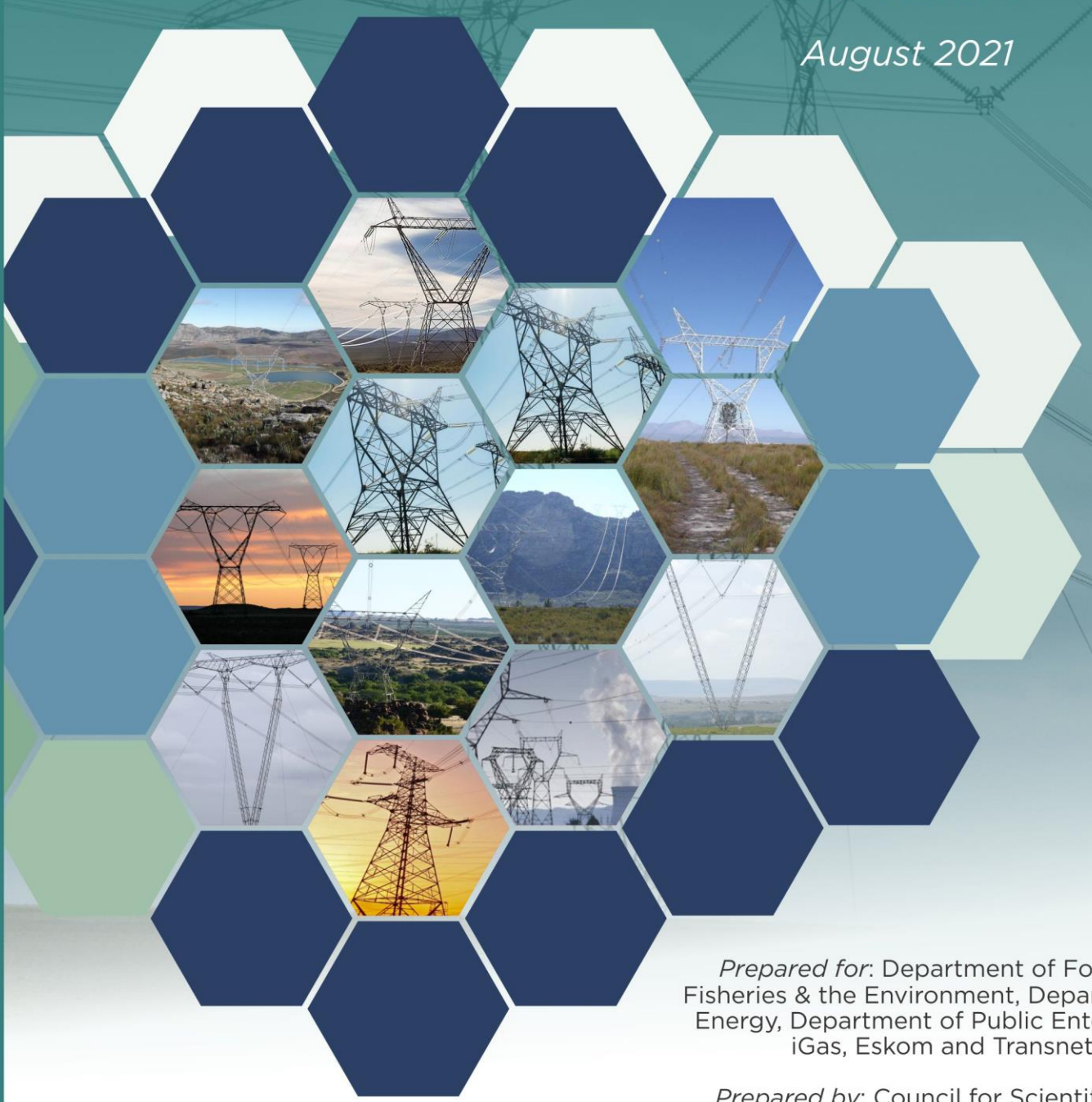


Standard for the Development of Power Lines and Substations within Identified Geographical Areas

Revision 1

August 2021



Prepared for: Department of Forestry, Fisheries & the Environment, Department of Energy, Department of Public Enterprises, iGas, Eskom and Transnet

Prepared by: Council for Scientific and Industrial Research (CSIR) and South African National Biodiversity Institute (SANBI)



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Prepared for:

Department of Forestry, Fisheries and the Environment
Department of Mineral Resources and Energy
Department of Public Enterprises
iGas
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³ Department of Environment, Forestry and Fisheries, 2019. Strategic Environmental Assessment for the Expansion of Electricity Grid Infrastructure Corridors in South Africa. CSIR Report Number: CSIR/SPLA/EMS/ER/2019/0076/B. ISBN Number: ISBN 978-0-7988-5648-5. Stellenbosch and Durban.

⁴ Note that this Author was under the employ of the Council for Scientific and Industrial Research (CSIR) during the completion of the relevant SEA Report Chapters; however has subsequently resigned.

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Figure 1: Five Gazetted EGI Corridors assessed as part of the 2016 EGI SEA and two Expanded EGI Corridors assessed as part of the 2019 EGI Expansion SEA.

7

ABBREVIATIONS

BID	Background Information Document
BFD	Bird Flight Diverter
CBO	Community-Based Organisation
CR	Critically Endangered
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
ECO	Environmental Control Officer
EGI	Electricity Grid Infrastructure
EMPr	Environmental Management Programme
EN	Endangered
EWT	Endangered Wildlife Trust
GIS	Geographic Information Systems
HIA	Heritage Impact Assessment
I&APs	Interested and Affected Parties
IBA	Important Bird Area
LC	Least-Concern
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended
NEM:BA	National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004), as amended
NGO	Non-Governmental Organisation
OEC	Obstacle Evaluation Committee
SABAP	South African Bird Atlas Project
SACAA	South African Civil Aviation Authority
SACNASP	South African Council for Natural Scientific Professions
SAHRA	South African Heritage Resources Agency
SCC	Species of Conservation Concern
SEA	Strategic Environmental Assessment
VU	Vulnerable

CHAPTER 1. CONTEXT, PURPOSE AND APPLICATION

1.1 Context of the Standard

The National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) promotes the integrated environmental management of activities that may have a significant impact (positive or negative) on the environment. Section 24(1) of the NEMA states that *“in order to give effect to the general objectives of integrated environmental management laid down in this Chapter, the potential consequences for or impacts on the environment of listed activities or specified activities must be considered, investigated, assessed and reported on to the competent authority or Minister responsible for Mineral Resources, as the case may be, except in respect of those activities that may commence without having to obtain environmental authorisation in terms of this Act.”*

Section 24(2)(c) - (e) provides the ability of the Minister, or MEC in concurrence with the Minister to identify activities and geographical areas within which activities may be excluded from the requirement to obtain environmental authorisation and section 24(2)(d) provides the additional ability to link such exclusions with compliance with prescribed norms or standards. This Standard, entitled “Standard for the Development of Powerlines and Substations within Identified Geographical Areas” (the Standard) is intended to be adopted in terms of section 24(10)(a) of NEMA to allow for the exclusion, in terms of section 24(2)(d) of NEMA, of activities which relate to the development of electricity transmission and distribution infrastructure as identified in Listing Notices 1 and 2 of the Environmental Impact Assessment (EIA) Regulations, promulgated under section 24(5) of NEMA as well as any listed or specified activities necessary for the realisation of such infrastructure which includes substations, as described in the scope of this Standard.

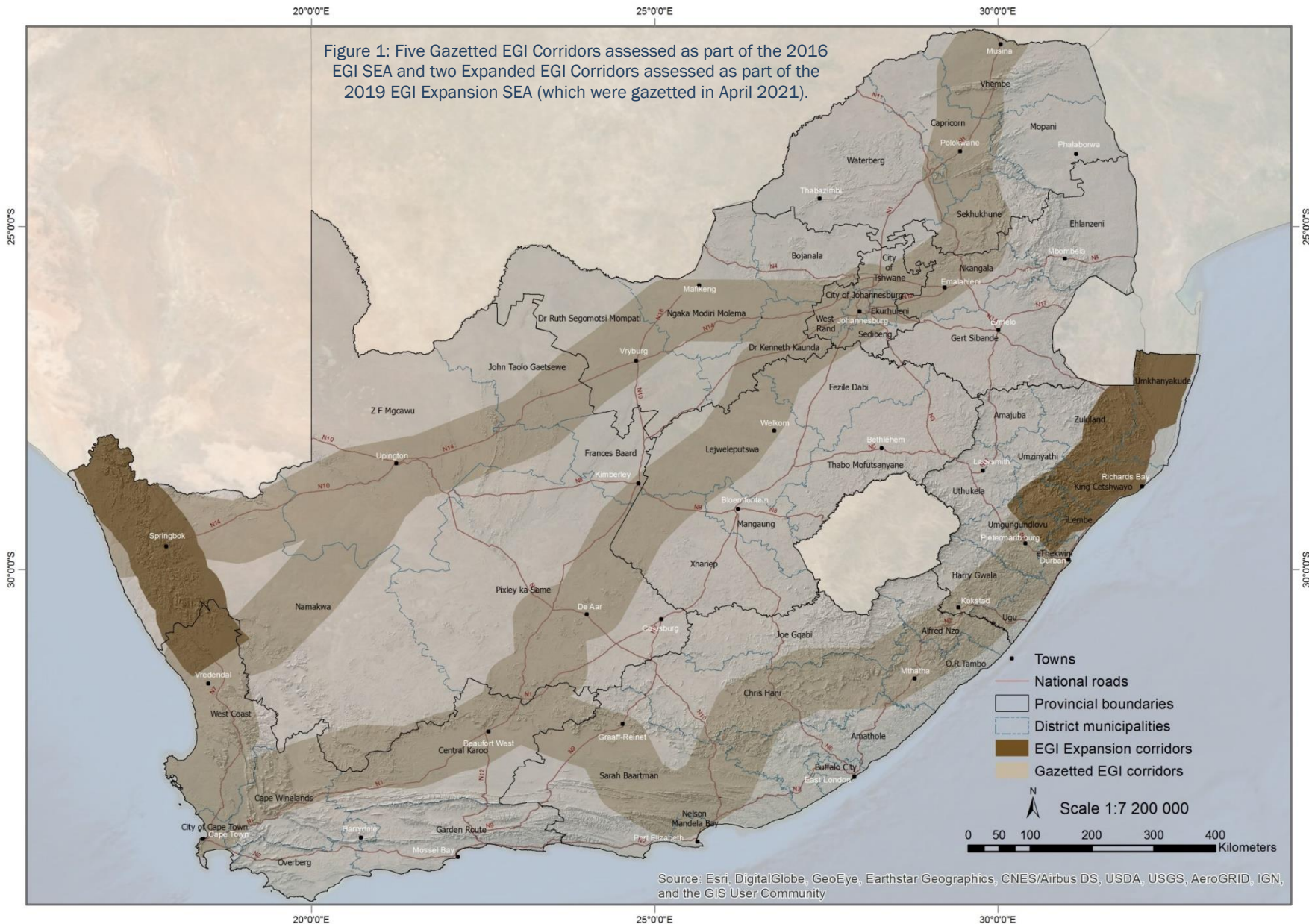
This Standard has been developed based on two Strategic Environmental Assessment (SEA) processes undertaken for the development of Electricity Grid Infrastructure (EGI) in South Africa as listed below:

- SEA completed in 2016 for the identification and assessment of five (5) EGI Corridors; and
- SEA initiated in 2017 and completed in 2019 for the identification and assessment of two (2) expanded EGI Corridors.

The SEA processes identified geographical areas which are of strategic importance for the rollout of electricity transmission and distribution infrastructure in terms of Strategic Integrated Project 10: Electricity Transmission and Distribution for all. These geographical areas consist of seven (7) strategic transmission corridors for the development of transmission and distribution infrastructure (Figure 1) that have been pre-assessed for environmental sensitivities.

- 2016 EGI SEA:
 - Central Corridor;
 - Eastern Corridor;
 - International Corridor;
 - Northern Corridor; and
 - Western Corridor.
- 2019 Expanded EGI SEA:
 - Expanded Eastern Corridor; and
 - Expanded Western Corridor.

The study areas of the SEAs (i.e. the corridors) were investigated by specialists through desktop geographic information system (GIS) analysis. These strategic transmission corridors have been gazetted as identified geographical areas in Government Notice No. 113 published under Government Gazette No. 41445 of 16 February 2018 and Government Notice No. 1637 published under Government Gazette No. 45690 of 24 December 2021.



1.2 Purpose of the Standard

The purpose of this Standard is to provide rules, which must be complied with, ensuring:

- compliance to the principles contained in section 2 of NEMA and the duty of care, in terms of section 28(1) of NEMA; and
- sustainable development within the strategic transmission corridors.

This Standard has been prepared to allow a proponent to achieve planning, routing, siting and remediation objectives that will ensure the acceptability of the impacts of the development of EGI including substations on the environment, independently from the need for an assessment by the competent authority. These planning, routing, siting and remediation objectives were determined through the development of two SEAs undertaken to identify geographical areas best suited for the development of EGI infrastructure and its supporting infrastructure, including substations as identified in paragraph 1.1 above.

The submission of the registration form provided in Appendix F, the signing of the declaration by the proponent to commit to implementing the Standard provided in Appendix 9 and to comply with the Generic Environmental Management Programmes identified in paragraph 1.5 and provided in Appendix 10, will enable the exclusion of the development of EGI infrastructure and substations in the identified strategic transmission corridors from the need to obtain an environmental authorisation from the competent authority, as provided for in section 24(2)(d) of NEMA, for the development of transmission and distribution infrastructure within the Strategic Transmission Corridors as identified in paragraph 1.3.

The Final SEA Reports for the 2016 EGI SEA and 2019 EGI Expansion SEA can be accessed at: <https://gasnetwork.csir.co.za/> and <https://egis.environment.gov.za/>

1.3 Scope of this Standard

The provisions of this Standard are applicable:

- within the strategic transmission corridors as identified in Government Notice No. 113 in Government Gazette No. 41445 of 16 February 2018 and Government Notice No. 1637 in Government Gazette No. 45690 of 24 December 2021;
- in areas identified by the national web based screening tool⁵ (screening tool) as being of medium or low environmental sensitivity and confirmed to be such by the EAP or the relevant specialist for the identified environmental theme; and
- for the following activities, including the associated activities necessary for the realisation of the infrastructure, as identified in the EIA Regulations:
 - Listing Notice 1: Activity 11⁶ and 47; and
 - Listing Notice 2: Activity 9;

In addition to the activities identified above, the following activities and infrastructure are required for the realisation of transmission and/ or distribution power lines and/ or substations which could trigger additional listed or specified activities. Should any of the associated activities undertaken trigger an identified activity, it is regarded as being included in this Standard;

⁵ The screening tool is an online application that includes a database of currently available spatial data used to assist Environmental Assessment Practitioners (EAPs) identify and consider environmental sensitivities in an area where development is being proposed. The screening tool can be accessed at: <https://screening.environment.gov.za/screeningtool>.

⁶ Activity 11 of Environmental Impact Assessment Regulations Listing Notice 1 of 2014 is inclusive of substation developments

- Construction camp site and laydown area establishment;
- Servitude gate installation to facilitate access to the servitude;
- Vegetation clearing to facilitate access, construction and the safe operation of the infrastructure;
- Establishing of access roads on the servitude where required;
- Preparation for construction right-of-way and ground preparation;
- Pegging of tower positions for construction;
- Transportation of equipment, materials and personnel to site and stores;
- Installation of foundations for the towers;
- Tower assembly and erection;
- Conductor stringing and regulation;
- Transfer of the line from the Contractor for commissioning;
- Final inspection of the line, commissioning and transfer to the Grid Line and Servitude Manager for operation;
- Rehabilitation of disturbed areas;
- Final inspection of the line, commissioning and transfer to the Grid Line and Servitude Manager for operation;
- Rehabilitation of disturbed areas;
- Signing off of Landowners on acceptability of the rehabilitation upon completion of the construction and rehabilitation;
- Transfer of the servitude by the Grid Environmental Manager; and
- Operation and maintenance of the infrastructure.

Transmission and distribution power lines are located within a registered servitude and maintenance of this servitude is required to retain access and reduce the risk of obstruction and lightning strikes to the power line infrastructure. Servitude widths vary from 15 m – 80 m depending on the size of the power line and an access road of 4 m – 6 m in width is required. The servitude agreement with the landowner will specify the requirements of the power line operator. Maintenance activities will include cleaning, inspections, and repair (as required).

1.4 Exclusions

This Standard and exclusions do not apply in the following instances:

- Where any part of the infrastructure occurs on an area for which the environmental sensitivity for a relevant environmental theme is identified as being very high or high by the screening tool and confirmed to be such by the EAP or the relevant specialist for the identified environmental theme; or
- Where the greater part of the proposed infrastructure fall outside of any strategic transmission corridor.

Where this Standard does not apply, either the requirements of the EIA Regulations, or the requirements of Government Notice No. 113 in Government Gazette No. 41445 of 16 February 2018, read with the NEMA EIA Regulations, where relevant, apply to the relevant environmental theme for which the very high or high sensitivity has been identified, in respect of the portion of the development which occurs on the area where the environmental sensitivity is confirmed to be very high or high, or to the entire development where the greater part of the infrastructure falls outside of the strategic transmission corridor.

1.5 Applicability of the Generic Environmental Management Programme

As part of the 2016 EGI SEA, a Generic Environmental Management Programme (EMPr) was compiled for the development and expansion of: (a) overhead electricity transmission and distribution infrastructure; and (b) substation infrastructure for the transmission and distribution of electricity. The two Generic EMPrs were gazetted for implementation in Government Notice No. 435 published under Government Gazette No. 42323 of 22 March 2019. The Generic EMPrs apply within South Africa as a whole, and need to be applied

for the development of all overhead and substation electricity transmission and distribution infrastructure (as contained in Government Notices R982⁷, R983⁸, R984⁹ and R985¹⁰). These Generic EMPs consist of the following:

- Part A - Includes definitions, acronyms, roles and responsibilities and documentation and reporting requirements.
- Part B – Section 1: Pre-Approved Generic Template that must be completed by the contractor prior to commencement of construction. This section does not need to be submitted to the competent authority.
- Part B – Section 2: Provision of preliminary infrastructure layout and a declaration that the applicant/holder of the environmental authorisation will comply with the pre-approved Generic EMP template contained in Part B: Section 1 and understands that the impact management outcomes and impact management actions are legally binding.
- Part C – Site Specific Sensitivities and Attributes: If any specific environmental sensitivities or attributes are present on the site which require site specific impact management outcomes and actions that are not included in the pre-approved generic EMP (Part B – Section 1), these specific impact management outcomes and actions must be included in Part C and must be submitted to the competent authority for approval.

For the purpose of this Standard, the Pre-Approved Generic Template of the Generic EMPs (Part B – Section 1) applies. Part C will apply if any specific environmental sensitivities or attributes are identified which the generic pre-approved template does not cover. However, in the case of this Standard being applicable, Part C does not need to be submitted to the competent authority for approval. In this case Part C must be appended to the Pre- Approved Generic Template (Part B – Section 1).

1.6 General

The provisions of the National Appeal Regulations, 2014, as amended, are applicable to decisions taken based on this Standard and an appeal against any registration decision related to this Standard may be lodged.

Compliance with this Standard does not negate the need for the proponent to comply with all other applicable legislation.

⁷ Published under Government Gazette No. 38282 of 4 December 2014, as amended

⁸ Published under Government Gazette No. 38282 of 4 December 2014, as amended

⁹ Published under Government Gazette No. 38282 of 4 December 2014, as amended

¹⁰ Published under Government Gazette No. 38282 of 4 December 2014, as amended

CHAPTER 2. PROCEDURAL REQUIREMENTS

1. The proponent must identify a *preliminary corridor*¹¹ and/or the proposed substation sites using the screening tool and additional up-to-date spatial datasets where available.
2. The proponent must appoint an Environmental Assessment Practitioner (EAP) and must ensure that the EAP fulfils the requirements to register the proposed development in accordance with this Standard.
3. The proponent must ensure that the EAP, as a minimum, follows the public participation process required in Chapter 6 of the EIA Regulations for a linear development during the route determination process, excluding the following requirements which would not be relevant to the Standard:
 - Obtaining written consent from the owner or person in control of the land on which the proposed development is to be undertaken for the powerline development;
 - Timeframes pertaining to comment periods for basic assessment reports, EMPr, scoping reports, EIA reports, and closure plans;
 - Notification along alternative routes in the form of notice boards; and
 - Giving notice of the process being applied (basic assessment or scoping and environmental impact report).
4. As part of the interested and affected parties¹² (I&APs) the EAP¹³ must ensure that relevant Non-Governmental Organisations (NGOs) and Community-Based Organisations (CBOs) are effectively consulted during the public participation process.

Based on the information provided by the screening tool, additional spatial data and the EAP's professional knowledge, the proponent assisted by the EAP must appoint a specialist team who will assist with the route planning. The proponent must ensure that the EAP prepares a preliminary database of possible stakeholders and interested and affected parties¹⁴ (I&APs) along the *preliminary corridor* and in the vicinity of the substation site, including relevant government departments and relevant non-governmental stakeholders. The proponent assisted by the EAP must then announce the proposed development by making available a Background Information Document (BID) on a publicly accessible website and distributing the BID to stakeholders and I&APs identified on the database.

5. The proponent assisted by the EAP must appoint a specialist team to undertake the site verification of the relevant environmental themes where relevant as well as a walkthrough¹⁵ of areas that need verification in the opinion of the EAP and specialist. Should a particular specialist not be required, the EAP must motivate their exclusion from the team and include this motivation in the BID. It is anticipated that the following specialist expertise will be required:
 - (a) Terrestrial biodiversity and ecology;
 - (b) Aquatic biodiversity and ecology;
 - (c) Avifauna;
 - (d) Heritage;
 - (e) Agriculture/soil scientist; and
 - (f) Visual (not required for a substation).

¹¹ The *preliminary corridor* is to be wide enough to provide options to avoid environmental and engineering constraints. The width of the Preliminary Corridor shall be determined by the proponent based on best practice.

¹² The purpose of the BID is not to obtain comments within a dedicated comment period but rather to announce the project, and to update the stakeholder database with registered stakeholders.

¹³ There is reference to an environmental assessment practitioner who may work on behalf of the proponent, however the proponent remains responsible for undertaking all legislated tasks.

¹⁴ The purpose of the BID is not to obtain comments within a dedicated comment period but rather to announce the project, and to update the stakeholder database with registered stakeholders.

