



SITE SENSITIVE VERIFICATION REPORT: SOCIAL

Proposed Deviation of SAR Rooikop 88KV Powerline Project.

Prepared by:

Vhahangwele Manavhela

Environmental Social and Governance (ESG) Professional & Socio-Economic Impact
Assessor

Date: 22 April 2024

Submitted to: Esther Ndou



BIOGRAPHY OF INDEPENDENT CONSULTANT

Personal details

Consultant: Vhahangwele Manavhela

Physical Address: 104 Palliser Road, Edenvale, 1609

Telephone (mobile): 0834517006.

Email: vmanavhela@gmail.com

Qualification

University of Limpopo: B.A Social Science – 1994

University of Venda: B.A (Honours) in Psychology- 2004

University of Johannesburg: Masters in Sociology (Social Impact Assessment)- 2014

Experience

Vhahangwele has over 20 years of professional experience in Environmental Social Government (ESG) strategy design, corporate social responsibility, stakeholder engagement, environmental administration, and risk assessment.

She most recently established and ran the Impact and ESG departments for the unlisted investments of the Public Investment Corporation ("PIC"), covering all unlisted strategies, including private equity, real estate, and impact investment. The PIC is the Asset Manager for the South African Government Employee Pension Fund, Unemployment Insurance Funds and Compensation Commission and is Africa's largest pension fund. Vhahangwele has been an independent Socio-Economic specialist since 2013.

Over the last five years, she has served on four PRI advisory committees and the Advisory Board for the Sustainability Accounting Standards Board. Hangwi regularly speaks on ESG panels at conferences globally. She is an Eisenhower Fellow.

During her career in sustainable development within different industries, she has worked in non-government organisations focusing on community upliftment. She has managed the Corporate Social Investment ("CSI") Fund for Blue chip companies in South Africa.

Hangwi holds a Master's in Sociology (Social Impact Assessment) from the University of Johannesburg and a BA (Hons) in Psychology from the University of Venda and the University of the North (Limpopo).

DECLARATION OF INDEPENDENCE

I, Vhahangwele Manavhela, ID number 7411080476080, declare that I act as an independent specialist consultant in Environmental Social and Governance (ESG) and Socio-Economic Impact Assessment (SEIA).

I am appointed as a Socio-Economic Specialist Consultant by Nsovo Environmental Consultant in March 2024 to conduct a Social Feasibility study for the proposed Deviation of SAR Rooikop 88KV Powerline.

I do not have or will not have any financial interest in undertaking the activity other than remuneration for work performed and have or will not have any vested interest in the proposed activity proceeding. I have objectively performed the work relating to the application. I Will provide the client and competent authority with access to all information regarding this project, whether favourable or not.

I have the expertise required in Sections 17 and 32 of Regulation 543 issued under the National Environmental Management Act 107 of 1998. I Undertake to disclose to the client and the competent authority any material information that has or may have the potential to influence the decision of the competent authority required under the Environmental Impact Assessment Regulations 2006. I also confirm that the report aligns with Appendix 6 of the EIA regulation.

Contents

1. Introduction.....	5
2. Legislative and Regulatory Context.....	8
3. Socio-Economic Landscape	9
4. Site Assessment.....	9
5. Conclusion and recommendation	14

