitation in terms of Section 21 of the National Water Act (Act No 36 of 1998). The WULA Procedure is regulated under the 'Procedural Requirements for WaterUse License Applications and Appeals (GNR 267, 24 March 2017) published in terms of the NWA.

Table 8:Water Use Activities Triggered under NWA

WULA Triggered Activity	Description	Relevance
Section 21(a).	Taking water from a water resource.	Abstraction of underground water through a borehole.

SECTION FIVE: DFFE SCREENING TOOL REPORT (STR) FINDINGS

5.1 STR FINDINGS

The site sensitivity verification has been undertaken by Dr Patrick Sithole.

5.1.2 Environmental Themes that are sensitive to the development.

Table 9: STR Specified Environmental Themes and required specialist studies.

Environmental Sensitivity Themes	Rate	Response	Comment/Motivation for sensitivity
Agricultural Theme	Low	Accepted	There is no evidence of agricultural activities observed onsite and the site is dominated by sandy soils, however, the compliance statement will be conducted and submitted.
Animal Species Theme	Medium	Accepted	No animal species observed during the site visit. However, the screening tool identified numerous animals that might be found in the areas which include: Aves-Circus maurus Mammalia-Eremitalpa granti granti Sensitive species 21 Invertebrate-Brinckiella mauerbergerorum Potentials impacts would be managed according to the provisions of the EMPr. Thus, the study will be conducted as part of Terrestrial Biodiversity Study.
Aquatic Biodiversity Theme	Low	Accepted	No watercourses were observed within the proposed development. however, the

			aquatic compliance statement will be conducted.
Archaeological and Cultural Heritage Theme	Low	Accepted	No features of Archaeological and Cultural Heritage were observed on site. The study will be conducted.
Civil Aviation Theme	Medium	Refuted	The site is located approximately 11.67 km from Kleinzee Airfield. The proposed infrastructure will be of a similar height to the existing substation infrastructure and is therefore unlikely to interfere with civil aviation activities.
Defence Theme	Low	Accepted	No military base was identified within 5km of the proposed development; thus, the development poses no threat to the South African Defence Force. The STR finding is therefore accepted.
Paleontology Theme	Low	Accepted	No features of Paleontology value were observed on site. However, the study will be conducted.
Plant Species Theme	Medium	Accepted	No protected or threatened species were observed on-site. The site is dominated by dwarf microphyllous shrubs, with 'white' grasses of the genera Aristida and Eragrostis; Thus, the study will be conducted as part of Terrestrial Biodiversity Study

Terrestrial Biodiversity Theme	Low	Accepted	No protected or threatened species were recorded during the site assessment. However, the Terrestrial Biodiversity Study will be conducted.

Based on the information gathered through the desktop study (GIS-based spatial tools) and the site inspection undertaken on 20 January 2026 for the proposed development, not all of the identified sensitivities are expected to apply.

5.2 VERIFICATION OF STR FINDINGS

This section of the SVR serves to:

➢ Verify the land use and sensitivities identified in the STR;

➢ Confirm/refute the need for various specialist inputs called for in terms of the STR; and

Motivation and evidence of either the verified or the different use of land and environmental sensitivity.

The verification findings are presented in a table overleaf.

5.2.1 STR Findings, Environmental sensitivity theme, Desktop analysis results, and EAP comments

The environmental sensitivity themes identified through the STR, including the EAP comments and desktop analysis, are summarised below in Tables 3 to 11.

Sensitivity Themes

Table 10: Sensitivity Theme 1: Agricultural

Environmental Theme	**Sensitivity**				**STR Motivation**	**Relevant (Yes/No)**	**STR Specialist Study Required**
	High	**High**	**Medium**	**Low**			
Agricultural				X	5. Low	YES	YES
(a) EAP Comments based on Site Visit Findings							
There is no evidence of active agricultural activities currently taking place on the site. The area is dominated by the sandy soil as depicted by the image below. Therefore, the site's agricultural sensitivity is confirmed to be low.							