¹⁵ It is not intended that a walkthrough would be required for the entire footprint, but rather areas that need verification in the expert view of the specialist or EAP

6. The BID must include as a minimum the following information:
 - (a) Purpose of the BID;
 - (b) Legal context;
 - (c) Background and project description;
 - (d) Process and timeline;
 - (e) The screening report generated from the screening tool for the *Preliminary Corridor* and/or proposed substation site;
 - (f) Location of the *Preliminary Corridor* and/or proposed substation site
 - (g) Contact details of the EAP; and
 - (h) I&AP registration forms.

7. The proponent must ensure that the EAP and specialists identify through their specialist knowledge and site verifications/walkthrough as necessary, a *proposed route* and/or the substation location/s (where a substation or substations are relevant) within the *preliminary corridor* based on:
 - a) consideration and implementation of the mitigation hierarchy¹⁶,
 - b) environmental sensitivity identified using the methodologies or processes as stipulated in Chapter 3 of this Standard, and
 - c) engineering constraints.

8. As the route is being identified, the initial servitude negotiations¹⁷ are to be undertaken to ensure that the route and/or substation location is not fatally flawed in relation to servitude access.

9. The process to identify the *proposed route* and/or substation location and the outcome of the initial servitude negotiations must be documented in an environmental sensitivity report, which must be subjected to a minimum public comment period of 30 days as part of the public participation process identified in 3 above.

10. The environmental sensitivity report must include, as a minimum, the following information:
 - (a) The details and relevant expertise of the EAP and specialists preparing the report;
 - (b) The outcome of the screening exercise¹⁸ undertaken using the screening tool, the expert knowledge of the specialists where necessary, results of the site verification, the adoption of the mitigation hierarchy principles and the principles contained in Chapter 3 of this Standard;
 - (c) Location map of the *proposed route* and/or proposed location of the substation;
 - (d) Details of the public participation process undertaken;
 - (e) A discussion by the specialists and/or EAP of the process used to confirm that the *proposed route* and/or substation location has applied the principles stipulated in Chapter 3, and the process used to confirm that the site sensitivity of the proposed route and/or substation location is of low or medium environmental sensitivity; and
 - (f) If applicable, a site specific EMPr as per Part C of the Generic EMPr for overhead power lines and/or substations gazetted in Government Notice 435¹⁹ published in Government Gazette No. 42323 of 22 March 2019.
 - (g) The completed generic EMPr pre-approved template which is Part B – Section 1 of the Generic EMPr for overhead power lines and/or substations, and where applicable Part C, gazetted in Government Notice 435 published in Government Gazette No. 42323 of 22 March 2019, for display on the websites of the proponent and the EAP.

¹⁶ Mitigation hierarchy includes the following steps in the order of decreasing desirability: Avoid, Minimise, Rehabilitate, and Offset.

¹⁷ Initial servitude negotiations do not entail the signing of actual servitude agreements but should indicate proof of the negotiations which can be in the form of a “no objection letter” signed by the landowner indicating that they are aware of the proposed routing and have no objection to the route traversing their property based on the formal signing of a servitude agreement.

¹⁸ The screening exercise would entail the generation of several screening reports and the consideration of various alternative routes to avoid environmental sensitivities and engineering constraints.

¹⁹ Part C of the Generic EMPr must include, where required, additional site specific impact management outcomes and impact management actions.

- (h) The confirming statement by the various specialists in the format as identified in Appendix B.
11. The *proposed route* must be finalised to become the final *pre-negotiated route*²⁰ and where relevant the final location/s of the substation/s, by taking into consideration comments received during the public participation process and refining the route as relevant.
 12. A final environmental sensitivity report must be prepared by the EAP supported by the specialists, which locates the final pre-negotiated route and/or the substation location on a map which includes the location of any mitigation devices such as bird flight diverters, a record of comments and responses and, where applicable, Part C of the Generic EMPr and the final confirming statements by the various specialists in the format as identified in Appendix B.
 13. All registered I&APs must be notified of the availability of the final environmental sensitivity report for information²¹.
 14. The proponent must submit the relevant registration form contained in Appendix F of this Standard.
 15. The registration form must be accompanied by:
 - (a) The final pre-negotiated route and the signed declaration by the proponent of commitment to implement the Standard (included as Appendix 9 to the registration form);
 - (b) A signed statement from the proponent that initial servitude negotiations have been concluded;
 - (c) The signed declaration that the proponent will comply with the pre-approved Generic EMPr templates and site specific EMPr if relevant; and
 - (d) All supporting documents stipulated in the registration form.
 16. On receiving the relevant information identified in paragraph 15 above, the competent authority must issue a registration number within 30 days of receipt of the information submitted or if the information is incomplete, indicate to the proponent that the submission is incomplete and identify the outstanding information. A register of all registrations must be kept by the competent authority.
 17. Upon receipt of a registration number, the proponent must inform all registered I&APs within 14 days of the registration and the opportunity to appeal.²²
 18. Registration contemplated in paragraph 16 will be valid for a period of 10 years from receipt of the registration number in order for commencement to take place (validity period). If commencement does not take place within the validity period or the construction has not been finalised, the process contemplated in Chapter 2 will apply afresh in such instances.
 19. The proponent must provide written notice to the compliance monitoring unit within the competent authority 14 days prior to the date on which the first of the activities contemplated in the scope of this Standard, including site preparation, will commence in order to facilitate compliance inspections.
 20. Proof of registration must be:
 - (a) lodged by the proponent with the relevant Local Municipality, as well as the relevant provincial department responsible for the environment, if the national department responsible for the environment is the CA, prior to commencement;
 - (b) made available by the proponent on request by any member of the public or Authority; and

²⁰ The pre-negotiated route must be 250m or less in width. The width of the pre-negotiated route must be included in the final environmental sensitivity report.

²¹ The purpose of the notification is not to make the report available for comment, but rather to make it available for information purposes so that I&APs have access to it.

²² Any appeal must be lodged and processed according to the NEMA National Appeal Regulations promulgated in Government Notice 993 published in Government Gazette 38303 of 8 December 2014; and the NEMA National Appeal Amendment Regulations promulgated in Government Notice 205 published in Government Gazette 38559 of 12 March 2015.

- (c) made available, where the proponent or owner has a website, on such publicly accessible website.

21. Where change of ownership of a registered development in terms of paragraph 16 occurs during the pre-construction or construction phases of the infrastructure, the registration number is retained by the new owner, however the new owner must submit to the competent authority for re-registration, the declaration by the proponent of commitment to implement the Standard (included as Appendix 9) and the declaration to implement Part B – Section 1 of the Generic EMP for overhead power lines and/or substations, and where applicable Part C (Appendix 10), within 30 days upon finalisation of such change. There is no requirement for re-registration once the infrastructure has been constructed as the operation of a power line or substation is not an identified activity in terms of the Act.

Appendix C of this Standard contains a process flow diagram of the procedural requirements and route determination and/or substation location process.

CHAPTER 3. GENERAL ENVIRONMENTAL PRINCIPLES

When planning the power line route or locating the substation position, the following principles must be adhered to:

- 22. There must be no removal of threatened plant species.
- 23. There must be no impact on Tier 1 plant species²³ identified through the screening process and site verification process.
- 24. Clear-cutting during construction must be kept to a maximum of 8 m.
- 25. Wetlands must be avoided or, where wetland crossing is unavoidable, the power line should be routed over the narrowest part of the wetland. For the most part, wetlands and rivers can be traversed by the power line with little to no impact, as they are often not more than 500 m in diameter.
- 26. Avoid all known Blue Swallow breeding habitat by a 2.5 km buffer. Should the full extent of the buffering not be practically possible, a thorough investigation must be conducted by a suitably experienced avifaunal specialist with experience of Blue Swallows to identify any potential nesting holes, which must then be appropriately buffered, in consultation with Ezemvelo KwaZulu-Natal Wildlife and BirdLife South Africa to prevent destruction of the nest holes.
- 27. Avoid Cape Vulture and White-backed Vulture breeding colonies by a 5 km buffer. In addition, it would require management of the potential impacts on the breeding birds once construction commences, which would necessitate the involvement of the avifaunal specialist and the environmental control officer (ECO).
- 28. Avoid Lappet-faced Vulture and Bearded Vulture restaurants by a 5 km buffer. Should the full extent of the buffering at vulture restaurants not be practically possible, the vulture restaurant should be relocated in consultation with the owner of the restaurant.

²³ A tier 1 plant species means “Habitat for species that are endemic to South Africa, where all the known occurrences of that species are within an area of 10 km² are considered Critical Habitat[1], as all remaining habitat is irreplaceable[2]. Typically these include species that qualify under Critically Endangered (CR), Endangered (EN), or Vulnerable (VU)[3] D criteria of the IUCN or species listed as Critically/ Extremely[4] Rare under South Africa’s National Red List Criteria. For each species reliant in a Critical Habitat, all remaining suitable habitat has been manually mapped at a fine scale

29. The power line alignment or substation footing shall not be located within 500 m of the edge of waterbodies found to be suitable for Greater Flamingo, Black Stork, Blue Crane, Great White Pelican, Lesser Flamingo and African Marsh-harrier.
30. The power line alignment or substation shall not be located within 1 km of major²⁴ piggeries and poultry farms.

CHAPTER 4. COMPLIANCE – AUTHORITY INSPECTIONS

31. The proponent must provide the competent authority and any authorised official, including duly designated Environmental Management Inspectors, with access to the facility where the activity included under this Standard is undertaken, for the purposes of monitoring compliance with the Standard.

CHAPTER 5. OFFENCES

32. Failure to comply with the requirements of the Standard constitutes an offence in terms of section 49A of NEMA.

CHAPTER 6. CONTACT DETAILS

The information relating to the location of the EGI Corridors contained in the Standard can also be obtained from the Head Office of the Department of Forestry, Fisheries and the Environment, at the contact details provided below:

CONTACT PERSON/S

Directorate Spatial information Management

Ms Marlanie Moodley or Ms Lisa Pretorius

CONTACT DETAILS

- GazetteMapping@dffe.gov.za
- Direct Line +27 12 399 8916/9301
- Call Centre Number: +27 86 111 2468

CHAPTER 7. REFERENCES

Parties using the Standard shall also consider, *inter alia*, the most recent edition of the documents listed hereunder:

Normative

- The National Environmental Management Act, 1998 (Act No. 107 of 1998);
- The National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEM: BA);
- The National Environmental Management: Protected Areas Act, 2003 (Act No. 59 of 2003) (NEM:PAA);
- The National Water Act, 1998 (Act No. 36 of 1998);
- Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983) and relevant regulations;

²⁴ A major facility is a facility as described in Listing Notice 1, Activity 4 and 5, of the EIA Regulations.

- National Forest Act, 1998 (Act No. 84 of 1998) and the Notice Of Protected Tree Species under the National Forest Act (Government Notice No. 817 published in Government Gazette No. 30253, of the 7 September 2007); and
- Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act No. 36 of 1947).

Informative

- NEM: BA GNR 1002 of 2011 – National list of ecosystem that are threatened and in need of protection.
- NEM: BA GNR 255 of 2015 – Threatened or Protected Species Regulations.
- NEM: BA: GNR 598 of 2014 – Alien and Invasive Species Regulations.
- National Biodiversity Strategy and Action Plan (2005).
- National Biodiversity Framework (2008).
- National Protected Area Expansion Strategy (2008).
- National Biodiversity Assessment (2011).
- Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013).
- Heritage Western Cape Short Guide to and Policy Statement on Grading issued in 2012²⁵;
- South African Heritage Resources Agency (SAHRA) Minimum Standards for Archaeological and Palaeontological Impact Assessments issued in 2007²⁶.
- SANS 10280-1:2013 Overhead power lines for conditions prevailing in South Africa. Part 1: Safety.
- Eskom Specifications:
 - Land and Biodiversity Policy, 32-736.
 - Transmission Environmental Policy, TPL41-435, June 2010.
 - Herbicide Management Policy, ESKPBAAD4, June 2005.
 - Land and Biodiversity Standard, 32-815, May 2016.
 - Wildlife Interaction and Management Standard, 32-829, December 2016.
 - Transmission servitude gates Standard, TGL41-338, November 2009.
 - Standard for bush clearance and maintenance within overhead power line servitude, ESKASABG3, May 2003.
 - Standard for the Safe use of pesticides and herbicides, ESKASAALO, June 2005.
 - Guideline on the electrical coordination of pipelines and power lines, 240-66418968, April 2015.
 - Erosion Guideline, TGL41-337, November 2009.
 - Transmission vegetation management guideline, TGL41-334, November 2009.
 - Bird nesting guidelines, TGL41-333, November 2009.
 - Transmission Bird collision prevention guideline, TGL41-335, November 2009.
 - Transmission Bird perch guideline, TGL41-332, November 2009.
 - Proactive bird mitigation in distribution, 240-115756171.
 - Specification – Transmission line towers and line construction, TRMSCAAC1, March 2001.
 - Contractor Specification for Vegetation Management, 240-52456757, February 2013.
 - Vegetation Management on Eskom Land, Servitudes, Rights of Way, 240-70172585, January 2014.
 - Environmental Procedure for vegetation clearance and maintenance within overhead power line servitudes and on Eskom owned land, 32-247, September 2007.

²⁵https://www.westerncape.gov.za/other/2012/9/grading_guide_&_policy_version_5_app_30_may_2012.pdf

²⁶ <http://www.sahra.org.za/sahris/sites/default/files/website/articledocs/ASG2-2%20SAHRA%20A%26PIAs%20MIN%20STDS%20Ph1-2%2016May07.pdf>

APPENDIX A – ENVIRONMENTAL SPECIFICATIONS

Appendix A includes specifications per environmental theme that need to be carried out to verify the environmental sensitivity of the site and undertake the walkthrough to guide the power line routing and to identify the *final pre-negotiated route as well as identify the location of a substation where relevant*.

A.1. Terrestrial Ecology

1. The Terrestrial Ecology Specialist must:

- a) Use the **most recently obtainable and available information** (spatial and otherwise) to verify, on a desktop level, the environmental sensitivity of the power line routing and/or substation location. This includes, *inter alia*, most recent versions of the provincial or municipal conservation plans.
- b) Identify ecosystem types and faunal species that are prone to impacts resulting from power lines and/or substations within the proposed route.
- c) Verify with a walkthrough, the presence and status of the ecosystem types and species.
- d) Avoid threatened ecosystem types (CR, EN and VU) or threatened or rare/range restricted species in the final routing and/or substation location if relevant.

A.2. Bats

2. Avoid bat roosts that are known and/or have been identified within a 500 m buffer of the proposed alignment.

A.3. Aquatic Ecology

3. Engage with the department responsible for water affairs to discuss the requirements of a General Authorisation or Water Use Licence.
4. The outcomes of the engagement process contemplated in sub-section (3) of Section A.3, where required, must be documented in the final environmental sensitivity report, including any restrictions or design requirements.
5. Identify freshwater features that are prone to impacts resulting from the construction of power lines within the proposed route.
6. Avoid the freshwater features in the final routing.

A.4. Estuaries

7. Pylons shall not be placed within the estuarine functional zone²⁷ or within its associated inflowing coastal wetlands and rivers.
8. Estuarine vegetation and associated coastal freshwater riparian vegetation flowing into and/or associated with estuaries shall not be cleared.

A.5. Avifauna

9. During the planning phase:
 - a) A 2 km buffer either side of the centre line of the proposed route of the power line alignment falling within the *preliminary corridor* must be drawn for verification of avifaunal sensitivity.
 - b) The Avifauna specialist must:

²⁷ In South Africa the estuary functional zone is generally defined by the +5 m topographical contour (as indicative of 5 m above mean sea level) and includes all the estuarine open water area; estuarine habitats (sand and mudflats, rock and plant communities) and adjacent floodplain area whether developed or undeveloped. It therefore encompasses not only the estuary water-body but also all the habitats that support physical and biological processes that characterise an estuarine system.

- i. Use the **most recently obtainable and available information** (spatial and otherwise) as well as the screening tool, professional knowledge of the EAP and the avifauna specialist to determine, on a desktop level, the habitat sensitivity for avifaunal species along the power line route and/or substation location must be determined. BirdLife South Africa, WWF, the Endangered Wildlife Trust and VULPRO, must be contacted for their input.
- ii. The power line bird mortality incident database of the Endangered Wildlife Trust must be consulted to determine which of the species occurring in the broader study area are typically impacted upon by power lines (EWT unpublished data).
- iii. Establish habitat and migratory routes based on the most recently obtainable and available desktop data and site verification.
- iv. The conservation status of all avifaunal species recorded by the most recent iteration of the SABAP in the broader study area must be determined as per the most recent iteration of the list of threatened species and the IUCN Red Data List of Birds.
- v. Based on the information collected on birds typically impacted upon by power lines, identify the presence of threatened species which include, as a minimum, Cranes, Flamingos, Vultures, Kori Bustards, and Pelicans.
- vi. Where high risk areas are identified these areas must be confirmed with EWT by using their risk assessment tool²⁸.
- vii. Where the risk assessment tool identifies that mitigation measures can be applied, apply these mitigation measures in consultation with EWT, BirdLife South Africa and the local conservation agency.
- viii. Where no acceptable mitigation measures can be applied, re-routing options or engineering solution, for example routing under the risk area identified or increasing the height of the power line in order to avoid potential collision risk areas, must be applied. Where engineering options are considered these must be discussed with EWT, BirdLife South Africa and the local conservation agency.

A.6. Agriculture

10. The placement of pylons must be avoided in the following areas:
 - (a) Land capability evaluation values 11 – 15.
 - (b) Demarcated high value agricultural areas with a priority rating of A and/or B.
11. Where pylons are located in the following areas, the placement must be undertaken in manner in which the impact on these areas are minimised:
 - (a) Land capability evaluation values 8 – 10.
 - (b) Irrigated land.
 - (c) Horticulture and viticulture.
 - (d) Demarcated high value agricultural areas with a priority rating of C and/or D.
12. Where avoidance of the areas specified in sub-section (10) of Section A.6 is not possible, the areas disturbed during construction must be returned to the pre-disturbance land capability within two years of the construction.
13. All reasonable measures must be taken through micro-siting of the proposed development to minimize fragmentation and disturbance of agricultural activities.
14. Self-supporting lattice or monopole structures are to be used in crop fields, orchards and vineyards.

A.7. Visual

15. Sensitive human receptors (including, but not limited to, residents, commuters, visitors and tourists) must be identified and a visual sensitivity map compiled to inform the location of the proposed route of the power line.
16. The precautionary principle must be followed, whereby negotiations must be undertaken with the sensitive human receptors.
17. If the negotiations stipulated in sub-section (16) of Section A.7 are unsuccessful, the power line must avoid sensitive human receptors.

²⁸ Screening.environment.gov.za

A.8. Heritage Resources

18. Where required, a heritage impact assessment (HIA) will be undertaken in compliance with Section 38(1) to 38(4) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) as well as any Minimum Standards or Guidelines published in relation to Section 38(3)²⁹.
19. The HIA must be submitted to the South African Heritage Resources Agency and applicable Provincial Heritage Authorities for decision making procedures.
20. The applicable recommendations or requirements from the South African Heritage Resources Agency and applicable Provincial Heritage Authorities must be documented in the final environmental sensitivity report.

A.9. Civil Aviation

21. Engage with Civil Aviation Authority to identify potential hazards and obstacles to civil aviation installations and conditions as described in the South African Civil Aviation Regulations of 2011.
22. The outcomes of the engagement process must be documented in the final environmental sensitivity report, including any restrictions or design requirements.

A.10. Defence

23. Engage with the defence authorities in the event of the power line being located within:
 - (a) 1 km of forward airfields, high sites, operational military bases, military training areas, shooting ranges, border posts, all other Department of defence features (including naval bases, housing, offices, workshops);
 - (b) 8 km from air force bases;
 - (c) 10 km from ammunition depots; or
 - (d) 56 km from bombing ranges.
24. The outcomes of the engagement process, where required, must be documented in the final environmental sensitivity report, including any restrictions or design requirements.

²⁹ The SG 2.2 SAHRA APM Guidelines: Minimum Standards for the Archaeological & Palaeontological Components of Impact Assessment Reports can be accessed on the following website:
<https://www.sahra.org.za/publications/gazettes/>

APPENDIX B – FORMAT OF ENVIRONMENTAL SPECIALIST CONFIRMING STATEMENTS

Appendix B provides the formats of the confirming statements to be provided by the specialist(s) or EAP per theme. The overall aim of the confirming statement is to:

- Confirm that the environmental sensitivity is low or medium as per the sensitivity identified by the screening tool;
- provide a brief elaboration on how the mitigation hierarchy was implemented for the theme;
- state whether identified route is considered to be optimal based on the specialist confirmation of low or medium environmental sensitivity and walkthrough.

In all the confirming statements the following information must be provided:

1. Contact details, relevant qualifications and curriculum vitae of the specialist or EAP, including a description of expertise in preparing the statement;
2. A signed declaration of independence by the specialist or EAP on the form contained in Appendix D or Appendix E of this Standard;

B.1. Terrestrial Ecology

The confirming statement must be prepared by a specialist registered with the South African Council for Natural Scientific Professions (SACNASP) with relevant expertise in terrestrial ecology or similar, and must contain, as a minimum, the following information:

1. A statement on the duration, date and season of the site verification inspection and walkthrough as well as the relevance of the season to the outcome of the confirming statement;
2. Confirmation that the terrestrial ecology (flora and fauna) within the *final pre-negotiated route* and/or the substation location is low based on the most recently available desktop data, site verification inspection and walk through;
3. Identification of terrestrial ecological areas to be avoided within the *final pre-negotiated route*, including buffers and/or the substation location;
4. A terrestrial biodiversity sensitivity map, generated by the screening tool and enhanced by any relevant additional information including the walkthrough, overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure);
5. A description on how the identified environmental sensitivity, relating to terrestrial ecology, has been considered in determining the *final pre-negotiated route* and/or the substation location;
6. A description on how the identified engineering constraints, relating to terrestrial ecology, have been considered in determining the preferred route;
7. A description of the implementation of the mitigation hierarchy in order to determine the *final pre-negotiated route* and/or substation location;
8. How the comments from interested and affected parties on the proposed route and/or substation location were incorporated; and
9. A statement confirming that:
 - a. impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or
 - b. where required, specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr.