1. Introduction

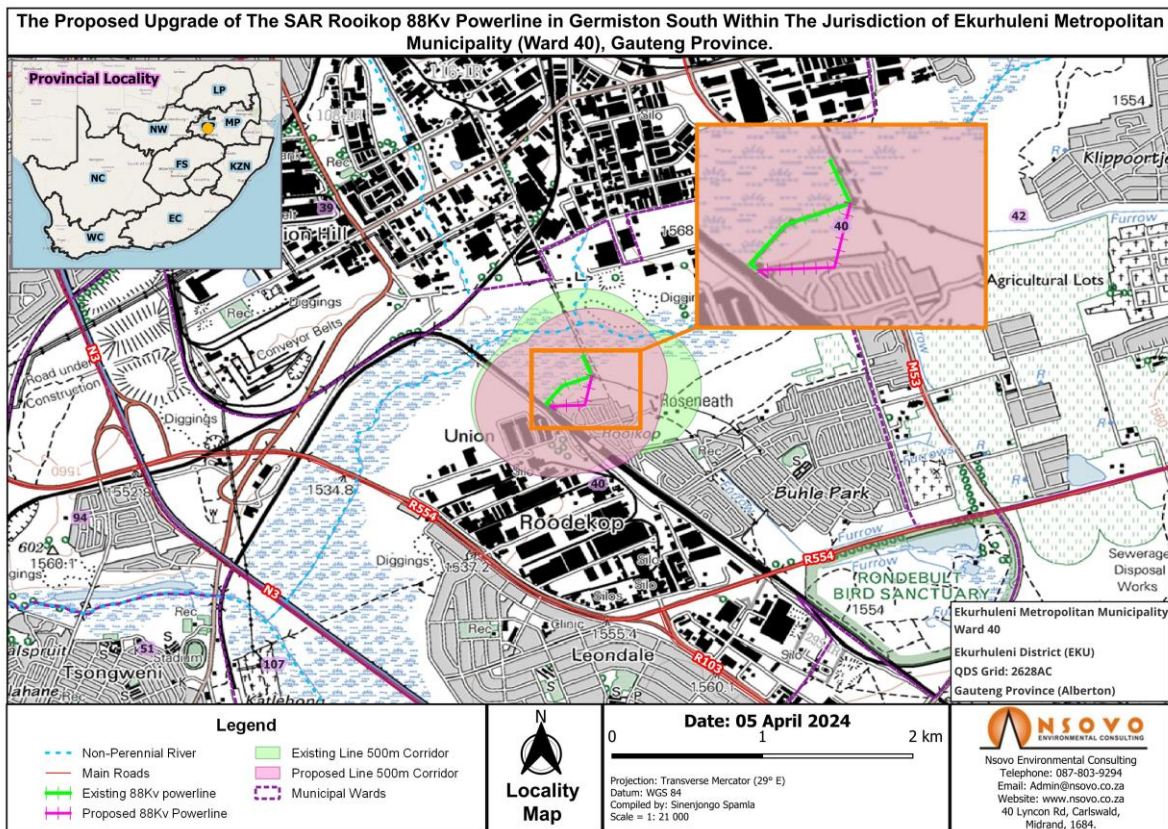
The SAR Rooikop 88kV powerline deviation project, is an infrastructure initiative to enhance the electricity supply to the SAR Rooikop 88kV Traction Substation in Germiston South. The current route of the powerline crosses a sensitive wetland area, presenting environmental and operational challenges. The project proposes rerouting the powerline to avoid the wetland by dismantling existing infrastructure and installing new steel monopole structures along a redesigned servitude.

The project is expected to deliver several benefits, including improved reliability of electricity supply, which is crucial for the area's residential and commercial sectors. The project promotes biodiversity preservation and ecological sustainability by reducing the impact on the wetland. Enhanced access for maintenance crews will increase operational efficiency and safety, minimising the risks associated with wetland terrain.

The project also focuses on socio-economic benefits, ensuring the local community gains from more reliable power and supports economic stability and growth. The construction phase will create job opportunities and stimulate regional economic activity.

This report assesses the socio-economic impacts of the powerline deviation, aiming to mitigate adverse effects while enhancing positive outcomes. The assessment ensures that the project meets infrastructural and environmental goals and contributes positively to the socio-economic aspects of the community, aligning development with broader goals.

1.1 Project Description



The project involves rerouting a section of the SAR Rooikop 88kV powerline, extending from the Germiston South 88/33kV Substation to the SAR Rooikop 88KV Traction Substation. The deviation, spanning approximately 485 meters between structures 1 and 3, aims to address the existing powerline's infringement on wetland boundaries.

The scope includes removing the current conductors and support structures within the designated segment and installing two 20-meter-high steel monopole structures. These structures will be erected along the newly established servitude to minimise ecological disturbance and improve maintenance accessibility.

Additionally, the project will involve installing 14 stays to secure the monopoles, ensuring the powerline's structural integrity and operational reliability. This reconfiguration is designed to eliminate the environmental challenges of operating within a wetland area while mitigating potential service disruptions to the electricity supply.