(b) Desktop Analysis

The STR findings rated the are as low sensitivity

Table 11: Sensitivity Theme 2: Animal Species

Environmental Theme	Sensitivity				STR Motivation	Relevant (Yes/No)	STR Specialist Study Required
	High	High	Medium	Low			
Animal Species			X		Aves-Circus maurus Mammalia-Eremitalpa granti granti Sensitive species 21 Invertebrate-Brinckiella mauerbergerorum	NO	YES
(a) EAP Comments based on Site Visit Findings							
No animal species were observed during the site visit. Ongoing construction activities at the substation may have caused fauna to migrate, and the area is already disturbed by existing powerline and substation infrastructure. However, a Terrestrial Impact Assessment will be undertaken.							
(b) Desktop Analysis							
The STR shows that there's a medium sensitivity of Aves-Circus maurus, Mammalia-Eremitalpa granti granti, and Invertebrate-Brinckiella mauerbergerorum features.							

Table 12: Sensitivity Theme 2: Aquatic Biodiversity

Environmental Theme	Sensitivity				STR Motivation	Relevant (Yes/No)	STR Specialist Study Required
	Very high	High	Medium	Low			
Aquatic Biodiversity				X	Low Sensitivity	YES	YES
(a) EAP Comments based on Site Visit Findings							
There is no aquatic biodiversity within the 500m buffer of the proposed site. Therefore, the sensitivity rating for aquatic biodiversity is accepted.							
(b) Desktop Analysis							
The STR findings show low sensitivity.							

Table 13: Sensitivity Theme 4: Archaeological and Cultural Heritage

Environmental Theme	Sensitivity				STR Motivation	Relevant (Yes/No)	STR Specialist Study Required
	Very high	High	Medium	Low			
Archaeological and Cultural Heritage Theme				X	Low Sensitivity	YES	YES
(a) EAP Comments based on Site Visit Findings							
There are no important cultural elements identified on the proposed site. However, during the construction phase, archaeological artefacts can be dug up and destroyed, if any artefacts are encountered, construction works should cease immediately, and SAHRIS and LIHRA should be notified within 24 hours of the findings. However, a specialist will be commissioned as per NHRA 25 of 1999. The STR finding is therefore accepted.							
(b) Desktop Analysis							
The STR findings show low sensitivity							

Table 14: Sensitivity Theme 5: Civil Aviation

Environmental Theme	Sensitivity				STR Motivation	Relevant (Yes/No)	STR Specialist Study Required
	Very high	High	Medium	Low			
Civil Aviation			X		Between 8 and 15 km of other civil aviation aerodrome	NO	NO
(a) EAP Comments based on Site Visit Findings							
No airport or any airspace infrastructure was observed within an 8km to 15 km radius during the site visit, and the project would not affect any civil aviation. The STR finding is therefore refuted.							
(b) Desktop Analysis							
The STR findings show medium Sensitivity of features between 8 and 15 km of other civil aviation aerodrome.							

Table 15: Sensitivity Them 6: Defence

Environmental Theme	Sensitivity				STR Motivation	Relevant (Yes/No)	STR Specialist Study Required
	Very high	High	Medium	Low			
Defence				X	Low Sensitivity	NO	NO
(a) EAP Comments based on Site Visit Findings							
No military base was identified within 5km of the proposed development; thus, the development poses no threat to the South African Defence Force. The STR finding is therefore accepted.							
(b) Desktop Analysis							
The STR findings show Low Sensitivity							

Table 16: Sensitivity Theme 7: Palaeontology

Environmental Theme	Sensitivity				STR Motivation	Relevant (Yes/No)	STR Specialist Study Required
	Very high	High	Medium	Low			
Palaeontology				X	Features with a Low paleontological sensitivity	YES	YES
(a) EAP Comments based on Site Visit Findings							
During the site assessment, no evidence of palaeontological resources was identified, such as fossiliferous rock formations, exposed sedimentary layers, or fossil remains within the proposed development footprint. Furthermore, none of these were encountered during the construction of the substation and pylons. The STR findings are therefore accepted.							
(b) Desktop Analysis							
The STR shows features with a Low paleontological sensitivity							

