DRAFT SITE VERIFICATION REPORT

FOR THE PROPOSED CONSTRUCTION AND UPGRADING OF ROADS D5010 AND D5021 INCLUDING THE ASSOCIATED INFRASTRUCTURE WITHIN THE LEPELLE-NKUMPI AND FETAKGOMO TUBATSE LOCAL MUNICIPALITIES, CAPRICORN AND SEKHUKHUNE DISTRICT MUNICIPALITIES, LIMPOPO PROVINCE (RAL/T1282/2025)

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Roads Agency Limpopo (SOC) Ltd

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Predominant land use of the surrounding area	Mixed rural-residential and natural land	
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1. INTRODUCTION AND OUTLINE

Roads Agency Limpopo (SOC) Ltd (RAL) is undertaking a Basic Assessment (BA) process in support of an application for Environmental Authorisation (EA) to the Limpopo Department of Economic Development, Environment and Tourism (LEDET) for the proposed development. The BA process is being undertaken in accordance with the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended).

The proposed development also requires several associated regulatory applications, including a Water Use Licence Application (WULA) to the Limpopo-Olifants Catchment Management Agency (LOCMA), an application for the borrow pit authorisation from the Department of Mineral and Petroleum Resources (DMPR), and an application for a tree-cutting licence/permit in terms of the National Forests Act, 1998 (Act No. 84 of 1998). These associated applications are being undertaken in conjunction with the Environmental Authorisation process to ensure that all relevant environmental and resource-use requirements for the proposed development are addressed.

The proposed project entails the construction of a new bridge over the Olifants River. The proposed development also includes the upgrading of Road D5010 in Nkotokwane and installation of culverts and the construction of a new section of Road D5021 between Nkotokwane and Apel Nkotokwane and Apel within the Lepelle-Nkumpi and Fetakgomo Tubatse Local Municipalities, Capricorn and Sekhukhune District Municipalities, Limpopo Province. Both roads will be upgraded from gravel to a bituminous surfaced standard. The total length of the proposed road works is approximately 3.6 km, comprising 2.2 km for the upgrading of Road D5010 and 1.4 km for the construction of the new Road D5021. In addition, the project includes applications for the excavation of five borrow pits to provide construction materials for the road and bridge works.

Section 24(5) (h) of the NEMA and regulation 16 (1)(b)(v) of the EIA Regulations of 2014 also requires 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 the proposed development site, based on the national sector classification and the environmental sensitivity of the site.

Before commencing the BA and specialist assessments, the current land use and environmental sensitivity of the site under consideration, as identified in the STR, must be confirmed through 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 in Limpopo Province.

1.1 PURPOSE OF THE REPORT

This report provides an overview of the following:

- Project location, description, and required services;
- DEFF 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.

1.2 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.

1.3 PROJECT DESCRIPTION

Roads Agency Limpopo (SOC) Ltd proposes the upgrading of Road D5010 in Nkotokwane and the installation of culverts and the construction of a new section of Road D5021 between Nkotokwane and Apel within the Lepelle-Nkumpi and Fetakgomo Tubatse Local Municipalities, Capricorn and Sekhukhune District Municipalities, Limpopo Province. Both roads will be upgraded from gravel to a bituminous surfaced standard. The proposed development also includes the construction of a new 1,687 m² bridge which is 140m long over the Olifants River. The total length of the proposed road works is approximately 3.6 km, comprising 2.2 km for the upgrading of Road D5010 and 1.4 km for the construction of the new Road D5021. In addition, the project includes applications for the excavation of five borrow pits to provide construction materials for the road and bridge works.