1.2 Scope of Work

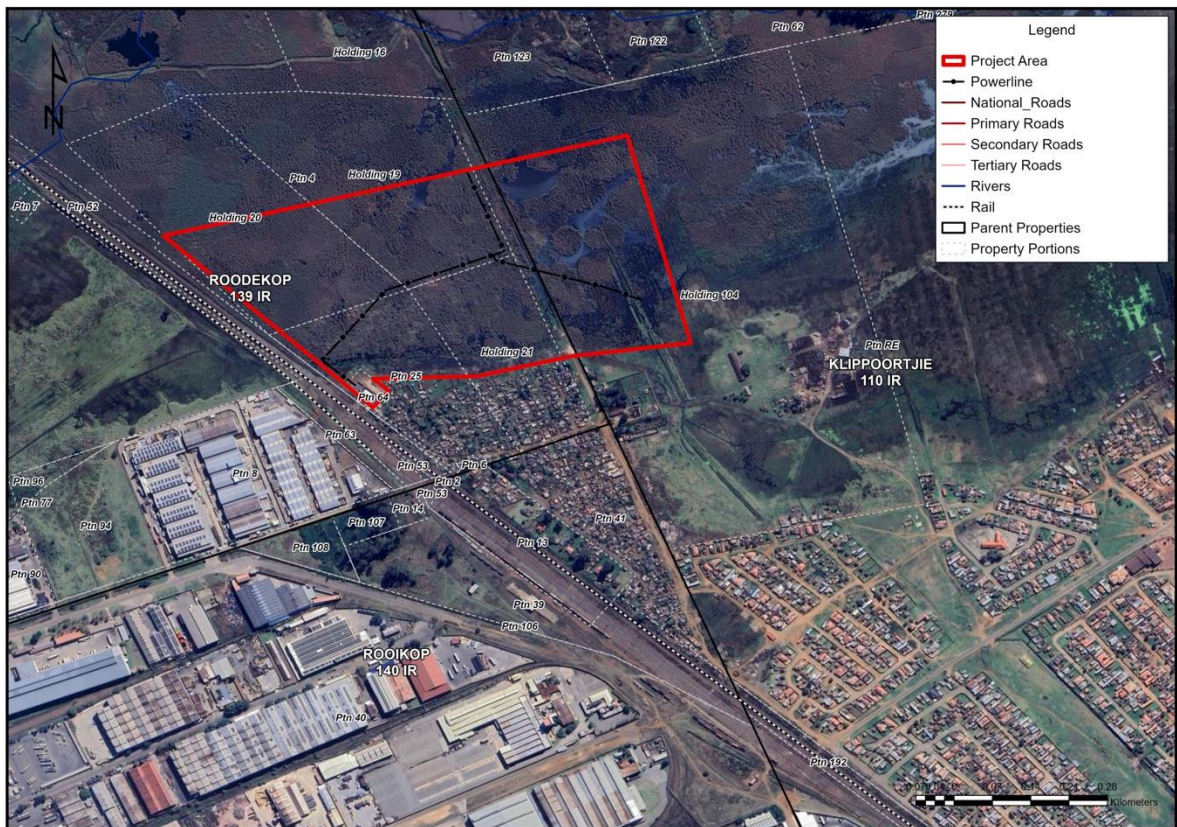
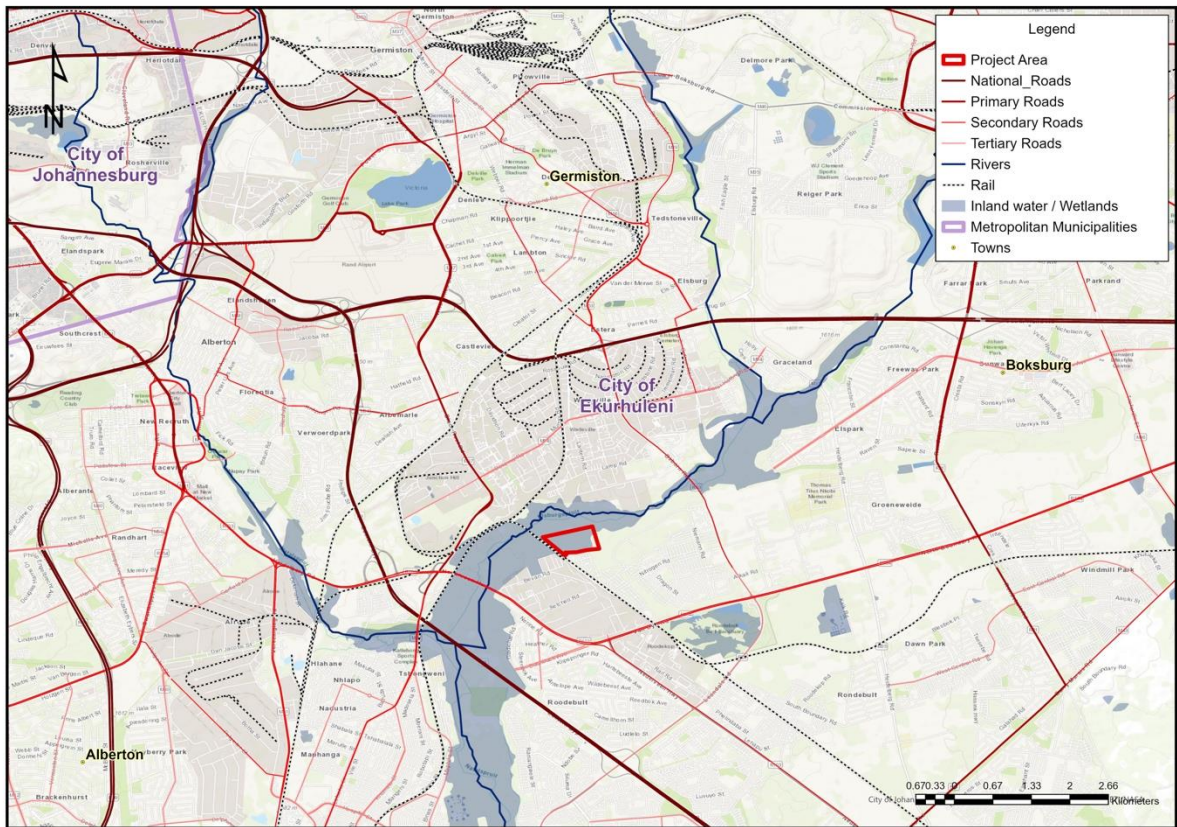
The ultimate purpose of the SSV report on socio-economic factors is to ensure that the infrastructure project not only achieves its technical and environmental objectives but also positively integrates into and supports the socio-economic fabric of the area it impacts.