B.2. Aquatic Ecology

The confirming statement must be prepared by a specialist registered with the SACNASP with relevant expertise in aquatic ecology or similar, and must contain, as a minimum, the following information:

10. A statement on the duration, date and season of the site verification inspection and walkthrough as well as the relevance of the season to the outcome of the confirming statement;
11. Confirmation that the aquatic ecology (flora and fauna) and existing environmental impacts within the *final pre-negotiated route* and/or substation location is low, based on the most recently available desktop data, site verification inspection and walk through;
12. Identification of aquatic ecological areas to be avoided within the *preliminary corridor*, including buffers;
13. An aquatic biodiversity sensitivity map, generated by the screening tool and enhanced by any relevant additional information, overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure);
14. A description on how the identified environmental sensitivity, relating to aquatic ecology, has been considered in determining the proposed route;
15. A description on how the identified engineering constraints, relating to aquatic ecology, have been considered in determining the proposed route;
16. A description of the implementation of the mitigation hierarchy in order to determine the proposed route and/or substation location;
17. How the comments from interested and affected parties on the proposed route and/or substation location were incorporated; and
18. A statement confirming that:
 - a. impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or
 - b. where required, specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr;

B.3. Estuaries

The confirming statement is only required if the development is proposed within 5 km of an estuary, and must be prepared by an EAP, or a specialist with relevant expertise in aquatic and/or terrestrial ecology, and must contain, as a minimum, the following information:

19. A description of the affected environment in relation to the presence of estuaries within the *preliminary corridor* and their existing condition, based on available desktop information;
20. Identification of the estuary functional zone to be avoided within the *preliminary corridor*, including buffers that are delineated from the channel margin;
21. A map identifying the estuary and buffer if relevant overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure) based on most recently obtainable and available desktop data, such as the information on the screening tool;
22. A description on how the identified environmental sensitivity, as it pertains to estuaries, has been considered in determining the proposed route;
23. A description on how the identified engineering constraints, as it pertains to estuaries, have been considered in determining the proposed route;
24. A description of the implementation of the mitigation hierarchy in order to determine the *final pre-negotiated route* and/or substation location;
25. How the inputs made by I&APs were considered when determining *the final pre-negotiated route* and/or substation location; and
26. A statement confirming that:
 - a. impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or
 - b. where required, specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr;

B.4. Avifauna

The confirming statement must be prepared by an avifaunal specialist registered with the SACNASP, and must contain, as a minimum, the following information:

27. A statement on the duration, date and season of the site verification inspection and walk through as well as the relevance of the season to the outcome of the confirming statement;
28. A description of the affected environment relating to avifauna within the *preliminary corridor*, based on the most recently available desktop data, site verification inspection and walk through information;
29. Identification of avifaunal sensitive areas to be avoided within the *preliminary corridor*, including buffers;
30. An avifauna sensitivity map overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure);
31. A description on how the identified environmental sensitivity, relating to avifauna, has been considered in determining the proposed route;
32. A description on how the identified engineering constraints, relating to avifauna, have been considered in determining the proposed route;
33. A description of the implementation of the mitigation hierarchy in order to determine the proposed route and/or substation location;
34. How the inputs of I&APs were considered when determining the *final pre-negotiated route* and/or substation location; and
35. A statement confirming that:
 - a. impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or
 - b. where required specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr;

B.5. Agriculture

The confirming statement must be prepared by a soil scientist or agricultural specialist registered with the SACNASP, and must contain, as a minimum, the following information:

36. The duration, date and season of the site verification inspection and walk through as well as the relevance of the season to the outcome of the confirming statement;
37. Confirmation that the affected environment within the *preliminary corridor*, as it pertains to agricultural resources is low to medium, based on desktop information, site verification and walk through information;
38. Identification of agricultural resource areas to be avoided within the *preliminary corridor*, including buffers;
39. An agricultural resources sensitivity map generated by the screening tool and enhanced by any relevant additional information, overlaid with the (i.e. pylon placement and power line route, as well as supporting infrastructure);
40. A description on how the identified environmental sensitivity, as it pertains to agricultural resources, has been considered in determining the proposed route;
41. A description on how the identified engineering constraints, as it pertains to agricultural resources, have been considered in determining the proposed route;
42. A description of the implementation of the mitigation hierarchy in order to determine the proposed route and/or substation location; and confirmation that all reasonable measures have been considered in the micro-siting of the development to minimise fragmentation and disturbance of agricultural activities;
43. How the inputs of I&APs were considered when determining the *final pre-negotiated route* and/or substation location; and
44. A statement confirming that:
 - a. impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or
 - b. where required specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr.

B.6. Visual

The confirming statement must be prepared by a visual specialist. In the context of this Standard, a visual specialist is a person that has relevant academic qualifications and expertise in the domain of visual impact assessments. The confirming statement must contain, as a minimum, the following information:

45. A description of the affected environment as it pertains to visual aspects, including the identification of possible sensitive human visual receivers.
46. A description of the findings of the engagement with the sensitive visual receptors;
47. A description of the implementation of the mitigation hierarchy in order to determine the *preferred route and/or* substation location;
48. Statement on whether or not the proposed development will have any residual risk on the sensitive visual receptors, and whether such a risk is acceptable or not;
49. How the inputs of I&APs were considered when determining the *final pre-negotiated route and/or* substation location, and
50. A statement confirming that:
 - a. impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or
 - b. where required, specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr.

B.7. Heritage Resources

The confirming statement must be prepared by suitably qualified specialist in the field of heritage resources (archaeology, marine and built environment) and palaeontology, and must contain, as a minimum, the following information:

51. A description of the affected environment in terms of heritage resources and palaeontology, and an indication of existing heritage and palaeontological impacts within the *preliminary corridor* based on the site verification inspection and walk through.
52. Identification of heritage resources and palaeontological areas to be avoided within the *preliminary corridor*, including buffers;
53. A heritage sensitivity map overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure) based on most recently obtainable and available desktop data, such as the information on the screening tool and the South African Heritage Resources Information System, site verification inspection and walk through (where necessary);
54. Where required, a written comment or letter of no objection from the South African Heritage Resources Agency and/or applicable provincial heritage authority confirming that there is no unacceptable impact on heritage resources and palaeontology;
55. Confirmation that any recommendations as required by the South African Heritage Resources Agency and/or applicable provincial heritage authority have been incorporated and considered;
56. A description on how the identified environmental sensitivity pertaining to heritage resources and palaeontology has been considered in determining the proposed route;
57. A description of the implementation of the mitigation hierarchy in order to determine the proposed route and/or substation location;
58. How the inputs of I&APs were considered when determining the *final pre-negotiated route and/or* substation location; and
59. A statement confirming that:
 - a. impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or
 - b. where required, specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr.

B.9. Civil Aviation

The confirming statement must be prepared by an EAP and must contain, as a minimum, the following information:

60. A signed declaration of independence by the EAP on a form prescribed by the competent authority as contained in Appendix E of this Standard;
61. Confirmation that the affected environment within the *preliminary corridor* is low or medium, as it pertains to aspects of civil aviation based on desk top information, the site verification inspection and the walk through;
62. Identification of civil aviation areas to be avoided within the proposed route, including buffers;
63. A civil aviation sensitivity map overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure) based on most recently obtainable and available desktop data, such as the information on the screening tool;
64. Where required, a written comment from the South African Civil Aviation Authority (SACAA), which may require input from the Obstacle Evaluation Committee (OEC), confirming that there is no unacceptable impact on civil aviation installations;
65. Confirmation that any restrictions or design requirements as required by the SACAA and/or OEC have been incorporated and considered;
66. A description on how the identified environmental sensitivity, as it pertains to civil aviation, has been considered in determining the proposed route;
67. A description on how the identified engineering constraints, as it pertains to civil aviation, have been considered in determining the proposed route;
68. A description of the implementation of the mitigation hierarchy in order to determine the proposed route and/or substation location;
69. How the inputs of I&APs were considered when determining the *final pre-negotiated route* and/or substation location; and
70. A statement confirming that:
 - a. impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or
 - b. where required, specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr;

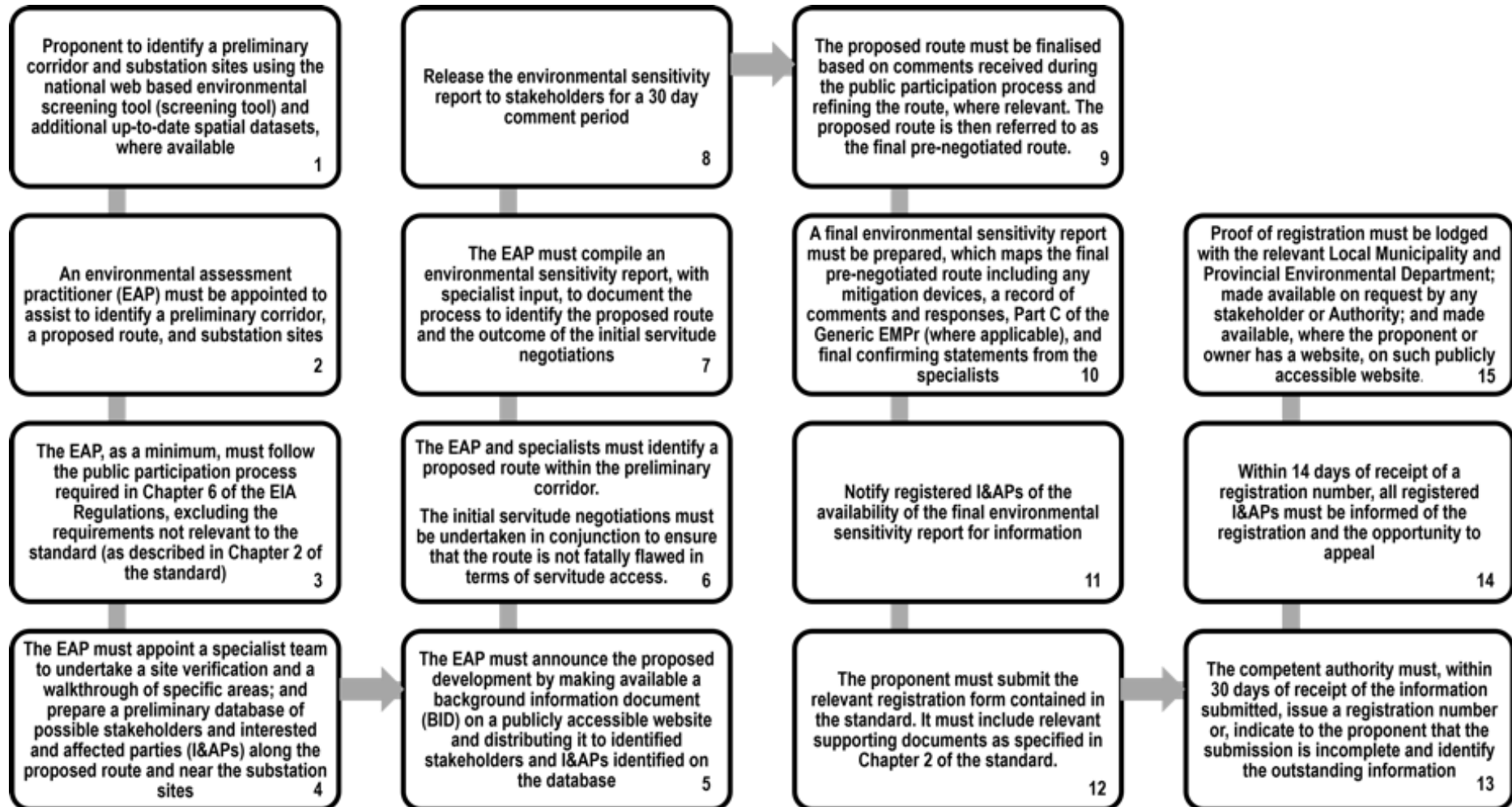
B.10. Defence

The confirming statement must be prepared by an EAP, and must contain, as a minimum, the following information:

71. A signed declaration of independence by the EAP on a form prescribed by the competent authority as contained in Appendix E of this Standard;
72. Confirmation that the affected environment within the *preliminary corridor* is low or medium, as it pertains to aspects of Defence;
73. Identification of defence areas to be avoided within the *preliminary corridor*, including buffers;
74. A defence sensitivity map overlaid with the proposed development footprint (i.e. pylon placement and power line route, as well as supporting infrastructure) based on most recently obtainable and available desktop data, such as the information on the screening tool;
75. Where required, a written comment from the defence authority confirming that there is no unacceptable impact on military areas of interest;
76. Confirmation that any restrictions or design requirements as required by the defence authority have been incorporated and considered;
77. A description on how the identified environmental sensitivity, as it pertains to defence, has been considered in determining the proposed route;
78. A description on how the identified engineering constraints, as it pertains to defence, have been considered in determining the proposed route;
79. A description of the implementation of the mitigation hierarchy in order to determine the proposed route and/or substation location;
80. How the inputs of I&APs were considered when determining the *final pre-negotiated route* and/or substation location and
81. A statement confirming that:
 - a. impact management actions as contained in the pre-approved Generic EMPr template are sufficient for the avoidance, management and mitigation of impacts and risks; or

- b. where required, specific impact management outcomes and actions are required and have been provided as part of the site specific EMPr.

APPENDIX C - GENERIC PROCESS FLOW DIAGRAM OF THE PROCEDURAL REQUIREMENTS



APPENDIX D - SPECIALIST DECLARATION TEMPLATE

Specialist Company Name:			
Specialist name:			
Specialist Qualifications:			
Professional affiliation/registration:			
Physical address:			
Postal address:			
Postal code:		Cell:	
Telephone:		Fax:	
E-mail:			

DECLARATION BY THE SPECIALIST

I, _____, declare that –

- I act as the independent specialist in this Standard registration process;
- I have performed the work relating to the specialist assessment and/or route or substation location confirmation in an objective manner;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist input and confirming statement relevant to this request for registration, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the proponent all material information in my possession that reasonably has or may have the potential of influencing compliance with the Standards registration process; and
- all the particulars furnished by me in this form are true and correct.

Signature of the Specialist:

Name of Company:

Date:

APPENDIX E - ENVIRONMENTAL ASSESSMENT PRACTITIONER DECLARATION TEMPLATE

EAP Company Name:	Ourbiosphere Environmental (Pty) Ltd		
EAP name:	Mr. Musa Netshivhambe (EAPASA, SACNASP)		
EAP Qualifications:	Master of Environmental Sciences		
Professional affiliation/registration:	EAPASA REG 2019/1853 and SACNASP REG 200076/12		
Physical address:	9 Lords Lane Street, Northview Complex, Bendor Park, Polokwane, 0699		
Postal address:	9 Lords Lane Street, Northview Complex, Bendor Park, Polokwane		
Postal code:	0699	Cell:	073 977 9414
Telephone:	086 001 8255	Fax:	086 567 5523
E-mail:	musa@ourbiosphere.co.za		

DECLARATION BY THE EAP

I, Musa Netshivhambe, declare that –

- I act as the independent environmental assessment practitioner in this Standard registration process;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I have complied with the Act, Regulations and all other applicable legislation;
- I have performed the work relating to the Standard registration process in an objective manner;
- I have taken into account, to the extent possible, the matters listed in regulation 13 of the Environmental Impact Assessment Regulations, 2014 (as amended) when preparing the various reports and submitting the request for registration;
- I have disclosed to the Proponent all material information in my possession that reasonably has or may have the potential of influencing the Standard registration process; and the objectivity of any report, plan or document prepared by myself for submission as part of this Standard registration process, other than information that is protected by law, in which case it was indicated that such information exists; and
- I have performed all obligations as expected from an environmental assessment practitioner in terms of the registration process in terms of the Standard.

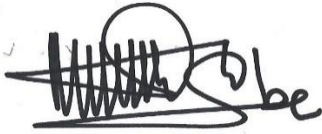
Disclosure of Vested Interest (delete whichever is not applicable)

I do not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of this Standard registration process;

I have a vested interest in the proposed activity proceeding, such vested interest being:

Not Applicable

Signature of the Environmental Assessment Practitioner



Name of Company:

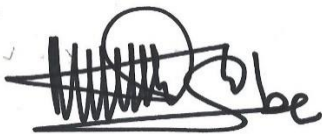
Ourbiosphere Environmental (Pty) Ltd

Date

UNDERTAKING UNDER OATH/ AFFIRMATION

I, Musa Netshivhambe, swear under oath / affirm that all the information submitted for the purposes of this registration is true and correct.

Signature of the Environmental Assessment Practitioner



Name of Company

Ourbiosphere Environmental (Pty) Ltd

Date

Signature of the Commissioner of Oaths

Date

APPENDIX F – REGISTRATION FORM

Registration form to request registration and intent to comply with the *Standard for the Development of Powerlines and Substations within Identified Geographical Areas Revision 1* in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

FOR OFFICE USE ONLY

Date of receipt of the registration form	
Registration number	

PROJECT TITLE

Construction of a new 20MVA 132/22kV OCHENI Substation in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province.

1. This form must always be used when requesting registration in terms of *the Standard for the Development of Power Lines and Substations within Identified Geographical Areas Revision 1*, which allows for the exclusion from the requirement to obtain an environmental authorisation from the competent authority for listed and specified activities identified in the scope of this Standard which are associated with the development of electricity transmission and distribution power lines and substations when developed in areas of low or medium environmental sensitivity within the *Strategic Electricity Corridors*.
2. An electronic copy (in the form of a USB) of the signed registration form must be submitted together with two hard copies (one of which must contain the original signatures of both the proponent and EAP) to the competent authority.
3. All fields must be completed in full. The submission of incomplete information will lead to the registration being returned for inclusion of the missing information.
4. The required information must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing. A legible font type and size must be used when completing the form. The font size should not be smaller than 10pt (e.g. Arial 10).
5. Unless protected by law, all information contained in and attached to this registration form, will become public information on receipt by the competent authority other than personal information of landowners which is for competent authority verification only. Upon request during any stage of the registration process, the proponent / EAP must provide any registered interested and affected party with the information contained in and attached to this registration form other than the personal information of landowners.
6. Please note that where the competent authority is the national department responsibly for the environment, this form must be copied to the relevant Provincial Environmental Department(s) for their information.
7. Shape files of the mapping included in the supporting documentation must be provided on the electronic copy (in the form of a USB). Hartebeesthoek94 WGS84 co-ordinate system must be used.

Departmental Details (example provided is for the national competent authority):

Postal address:

Department of Forestry, Fisheries and the Environment
 Attention: Chief Director: Integrated Environmental Authorisations
 Private Bag X447
 Pretoria
 0001

Physical address:

Department of Forestry, Fisheries and the Environment
 Attention: Chief Director: Integrated Environmental Authorisations
 Environment House
 473 Steve Biko Road
 Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at:
 Email: EIAAdmin@dffe.gov.za

COMPETENT AUTHORITY

Identified competent authority to consider the registration form:	Department of Forestry, Fisheries, and the Environment
Reason(s) in terms of S24C of NEMA:	Eskom is a Parastatal and have a National Footprint in South Africa

DETAILS OF THE PROPONENT

All notifications regarding the registration will be sent to the proponent using the details provided in this section.

Name of the proponent (Company/ Trading Name):	Eskom Distribution (Central East Cluster – KwaZulu-Natal)		
Name of contact person for proponent:	Ms. Tshililo Nekhalale		
RSA Identity/ Passport Number:	7706200569080		
Responsible position, e.g. Director, CEO, etc.:	Manager : Environmental Management		
Company Registration Number:	2002/015527/30		
BBBEE status:	Level 8		
Physical address:	25 Valley View Road, New Germany, 3620		
Postal address:	25 Valley View Road, New Germany,		
Postal code:	3620	Cell:	083 229 2295
Telephone:	031 710 5044	Fax:	086 666 9403
E-mail:	NekhalT@eskom.co.za		

The originally signed declaration by the proponent confirming commitment to comply with the *Standard for the Development of Power Lines and Substation within Identified Geographical Areas Revision 1* in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), must be submitted as Appendix 9 of the registration form.

Where a change of ownership of a registered development in terms of paragraph 16 occurs during the pre-construction or construction phases of the infrastructure, the registration number is retained by the new owner, however the new owner must submit the declaration by the proponent of commitment to implement

the Standard (included as Appendix 9) and the declaration to implement Part B – Section 1 of the Generic EMPr for overhead power lines and substations, and where applicable Part C, within 30 days upon finalisation of such change. There is no requirement for re-registration once the infrastructure has been constructed as the operation of a power line and substation are not identified activities in terms of the Act.

LANDOWNER CONTACT DETAILS

Please note that the Department of Forestry, Fisheries and the Environment complies with the Protection of Personal Information Act, 2013 (Act No. 4 of 2013) and the personal information of landowners is for the use of the Department only for verification if necessary of pre-negotiation of the route only.

Name of the landowner:	Inkosi Philuswa Costa Zubane		
Name of contact person for landowner (if other):	Inkosi Philuswa Costa Zubane		
Postal address:	P.O.Box 419, Maphumulo,		
Postal code:	4470	Cell:	081 830 0635
Telephone:		Fax:	
E-mail:	nkosiecosta@gmail.com		

Name of Person in control of the land:	Inkosi Philuswa Costa Zubane		
Name of contact person for person in control of the land:	Inkosi Philuswa Costa Zubane		
Postal address:	P.O.Box 419, Maphumulo,		
Postal code:	4470	Cell:	081 830 0635
Telephone:		Fax:	
E-mail:	nkosiecosta@gmail.com		

In instances where there is more than one landowner, please attach a list of those landowners with their contact details in Appendix 3 of this registration form.

PROVINCIAL ENVIRONMENTAL AUTHORITY AND LOCAL MUNICIPALITY CONTACT DETAILS

Provincial Environmental Authority:	Kwazulu-Natal Department of Economic Development, Tourism and Environmental Affairs		
Name of contact person:	Mr. Muziwandile Mdamba		
Postal address:	Next to sports complex in Veld en Vlei, corner Aloe & Loop Street, Richards Bay		
Postal code:		Cell:	082 822 2582
Telephone:	(035) 780 0313	Fax:	(035) 780 0315
E-mail:	muziwandile.mdamba@kznedtea.gov.za		
Local Municipality:	Maphumulo Local Municipality		
Name of contact person in (Environmental Section)	Mr C.S Mhlongo		
Postal address:	Private Bag X9205, Maphumulo, 4470		
Postal code:		Cell:	
Telephone:	032 481 4500	Fax:	
E-mail:	sikhululekile.mhlongo@maphumulo.gov.za		

In instances where there is more than one Provincial Environmental Authority and Local Municipality involved, please attach a list of these Authorities with their contact details in Appendix 4 of this registration form.

ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

Company of Environmental Assessment Practitioner: B-BBEE	Ourbiosphere Environmental (Pty) Ltd		
EAP name:	Contribution level (indicate 1 to 8 or non-compliant)	Level 1	Percentage Procurement recognition
EAP Qualifications:	Musa Netshivhambe		
Professional affiliation/registration:	Master of Environmental Sciences		
Physical address:	EAPASA REG NO: and SACNASP REG NO:		
Postal address:	9 Lords Lane Street, Northview Complex, Bendor Park, Polokwane, 0699		
Postal code:	0699	Cell:	073 977 9414
Telephone:	086 001 8255	Fax:	086 567 5523
E-mail:	musa@ourbiosphere.co.za		

The appointed EAP must meet the requirements of regulation 13 of the EIA Regulations, 2014 as amended. The declaration of independence of the EAP and undertaking under oath or affirmation that all the information submitted for the purposes of the registration is true and correct must be submitted and included in Appendix 11. Curriculum Vitae of the EAP and specialists must be included in Appendix 12.

PROJECT INFORMATION AND MAPS

Please provide a **detailed** description of the project:

Eskom have received an environmental authorization for the application of Environmental Authorisation in terms of the National Environmental Management Act, 1998: GN R543, R544 and R546: Construction of a new 20MVA 132/22kV Ocheni Substation in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province, obtained on 29 August 2017 as amended.

Eskom have commenced with the construction of this project through Survey work on the ground, however Eskom noted that the approved location of Ocheni Substation as per the Environmental Authorization is now being utilized as a Shembe temple location.

This have necessitated Eskom to relocate the currently authorised substation to slightly ± 25 metres backwards. This new substation location will be occurring within the authorised powerline corridor. Eskom therefore have approached the Department of Forestry, Fisheries and Environment (DFFE) to seek advice on how to proceed with the amendment of the environmental authorization before the continuation of the substation construction. The first consultation meeting with the following REF: 2023-01-0006 was held on January 27, 2023, with the officials from DFFE. Eskom requested to have the substation follow the Electricity Grid Infrastructure (Transmission Strategic Corridors) Process. And the second Pre-Application meeting with the following ref No: 2024-01-0005/0006 was held on 07 February 2024

to discuss final inputs on the EGI process.

Please indicate which gazetted Strategic Transmission Corridor the project will take place in:

The Proposed Ocheni Substation site relocation project falls within the Expanded Electricity Grid Infrastructure (EGI) [Expanded Eastern Corridor] that is, it is located within the Eastern Strategic Transmission Corridor to be precise as per the National Environmental Management Act, 1998 (Act NO.107 of 1998) Standard No 383 of 29 April 2021 as gazetted. The Standard identification is in terms of sections 24(3), 24(5)(1) and 24(5)(b) of the National Environmental Management Act, 1998 of expanded geographical areas of strategic importance for the development of electricity transmission and distribution infrastructure.

When read in conjunction with as expansion of the Strategic Transmission Corridors published in Government Notice No. 113 under Government Gazette No. 41445 on 16 February 2018, as set out in the Schedule hereto. Eskom intends to be excluded through exclusions and/ or specific requirements of Basic Assessment Process. The EGI process is in accordance to Notice of identification in terms of Section 24(5)(a) and (b) of the National Environmental Management Act, 1998, of the procedure to be followed in applying for Environmental Authorisation for large scale Electricity Transmission and Distribution Development activities identified in terms of Section 24(2)(a) of the National Environmental Management Act, 1998 when occurring in geographical areas of strategic importance.

A copy of the final Screening Tool Report generated on the National Web Based Environmental Screening Tool for the proposed pre-negotiated route and any substation where relevant must be attached as Appendix 1 of the registration form.

A copy of the final environmental sensitivity report as required in the *Standard for the Development of Power Lines and Substations within Identified Geographical Areas Revision 1* must be submitted as Appendix 2 of the registration form.

A locality map must be attached to Appendix 6 of the registration form. For linear activities of more than 25 kilometres, a small scale e.g. 1:250 000 can be used. The scale must be indicated on the map. The map must include the following:

- an accurate indication of the project site position;
- location of the gazetted Strategic Transmission Corridor(s);
- road names or numbers of all the major roads as well as the roads that provide access to the site(s)
- a north arrow;
- a legend;
- a scale bar; and
- GPS co-ordinates (Indicate the position of the proposed activity with the latitude and longitude at strategic points along the route of the power line. The co-ordinates should be in degrees and

decimal minutes. The minutes should be to at least three decimal places. The projection that must be used in all cases is the WGS-84 spheroid in a national or local projection).

A final pre-negotiated route plan and/or any substation location where relevant must be attached to Appendix 7 of the registration form.

The sensitivity map must be attached as Appendix 8 of the registration form. The map must include the following:

- a north arrow;
- a legend;
- a scale bar;
- site sensitivities, including but not limited to vegetation, wetlands, watercourses, heritage sites, critical biodiversity area/s, world heritage site, etc. and it must be overlaid by the study area and proposed electricity grid infrastructure and/or any substation where relevant.

SITE DESCRIPTION

Provide a detailed description of the site involved in the registration.

Province/s	KwaZulu-Natal
District Municipality/ies	iLembe District Municipality
Local Municipality/ies	Maphumulo Local Municipality
Ward number/s	6
Nearest town/s	Maphumulo
Farm name/s and number/s	UMPOMULA MISSION RESERVE 8308 FU
Portion number/s	NOFU0000

Surveyor General 21 digit codes for the route alignment, which can be obtained from the screening report:

N	0	F	U	0	0	0	0	0	0	0	0	8	3	0	8	0	0	0	0	0
1	2			3								4							5	

If there are more than 4, please attach a list with the rest of the codes. Where the 21 digit SGID and farm name are not available, the coordinates of the boundary of the property or properties must be provided in Appendix 5 of this registration form.

LIST OF APPENDICES

		SUBMITTED	
APPENDIX 1	Final screening tool report for the final proposed pre-negotiated route and/or the location of any substation where relevant	YES	NO
APPENDIX 2	Final environmental sensitivity report	YES	NO
APPENDIX 3	List and contact details of land owners	YES	NO
APPENDIX 4	List and contact details of provincial environmental authority and local municipality	YES	NO
APPENDIX 5	List of SGIDs/coordinates of the boundary of the property or properties	YES	NO
APPENDIX 6	Locality map	YES	NO
APPENDIX 7	Final pre-negotiated route plan of the electricity grid infrastructure and/or the location of any relevant substation	YES	NO
APPENDIX 8	Sensitivity map	YES	NO

APPENDIX 9	Declaration of the proponent: commitment to implement the Standard	YES	NO
APPENDIX 10	Declaration of the proponent: commitment to implement the Generic and where relevant the site specific environmental management programme	YES	NO
APPENDIX 11	Declaration of EAP and undertaking under oath or affirmation	YES	NO
APPENDIX 12	Curriculum vitae of the EAP and specialists	YES	NO

APPENDIX 1:

**FINAL SCREENING TOOL REPORT FOR THE FINAL PROPOSED PRE-NEGOTIATED ROUTE
AND/OR THE LOCATION OF ANY SUBSTATION WHERE RELEVANT**

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS
REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE
ENVIRONMENTAL SENSITIVITY**

EIA Reference number: 12/12/20/2271

Project name: Ocheni Substation

Project title: Construction of the new 132/22 kV Ocheni Substation and the associated 132kV powerline, Ref No: 12/12/20/2271.

Date screening report generated: 04/03/2023 13:29:08

Applicant: Eskom KZN Operating Unit

Compiler: Ourbiosphere Environmental (Pty) Ltd

Compiler signature:

.....

Application Category: Utilities Infrastructure | Electricity | Distribution and Transmission | Substation

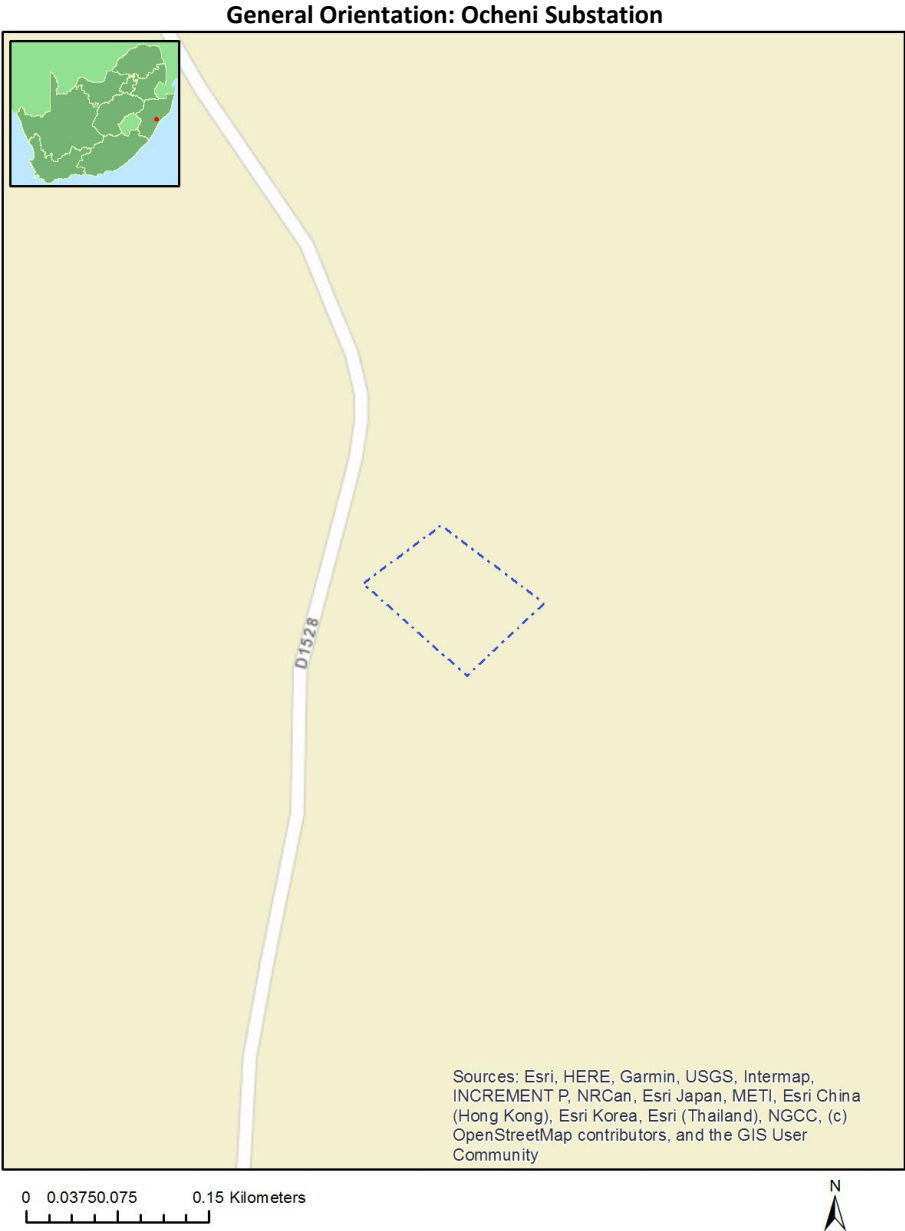


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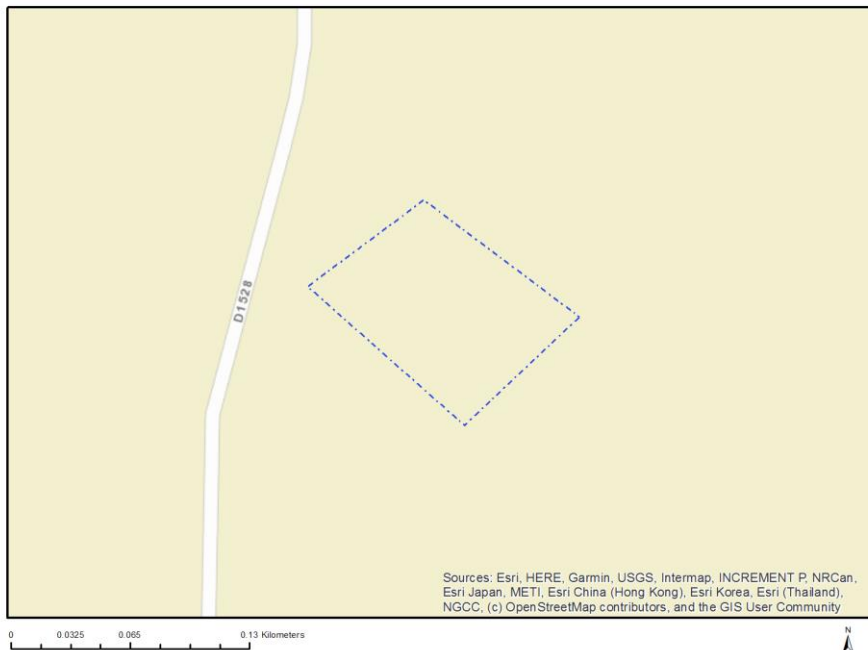
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Proposed Project Location

Orientation map 1: General location



Map of proposed site and relevant area(s)



Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	UMPOMULA MISSION RESERVE	8308	0	29°10'11.42S	31°0'57.09E	Farm
2	UMPOMULA MISSION RESERVE	8308	6	29°10'11.42S	31°0'57.09E	Farm Portion

Development footprint¹ vertices:

No development footprint(s) specified.

Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No nearby wind or solar developments found.

Environmental Management Frameworks relevant to the application

¹ "development footprint", means the area within the site on which the development will take place and includes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

No intersections with EMF areas found.

Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is:

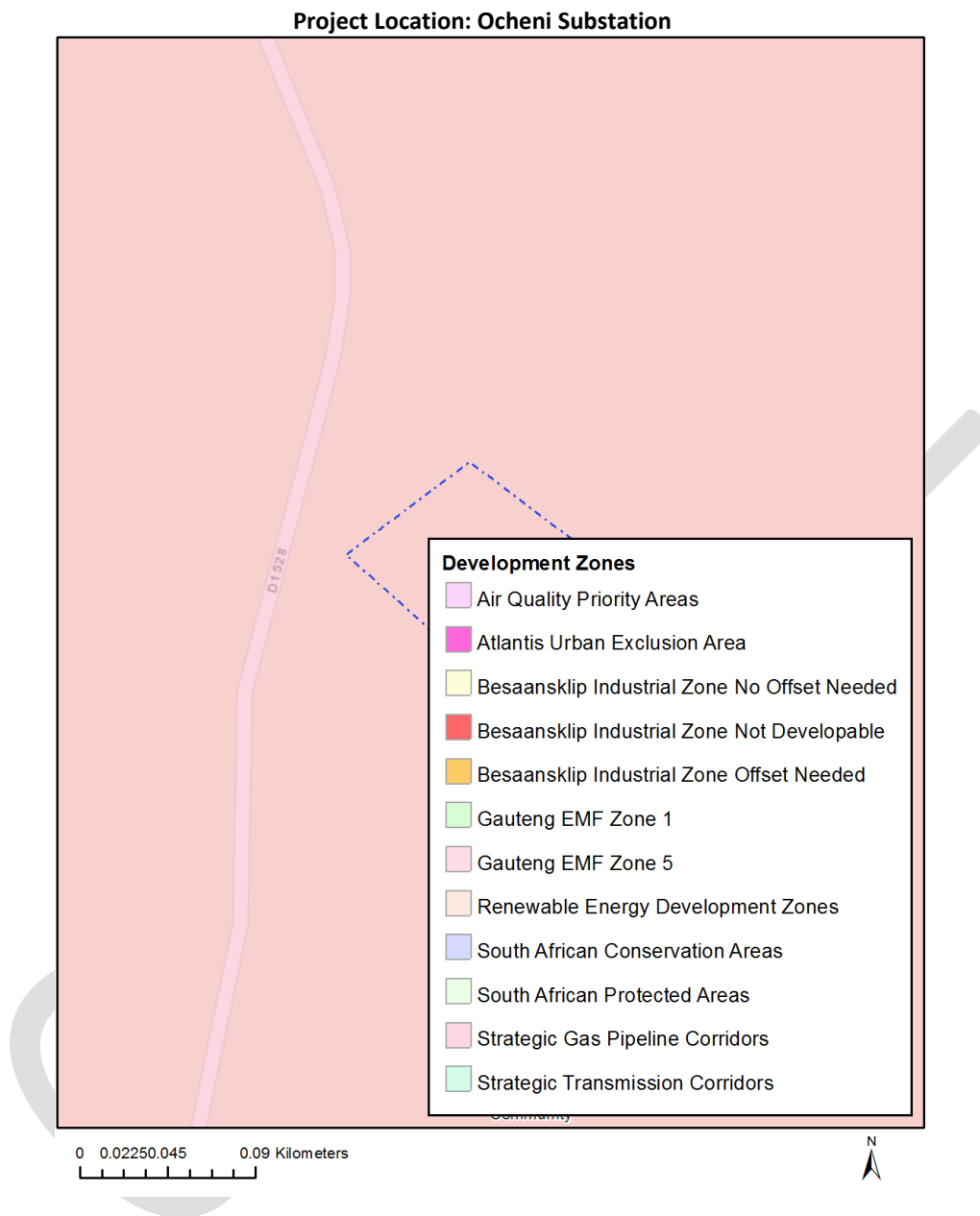
Utilities Infrastructure | Electricity | Distribution and Transmission | Substation.

Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

Incentive, restriction or prohibition	Implication
Strategic Transmission Corridor- Eastern Corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
Strategic Transmission Corridor- Expanded Eastern Corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
Strategic Gas Pipeline Corridors- Phase 7: Coega to Richards Bay	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones



Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme		X		
Animal Species Theme			X	

Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme				X
Civil Aviation Theme			X	
Defence Theme				X
Paleontology Theme				X
Plant Species Theme				X
Terrestrial Biodiversity Theme	X			

Specialist assessments identified

Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

N o	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf
2	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
5	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf
6	Geotechnical Assess	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf

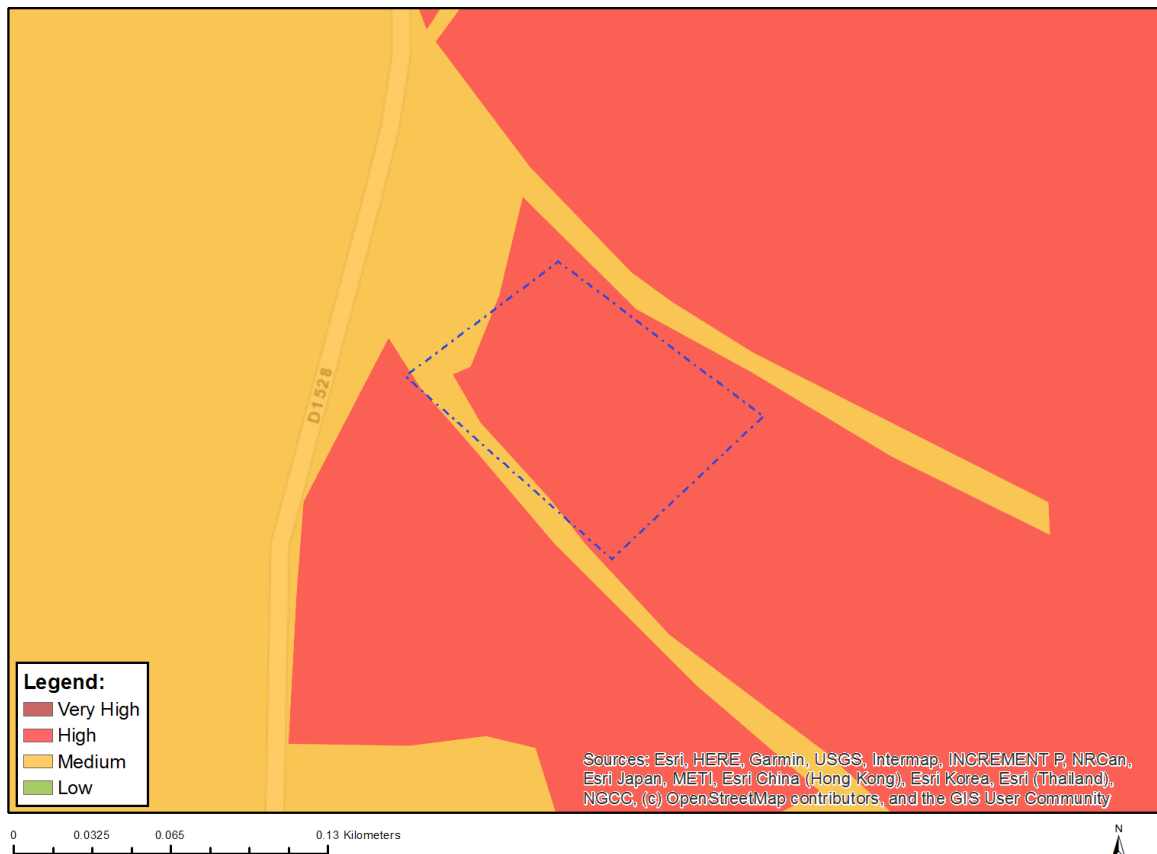
	ment	
7	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
8	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf

OFFICIAL

Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

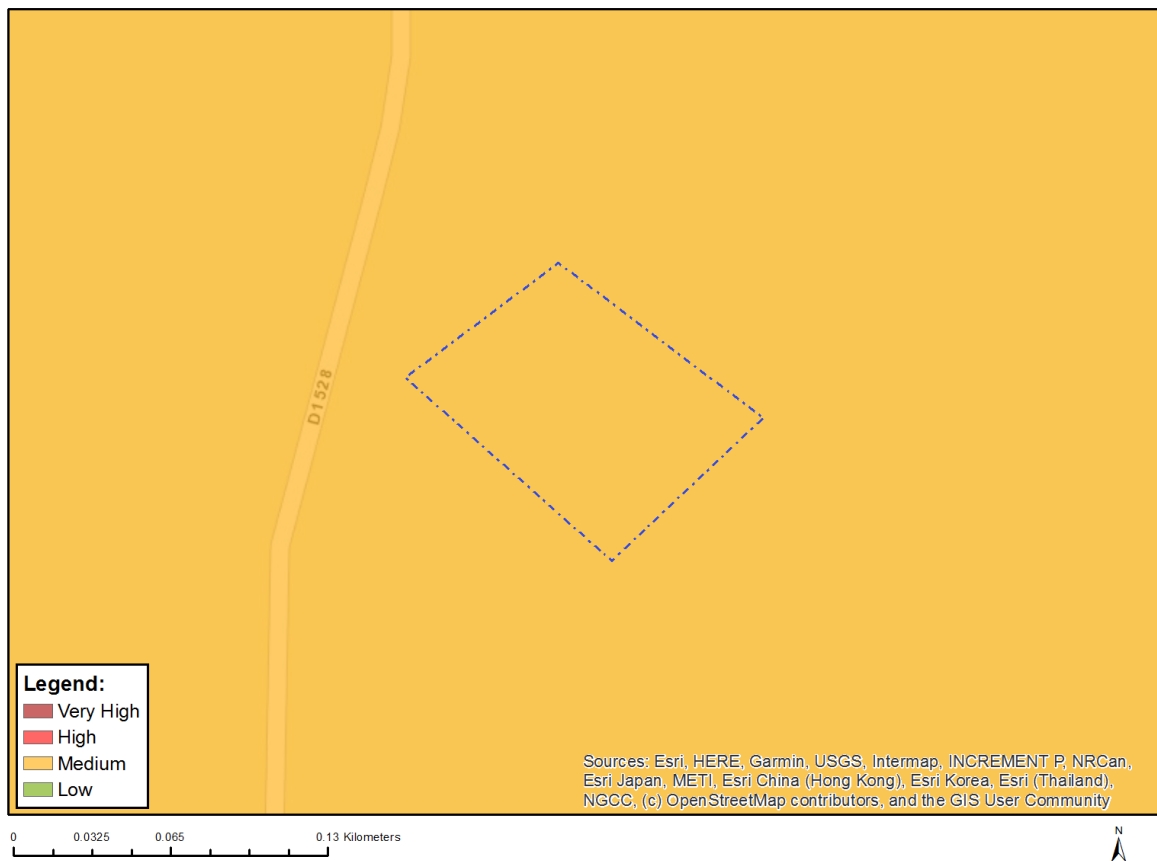


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Subsistence Farming 1; Land capability; 06. Low-Moderate/07. Low-Moderate/08. Moderate
Medium	Land capability; 06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



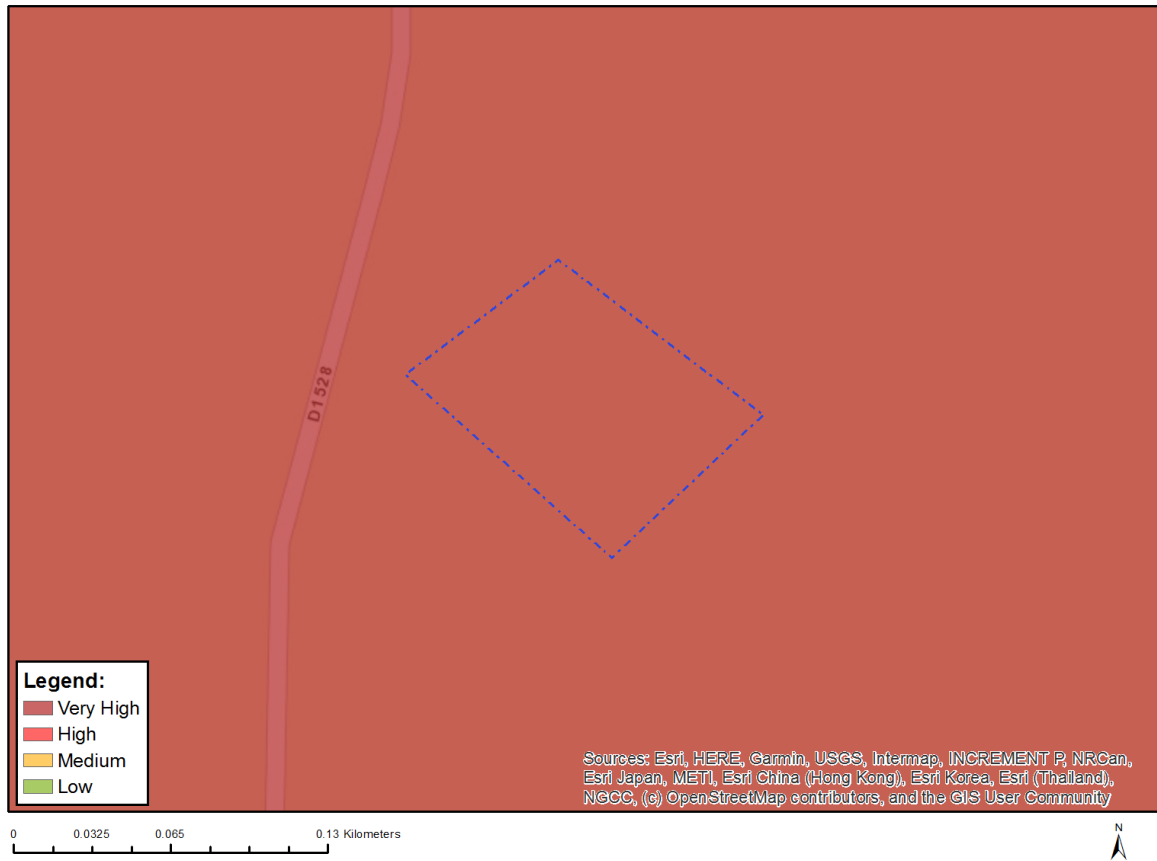
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Mammalia-Chrysospalax villosus
Medium	Mammalia-Ourebia ourebi ourebi
Medium	Sensitive species 8
Medium	Invertebrate-Arytropteris basalis

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

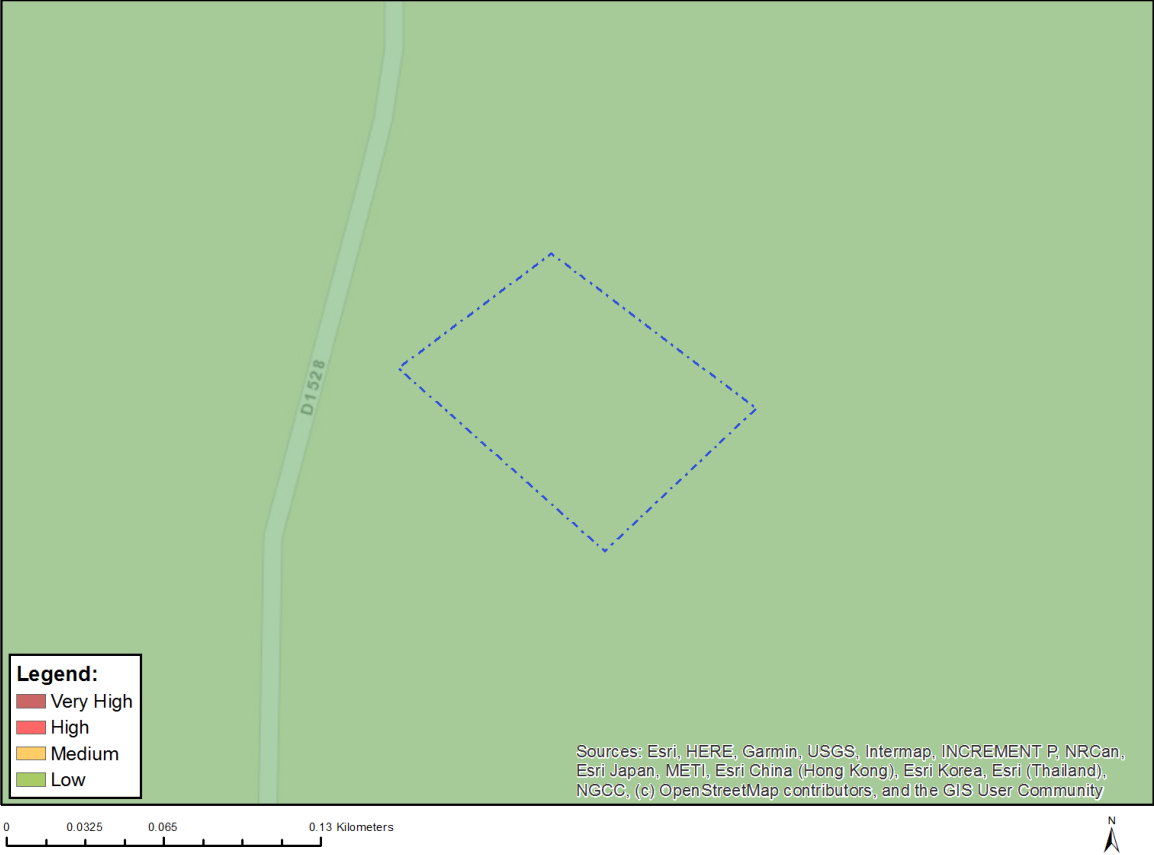


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	Strategic water source area

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

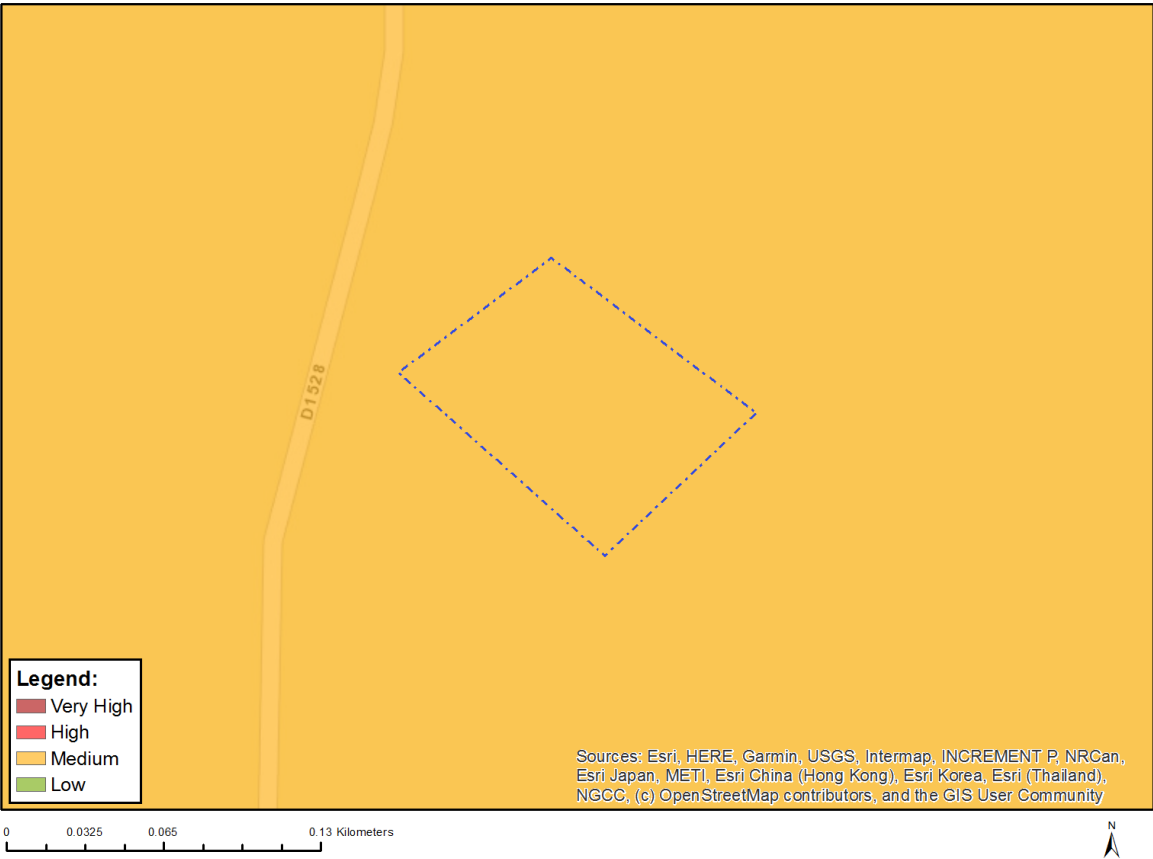


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

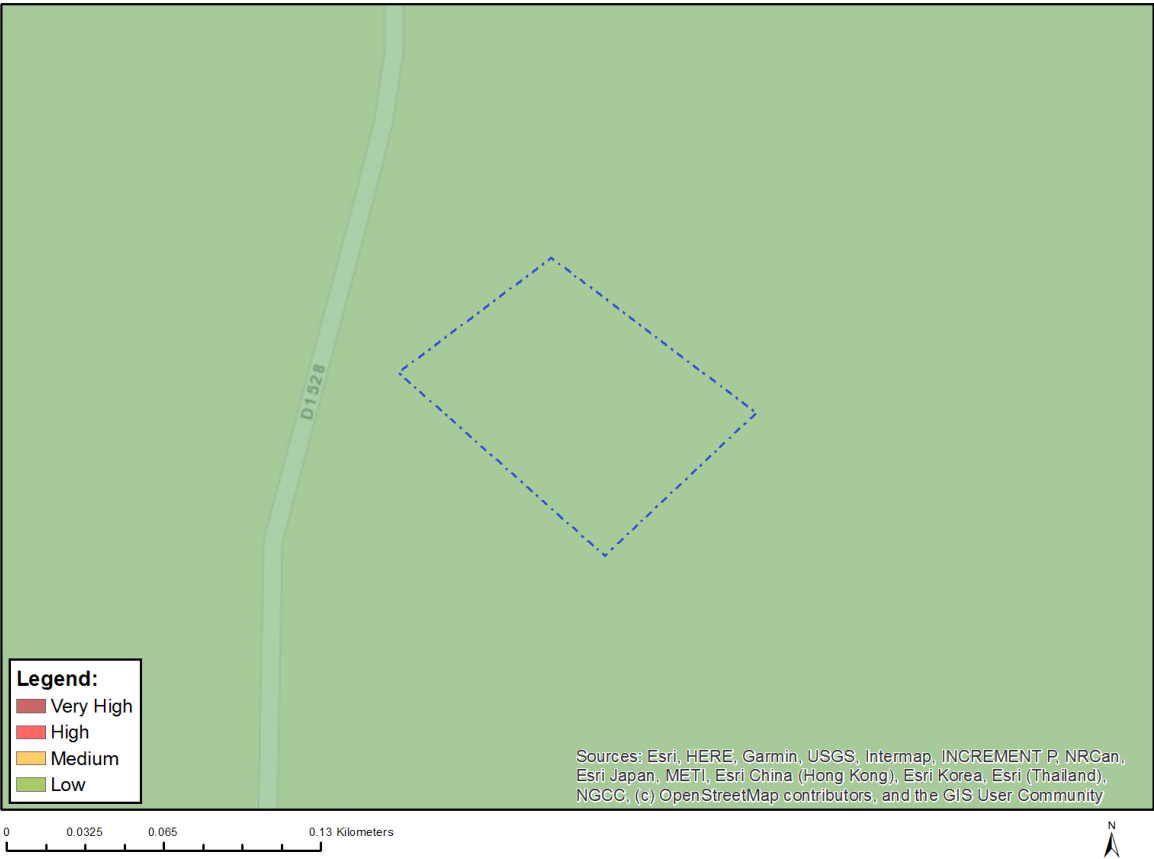


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Between 8 and 15 km of other civil aviation aerodrome

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

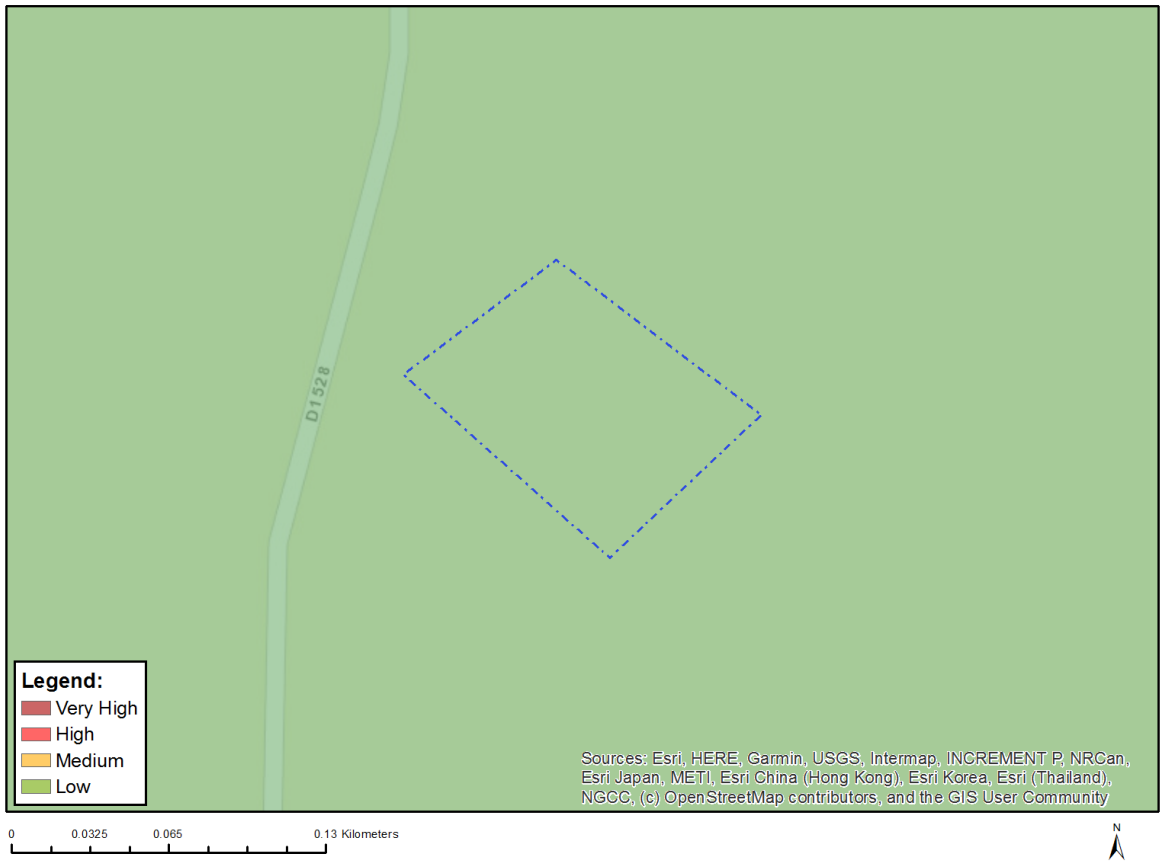


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

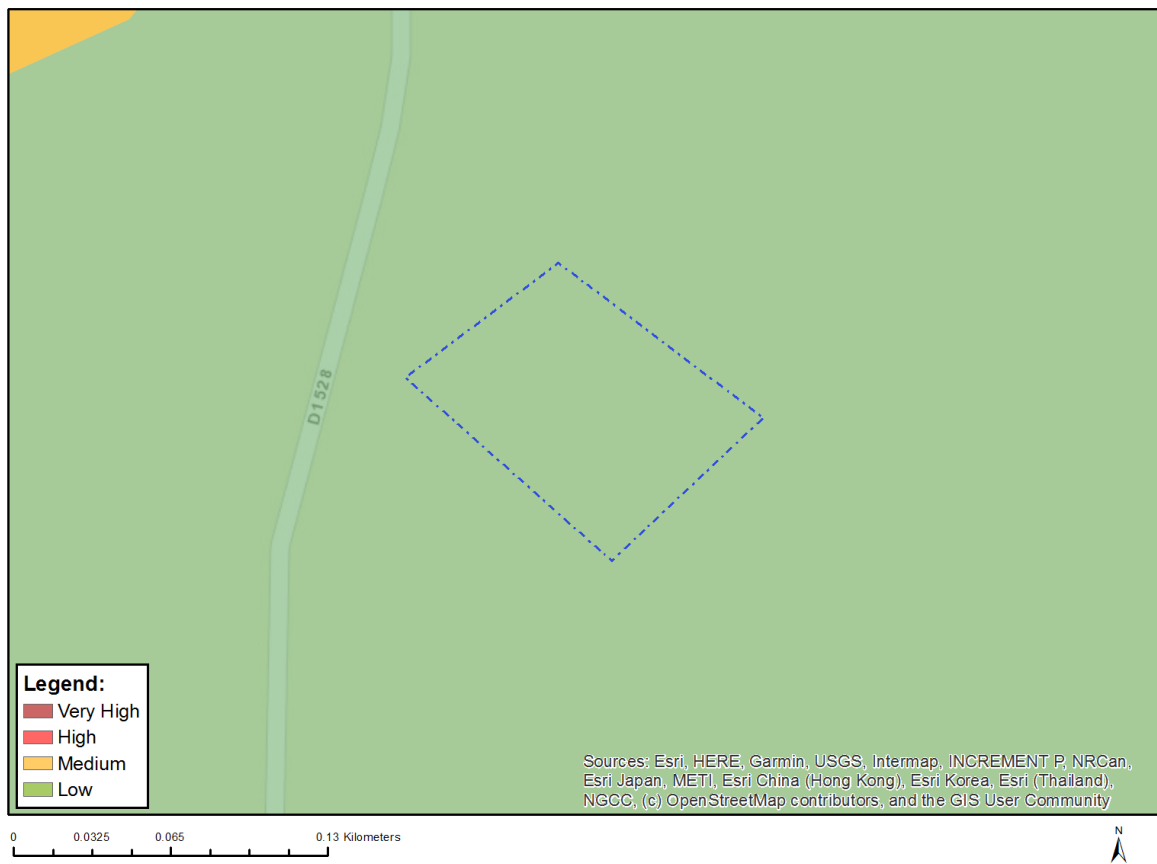


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Features with a Low paleontological sensitivity