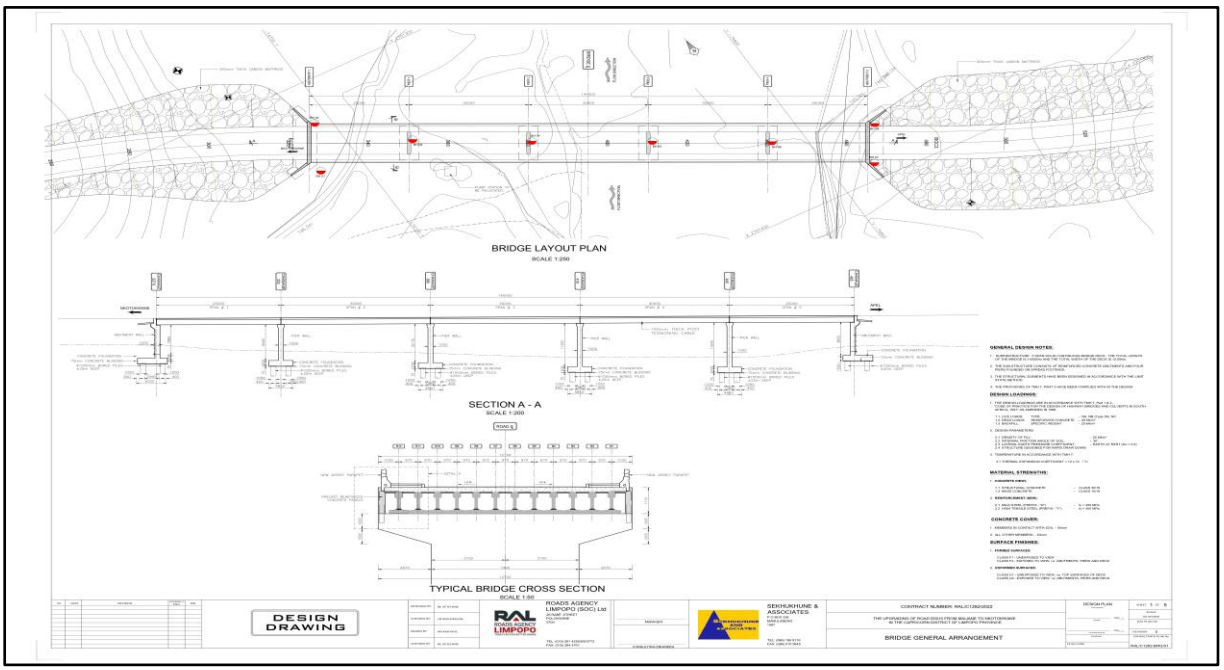


Figure 1: Bridge Design Drawings

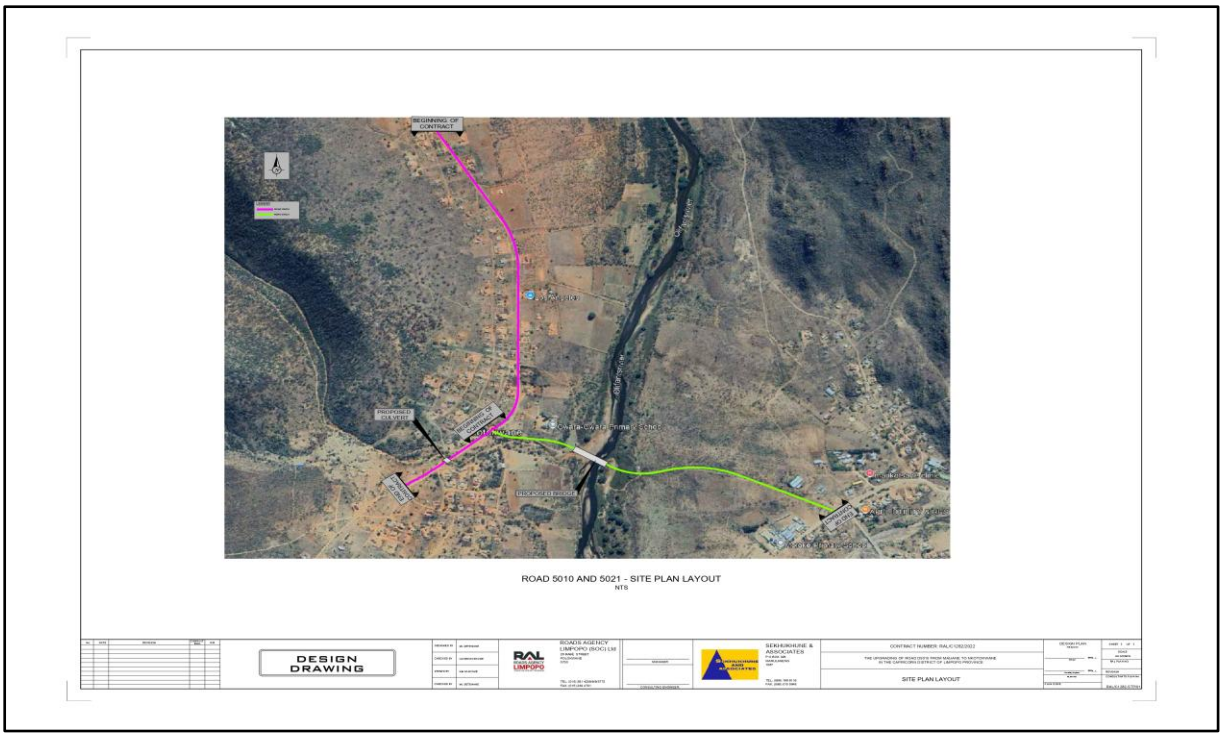


Figure 2: Project Layout Plan

1.4 PROJECT LOCALITY

The proposed construction and upgrading of Roads D5010 and D5021 project is located within Apel and Nkotokwane villages, with the construction of a bridge over the Olifants River within Lebowakgomo Town. The proposed project is located on Portion 0 of Farm

Olifantspoort 479 KS, Portions 0 and 2 of Farm Mooiplaats 516 KS, and Portion 0 of Farm Eerste Recht 502 KS. The project site spans the boundary between the Fetakgomo Tubatse Local Municipality within the Sekhukhune District Municipality and the Lepelle-Nkumpi Local Municipality within the Capricorn District Municipality, Limpopo Province. Figure 3 illustrates the location of the proposed development, while Table 1 provides a summary of the properties affected by the project.

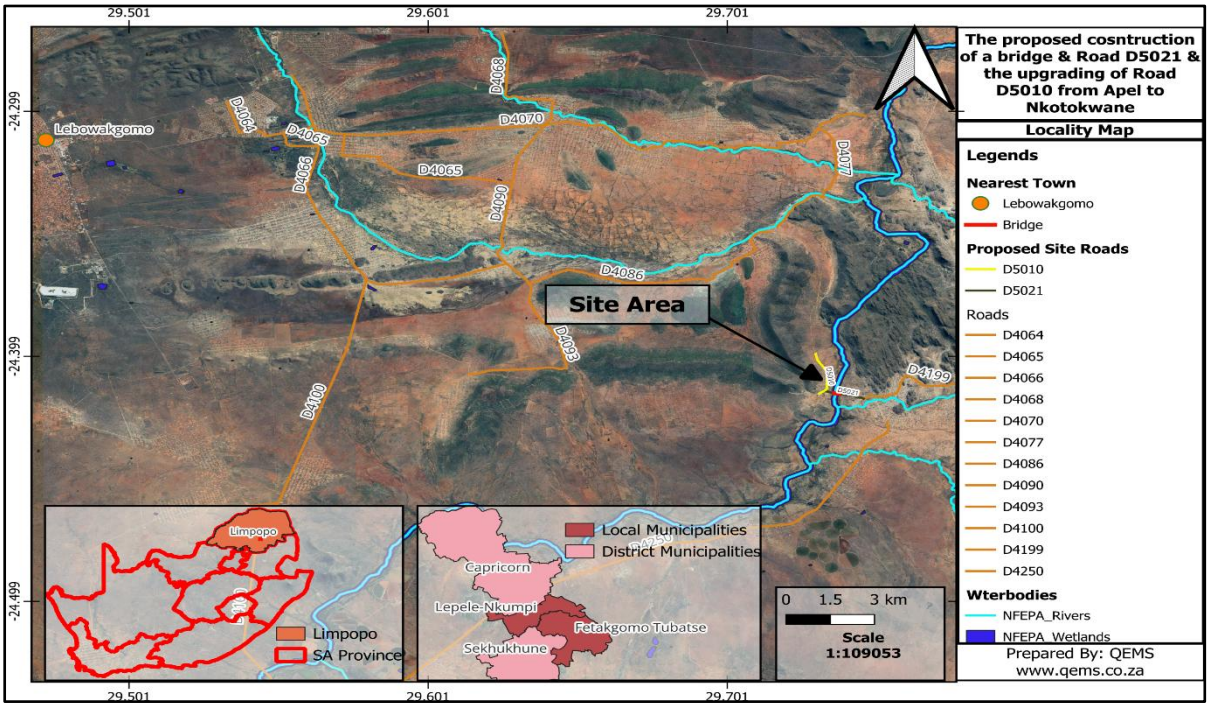


Figure 3: Project Locality Map

Table 1: Farm portion and Surveyor General 21 Digit

Farm Name and No.	Farm Portion	Surveyor General 21 Digit code
Road D5021 & Bridge		
Olifantspoort 479 KS	0	T0KS00000000047900000
Mooiplaats 516 KS	0	T0KS00000000051600000
Mooiplaats 516 KS	2	T0KS00000000051600002
Eerste Recht 502 KS	0	T0KS00000000050200000
Road D5010		
Olifantspoort 479 KS	0	T0KS00000000047900000

Table 2: Start and End point Coordinates of the Proposed Project

Coordinates	Latitude (S)	Longitude (E)
Road D5021		
Start point	24°24'47.30"S	29°44'0.12"E
End point	24°24'58.75"S	29°44'47.79"E
Bridge		
Start point	24°24'50.92"S	29°44'12.54"E
End point	24°24'51.38"S	29°44'18.21"E
Road D5010		
Start point	24°23'53.17"S	29°43'50.17"E
End point	24°24'51.34"S	29°43'54.39"E

2. DETAILS OF THE EAP

The on-site sensitivity verification was undertaken by Dr. Patrick Sithole, Ms. Engel Chilundo, and Ms. Kholofelo Magopa. Ms. Engel Chilundo, with assistance from Ms. Kholofelo Magopa, prepared the Site Verification Report (SVR) for the site. Details are as follows:

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2.1.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 winning and working 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).

3. SITE SENSITIVITY VERIFICATION METHODOLOGY

QEMS conducted a desktop analysis, using satellite imagery of the project site, including the GIS historical vegetation covers for specific years (2012, 2019, and 2026), and generated a STR for the project site. The findings of the STR have been verified through a site inspection on 24th April 2026.

3.1. DFFE SCREENING TOOL REPORT (STR) FINDINGS

Table 3: STR specified environmental sensitivity for the proposed Road D5021, Bridge, and Road D5010

Environmental Sensitivity Themes	Sensitivity	Motivation for sensitivity
Agricultural Theme	High sensitivity	• Subsistence_Farming_1 • 08. Moderate • 09. Moderate-High • 05. Low • 06. Low-Moderate • 07. Low-Moderate
Animal Species Theme	Medium sensitivity	• Aves-Podica senegalensis • Aves-Hydroprogne caspia • Aves-Aquila rapax • Mammalia-Dasymys robertsii • Reptilia-Crocodylus niloticus • Reptilia-Kinixys lobatsiana
Aquatic Biodiversity Theme	Very high sensitivity	• Low Sensitivity • Rivers
Archaeological and Cultural Heritage Theme	Low sensitivity	Low Sensitivity

Civil Aviation Theme	High sensitivity	• Dangerous and restricted airspace as demarcated
Defence Theme	Medium sensitivity	• Military and Defence Site
Paleontology Theme	High sensitivity	• Features with a High paleontological sensitivity • Features with a Medium paleontological sensitivity
Plant Species Theme	Low sensitivity	• Low Sensitivity
Terrestrial Biodiversity Theme	Very High sensitivity	• CBA 2 • ESA 2 • EN_Sekhukhune Plains Bushveld

Based on the information gathered through the desktop study (GIS-based spatial tools) and site verification undertaken on 24th April 2026, not all of the identified sensitivities are expected to apply.