The assessment will consider the following:

- a. The report will systematically analyse the potential socio-economic impacts, both positive and negative, that may arise from the project. It will assess and mitigate any potential socio-economic implications from the powerline's deviation, including the effects on local communities, employment, land use, and overall well-being, ensuring that the project supports local development objectives.
- b. To ensure that the project complies with relevant laws and regulations concerning socio-economic aspects.
- c. The report serves as a tool for decision-makers, providing them with a comprehensive understanding of the socio-economic landscape influenced by the project.
- d. Based on the impact assessment findings and community feedback, the report aims to develop strategies to mitigate adverse socio-economic impacts.

1.2 Project Location

The SAR Rooikop 88kV powerline deviation project location is in the Germiston South area within the City of Ekurhuleni Metropolitan Municipality, Gauteng Province, South Africa. This area lies approximately 2 kilometres south of Germiston, from Vosloorus EXT 6.



Germiston South is an industrial hub with a mix of residential, commercial, and industrial areas, enhancing its diverse socio-economic structure. The existing powerline route traverses a sensitive wetland, necessitating the planned deviation to protect this ecologically important area. Wetlands are essential for biodiversity, providing habitats for various species and playing significant roles in water purification and flood management.

The current route of the powerline passes through a wetland area, which is environmentally sensitive and poses challenges for maintenance and operational stability. Wetlands are crucial for biodiversity, providing habitat for various species and serving essential hydrological functions, such as water filtration and flood control. The necessity to deviate from the powerline route arises from preserving these ecological functions and improving access for maintenance.

The project's vicinity is characterised by its mixed-use nature, which includes residential communities that rely on stable and reliable power supply for daily and economic activities. Industrial and commercial entities in the area also depend heavily on the electricity supplied through the SAR Rooikop powerline for their operations, making the reliability of this powerline critical to the local economy.

The proximity to Vosloorus, a large township with a vibrant community, adds another layer of socio-economic importance to the project. The township's economy and well-being are closely tied to the infrastructure developments within the broader Ekurhuleni area.

2. Legislative and Regulatory Context

The SAR Rooikop 88kV, powerline deviation project operates within a framework of stringent legislative and regulatory standards that govern infrastructure development, environmental conservation, and community impact. Understanding this context is crucial for ensuring the project complies with all applicable laws and supports sustainable development objectives.