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



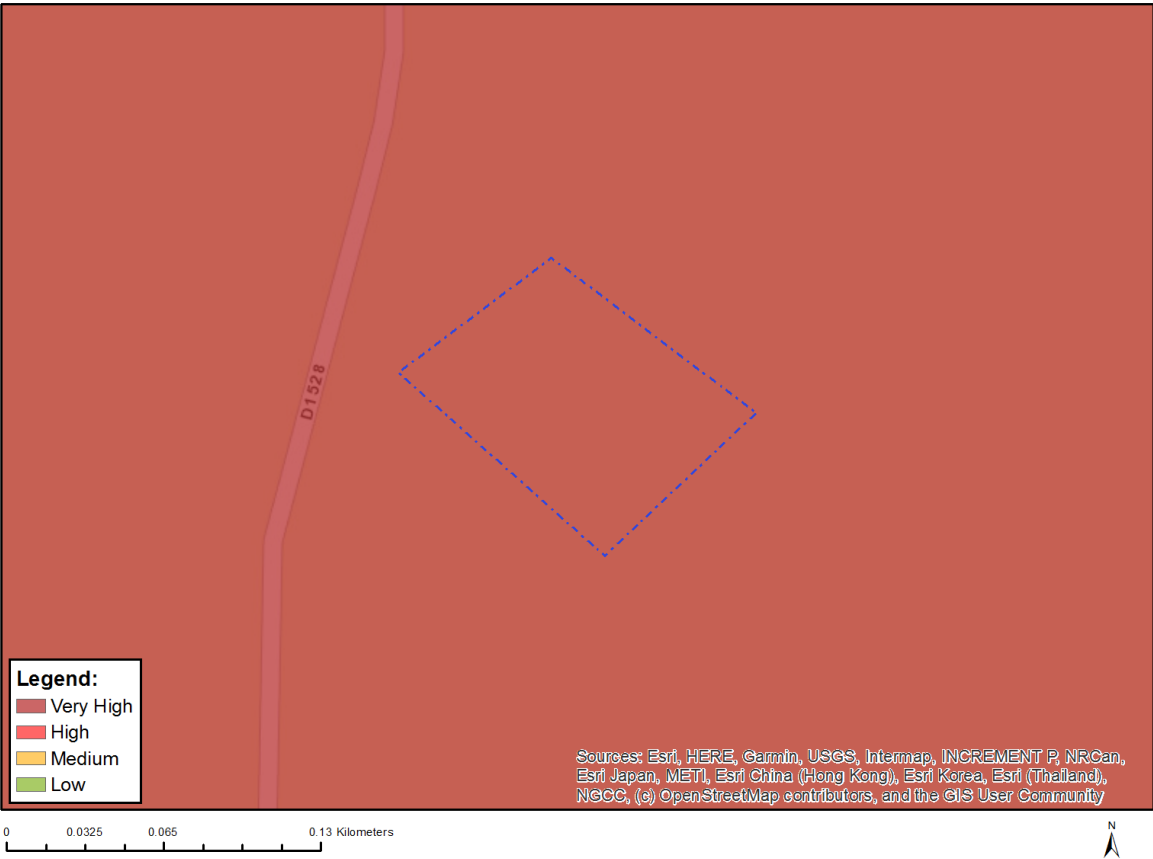
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	Endangered ecosystem

APPENDIX 2:

FINAL ENVIRONMENTAL SENSITIVITY REPORT



OURBIOSPHERE
— ENVIRONMENTAL —

**FINAL ENVIRONMENTAL SENSITIVITY
REPORT**

DFFE REF: 2024-01-0005/0006

**Construction of a new 20MVA 132/22kV
OCHENI Substation in Maphumulo within
Maphumulo Local Municipality in the
Kwazulu-Natal Province.**

**Web Based Environmental Screening Tool
and 20 MVA 132/22 kV Ocheni Substation Site
Assessment Verification Report**

Prepared For:

Eskom KZN Operating Unit

**Nandipa Mbili: Environmental Management
Officer, Land Development**

February 2024

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i) List of Abbreviations

Terms	Description
BRP	Bioregional Plan
BSP	Biodiversity Sector Plan
CBA	Critical Biodiversity Area
CARA	Conservation of Agricultural Resources Act 43 of 1983
CR	Critically Endangered (IUCN threat category)
DFFE	National Department of Agriculture, Forestry and Fisheries
The district	The iLembe District Municipality
DPLG	The Department of Provincial and Local Government
DWS	The Department of Water and Sanitation
EI	Ecological Infrastructure
EIA	Environmental Impact Assessment
EKZNW	Ezemvelo KwaZulu-Natal Wildlife as defined in Act 9 of 1997 to be the KZN Nature Conservation Service
EN	Endangered (IUCN threat category)
EMF	Environmental Management Framework
EMPr	Environmental Management Programme
ESA	Ecological Support Area
ESCA	Estuarine Systematic Conservation Assessment
FEPA	Freshwater Ecosystem Priority Area
GIS	Geographic Information System
IUCN	International Union for Conservation of Nature
KZN	KwaZulu-Natal Province of the Republic of South Africa
NEMA	The National Environmental Management Act 107 of 1998
NEMBA	National Environmental Management Biodiversity Act 10 of 2004
NEMPAA	National Environmental Management Protected Areas Act 57 of 2003
NBA	The National Biodiversity Assessment
NPAES	National Protected Area Expansion Strategy
SANBI	The South African National Biodiversity Institute
SEA	Strategic Environmental Assessment
SCA	Systematic Conservation Assessment
SDF	Spatial Development Framework
TFCA	Transfrontier Conservation Areas (TFCA)

ii) List of Definitions

Term	Description
Bioregional Plan (BRP)	A district-based plan which identifies priority biodiversity areas (CBAs and ESAs) and provides associated planning and decision-making guidelines for a range of sectors whose actions, policies, and decisions impact on biodiversity. Once adopted, the BRP has to be considered in all the planning and assessment tools used within a bioregion. Bioregions have been identified as a District Municipality.
Biodiversity Sector Plan (BSP)	A precursor to the BRP which includes a biodiversity priorities area map and associated management guidelines. BSPs incorporate provincial biodiversity conservation priorities and other available information to determine the Critical Biodiversity Areas (CBA) and Ecological Support Areas (ESA) within a bioregion which is then used for the development of a Bioregional Plan.

Buffers	There are three main forms of buffer which are considered in the creation of the KZN Biodiversity Planning process; namely those that reflect land-use management guideline principals associated with agreements and/or conventions, those that must be considered in order to better reflect a mapped feature (e.g., buffer a river line to more accurately reflect the width aspect associated with the feature in question), and those that are associated with geographical feature and/or a specific species that are required to ensure the persistence of that feature or specific species.
Critical Biodiversity Area (CBA)	Natural or near-natural features, habitats or landscapes that include terrestrial, aquatic, and marine areas that are considered critical for (i) meeting national and provincial biodiversity targets and thresholds (ii) safeguarding areas required to ensure the persistence and functioning of species and ecosystems, including the delivery of ecosystem services; and/or (iii) conserving important locations for biodiversity features or rare species. Conservation of these areas is crucial, in that if these areas are not maintained in a natural or near-natural state, biodiversity conservation targets cannot be met.
CBA: Expert Input	Areas of natural or near natural state which are identified by local experts as being of high biodiversity importance based on the feature's uniqueness, rarity and/ or critical endangered threat status, and where the suitability and condition has been verified or there is high confidence in the data.
CBA Irreplaceable	Areas considered critical for meeting biodiversity targets and thresholds, and which are required to ensure the persistence of viable populations of species and the functionality of ecosystems. This category is a combination of three subcategories, namely CBA: Irreplaceable (SCA), CBA: Irreplaceable linkage and CBA: Expert Input.
CBA Irreplaceable (SCA)	Areas which are required to meet biodiversity conservation targets, and where there are no alternative sites available. (Category driven by species and feature presence). Derived from the Systematic Conservation Assessment and is a combination of the SCA subcategories, CBA Irreplaceable and CBA High Irreplaceability
CBA Irreplaceable: SCA-Subcategory Irreplaceable	Areas identified as having an Irreplaceability value of 1, these planning units represent the only localities for which the conservation targets for one or more of the biodiversity features contained within can be achieved i.e., there are no alternative sites available
CBA Irreplaceable: SCA Subcategory High Irreplaceable	Areas of significantly high biodiversity value. In C-Plan analyses, these areas are identifiable as having an Irreplaceability score of ≥ 0.8 and < 1.0 whilst the MARXAN equivalent is reflected in PU's displaying a selection frequency value of between 80 – 100%
CBA: Irreplaceable Linkage (Terrestrial)	Areas within Terrestrial Landscape Corridors that, due to the modification of the natural landscape within and surrounding the corridor, represent the only remaining and highly constrained link (i.e., pinch point on corridor) which, if lost, would result in the breakage of the corridor and corridor network. These areas are vital in maintaining the linkage of the corridor and its associated biodiversity related processes.
CBA: Irreplaceable Linkage (Aquatic)	National flagship rivers as identified through the Freshwater Ecosystem Priority Area's project.
CBA Optimal	Areas that represent an optimised solution to meet the required biodiversity conservation targets while avoiding areas where the risk of biodiversity loss is high Category driven primarily by process but is also informed by expert input. This category is a combination of two subcategories, namely CBA: Optimal (SCA) and CBA: Optimal Expert Input.
CBA Optimal Expert Input	Areas of natural or near natural state which are identified by local experts as being of biodiversity importance based on (i) the feature's endangered or vulnerable threat status and a high confidence in the data. (ii) the feature qualifying for CBA Irreplaceable but having a medium confidence in the data and requiring site verification to increase data confidence level to High

CBA Optimal (SCA)	Areas which represent the best localities out of a potentially larger selection of available planning units that are optimally located to meet both the conservation target but also the criteria defined by the Decision Support Layers or the Cost Layers, which weigh the risk of loss of biodiversity in areas. Using C-Plan, these areas are identified through the MINSET analysis process and reflect the negotiable sites with an Irreplaceability score of less than 0.8. Within the C-Plan MINSET analysis this does not mean they are of a lower biodiversity value however, only that there are more. alternate options available within which the features located within can be met.
Ecological Infrastructure	Functional landscapes that provide ecological goods and services to society. These areas are not necessarily required to meet conservation targets but are important to promote water security, assist disaster relief (e.g., flooding), prevent soil loss and in maintaining or improving key services such as clean water for domestic and recreational use.
Ecological Support Area	Functional, but not necessarily entirely natural, areas that are required to ensure the persistence and maintenance of biodiversity patterns and ecological processes within the Critical Biodiversity Areas. This category is made up of four subcategories: namely Ecological Support Areas (SCA), ESA: Expert input, ESA: Species Specific and ESA: Corridors
Ecological Support Area: Corridors	Corridors made up of Landscape and Local Corridors
Ecological Support Area: Expert Input	Areas identified by local experts as areas of functional but not necessarily entirely natural areas that are required to ensure the persistence and maintenance of biodiversity patterns and ecological processes within the Critical Biodiversity Areas.
Ecological Support Area: Species Specific	Areas required for the persistence of specific species. Although these areas are frequently modified, a change in current land use, to anything other than rehabilitated land, would most likely result in a loss of that feature from the area.
Ecosystem goods and services	Ecosystem services are direct and indirect benefits derived from the natural environment (ecological infrastructure), and include production services such as food and oxygen, regulatory services such as flood attenuation and pollination, spiritual & knowledge services and space services, such as settlement areas and farmland.
Endemism	The ecological state of being unique to, or only found within a defined geographic location, such as a habitat, island, country, etc.
Flagship Rivers	Flagship rivers are rivers that have been identified as (i) been representative of Free-Flowing Rivers and (ii) having high importance based on ecosystem processes and biodiversity values.
Flagship species	A species that is selected as an icon/symbol within the environment. Such species are chosen because of their vulnerability, attractiveness and/or distinctiveness in order to attract support and acknowledgment from society. The conservation of specific habitats and ecosystems to support such species provides for the protection of the other less charismatic species within the area.
Free Flowing Rivers	Free flowing rivers are rivers that flow undisturbed (not dammed/impounded) from its source to the confluence with another large river or to the sea. Where such a river must be permanent or seasonal flowing and have an 'A or B' ecological category (good condition), with inland rivers have a minimum length of 50 kms (Driver, A et al, 2011)
Freshwater Ecosystem Priority Areas	Freshwater Ecosystem Priority Areas (FEPAs) are strategic spatial priorities for conserving freshwater ecosystems and supporting sustainable use of water resources. The National Freshwater Ecosystem Priority Areas Project determined the FEPAs through a process of systematic biodiversity planning and expert input, using a range of criteria dealing with maintenance of key ecological processes and the conservation of ecosystem types and species associated with rivers, wetlands, and estuaries.

High Potential Agricultural land	Land having the soil and terrain quality, growing season and available moisture supply needed to produce sustained high yields of crops (cash crops or planted pastures) economically when treated and managed according to best possible farming practices (Collett & Mitchell, 2012).
Landscape Corridors	A series of bio-geographic corridors created in KZN to facilitate ecological and climate change processes to create a linked landscape for the conservation of species in a fragmented landscape.
Landscape Corridors: Aquatic	Aquatic landscape corridors are to facilitate movement of aquatic species and are the KZN Flagship Rivers.
Landscape Corridors: Terrestrial	A series of altitudinal and biogeographic corridors to facilitate, ecological and climate change processes and to create a linked landscape for the conservation of species in a fragmented landscape.
Local Corridors	Terrestrial and Aquatic corridors developed at a District scale to create fine scale links within the landscape that facilitates ecological processes and ensure persistence of critical biodiversity features.
National Threatened Ecosystems	National Threatened Ecosystems are provided for in the National Environmental Management: Biodiversity Act (Act 10 of 2004), these areas represent threatened and protected ecosystems categorised according to one of four categories (Critically Endangered, Endangered, Vulnerable and Protected Ecosystems). Within this Act, it is stated that both Critically Endangered and Endangered Ecosystems must be considered as part of Critical Biodiversity Areas.
Protected Area	Formally Protected Areas declared under NEMPAA. Such areas form the backbone of the conservation network and are critical in their contribution to the achievement of conservation objectives in the province.
Red List	Identifies the status of threatened species in terms of threat categories, namely: Critically Endangered, Endangered, Vulnerable, Near Threatened and Data Deficient.
Systematic Conservation Assessment	An approach to conservation that prioritises actions by setting quantitative targets for biodiversity features such as broad habitat units or vegetation types. It is premised on conserving a representative sample of biodiversity pattern, including species and habitats (the principle of representation), as well as the ecological and evolutionary processes that maintain biodiversity over time (the principle of persistence).

i) EXECUTIVE SUMMARY

Eskom have received an environmental authorization for the application of Environmental Authorisation in terms of the National Environmental Management Act, 1998: GN R543, R544 and R546: For the Construction of a new 20MVA 132/22kV Ocheni Substation in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province, obtained on 29 August 2017 as amended.

Eskom have since therefore approached the Department of Forestry, Fisheries and Environment (DFFE) to seek advice on how to include the original site on the authorization before construction commencement.

With regard to the site verification of the environmental sensitivity ratings as suggested by the National Web Based Environmental Screening Tool, the following statements are concluded after a verification site visit was conducted as well as research from other relevant Provincial Resources were consulted, i.e., Ezemvelo Kwazulu-Natal Wildlife (EKZNW).

The summary of the Ocheni Substation development site's environmental sensitivities has been identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and has been verified on site by a registered EAPASA and SACNASP Environmental Assessment Practitioner (EAP).

Ocheni substation site area falls within Strategic Transmission Corridors (EGI) -Expanded Eastern Corridor as gazetted by Government Notice No. 114 in Government Gazette No. 41445. This zone includes EGIs and identifies 5 strategic transmission corridors important for the planning of electricity transmission and distribution infrastructure as well as procedure to be followed when applying for environmental authorisation for electricity transmission and distribution expansion when occurring in these corridors. Ocheni substation is the most relevant development that suit well with EGIs as it meant to strengthen the weakened energy supply in the area.

Desktop analysis was conducting through the use of satellite imagery, research and Critical Biodiversity Area of the study areas as published which was followed by a verification site visit. Relevant Provincial source EKZNW placed Ocheni Substation site at **Category D** which is a Secondary Agricultural Land Use that has Low Agricultural Potential. This contradicts the Agriculture Theme as per Web based Environmental Screening Tool which allocated High Sensitivity, the site visit conducted together with the Ezemvelo rating hereby assist to dispute the High sensitivity rating as shown by the environmental screening tool. A rating of low sensitivity is sought to be more relevant rating to this Agricultural Theme. The reasons for this are, the land in the main is used for subsistence farming and is one many hundreds located in and around the study area. A satellite imagery showed that there was no cultivating activity from 2006 to 2009, this translates to 4 years of inactivity. Then again there was no cultivating activities from 2018 to 2023, this translates to 6

years of inactivity. And also, the substation site will only use 100m-by-100m perimeter fence which translate to almost 0,0001% of the Ocheni/Dumenkungwini village, hence less impact if any.

The web based environmental screening tool has placed a medium rating for the animal theme, however the site visits as well other sources consulted has resulted on the conclusion that the medium rating hereby disputed, and a rating of low sensitivity is therefore deemed to be appropriate for the 100m-by-100m substation site. In the main, the problem is the presence and location of the residential dwellings that are located in close proximity and almost on all directions to the site, the site is bordered by residential dwelling all around with the exception of the east where the dwellings are slightly far away from the site, thus, poaching would have remained the first enemy to terrestrial animals that are not domestic in nature. The other critical factor to this is that none of the animals were observed during the site visit within the 100m-by-100m site. There is also a footpath which is frequently used by local villagers and all the agricultural activities.

The very high sensitivity rating suggested for the aquatic biodiversity theme is hereby disputed. The reason for this is that the study area does not have any form of perennial or non-perennial river or wetland on site or nearby within 100 metres. And it is in no way that the aquatic biodiversity theme can be very high in a place where there is no stream nor an intermittent stream nearby or a wetland. The only rating that can suite the site is a Low Rating.

The low rating given by the web based environmental screening tool allocated for Archaeological and Cultural Heritage Theme is hereby confirmed. The reason for this is that no significant sites, structures, features, ecofacts and artefacts of importance associated with the history, architecture, or archaeology of human development occurrence has been identified on site. This may be due to the agricultural activities that has been taking place on site in the past.

Civil Aviation theme, the Ocheni Substation project site is determined and verified to be of low sensitivity (as it relates to civil aviation, the medium sensitivity is therefore disputed). This was determined through a site visit and based on existing databases, and confirms the sensitivity allocated on the Screening Tool, Air Traffic and Navigation Services SOC Limited (ATNS), RSA Airspaces in 3D. Based on the above, in terms of GN 320, no further requirements are applicable i.e., a Compliance Statement is not required. In the main, because there is no aviation installation nearby. The other factor is that the site according to Air Traffic and Navigation Services SOC Limited (ATNS), RSA Airspaces in 3D is not located on the flight route of any airport, in fact the site is located within what is classified as Restricted Air Space with a Restricted Flying Altitude of 5500 feet Altitude above ground level due to vast mountain ranges occurring in around the site. This is equivalent to 1.6764km above ground level. By inference, the Ocheni Substation and its related infrastructure will in no way infringe on any form of aviation altitude. The longest substation structure will be the Telecommunication Mast

at 35 metres above ground, and any related Powerline Structure will be at 30 metres above ground which is way to lower than the required 1.6764km altitude.

The Proposed Ocheni Substation site relocation project site was found to have low sensitivity with regard to Defence Theme, and this was confirmed (as it relates to defence installations). This verifies the sensitivity assigned on the Screening Tool and was determined through a site visit and based on already-existing databases. Based on the aforementioned, no additional requirements are relevant under GN 320, so a Compliance Statement is not necessary.

The low sensitivity of Palaeontological theme as provided by the environmental screening tool, and the subsequent site visit is hereby confirmed. During the site visit no Fossils of the geological remnants and scientific traces of species from the past were observed. Considering the fact that the site has been for a while used for sugarcane plantation, based on the above, in terms of GN 320, no further requirements are applicable i.e., a Compliance Statement is not required.

The Proposed Ocheni Substation site relocation project site was found to have low sensitivity Plant Species Theme, and therefore the, the Low Sensitivity plant species theme as per national web based environmental screening tool is hereby confirmed. This verifies the sensitivity assigned on the Screening Tool and was determined through a site visit and based on already-existing databases. Based on the aforementioned, no additional requirements are relevant under GN 320, so a Compliance Statement is not necessary. The site is covered only by grass land which is dominated by *Digitaria perianth* (digit grass or Pangola-grass), *Aristida junciformis* (Ngongoni Grass) According to SANBI, this taxon was not selected in any one of four screening processes for highlighting potential taxa of conservation concern for detailed assessment and was hence given an automated status of Least Concern. The Threatened Species Programme is currently systematically completing full assessments for all taxa with an automated status. This grass species is said not to be endemic to South Africa and is considered to be a least of concern (SANBI, 2023)

Although Terrestrial Biodiversity Theme is depicted as Very High Sensitivity, unfortunately the facts on the ground with regard to the proposed development site does not confirm to the rating. After conducting a site visit and consulting SANBI and EKZNW the very high sensitivity is disputed and rather a low sensitivity is provided. This is specifically with regards to the proposed Ocheni Substation site which is 100m-by-100m in extent:

- No vegetation units affected have an elevated conservation status.
- There are no concerns about the development's potential effects on ecological processes and options for future conservation expansion in the region raised by the fact that the site is located within a CBA 2, an NC-NPAES focus area, and it is not located within the close proximity of any conservation area.

- The development footprint in CBA 2 is 1ha, which is much less than the entire affected CBA and less than 1% of the size of CBA in the planned Ocheni Substation study region alone. There are no rare or endangered species or habitats on the portions of the site that are located in the NC-PAES Focal Region.

Environmental Impact Statement:

- The proposed Ocheni Substation site is viewed as generally appropriate for the building of a substation looking at electricity strengthening in the area. There are not any specific long-term effects that are likely to be connected to the substation that cannot be avoided or mitigated to a manageable level. Despite the fact that the development will have an impact on areas that are ESAs, CBAs, and the NC-PAES Focus Area, the site's conservation value is not thought to be exceptional, and its location and context suggest that these impacts are likely to be more acceptable and won't significantly impede future conservation efforts.

DECLARATION OF INDEPENDENCE

The Environmental Impact Assessment Regulations Regulation 13(1) of Government Notice No R982 of 2014), requires that the EAP must be Independent. And have expertise in conducting environmental impact assessments or undertaking specialist work as required, including knowledge of the Act,

Expertise of Author:

Musa Netshivhambe has experience that spans 3 decades working with Integrated Environmental Management Systems conducting almost 100 Environmental Impact Assessment, Environmental Management related project, assisting with many habitat suitability studies for Black Rhinos, conducting Botanical Assessment Studies, Development of Environmental Management Studies, Conducting Training on Tree and Grass Identification Trainings, compiling over 100 Environmental Management Programmes, Water use Licences and many countless environmental management reports and advice to Private Individuals, Government SOCs and the Government Departments of South Africa. Musa is registered with Environmental Assessment Practitioners Association of South Africa (EAPASA: 2019/1853) and Certificated Natural Scientist with the South African Council for Natural Scientific Professions (Reg. No. 200076/12).