3.2. ENVIRONMENTAL FEATURES

3.2.1 Vegetation

The vegetation type is known as Sekhukhune Plain Bushveld. The surrounding environment is dominated by bushveld ecosystems (Figure 4), part of the Sekhukhune region's diverse landscapes that support over 2,200 indigenous plant species, contributing to regional biodiversity hotspots. This vegetation type is characterized by predominantly short, open to closed thornveld with an abundance of Aloe species and other succulents. The encroachment by indigenous microphyllous trees and invasion by alien species is common throughout the area. The study area is heavily degraded in places and overexploited by man for cultivation, mining, and urbanization.

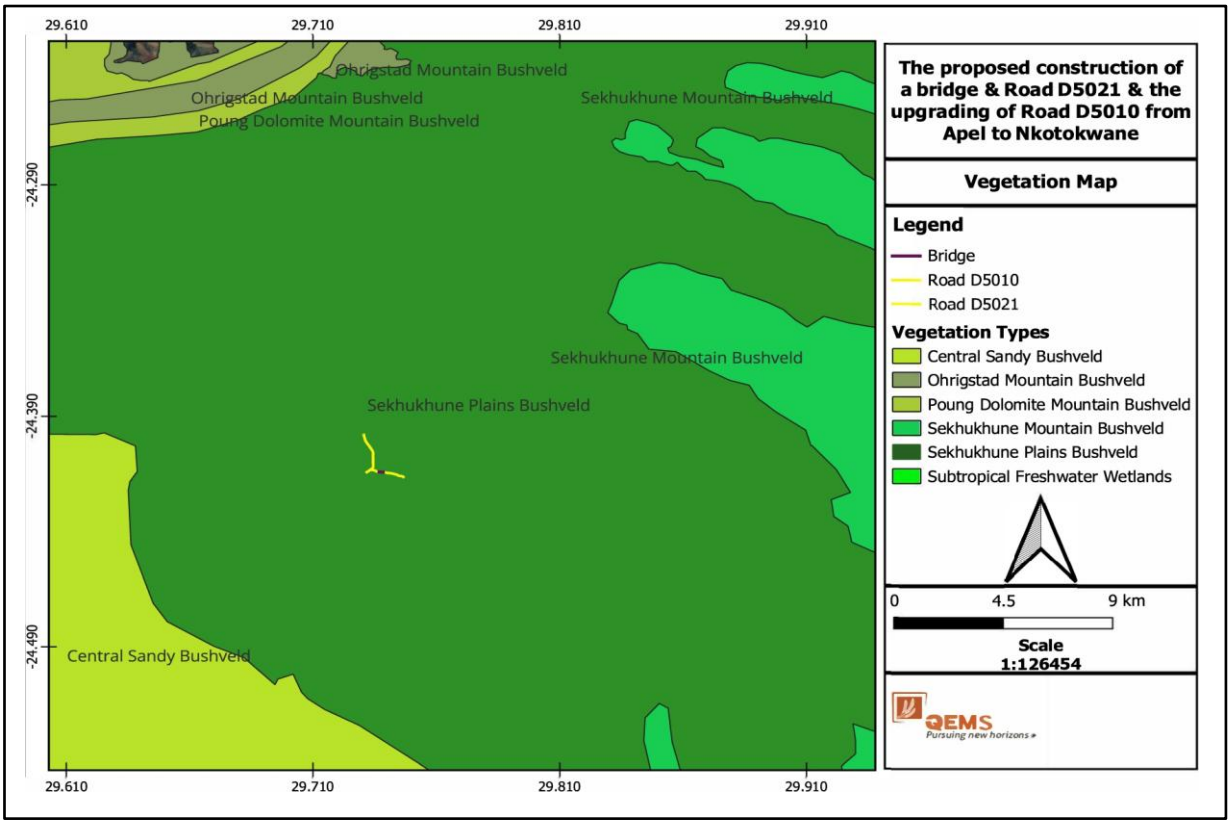


Figure 4: Vegetation Map of the proposed site

3.2.2 Geology and Soils

The proposed study area is underlain by diverse geological formations associated with the Bushveld Igneous Complex and surrounding lithological units (Figure 5). The geology of the area is characterised by the presence of the Dsjate Subsuite, Magaliesberg Formation, Roossenekal Subsuite, and Silverton Formation. The northern and eastern portions of the study area are predominantly underlain by the Dsjate Subsuite, while the western section is characterised by the Silverton Formation. The central portion of the study area, where the proposed bridge crossing and part of Road D5021 are located, is mainly underlain by the Magaliesberg Formation. The southern portion of the study area is dominated by the Roossenekal Subsuite. These geological units comprise a mixture of sedimentary and igneous rock types, including quartzite, shale, norite, gabbro, and associated intrusive rocks typical of the Bushveld geological environment. The area is expected to consist mainly of residual soils derived from the weathering of the underlying rock formations, with shallow rocky soils likely occurring in areas associated with the Magaliesberg Formation and deeper transported soils occurring along lower-lying areas near the Olifants River.