Table 17: Sensitivity Theme 7: Plant Species

Environmental Theme	Sensitivity				STR Motivation	Relevant (Yes/No)	STR Specialist Study Required
	Very high	High	Medium	Low			
Plant Species			X		Jordaaniella uniflora Boophone haemanthoides Tetragonia pillansii Sensitive species 422 Sensitive species 884 Sensitive species795	YES	YES
(a) EAP Comments based on Site Visit Findings							
No protected or threatened species were observed on-site. The site is dominated by dwarf microphyllous shrubs, with 'white' grasses of the genera Aristida and Eragrostis; STR finding is therefore accepted. A terrestrial biodiversity impacts study will be undertaken.							



(b) Desktop Analysis

The STR shows that there’s medium Sensitivity of Jordaaniella uniflora, Boophone haemanthoides, and Tetragonia pillansii

Table 18: Sensitivity Theme 8: Terrestrial Biodiversity

Environmental Theme	Sensitivity				STR Motivation	Relevant (Yes/No)	STR Specialist Study Required
	Very high	High	Medium	Low			
Terrestrial				X	Low Sensitivity	YES	YES
(a) EAP Comments based on Site Visit Findings							
No protected or threatened species were recorded during the site assessment. The proposed area is located within a low Terrestrial Biodiversity sensitivity theme. However, a study of terrestrial biodiversity has been undertaken. The STR finding is therefore accepted.							
(b) Desktop Analysis							
The STR indicates that the site falls within the Low Sensitivity area.							

SECTION SIX: POTENTIAL IMPACTS FROM THE PROPOSED DEVELOPMENT

6.1 INTRODUCTION

The following are the potential impacts of the proposed project in the area during the construction and operation phases. The mitigating measures will be included in the EIR and the EMPr.

Direct impacts: The main potential environmental impacts associated with the construction and operation phase of the proposed activity are as follows:

a. Dust impact

Construction Phase

Dust from construction activities will be from construction vehicles, and the dust will be below.

The regulated standards, and it can be easily managed through dust suppression measures.

Operational Phase

Dust may be generated from the movement of operational vehicles. These pollutants can affect the air quality and health of workers and neighbours. However, dust will be managed or mitigated by using dust suppression measures.

b. Traffic impact

Construction Phase

During the construction phase, construction vehicles will be moving in and out of the site. These vehicles will have a speed limit of 40km/hr and have the potential of causing traffic congestion. However, it is advised that the heavy vehicles and construction machinery be in motion before 7 am and after 6 pm so that they do not disturb daily road users.

Operational Phase

During the operational phase, the proposed development is expected to have less traffic.

c. Noise

Construction Phase

High levels of construction noise from the movement of heavy construction vehicles and machinery may be produced; however, to mitigate or manage construction noise, construction vehicles can be fitted with noise-suppressing equipment such as noise barriers, mufflers, and silencers, as well as limit the operating hours and frequency of noisy activities. In addition, there will also be noise emissions from rotating machinery and cooling systems of the synchronous condensers.

Operational Phase

During the operational phase, noise generated by the proposed development is expected to remain below regulated limits. Most of the noise during this phase will result from operating machinery.

To ensure continued compliance and minimise potential impacts, the following mitigation measures should be implemented:

- Install acoustic enclosures around major noise-generating equipment.
- Use low-noise cooling fans and machinery where feasible.
- Maintain equipment regularly to prevent excessive noise due to wear and tear.
- Conduct periodic noise monitoring to ensure compliance with applicable standards

d. Potential Soil Contamination

Construction Phase

Construction vehicles may release hazardous waste, which can contaminate the soil; however, this can be managed effectively by making use of drip trays on site.