Regulation	Description
National Environmental Management Act (NEMA)	This Act is the cornerstone of environmental management in South Africa and provides the principles for decision-making on environmental matters. The project must obtain an Environmental Authorisation under NEMA, which requires a thorough Environmental Impact Assessment (EIA) to identify, predict, and assess potential environmental and socio-economic effects.
EiA Regulations	The project is subject to EIA regulations, which dictate the process for public participation, the assessment of environmental impacts, and the reporting requirements. These regulations ensure that environmental considerations are integrated into the planning and decision-making processes.
Water Act	Given that the original powerline crosses a wetland, the project must comply with the National Water Act, which regulates water use and management, including activities within water-sensitive

	areas. The Act requires a water use license if the project activities impact water resources.
Electricity Regulation Act:	This Act oversees the generation, transmission, and distribution of electricity in South Africa, ensuring that electrical infrastructure projects meet technical and safety standards.
Local Government Municipal Systems Act:	This Act governs public administration and participation at the municipal level. The project must align with local zoning laws, land-use planning, and development objectives, which the Ekurhuleni Metropolitan Municipality oversees.
Integrated Development Plans (IDP):	The project should align with the local IDP, which outlines municipal goals and objectives for economic and social development, including infrastructure improvements and environmental management.
Public Participation Requirements:	Ensuring compliance with regulations concerning public involvement, the project must facilitate a process that allows stakeholders, including affected communities and interested parties, to contribute to the planning and evaluation phases.

3. Socio-Economic Landscape

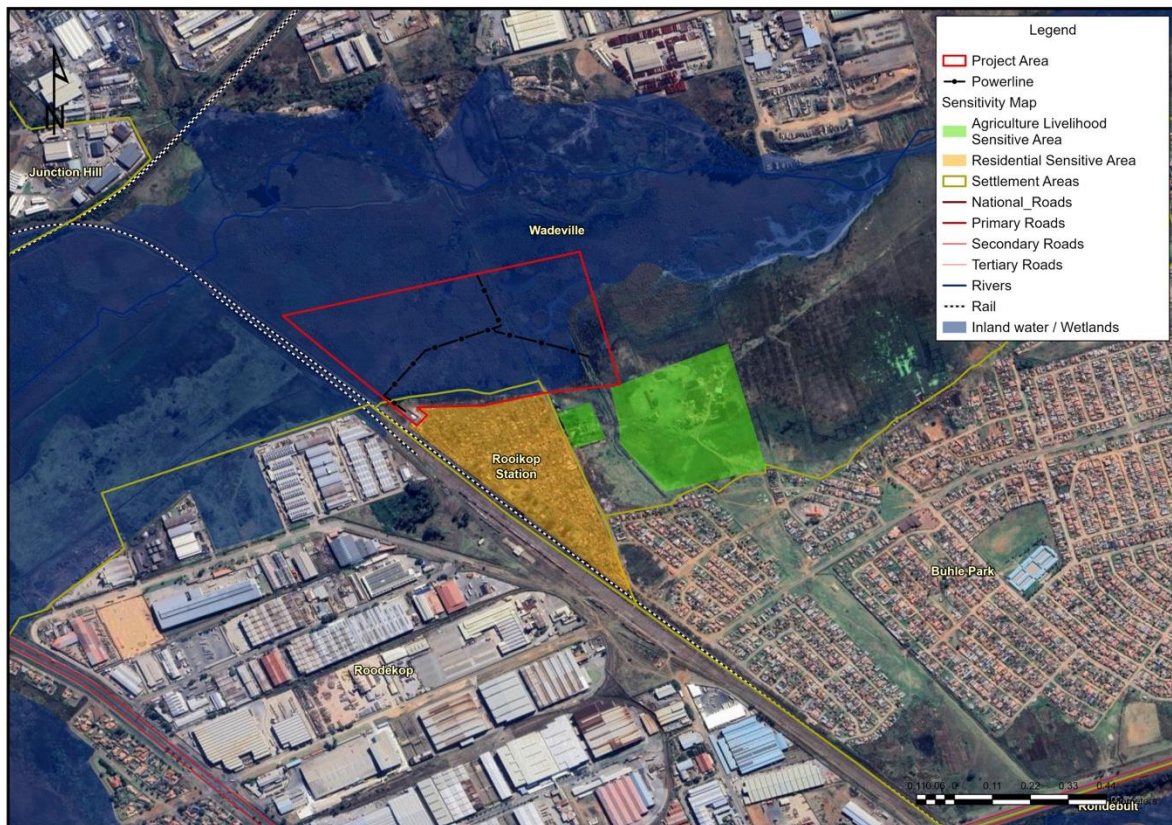
The socio-economic environment surrounding the SAR Rooikop 88kV powerline deviation project in Germiston South, located within the City of Ekurhuleni Metropolitan Municipality, includes industrial and residential sectors. This area has a diverse demographic profile and a solid industrial base that relies on stable and reliable electricity. The identified line for deviation is near an informal settlement equipped with essential water and sanitation facilities, emphasising the need for careful project planning to mitigate impacts on this community.