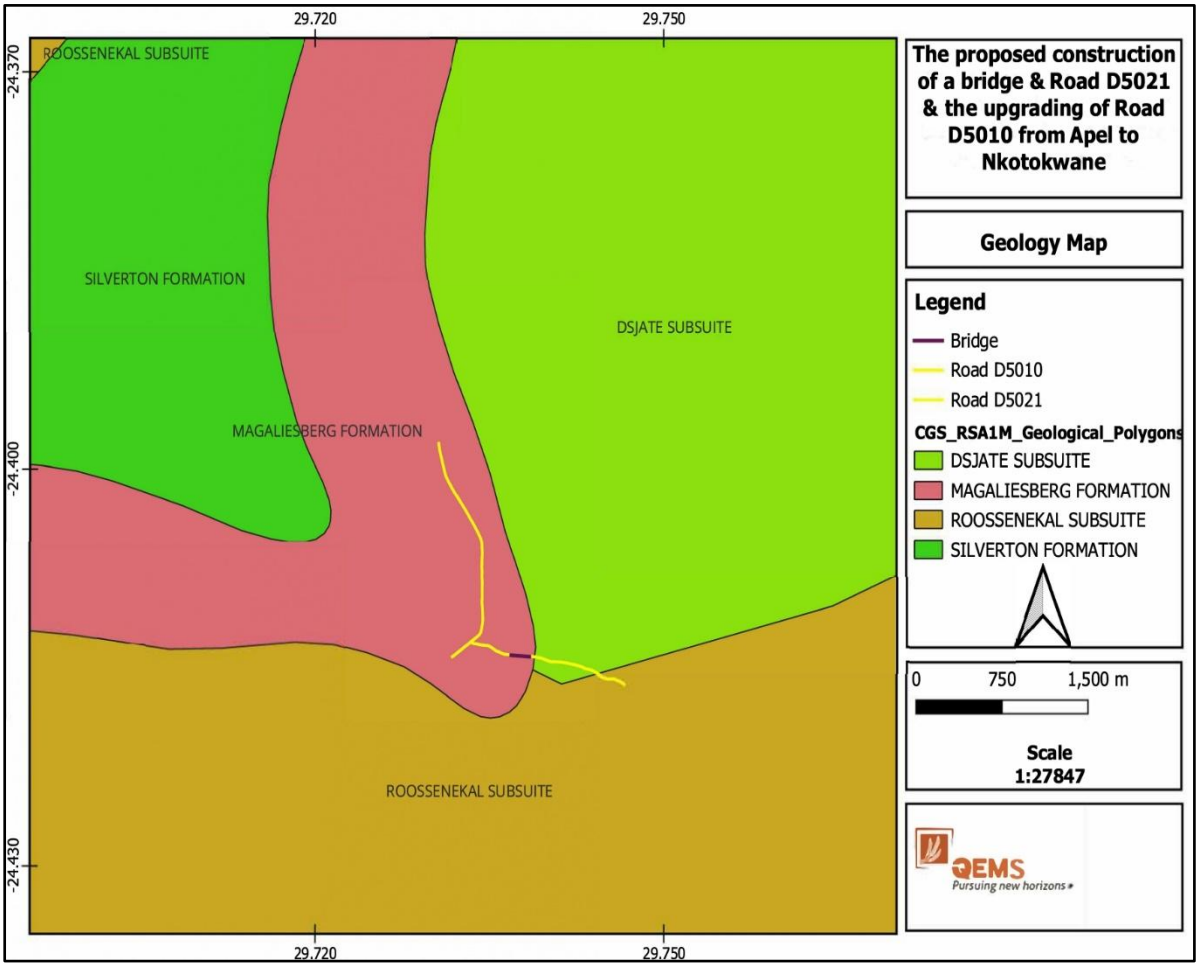


Figure 5: Geology Map of the proposed site

Topographically,

The study area lies at an elevation of approximately 760–860 meters above sea level within the broader Bushveld region, known for its undulating terrain (Figure 6). The local topography features rolling hills interspersed with savanna grasslands, forming part of the Bushveld savanna biome. The area is underlain by the Bushveld Igneous Complex, which contributes to the region's mineral resources.

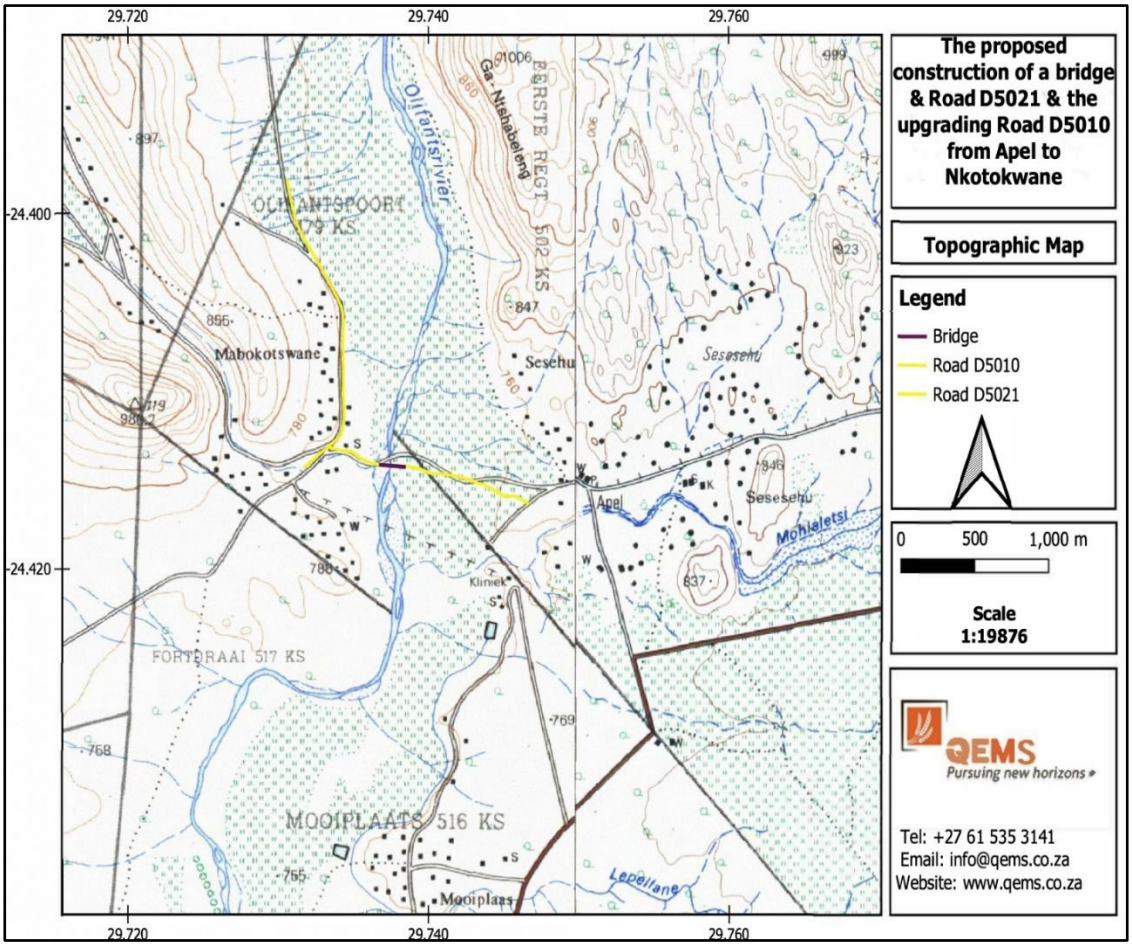


Figure 6: Topographic Map

3.2.3 Climate

The area experiences a hot semi-arid climate (BSh) characterized by warm, humid summers and cool, dry winters (Figure 7). Summers, spanning October to March, feature average daily high temperatures of 25–30°C and lows around 19°C, with the hottest month being January at a high of approximately 29°C. Winters, from May to August, are cooler and drier, with daily highs of 10–23°C and lows dipping to around 5°C in July. Annual rainfall totals 500–700 mm, predominantly occurring during summer thunderstorms between October and March, while the drier period from May to September sees minimal precipitation, often less than 10 mm per month.