Operational Phase

Operation vehicles may release hazardous waste, which can contaminate the soil; however, this can be managed effectively by making use of drip trays on site.

e. Socio-economic impacts

Construction Phase

During the construction phase, job opportunities will arise, which will attract a lot of people seeking employment to flood the area in search of job opportunities.

Operational Phase

The proposed development will have positive impacts during the operational phase as it will help in addressing the issue of job creation and poverty. Additionally, the addition of the synchronous condensers will enhance grid stability by providing reactive power support and improving voltage in weak grid areas, thereby reducing the risk of voltage instability and potential grid collapse.

f. Potential water contamination

Construction Phase

No potential water contamination is anticipated during the construction phase.

Operational Phase

No potential water contamination is anticipated during this phase.

g. Archaeological, Heritage, and cultural resources

Construction

No heritage or cultural sites were found on the project site. However, during the construction phase. Archaeological artefacts can be exhumed and destroyed if any artefacts are encountered construction works should cease immediately; SAHRIS and should be notified within 24hrs of the findings.

Operation

No impacts are anticipated during the operational phase.

6.3. SPECIALIST STUDIES RECOMMENDED BY THE STR

1. Agricultural Impact Assessment
2. Archaeological and Cultural Heritage Impact Assessment
3. Paleontology Impact Assessment
4. Terrestrial Biodiversity Impact Assessment
5. Aquatic Biodiversity Impact Assessment
6. Geotechnical Assessment
7. Plant Species Assessment
8. Animal Species Assessment

6.4. SPECIALIST STUDIES COMMISSIONED (DEEMED NECESSARY)

- Terrestrial Biodiversity Impact Assessment
- Aquatic And Wetland Compliance Statement report
- Archaeological and Cultural Heritage Impact Assessment
- Agricultural Compliance Statement
- Palaeontology Impact Assessment

SECTION EIGHT: ANY FATAL FLAWS

In conducting this environmental screening and site verification, no major concerns considered fatal were identified. The specialist's studies did not identify any fatal flaws.

SECTION NINE: ASSUMPTIONS AND LIMITATIONS

The findings of this SVR are based on the available project information, the site verification conducted on 20 January 2026, and GIS-based desktop information available for the project site. This report was conducted based on the desktop studies, particularly the DFFE Screening Tool and the preliminary site visit. It should be noted that the DFFE screening tool provides descriptions based on spatial data from various datasets. It is therefore essential to verify the data contained in the DFFE screening report on-site. Some of the discrepancies were identified between the DFFE screening report and the onsite verification and are detailed in the sections above. Furthermore, the findings discussed in this report may change as further studies are undertaken.

SECTION TEN: CONCLUSIONS

This SVR was prepared for the proposed to expand the Gromis Substation by approximately 5 hectares, increasing the current substation footprint from approximately 12 hectares to 17 hectares and an additional 6 and 2 hectares for the temporary laydown area 1 and 2 respectively located within the jurisdiction of the Nama Khoi Local Municipality in the Namakwa District Municipality, Northern Cape Province. The environmental screening and verification exercise was conducted based on available project information, the site inspection conducted on 20 January 2026, and a desktop analysis of the project site.

The proposed expansion of Gromis Substation should be authorized to ensure compliance with environmental laws and regulations. The expansion of the Gromis Substation footprint, through the addition of two synchronous condensers each with a capacity of (+300 / −200 MVAr), will significantly enhance electricity network stability, voltage control, and overall system reliability. The environmental assessment identified potential impacts primarily associated with the construction and operational phases; however, these impacts are expected to be localized and can be effectively managed through the implementation of appropriate mitigation measures. In addition, the project will contribute positively to infrastructure development and create short-term employment opportunities.

Based on the assessment findings, the benefits of the project outweigh the potential environmental impacts. It is therefore recommended that Environmental Authorisation be granted, subject to the implementation of the proposed mitigation and environmental management measures