Declaration of independence:

Ourbiosphere Environmental (Pty) Ltd in an independent consultancy firm and hereby declare that it does not have any financial or other personal stake in the undertaking of the proposed activity, other than remuneration for the work performed in terms of the National Environmental Management Act, 1998 (Act 107 of 1998). In addition, remuneration for services provided by Ourbiosphere is not subjected to or based on approval of the proposed project by the relevant authorities responsible for authorising this proposed project.

Disclosure:

Ourbiosphere undertake to disclose, to the competent authority, any material information that has or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) and will provide the competent authority with access to all information at its disposal regarding the application, whether such information is favourable to the applicant or not. Based on information provided to Ourbiosphere by the client, and in addition to information obtained during the course of this study, Ourbiosphere present the results and conclusion within the associated document to the best of the author's professional judgement and in accordance with best practise.

Musa Netshivhambe

.....

14 March 2023

II) CONDITIONS OF THIS REPORT

Terrestrial biodiversity assessment studies are constrained in their breadth, duration, and financial resources, notwithstanding the significant effort taken to assure the accuracy of this study. Discussions centre on plausible and well-informed premises supported by resources, expertise, and logical reasoning as well as true scientific principles. In order to account for shifting environmental circumstances and animal migrations, the most precise and factual environmental conclusions based on field research and observations can only be made across a number of years and seasons.

A later discovery of current information is possible since environmental impact assessments deal with dynamic natural systems. So, notwithstanding findings drawn in good faith using all available scientific and empirical data, the professional is not liable for any mitigation steps that are suggested.

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Any conclusions, suggestions, or claims derived from or supported by this report must expressly cite or refer to this report. Every time such recommendations, assertions, or conclusions are contained in a major report pertaining to the current inquiry, the complete report must be included. Without the author's prior written consent, no version of this report may be changed or expanded. So, these restrictions should be kept in mind while you read this report and take any action.

1. INTRODUCTION

Eskom have received an environmental authorization for the application of Environmental Authorisation in terms of the National Environmental Management Act, 1998: GN R543, R544 and R546: Construction of a new 20MVA 132/22kV Ocheni Substation in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province, obtained on 29 August 2017 as amended.

Eskom have commenced with the construction of this project through Survey work on the ground, however Eskom noted that the approved location of Ocheni Substation as per the Environmental Authorization is now being utilized as a Shembe temple location.

Eskom therefore have approached the Department of Forestry, Fisheries and Environment (DFFE) to seek advice on how to proceed with the amendment of the environmental authorization before the continuation of the substation construction. The consultation meeting with the following REF: 2023-01-0006 was held on January 27, 2023, with the officials from DFFE. Eskom requested to have the substation follow the Electricity Grid Infrastructure (Transmission Strategic Corridors) Process.

The Proposed Ocheni Substation site relocation project falls within the Expanded Electricity Grid Infrastructure (EGI) [Expanded Eastern Corridor] that is, it is located within the Eastern Strategic Transmission Corridor to be precise as per the National Environmental Management Act, 1998 (Act NO.107 of 1998) Standard No 383 of 29 April 2021 as gazetted. The Standard identification is in terms of sections 24(3), 24(5)(1) and 24(5)(b) of the National Environmental Management Act, 1998 of expanded geographical areas of strategic importance for the development of electricity transmission and distribution infrastructure.

When read in conjunction with as expansion of the Strategic Transmission Corridors published in Government Notice No. 113 under Government Gazette No. 41445 on 16 February 2018, as set out in the Schedule hereto. Eskom intends to be excluded through exclusions and/ or specific requirements of Basic Assessment Process. The EGI process is in accordance to Notice of identification in terms of Section 24(5)(a) and (b) of the National Environmental Management Act, 1998, of the procedure to be followed in applying for Environmental Authorisation for large scale Electricity Transmission and Distribution Development activities identified in terms of Section 24(2)(a) of the National Environmental Management Act, 1998 when occurring in geographical areas of strategic importance.

In this instance, the proposed Construction of a new 20MVA 132/22kV Ocheni Substation in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province falls within the Transmission Strategic Corridors (EGI), Expanded Eastern Corridor.

To this effect, The Department requested the following, that: for the Department to consider Eskom's request to follow the EGI process, Eskom must:

- Use the Web Based Environmental Screening Tool to determine the sensitivity of the substation site.
- Eskom's Environmental Assessment Practitioner to conduct a ground truthing to confirm or contrast the sensitivity as shown by the National web based Environmental Screening tool.
- A feedback report be prepared and be subjected to a public participation period of 30 days and all comments be included and then be submitted to the DFFE for decision.

This report contains the site's various sensitivities as per National Web based Environmental Screening Tool and the ground truthing feedback and other measures as suggested by the Environmental Assessment Practitioner (EAP).

1.1. Web Based Environmental Screening Tool

The site's environmental sensitivities were identified using the web-based environmental screening program. Prior to the site inspection, the initial environmental screening was completed on February 15, 2023. After the site visit, the final environmental screening report was created on March 4th, 2023, simply to make sure the environmental sensitivity had not altered.

1.2. Site Visit (Ground Verification)

The site visit was conducted for 1 day in summer on **23 February 2023**. The reason for the site visit was to confirm/verify or dispute the different environmental sensitivity themes that has been generated by the web-based environmental screening tool.

1.2.1. Methodology followed to assess all themes sensitivities:

1.2.1.1. Site sensitivity verification and minimum report content requirements

Prior to commencing with a specialist assessment, the current use of the land and the environmental sensitivity of the site under consideration identified by the screening tool has been confirmed by the undertaking a site sensitivity verification.

1.2.1.2. The site sensitivity verification was undertaken by an environmental assessment practitioner.

1.2.1.3 The site sensitivity verification was undertaken through the use of:

- (a) a desk top analysis, using satellite imagery.
- (b) a preliminary site inspection; and
- (c) any other available and relevant information.

1.2.1.4 The outcome of the site sensitivity verification was recorded in the form of a report this that:

- (a) confirms or disputes the current use of the 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 together with the relevant assessment report prepared in accordance with the requirements of the Environmental Impact Assessment Regulations.

2. BACKGROUND OF THE PROJECT.

2.1. Project area

The project area falls within the Ocheni/Dumenkungwini village of the Maphumulo Local Municipality area within the iLembe District Municipality in KwaZulu-Natal Province (GPS coordinates S 29°08'48.48"; E 31°00' 50.40"; **Figure 1.1** below) and is approximately 100m-by-100m (1ha) in extent. This area falls within the Quarter Degree Grid Square (QDS) 2931AA.

Table 1. 1: The four substation perimeter coordinates are:

Northwest	S: 29°08'46.68"	E: 31°00'49.96"
Northeast	S: 29°08'48.30"	E: 31°00'52.27"
Southwest	S: 29°08'48.25"	E: 31°00'48.36"
Southeast	S: 29°08'49.97"	E: 31°00'50.66"

2.2. Current land use and infrastructure

The entire project area is currently recovering from sugarcane cultivation and covered by a grassland with no trees (**Figure 1.3**). A dirt road borders the area on the north and the west, and on the west, a 22 kV powerline traverse on the western border from north to southern direction. The general area surrounding the project area is sparsely populated and comprise of homesteads which are extensive on the northern direction, the western direction, and the southern direction, and generally also covered by similar grassland recovering from previous agricultural activities.



Figure 1. 3: Showing the current land use on site, grassland recovering from agricultural activities.

2.3. Topography

With steep hills and little-diameter valleys, the general surrounding landscape is very undulating. The substation location at the northern terminus of the proposed line has the highest point at 612 m amsl. The study location is approached through a much more gently sloping slope up to the cliff located about a kilometre away. At the easternmost edge of the study area, there is a sharp descent to the valley. The terrain becomes more uneven and the mountain folds steeper as one travels further west.

2.4. Geology

The Natal Sandstone Group predominantly underlies the study region in a narrow band parallel to the shore. A thinner zone of Dwyka-tillite extends east of that, likewise parallel to the coast. The Natal Metamorphic Province, which is composed of granite and gneiss, forms the rugged terrain west of the Natal Sandstone Group. The geology of iLembe District varies and includes sediments of the Karoo Supergroup which has mudstones and lesser mudstones of the Adelaide and Tarkastad Subgroups (Beaufort Group) with intrusions of Dolerite. There is also Ecca Group shale present. In some areas Orovician Natal Group Sandstones dominate and in other areas there is layered quartz-feldspar metasediments (Maphumulo Group, mokolian), while along the coast dunes Aeolian deposited sands dominate (Indiflora CC Environmental Services, 2012).

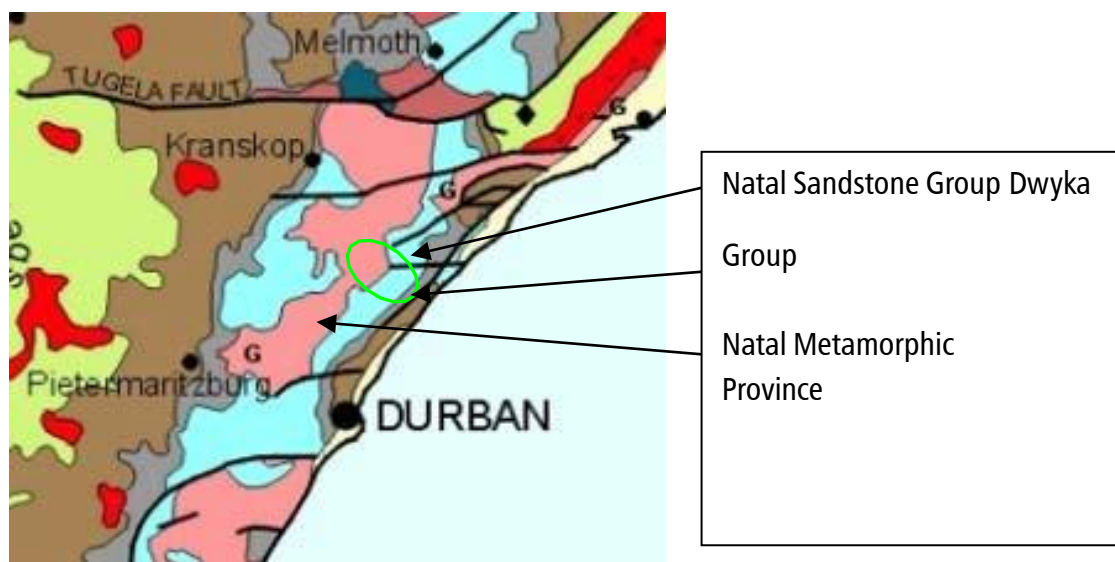


Figure 1. 4: The Geology of study area

Source, <http://www.geology.ukzn.ac.za/GEM/kzngeol/maponly.html>

2.5. Vegetation

Three different vegetation types make up the surrounding study area's native vegetation. The substation is recovering from recent agricultural activities. Due to both is agricultural activities, the substation area is only covered by grass and herbaceous plants and only few *Lantana camara* species. There are no tree species found in the proposed Ocheni substation location. The most dominant grass species on the site are three species, *Panicum natalense* (Natal Buffalo Grass), *Imperata cylindrica* (Cotton wool grass), *Aristida junciformis* (Ngongoni grass). SANBI however, indicated that this taxon was not selected in any one of four screening processes for highlighting potential taxa of conservation concern for

detailed assessment and was hence given an automated status of Least Concern. The Threatened Species Programme is currently systematically completing full assessments for all taxa with an automated status.

In the undulating and hilly Ocheni/Dumenkungwini, Maphumulo Local Municipality, KZN and Eastern Cape Provinces, Moist Coast Hinterland Grasslands can be found. It typically occurs below Midlands Mistbelt Grassland. Unappealing Ngongoni grass (*Aristida junciformis*) dominates the dense, tall, sour grassland that makes up 75% the overall grass cover on the substation site, and this monodominance is correlated with a lack of species variety on the proposed substation site.

The general surrounding area only has a small portion of the grassland areas remain as pure grasslands since so many of them have been altered by farming, excessive grazing, or plant invasions from foreign species. Several formerly cultivated regions around the site have been left fallow, where they have become infected with exotic weeds, native pioneer plants, or both.



Figure 1. 5: Showing grass as the dominant vegetation of the substation site.

3. SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE ENVIRONMENTAL SENSITIVITY

Findings of the Screening Tool

A Screening Tool Report was generated for the proposed EGI project using the following classification: Utilities Infrastructure > Electricity > Distribution and Transmission > Powerline > Powerline.

- The descriptions and justifications given below indicate that the proposed power lines will, nevertheless, be located in an area with medium sensitivity to civil aviation.

- Hence, if the site is really determined to be of medium sensitivity during the site visit, this means that further requirements are relevant, i.e., a Compliance Statement is not required.

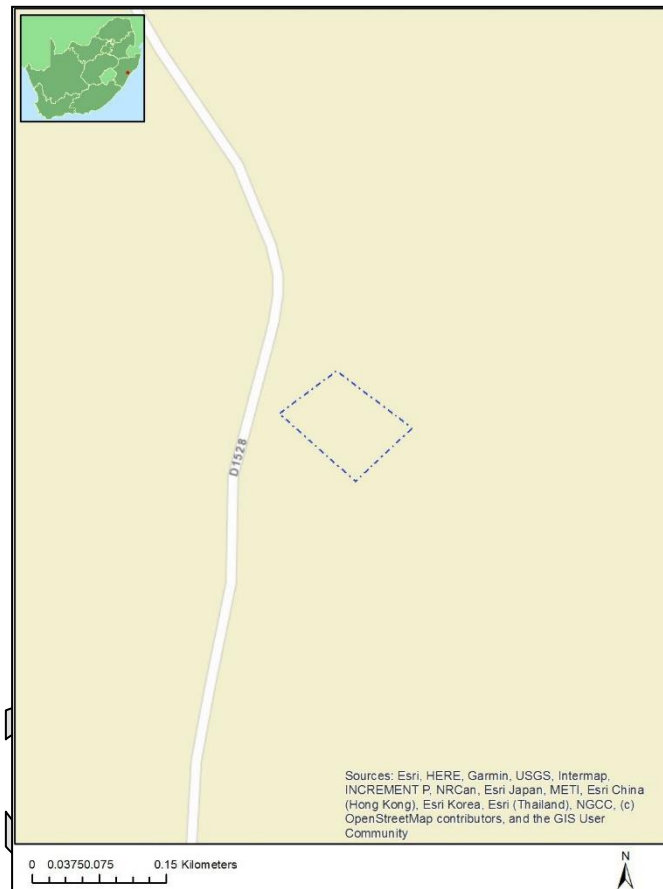


Figure 1. 6: General Orientation: Ocheni Substation

3.1. SITE SENSITIVITY VERIFICATION AND MINIMUM REPORT CONTENT REQUIREMENTS UTILISED

Prior to commencing with a specialist assessment, the current use of the land and the potential environmental sensitivity of the site under consideration, identified by the 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 desktop analysis, using satellite imagery.
 - a preliminary on-site inspection; and
 - any other available and relevant information.
- The outcome of the site sensitivity verification must be recorded in the form of a report that:
 - confirms or disputes the current use of the land and environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.
 - contains a motivation and evidence (e.g., photographs) of either the verified or different use of the land and environmental sensitivity; and
 - is submitted together with the relevant assessment report prepared in accordance with the requirements of the Environmental Impact Assessment Regulations.

3.2. Cadastral details of the proposed site

Property details:

Table 1. 2: Showing the Cadastral details of the proposed site.

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	UMPOMULA MISSION RESERVE	8308	0	29°10'11.42S	31°0'57.09E	Farm
2	UMPOMULA MISSION RESERVE	8308	6	29°10'11.42S	31°0'57.09E	Farm Portion

3.2.1. Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions, or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is: **Utilities Infrastructure | Electricity | Distribution and Transmission | Substation.**

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

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

Table 1. 3: Relevant development incentives, restrictions, exclusions, or prohibitions

Incentive restriction or prohibition	Implication
Strategic Transmission Corridor- Eastern Corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
Strategic Transmission Corridor- Expanded Eastern Corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
Strategic Gas Pipeline Corridors- Phase 7: Coega to Richards Bay	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion, or prohibition zones.

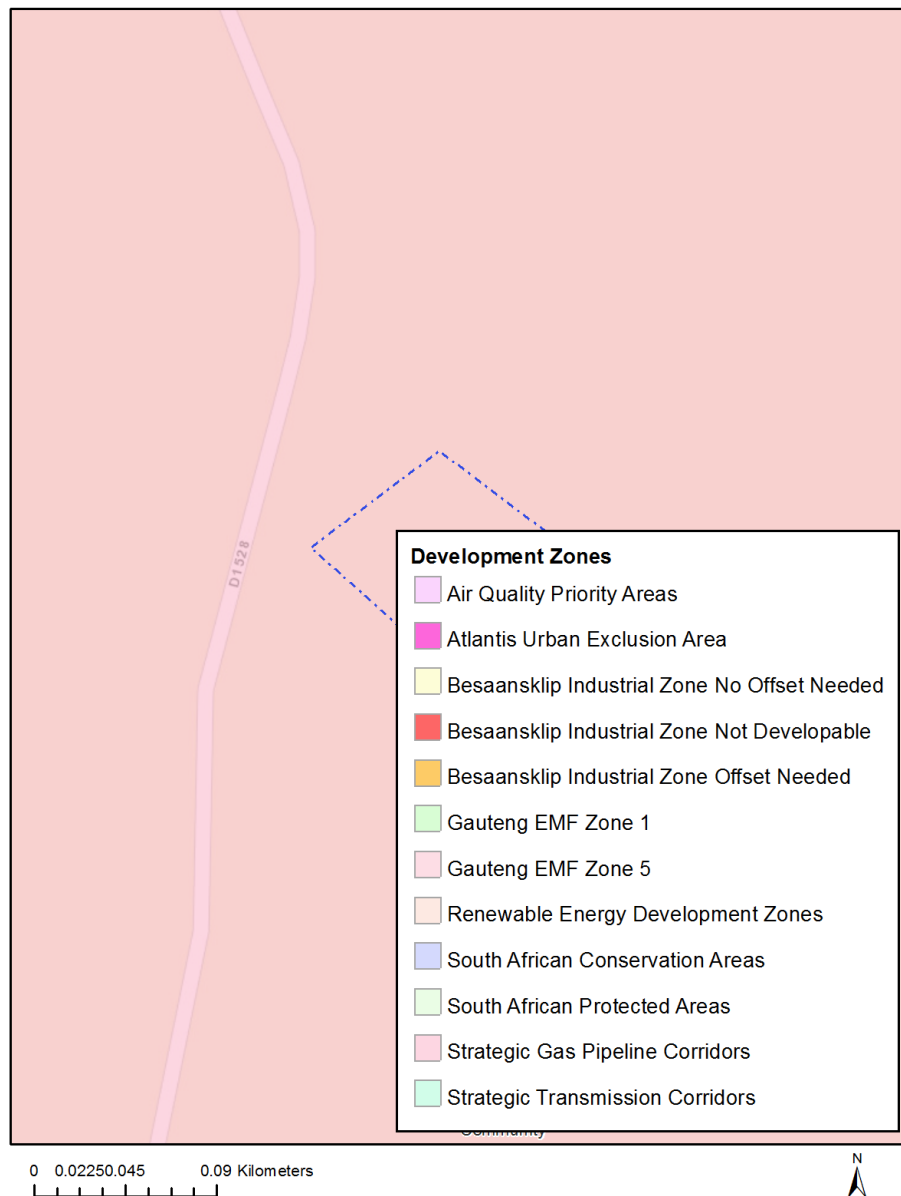


Figure 1. 7: Showing that the Ocheni substation area falls within the Renewable Energy Development Zone

Concluding Statement:

The Web Based Environmental Screening Tools confirms that the Ocheni substation area falls within the Renewable Energy Development Zone as well as Transmission Strategic Corridors (EGI). Ocheni substation site area falls within the Strategic Transmission Corridors or what is also known as Electricity Grid Infrastructure (EGI) as gazetted by Government Notice No. 114 in Government Gazette No. 41445. This has identified 5 strategic transmission corridors important for the planning of electricity transmission and distribution infrastructure as well as procedure to be followed when applying for environmental authorisation for electricity transmission and distribution expansion when occurring in these corridors. Ocheni substation is well suited with EGI project as it aims to strengthen the strategic electricity of the region to meet the energy demand.

3.4. Assessment Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified by the web based environmental screening tool. It only identified the highest environmental sensitivity. The footprint environmental sensitivities for the proposed development footprint have been identified, has been verified on site by a registered EAPASA and SACNASP registered Environmental Assessment Practitioner (EAP) .

Table 1. 4: Showing various environmental sensitivities and their ratings as per environmental screening tool.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme		X		
Animal Species Theme			X	
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme				X
Civil Aviation Theme			X	
Defence Theme				X
Palaeontology Theme				X
Plant Species Theme				X
Terrestrial Biodiversity Theme	X			

3.4.1. Agriculture Theme (High Sensitivity)

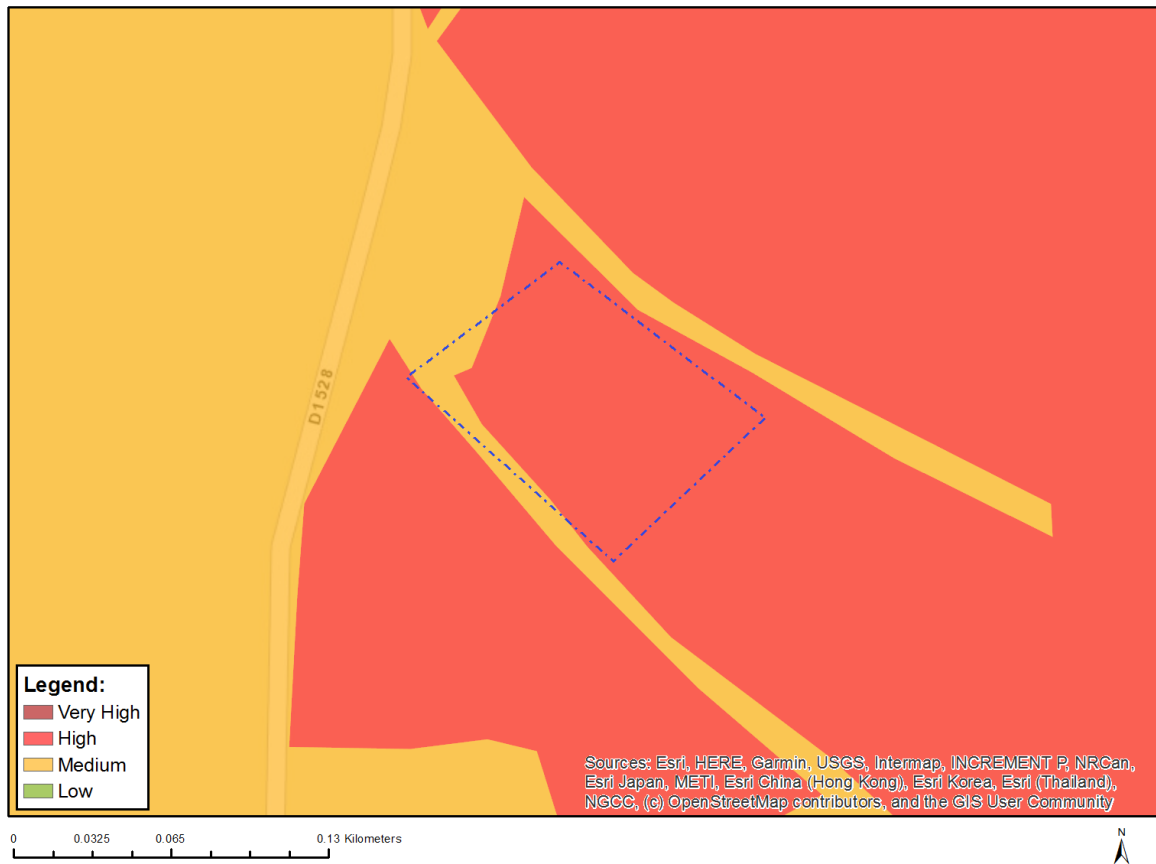


Figure 1. 8: Map of relative agriculture showing very high theme sensitivity as per web based environmental screening tool.