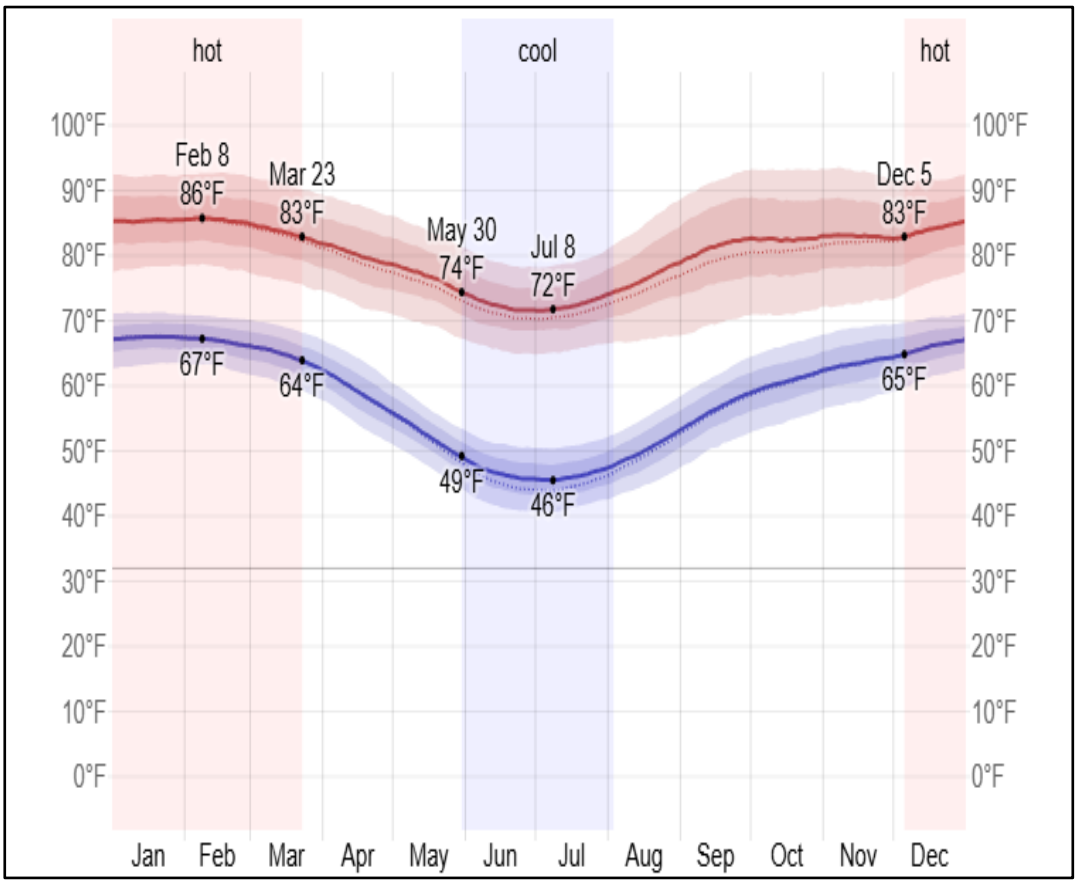


Figure 7: Average High and Low Temperature in Apel

3.2.4 Land use

The proposed project area is characterised by a combination of natural and transformed land uses (Figure 8), consisting mainly of natural grassland, wooded areas, watercourses, and built-up residential settlements associated with Apel and Nkotokwane villages. Portions of the area have undergone land-use changes from natural wooded land to grasslands and eroded areas, while other sections remain largely unchanged. Existing infrastructure within the area includes local roads and settlement-related developments. The proposed bridge and road infrastructure will mostly follow existing disturbed corridors and connect established settlements; therefore, the anticipated impact on current land use is expected to be low to moderate.

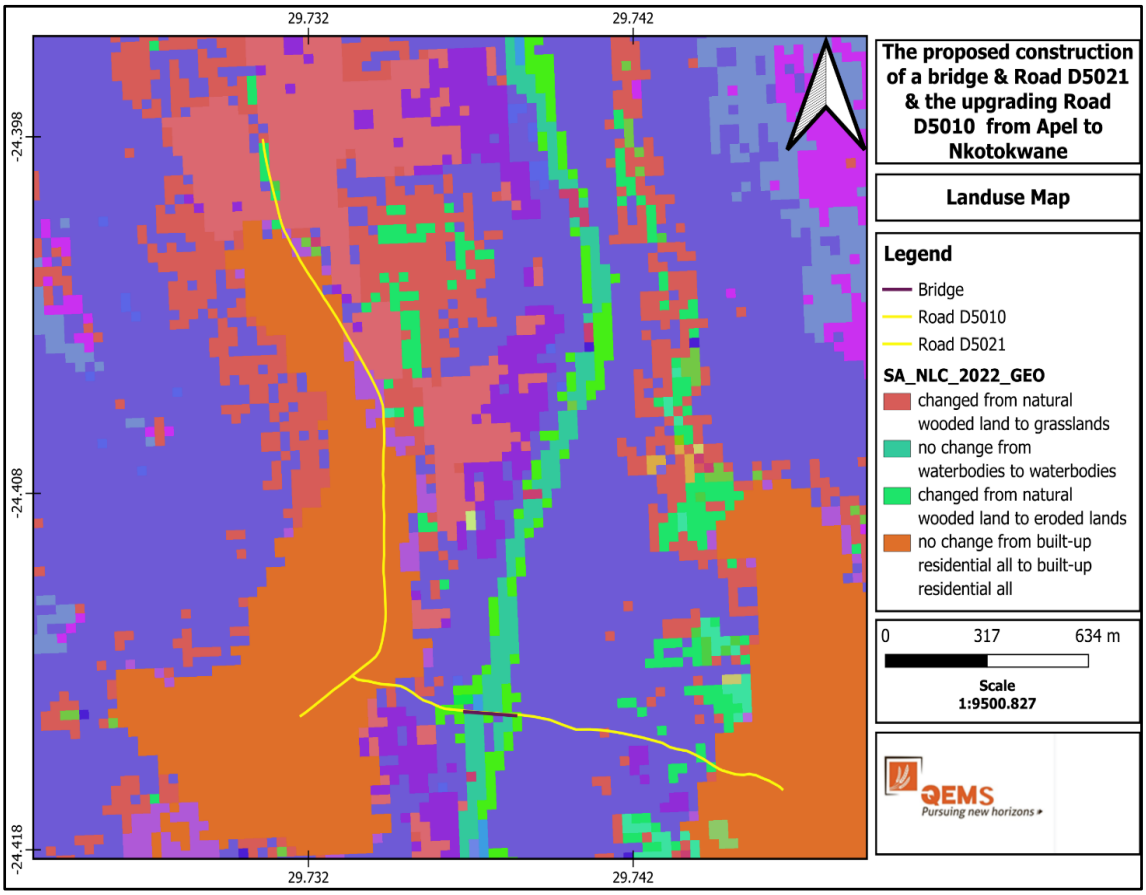


Figure 8: Land Use Map

3.3. Historical Vegetation Pictures



Figure 9: A satellite historical image showing the vegetation cover of the proposed

area in 2012



Figure 9: A satellite historical image showing the vegetation cover of the proposed area in 2019



Figure 11: A satellite historical image showing the vegetation cover of the proposed area in 2026