While developed, the infrastructure in Germiston South shows variability in quality and access across different communities, affecting the area's socio-economic resilience. Educational institutions and vocational training centres support local employment and skills development, aligning with the industrial sector's needs. Community life features cultural and recreational activities that enhance social cohesion and quality of life. However, the proximity to industrial activities and the informal settlement presents ongoing environmental health challenges, requiring robust public health and safety measures.

The SAR Rooikop powerline deviation project aims to address infrastructural and environmental challenges the current route poses through a sensitive wetland and improve local socio-economic conditions. Enhancing the reliability of the power supply and potentially stimulating job creation during the construction phase could significantly benefit local economic stability and growth. By engaging with the community, particularly the informal settlement near the deviation route, and ensuring that development aligns with local needs, the project can support the sustainable development of Germiston South.

4. Site Assessment

The social sensitivity analysis for the SAR Rooikop 88kV powerline deviation project is designed to assess the social impacts that the project may have on the communities in and around Germiston South. This analysis considers various social factors, notably the potential effects on the informal settlement near the deviation route, to ensure that the project's implementation aligns with local populations' needs and living conditions. While the project is anticipated to yield long-term benefits, it is essential to recognise that in terms of implementation, the deviation is a short-term project. The physical impact of the implementation will primarily affect those close to the project site.



Social Factor	Sensitivity
Land use	High
	<p>The land identified for the proposed deviation of the SAR Rooikop 88kV powerline is currently utilised for residential purposes, introducing specific challenges and considerations for the project implementation. Although there is an existing road that could facilitate the construction and minimise the disturbance to the area, the implementation of the project is still likely to impact some households directly.</p> <p>The proposed deviation line will be in the strip of road, which is the only practical option available. The residential areas affected by the proposed deviation are crucial components of the local community structure. The presence of homes near the construction zone means that families may experience disruptions. This can include noise from construction activities, temporary restrictions on local traffic, potential safety risks during construction, and possible alterations to the landscape that could affect property values.</p> <p>Measures</p> <ul style="list-style-type: none"> • Conducting thorough community consultations to inform residents about the project timelines, expected disturbances, and mitigation measures.

Social Factor	Sensitivity
	<ul style="list-style-type: none"> • Implementing safety measures to protect residents, especially children and older people, from construction-related hazards. • Providing clear signage and alternative routes to manage traffic effectively and safely around construction sites. • Offering support services for households directly affected by construction activities, if necessary. • Collaborating with community structures is essential to keep the community updated on progress, alterations, and strategies to lessen disruptions. This open communication helps manage expectations and mitigate potential conflicts. • Establishing a system for monitoring the impact on households and gathering feedback on the effectiveness of mitigation measures can help the project team adjust strategies as needed.
Increased construction traffic	Medium
	<p>The installation of two 20-meter-high steel monopole structures for the SAR Rooikop 88kV powerline deviation project impacts the local area due to increased construction traffic. The influx of heavy delivery vehicles leads to congestion, especially within the informal settlement, exacerbating traffic issues on already compromised roads. This can disrupt daily routines and increase safety risks for all road users, including vulnerable groups such as children and older people.</p> <p>Measure</p> <ul style="list-style-type: none"> • Enhance safety measures around the construction site and along routes used by construction vehicles. This can include better signage, improved street lighting, and temporary pedestrian pathways safely distanced from traffic. • Engage with the community through regular updates and feedback sessions to keep residents informed about construction schedules and traffic changes, helping to manage expectations and reduce potential conflicts. • Ensure that access is not hindered by construction activities or vehicles, maintaining clear pathways for emergency services.
Labour protection and safety	High
	Considering the project's proximity to an informal settlement and the SAR Rooikop 88kV powerline deviation project will be