3.4. SITE PHOTOGRAPHS



Figure 10: Vegetation on site

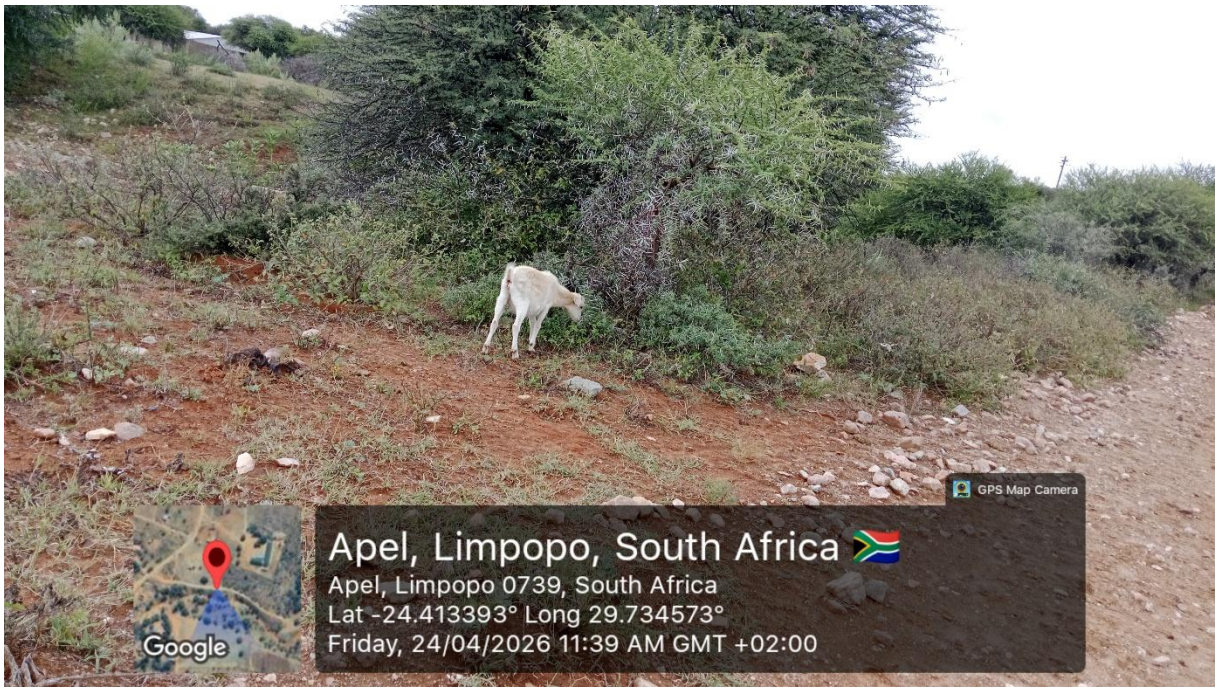


Figure 11: Animals on site

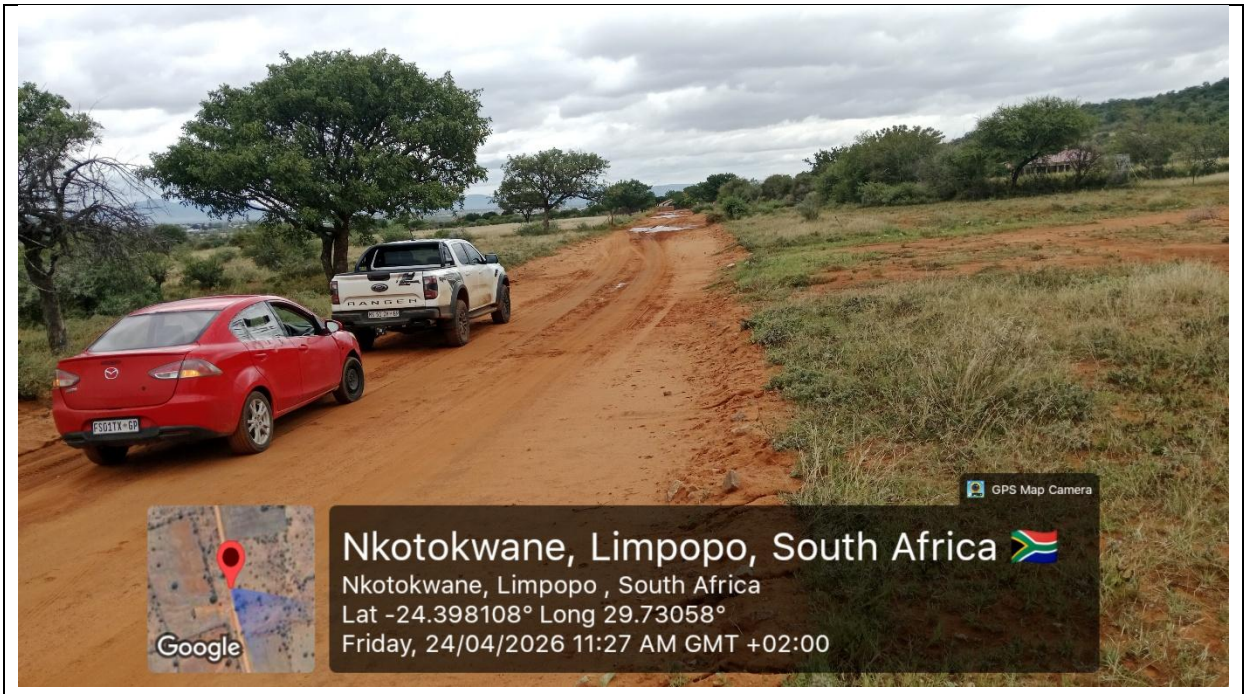


Figure 12: Existing Road D5010 on the village side (Nkotokwane)

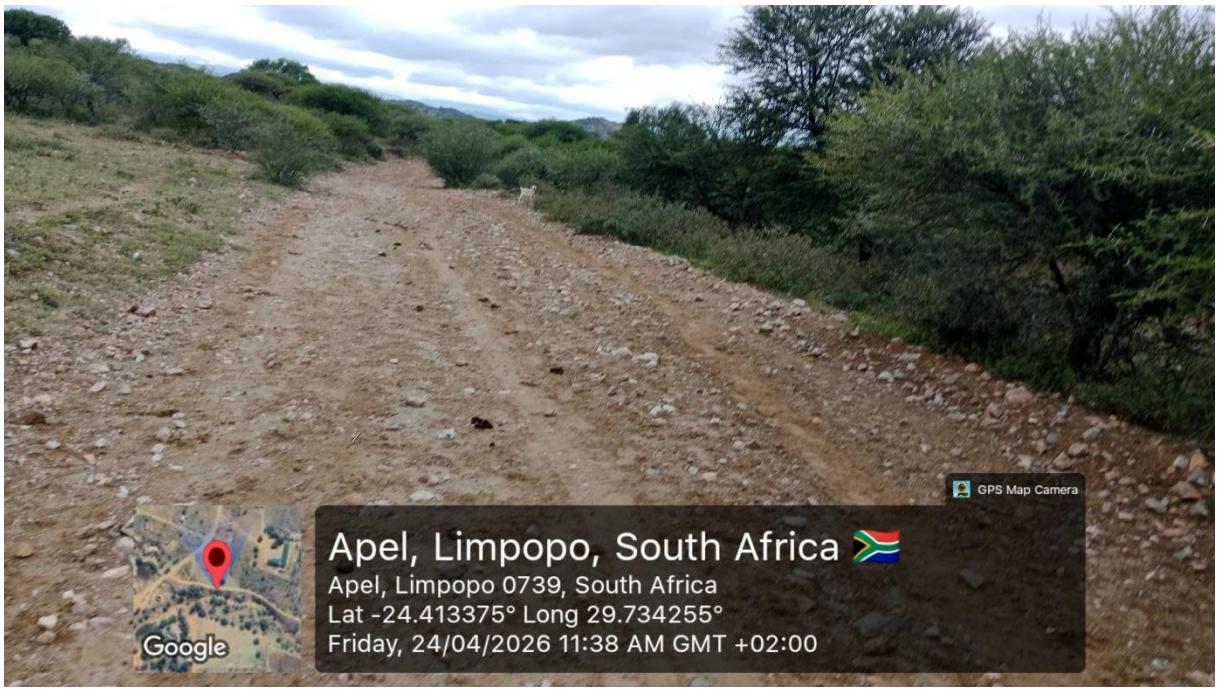


Figure 13: Proposed new Road D5021 across the Olifants River



Figure 14: Olifants River





Figure 15: Waste dumping observed on site




Figure 18: Showing the community crossing the river.

4. PROJECT LEGAL REQUIREMENTS

4.1 NEMA

All the applicable environmental standards contained within the environmental legislation are listed below as a requirement in terms of Section 23 (1), (4) and Appendix 4 of the Environmental Impact Assessment (EIA) Regulations of 2014 (as amended April 2017) promulgated under the National Environmental Management Act (Act 107 of 1998) (NEMA). NEMA-triggered activities are shown in Table 5 below.

Table 4: Triggered activity

Listing Notice and Activity Number	Description	Relevance
GNR. 327 Listing Notice 1 Activity 12 (ii) (a) (b) & (c)	The development of – (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs— (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse.	The applicant proposes the construction of a bridge that covers a footprint of approximately 1, 687 square metres within the Olifants River.
GNR. 327 Listing Notice 1 Activity 19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than	The proposed bridge construction over the Olifants River will require excavation, movement, and deposition of material within the watercourse for the establishment of bridge foundations and associated infrastructure. These activities will

	10 cubic metres from a watercourse;	consist of approximately 1930 cubic metres of infilling material.
GNR. 327 Listing Notice 1 Activity 24 (ii)	The development of a road (ii) with a reserve wider than 13.5 metres, or where no reserve exists where the road is wider than 8 metres;	The project involves the development of a road with a reserve wider than 13.5 metres..
GNR. 324 Listing Notice 3 Activity 12 (e) (ii)	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. **(e) Limpopo** (ii) Within critical biodiversity areas identified in bioregional plans; or	The project entails the clearance of an area of 300 square metres or more of indigenous vegetation and it falls within a Critical Biodiversity Area (CBA 2).
GNR. 324 Listing Notice 3 Activity 14(ii) (e) (i) (ff)	The development of (ii) infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs (a) within a watercourse; **(e) Limpopo** (i) Outside urban areas: (ff) Critical biodiversity areas or ecosystem service	Construction of a bridge with an approximate development footprint of 1,687 m². The proposed project area is located within a Critical Biodiversity Area (CBA 2).

	areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;	
GNR. 324 Listing Notice 3 Activity 18(e) (i)(ee) (hh)	The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre. **(e) Limpopo** (i) Outside urban areas: (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans (hh) Areas within a watercourse; or within 100 metres from the edge of a watercourse; or	The project entails the lengthening of a road by more than 1 kilometre, within a watercourse; or within 100 metres from the edge of a watercourse. The project site falls within a Critical Biodiversity Area (CBA 2).

4.2 WULA

A Water Use License Application (WULA) under the provisions of the National Water Act 36 of 1998 (NWA) is required for the project. The proposed development will use water from the Olifants River. A WULA needs to be submitted to LOCMA in this regard to obtain a Water Use License. Water uses relevant to this proposed project are outlined in Table 6.

Table 5: WULA triggered activity

No.	Activity	Description	Reason
1.	Section 21 (a)	Taking Water from a water resource	A total volume of 9,840 m³/a of water will be abstracted from the Olifants

			River for the proposed development.
3.	Section 21 (c)	Impeding or diverting the flow of water in a watercourse.	The proposed construction of the bridge will impede or divert the flow of water within the Olifants River. In addition, culverts will be constructed along the road to facilitate the conveyance of stormwater and maintain natural drainage patterns.
4.	Section 21 (i)	Altering the bed, banks, course, or characteristics of a watercourse	During the construction of the foundations and bridge supports, there will be a temporary river diversion, altering the bed and banks of the watercourse. In addition, culverts will be constructed along the road to facilitate the conveyance of stormwater and maintain natural drainage patterns and road D5010 is within 32m of the seasonal stream.

NATIONAL FOREST Act TRIGGERED ACTIVITIES

A tree-cutting permit is required for the proposed development in accordance with the National Forests Act, 1998 (Act No. 84 of 1998). The proposed development footprint contains Marula (Sclerocarya birrea) trees, which may be affected by vegetation clearance associated with the construction of the roads, bridge and associated infrastructure. An application for the relevant licence/permit is therefore required from the Department of Forestry, Fisheries and the Environment (DFFE) prior to the removal or disturbance of any protected trees. The identified Marula trees and the proposed tree-clearing activities associated with the project will be assessed as part of the application process.

Section 15(1) of the National Forests Act, 84 of 1998.

- No person may-: Cut, disturb, damage, destroy or remove any protected tree; or collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree, except under a license granted by the Minister.

5. STR FINDINGS

The site sensitivity verification has been undertaken by Dr. Patrick Sithole, Ms. Engel Chilundo, and Ms. Kholofelo Magopa and is not supported by any specialist investigations. The STR notes the incentives, restrictions, exclusions, or prohibitions that apply to the development site, as well as environmental sensitivity themes on site associated with the application category 'transformation of land from agriculture. The STR has a four-tier environmental sensitivity rating, which is associated with the level of assessment required to determine the possibility of impact management. The four tiers include Very High, High, Medium, and Low Sensitivity in the context of the project to the application site.

5.1. Relevant development incentives, restrictions, exclusions, or prohibitions

Table 6: Incentives, restrictions, or prohibition

Incentive, restriction or prohibition	**Implication**
Strategic Transmission Corridor-International corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf

5.2 Proposed Development Area Environmental Sensitivity

Table 7: Environmental theme and sensitivity for the Bridge and Road D5021

Theme	**Sensitivity**
Agriculture Theme	High Sensitivity
Animal Species Theme	Medium Sensitivity
Aquatic Biodiversity Theme	Very High Sensitivity

Archaeological and Cultural Heritage Theme	Low Sensitivity
Civil Aviation Theme	High Sensitivity
Defence Theme	Medium Sensitivity
Paleontology	High Sensitivity
Plant Species Theme	Low Sensitivity
Terrestrial Biodiversity Theme	Very High Sensitivity

5.3 VERIFICATION OF STR FINDINGS

This section of the SVR serves to:

- Verify the land use and sensitivities identified in the STR; and
- Confirm/refute the need for various specialist inputs called for in terms of the STR;
- Motivation and evidence of either the verified or different use of land and environmental sensitivity.

The verification findings are presented in a table overleaf

5.3.1 Environmental sensitivity themes applicable to the project and site

Table 8: Sensitivity Theme 1: Agricultural

Environmental Theme	Sensitivity				STR Motivation	Relevant (Yes/No)	STR Specialist Study Required
	Very high	High	Medium	Low			
Agricultural Theme		**X**			• Subsistence_Farming_1 • 08. Moderate • 09. Moderate-High • 05. Low • 06. Low-Moderate • 07. Low-Moderate	**Yes, compliance statement.**	
(a) EAP Comments based on Site Visit Findings							
There is no evidence of agricultural activities taking place on the site. The proposed development is located within an existing village. The site is already transformed and is not currently used for agricultural activities. The STR finding is therefore refuted to a low however, an Agricultural Compliance Statement will be conducted to evaluate the potential impacts of the proposed development on soil quality, land use, land capability, and agricultural potential.							

(b) Desktop analysis
Google Earth and GIS tools were used for desktop analysis; they revealed that the site is located within a zone where there are no agricultural activities taking place.

Table 9: Sensitivity Theme 2: Animal Species

Environmental Theme	**Sensitivity**				**STR Motivation**	**Relevant (Yes/No)**	**STR Specialist Study Required**
	Very high	**High**	**Medium**	**Low**			
Animal Theme			**X**		•Aves-Podica senegalensis •Aves-Hydroprogne caspia •Aves-Aquila rapax •Mammalia-Dasymys robertsii •Reptilia-Crocodylus niloticus •Reptilia-Kinixys lobatsiana	**Yes, a terrestrial impacts study will be undertaken.**	
(a) EAP Comments based on Site Visit Findings							

No threatened or protected faunal species were observed within the project area during the site verification. However, domestic animals, including goats and cattle, were observed within the project area. The area is predominantly used for residential purposes. A Terrestrial Biodiversity Impact Assessment will be undertaken. Therefore, the STR findings are accepted.
(b) Desktop Analysis
The STR shows that there's medium sensitivity for the following species: Aves-Podica senegalensis, Aves-Hydroprogne caspia, Aves Aquila rapax, Reptilia-Crocodylus niloticus, Reptilia-Kinixys lobatsiana, Aves-Aquila rapax, Mammalia-Dasymys robertsii, and Reptilia-Kinixys lobatsiana.

Table 10: Sensitivity Theme 3: Aquatic Biodiversity

Environmental Theme	Sensitivity				STR Motivation	Relevant (Yes/No)	STR Specialist Study Required
	Very high	High	Medium	Low			
Aquatic Theme	**X**				-Low Sensitivity -Rivers	**Yes, Aquatic study will be undertaken.**	
(a) EAP Comments based on Site Visit Findings							
The proposed bridge will be constructed over the Olifants River, and the proposed Road D5021 will cross the river system. The identified sensitivity is therefore expected due to the presence of the watercourse and associated aquatic environment. The STR findings for Road D5010 are rated as Low, as the road is located along the village and away from the watercourse. An aquatic biodiversity impacts study will be undertaken. Therefore, the STR findings are accepted.							
(b) Desktop Analysis							
The Screening Tool Report (STR) identifies the river as having Very High site sensitivity.							