Social Factor	Sensitivity
	<p>executed by contractors using their staff, there are crucial considerations surrounding labour protection and safety. The concerns encompass not only the safety and security of the workforce, but also potential challenges related to crime and violations that could occur from interactions between non-local workers and the local community. These dynamics necessitate careful planning and implementation of robust safety measures to ensure the workers' well-being and the community residents' security.</p> <p>Measure</p> <ul style="list-style-type: none"> • Meet with community leaders and residents to discuss project progress, address any grievances, and provide updates on safety measures. • Ensure all workers carry visible identification and are monitored through regular check-ins and tracking mechanisms during work hours. • Implement a thorough induction program for all workers, focusing on on-site safety protocols, local cultural sensitivities, and legal obligations. • Ensure workers remain in the site area and understand their responsibilities and expected behaviour standards. • Collaborate with local law enforcement to enhance their capacity to manage any increase in crime associated with the project and patrol the area during and after working hours.
Community Health and Safety	Medium
	<p>The project's implementation demands strict attention to health and safety issues due to its risks to nearby residents. This concern is especially significant for adjacent communities, particularly those in informal settlements, which experience challenges during construction. Managing these risks effectively is crucial for ensuring the safety and well-being of these communities. Among the risks, heavy construction vehicles pose significant concerns. Their operation can lead to increased noise and air pollution, impacting the health and comfort of the local population. Additionally, these vehicles can endanger the safety of pedestrians, including children who often play outdoors, making careful oversight essential throughout the project's duration.</p> <p>Measures</p>

Social Factor	Sensitivity
	<ul style="list-style-type: none"> • Hold regular meetings with community leaders and residents to provide updates on the project's progress and discuss any concerns related to health and safety. • Provide thorough training for all workers on the specific risks associated with working near informal settlements, focusing on respecting local norms and ensuring community safety. • Educate residents about the potential hazards associated with the construction project.
Managing Community Expectations	Medium
	<p>In South Africa's focus on local content and community involvement, managing community expectations is critical for project implementation, especially when the project duration is brief and does not include hiring local SMEs or employees. Effective communication and engagement strategies are essential to ensure the community understands the project's scope, benefits, and limitations regarding local hiring.</p> <p>Measures</p> <ul style="list-style-type: none"> • Work closely with local leaders, councils, and influential community figures to gain their support and to help convey information to the community. • Conduct initial community briefings before project commencement to outline the project scope, timeline, expected outcomes, and why local hiring may not be possible.
Crime and Security	Medium
	<p>Crime is a significant concern in South Africa, particularly with the rising incidents of cable theft, which pose ongoing risks to infrastructure projects. Addressing crime and security at project sites like the SAR Rooikop 88kV powerline deviation, especially near vulnerable communities such as informal settlements, demands a comprehensive and multifaceted approach. Effective crime prevention and security measures are essential to protect the project assets and communities. Implementing robust security strategies is crucial to mitigate these risks and ensure all stakeholders' safety.</p> <p>Measure</p> <ul style="list-style-type: none"> • Strengthen ties with local law enforcement agencies to ensure quick response times and support for security initiatives. • Adopting a just-in-time delivery system is crucial for enhancing project efficiency and minimising the risk of theft

Social Factor	Sensitivity
	<p>or damage. Ensuring that materials are delivered only on the day they are needed effectively reduces the time materials spend on-site before being used, significantly decreasing the chances of theft or damage.</p>

5. Conclusion and recommendation

The SAR Rooikop 88kV powerline deviation project, is an infrastructure endeavour to enhance the reliability of electricity supply in Germiston South while addressing environmental concerns related to the existing route through a wetland area. The project involves rerouting powerlines and installing new infrastructure to minimise ecological disturbances and ensure maintenance efficiency. A detailed socio-economic impact assessment has been conducted to ensure thoughtful management of all potential impacts.

Critical recommendations for the project include maintaining stakeholder engagement to ensure transparency and community involvement, implementing robust security measures to protect the construction site and nearby communities, and adopting a just-in-time delivery system to minimise risks associated with material storage on site. Additionally, the project should invest in community development initiatives that provide long-term benefits to residents and continue to monitor and evaluate the socio-economic impacts rigorously. Ensuring compliance with environmental regulations is also crucial to protect sensitive areas and maintain the project's sustainability.

By following these guidelines, the SAR Rooikop 88kV powerline deviation project aims to achieve a successful implementation that meets its technical and environmental objectives and contributes positively to the local community's socio-economic environment. This approach is expected to foster community support and ensure the project's sustainability and effectiveness.