Table 11: 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, Archaeological and Cultural Heritage will be undertaken.**
(a) EAP Comments based on Site Visit Findings						
No archaeological or cultural heritage importance was observed at the proposed site during the site visit. The site is located within a residential area. However, archaeological artefacts buried at depth may be uncovered during the construction phase. If that happens, a proper channel of notifying LIHRA/ SAHRIS will be followed. Even though no archaeological features were found on site, a heritage specialist will be appointed to thoroughly assess the site. The findings of the screening tool report are therefore accepted.						
(b) Desktop Analysis						
The STR findings have low sensitivity						

Table 12: Sensitivity Theme 5: Civil Aviation

Environmental Theme	**Sensitivity**				**STR Motivation**	**Relevant (Yes/No)**	**STR Specialist Study Required**
	Very high	**High**	**Medium**	**Low**			
Civil Aviation Theme		**X**			Dangerous and restricted airspace as demarcated	**No**	

(a) EAP Comments based on Site Visit Findings
The project involves the construction of a road and bridge only, and no structures of significant height or infrastructure that may interfere with aviation operations, flight paths, or navigation systems are proposed. It is also noted that the site is located approximately 150 km from Polokwane International Airport. Therefore, the STR finding is refuted to low.
(b) Desktop Analysis
The site is located approximately 150 km from Polokwane International Airport.

Table 13: Sensitivity Theme 6: Defence

Environmental Theme	**Sensitivity**				**STR Motivation**	**Relevant (Yes/No)**	**STR Specialist Study Required**
	Very high	**High**	**Medium**	**Low**			
Defence Theme			**X**		Military and Defence Site	**No**	
(a) EAP Comments based on Site Visit Findings							
The proposed construction of the bridge and new Road D5021, and the associated upgrading of D5010, will have no impact on nearby Military and Defence facilities. The site is located approximately 120 km from Roodewal Air Force Base (Limpopo). Therefore, the STR finding is							

refuted to low.
(b) Desktop Analysis
The site is located approximately 120 km from Roodewal Air Force Base (Limpopo).

Table 14: Sensitivity Theme 7: Paleontology

Environmental Theme	Sensitivity				STR Motivation	Relevant (Yes/No)	STR Specialist Study Required
	Very high	High	Medium	Low			
Paleontology Theme		**X**			• Features with a High paleontological sensitivity • Features with a Medium paleontological sensitivity	**No**	
(a) EAP Comments based on Site Visit Findings							
Typically, a paleontological theme cannot be verified by site observation but requires desktop analysis and in this case, desktop analysis did not show any sign of paleontological features. However, if buried artefacts are exhumed during excavations; in such a situation proper channel of notifying SAHRIS will be followed. Therefore, the STR finding is refuted Medium.							

(b) Desktop Analysis
The review of SAHRIS Palaeo Map available at https://sahris.org.za/map/palaeo shows that the proposed site falls within the area of low palaeo sensitivity. According to SAHRIS these sensitivities requires a paleontological desktop study

Table 15: Sensitivity Theme 8: Plant Species

Environmental Theme	**Sensitivity**				**STR Motivation**	**Relevant (Yes/ No)**	**STR Specialist Study Required**
	Very high	**High**	**Medium**	**Low**			
Plant Theme			**X**		-Low sensitivity	**Yes, a terrestrial impacts study will be undertaken.**	
(a) EAP Comments based on Site Visit Findings							
A few Marula trees (see image below) and Shepard trees were observed along road D5010, and the proposed site is located within a Critical Biodiversity Area (CBA) 2; however, they won't be cut down. Terrestrial Biodiversity Impact Assessment will be undertaken. Therefore, the STR findings are accepted.							



(b) Desktop Analysis

The STR shows low site sensitivity.

Table 16: Sensitivity Theme 9: Terrestrial Biodiversity

Environmental Theme	Sensitivity				STR Motivation	Relevant (Yes/No)	STR Specialist Study Required
	Very high	High	Medium	Low			
Terrestrial Theme	**X**				-CBA 2 -ESA 2 -EN_Sekhukhune Plains Bushveld	**Yes, a terrestrial impacts study will be undertaken.**	
(a) EAP Comments based on Site Visit Findings							
The site falls within areas classified as CBA 2 (Critical Biodiversity Area) and ESA 2 (Ecological Support Area). During the site visit, indigenous trees and bird nesting activity were observed (see image below), confirming the ecological value of the area. Terrestrial Biodiversity Impact Assessment will be undertaken. Therefore, the STR finding is accepted.							



(b) Desktop Analysis

Google Earth and GIS tools were used for desktop analysis, it revealed that the subject site is located within the CBA 2, ESA 2, and EN_Sekhukhune Plains Bushveld.

6. SPECIALIST STUDIES

Specialists will be appointed to conduct studies of the proposed site to further advise on how and where the proposed development will impact the environment, based on the nature of the project and the DFFE GIS-based National web-based Environmental Screening Tool. Below are the specialist studies that must be undertaken based on the Screening Tool Report, as well as those deemed necessary.

Specialist studies to be undertaken based on the Screening tool Report:

- Agricultural Impact Assessment
- Landscape/Visual Impact Assessment
- Archaeological and Cultural Heritage Impact Assessment
- Palaeontology Impact Assessment
- Terrestrial Biodiversity Impact Assessment
- Aquatic Biodiversity Impact Assessment
- Noise Impact Assessment
- Traffic Impact Assessment
- Geotechnical Assessment
- Socio-Economic Assessment
- Ambient Air Quality Impact Assessment
- Plant Species Assessment
- Animal Species Assessment

Specialist studies that are deemed necessary:

- Agricultural Impact Assessment (compliance statement)
- Terrestrial Biodiversity Impact Assessment
- Aquatic Biodiversity Impact Assessment and Risk Assessment
- Hydrological Impact Assessment
- Archaeological and Cultural Heritage Impact Assessment
- Socio-Economic Assessment

The specialist findings will be incorporated into the Basic Assessment Report. More studies may be identified during the public participation and the EIA processes.

7. ANY FATAL FLAWS

In conducting this environmental screening and site verification, no major concerns considered fatal were identified.

8. ASSUMPTIONS AND LIMITATIONS

The findings of this SVR are based on the available project information, the site verification conducted on 24th April 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.

9. CONCLUSIONS

This SVR was prepared for the proposed upgrading of Road D5010 in Nkotokwane and the installation of culverts and the construction of a new section of Road D5021 between Nkotokwane and Apel. Both roads will be upgraded from gravel to a bituminous surfaced standard. The proposed development also includes the construction of a new 1,687 m² bridge which is 140m long over the Olifants River. The total length of the proposed road works is approximately 3.6 km, comprising 2.2 km for the upgrading of Road D5010 and 1.4 km for the construction of the new Road D5021. The environmental screening and verification exercise was conducted based on available project information, the site inspection conducted on 24th April 2026, and a desktop analysis of the project site. The possible environmental authorisation processes and associated Water Use License application have been identified based on the project scope of activities. The project authorisation and Water Use License requirements include:

An Environmental Authorisation from LEDET is subject to the Basic Assessment Process, a Water Use License from LOCMA is subject to a Water Use License Application, and a Tree Cutting Permit from DFFE is subject to a Tree Cutting Permit Application. The above environmental authorization processes will be integrated as far as possible. Specialists will be appointed to conduct studies of the proposed site to further advise on how and where the proposed development will impact the environment, based on the nature of the project and the DFFE GIS-based National web-based Environmental Screening Tool.

More studies or input may be identified through the EIA process, public consultation, and authority involvement, yet it is the considered view of the EAP that the above specialist investigations are adequate to inform the decision-making of LEDET.