The site visit was conducted in summer for 1 day **23 February 2023** to determine the current use of the land and the environmental sensitivity of the substation site under consideration, this was done in order to confirm the sensitivity information as identified by the web based environmental screening tool.

The screening tool has allocated a high sensitivity theme on the substation site with regards to agriculture. This rating was then compared to the current land use on site which nothing on has been cultivated on site, and the site is covered by grass that is almost 1 meter long. Also, EKNW agricultural potential of the iLembe District was also compared with, and this one is mostly focused closely on the site and will be much more relevant (See **Figure 1.9 below**). The EKZNW agricultural potential disputes the web environmental screening tool rating of high sensitivity.

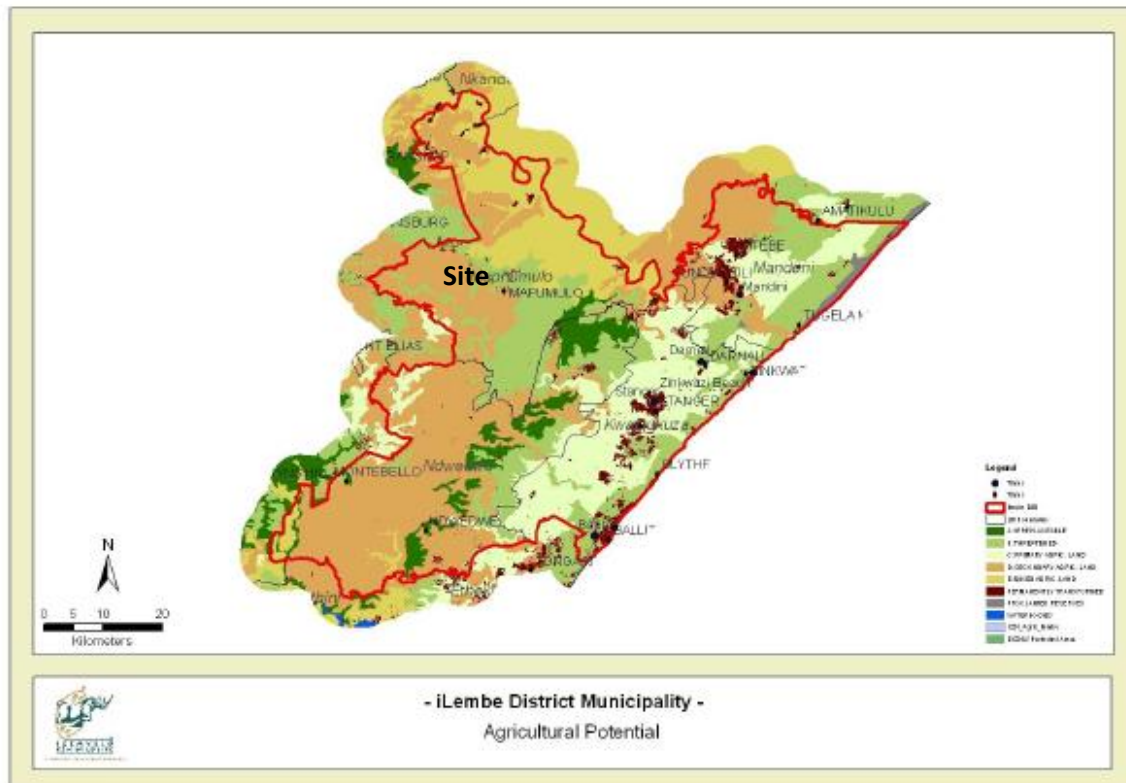


Figure 1. 9: Ezemvelo KZN has shown agricultural potential of the site as Category D: secondary: Low Potential

3.4.1.1. Agricultural Potential Category

According to the Published in Government Notice No. 648 Government Gazette 45421 of 10 May 2019, the protocol for the assessment and reporting of environmental impacts on agricultural resources, the potential of the land to produce sustainably over a prolonged period without degradation to the natural resources base. This includes land under production for cultivation purposes (arable land) and for grazing purposes. There are eight agricultural potential categories, namely:

Category A (Irreplaceable): Very High Agricultural Potential

Category B (Threatened): High Agricultural Potential

Category C (Primary Agricultural Land Use): Moderate Agricultural Potential

Category D (Secondary Agricultural Land Use): Low Agricultural Potential

Category E (Mixed Land Use): Very Low Agricultural Potential Waterbodies Permanently Transformed Proclaimed reserves.

According to the EKZNW, the Agricultural Potential Map shown above for the iLembe District Municipality which also include the site, The Ocheni Substation site is placed at **Category D (Secondary Agricultural Land Use):** which is Low

Agricultural Potential. This is in direct contrast with the **Category A (Irreplaceable): Very High Agricultural Potential** as suggested by the web based environmental screening tool.

According to Ezemvelo KwaZulu-Natal Wildlife, **Category D** is Land with low agricultural potential. This land requires significant interventions to enable sustainable agricultural production which could include terracing, contours, prominent levels of fertility correction, lower stocking rate, supplementary feed, etc.

In order to get a clear agricultural previous activity, a period from 2006 to 2009 as well as from 2018 and 2023 was selected. The land in the main is currently used for livestock grazing and is one many hundreds located around the study area. A satellite imagery showed that there was no cultivating activity from 2006 to 2009, this translates to 4 years of inactivity. Then again there was no cultivating activities from 2018 to 2023, this translates to 6 years of inactivity.

The sugar cane crop cycle varies between 10 and 24 months but can be extended four times or more by additional ratoon cropping. Cane is harvested after 12 to 18 months for most plant crops, after 12 months for ratoon crops. The growing period may be considerably shorter, with plant cane harvested 9 months after spring emergence, and 7-8 months for ratoon crops. Much of the time, the field is laid bare, and no cultivation is taking place. Hence why the rating of medium is more relevant than high sensitivity with regard to agricultural theme on site.

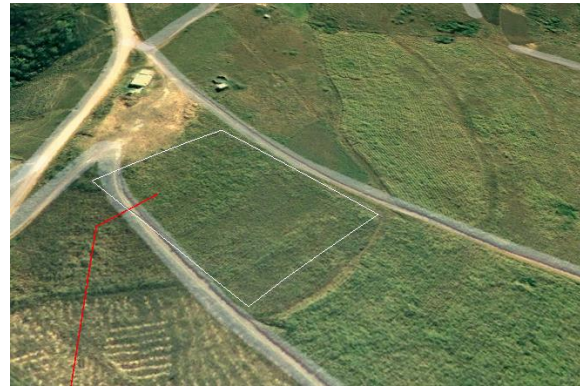
This translate to, although satellite imagery showed that the substation site has been disturbed by cultivation due to agricultural activities for several years. This site has been used less for cultivation for sugar cane plantation for a while. Currently the substation site is only covered by grass species. This grass species showed that the area has been disturbed a while back due to those agricultural activities and the site is recovering from the disturbed land.

For the study area, even when finally, cultivation of land was sought, only the western part of the site was cultivated, and the eastern side though not cultivated at the time. It was however only covered by grass marking the recovery from even more previous agricultural activities. Satellite imagery of previous years even shows almost the entire area cultivated.

The site has been laying bare for well over four to five years from agricultural activities for the plantation of sugar cane. The high sensitivity of the Agricultural Theme is therefore disputed, and a rating of low sensitivity is deemed relevant to the site.



2006: Not Cultivated



2007 Not Cultivated



2008: Not Cultivated



2009: Not Cultivated



2019: Cultivated but nothing planted



2020, Recovering from the cultivation



2021: Grass recovering



2022: Site further recovering



2023 (February 22): The field is covered by grass and has not been cultivated for over 4 years

Figure 1. 10: Showing the satellite imagery of the site previously disturbed by agricultural activities.



Figure 1. 11 : Showing the current pictures of the site of the grass of the site recovering from agricultural activities.

Concluding Statement:

After conducting a desktop analysis, using satellite imagery and a site visit, and other relevant local sources line EKZNW that places Ocheni Substation site at **Category D** (Secondary Agricultural Land Use with Low Agricultural Potential) the rating of Agriculture Theme at High Sensitivity as shown by the web-based environmental screening tool is hereby disputed. A rating of low sensitivity is therefore allocated in line with the site visit findings.

According to Government Notice No. 648 Government Gazette 45421 10 MAY 2019, an applicant intending to undertake an activity identified in the Scope of this Protocol on a site identified by the national web based environmental screening tool as being of "very high" or "high" sensitivity for agricultural resources must submit an Agricultural Agro-Ecosystems Assessment, unless the:

Application is for a linear activity for which impacts to the agricultural resource are temporary and the land in the opinion of the soil scientist/agricultural specialist based on the mitigation and remedial measures, can be returned to the current land capability within two years of the completion of construction phase; or

- impact on agricultural resources is from an electricity pylon which is self-supporting; or
- information gathered from the Initial Site Sensitivity Verification contemplated in section 3 of this Protocol or the specialist assessment differs from the designation of "very high" or "high" agricultural sensitivity from the national web based environmental screening tool and it is found to be of a "medium" or "low" sensitivity.
- In case agricultural compliance is a medium or low, an Agricultural Compliance Statement is to be provided. An environmental assessment practitioner or a registered soil scientist/agricultural specialist, as appropriate, must

append to the Agricultural Compliance Statement a motivation and evidence (e.g., photographs) of the different agricultural resource sensitivity. In this case, since the site visit and EKZNW report places the site at Low Potential, it means on Agricultural Compliance Statement is required to be submitted.

3.5. Animal Species Theme (Medium Sensitivity)

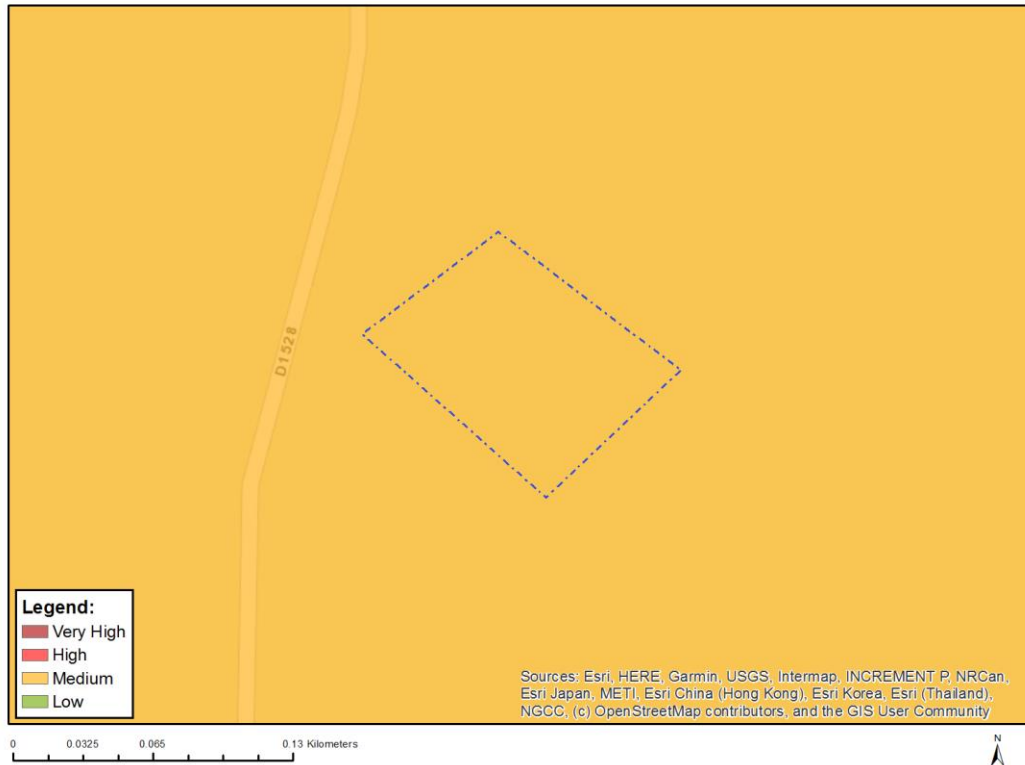


Figure 1. 12: Map of relative animal species theme sensitivity

The web-based environmental screening tool has allocated a medium sensitivity to the Animal Species Theme. This relates to the Terrestrial Animal Species that are said to be existing on the study area. After the site visit, the rating of medium sensitivity it is unfortunately disputed. Terrestrial animals are those animals that live predominantly or entirely on land, as compared with aquatic animals, which live predominantly or entirely in the water, and amphibians, which rely on a combination of aquatic and terrestrial habitats. Some of the examples of terrestrial animals include cats, ants, dogs, spiders, lions, mice, bats, bulls, oxen, leopards, elephants, and many more. There are animals though which live specifically underground.

During the site visit, the assessment was generally not only limited to the 100m-by-100m that caters for the substation perimeter fence, but up to 130m-by-130m buffer. Although some of the insects like grasshoppers were observed, no animals were observed during the study. There is a possibility that they could be some mice and all snails as well as amphibians that maybe occurring on site. However, considering the footprint of this substation, which is 100 metres by

100 metres, the medium sensitivity with regard to animal's species theme, the medium sensitivity may well be low sensitivity. A low sensitivity of animal species theme is considered to be appropriate specifically on the substation site.



Figure 1. 13: Cows Observed in the nearby land which possibly also graze on the study area.



Figure 1. 14: Showing one of the residences on the north closer to the study area

The other major problem with this medium sensitivity it is the presence of the residential areas that surrounds this site. Terrestrial animals that are likely to be affected by the development of the proposed substation would include some mice as well as snails and in the main cows and goats. During the site visit, cows were observed grazing in the nearby areas and some old cow droppings were also identified on site. Considering the 100m-by-100m size, the occurrence of terrestrial species is likely to be very low and also, none were identified during the site visit. There is also a possibility that they could be some of the terrestrial animals that may not have been observed during the site visit due to migration. However, the presence of the residential surrounding the site as well as the presence of the footpath that crosses through the site which is often frequented by locals would generally make many terrestrial animals not want to inhabit this human traffic infested site. The agricultural activity may also be another deterrent factor for terrestrial animals not to be found on site.

Concluding Statement

The medium rating is for the animal theme is here by disputed, and a rating of low sensitivity is therefore deemed to be appropriate for this 100m-by-100m substation site. In the main, the problem its location proximity of the residential dwellings that is located close and almost surround the site, the site is bordered by residential dwelling all around with the exception of the east where the dwellings are slightly far away from the site, thus, poaching would have remained the first enemy to terrestrial animals that are not domestic in nature. The other major contributor is the agricultural activities that occasionally practiced on site.

According to Government Notice No. 1150, government gazette 43855 of 30 October 2020. An applicant intending to undertake an activity identified in the scope of this protocol on a site identified by the screening tool as being of “low” sensitivity for terrestrial animal species must submit a Terrestrial Animal Species Compliance Statement.

Where the information gathered from the site sensitivity verification differs from the screening tool designation of “very high” or “high,” for terrestrial animal species sensitivity and it is found to be of a “low” sensitivity, then a Terrestrial Animal Species Compliance Statement must be submitted. The site visit has disputed the medium rating to a low rating and Compliance Statement will therefore be submitted.

3.6. Aquatic Biodiversity Theme (Very High Sensitivity)

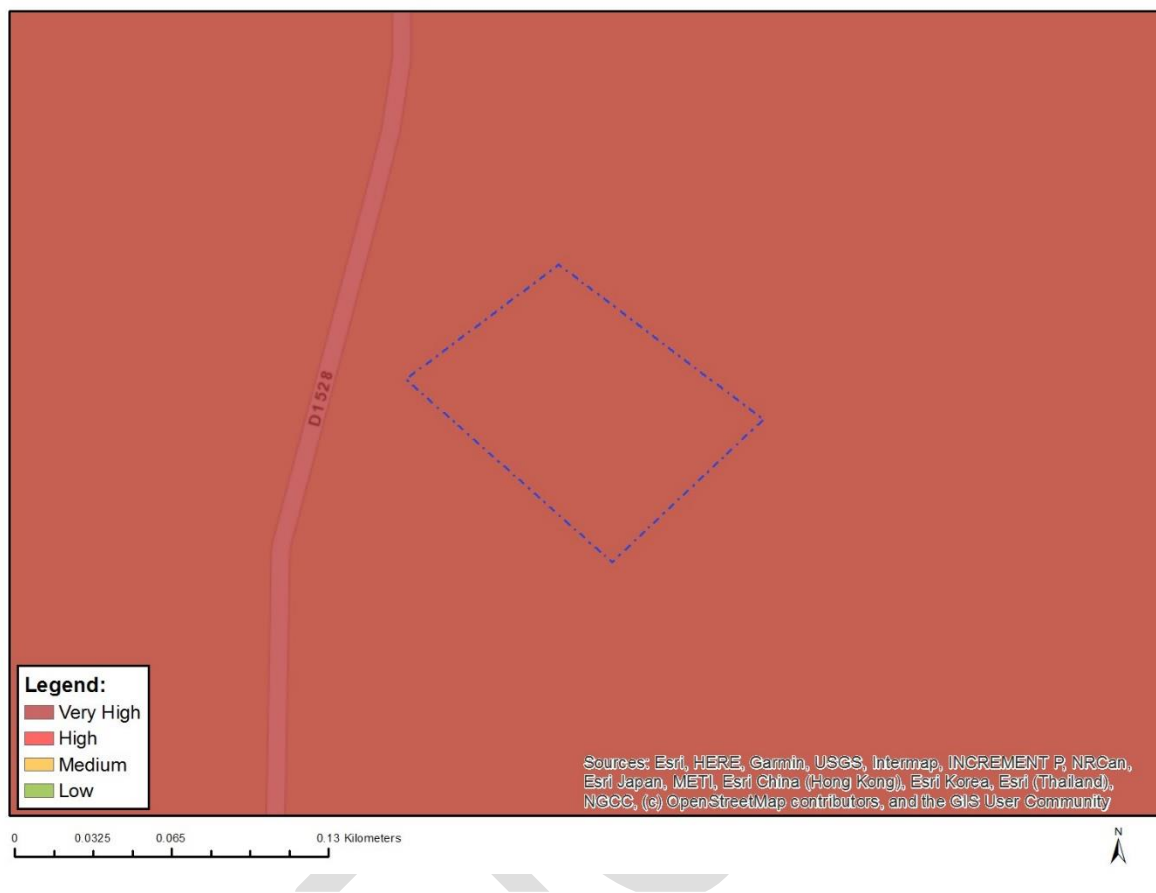


Figure 1. 15: Map of relative aquatic biodiversity theme sensitivity

The area is currently covered by grassland and recovering from sugarcane agricultural activities and there is not any river or wetland or intermittent stream on the site. The site is surrounded by residential dwellings and there is a 22kV powerline bordering the site on the western direction traversing north to southern direction.



Figure 1. 16: Showing the current land use, agricultural activities (sugar cane plantation and grazing) now covered by grassland and surrounded by residential dwellings.

Web-based environmental screening tool have allocated a rating of very high sensitivity with regard to aquatic biodiversity theme. This the very high sensitivity rating is here by disputed, the study area does not have any form of perennial or non-perennial river or wetland on site or nearby. And it is into possible that aquatic biodiversity theme can be very high in a place where there is no stream not even an intermittent stream nearby or a wetland.

Although the proposed substation site does not have any aquatic related parameters, the appropriate rating for site will be Low Sensitivity



Figure 1. 17: Showing the general site overview covered in grass toward the east



Figure 1. 18: Showing the general site overview covered in grass toward the south



Figure 1. 19: Showing the site overview covered in grass toward the south Towards the West



Figure 1. 20: Showing the general site overview covered in grass toward the south

Concluding Statement:

The very high sensitivity rating suggested for the aquatic biodiversity theme is here by disputed. The reason for this is that the study area does not have any form of perennial or non-perennial river or wetland on site or nearby within 100 metres. And it is in no way that the aquatic biodiversity theme can be very high in a place where there is no stream let alone intermittent stream nearby or a wetland. The only rating that can suite the site is a Low Rating.

According to Government Notice No. 648, Government Gazette 45421 10 May 2019 3(b) - protocol for the assessment and reporting of environmental impacts on aquatic biodiversity.

3.6.1. Requirements for the assessment and reporting of impacts.

Requirements for the assessment and reporting of impacts of development on aquatic biodiversity are set out in Table 1 below and correlate to the sensitivity ratings contained in the national web based environmental screening tool. Prior to beginning the assessment, the current land use and the potential environmental sensitivity of the site as identified by the national web based environmental screening tool must be confirmed by undertaking an Initial Site Sensitivity Verification.

The Initial Site Sensitivity Verification must be undertaken by an environmental assessment practitioner or a registered specialist with expertise in the relevant environmental theme being considered.

3.6.2. Requirements for environmental assessment

3.6.2.1. General Information

An applicant intending to undertake an activity identified in the Scope of this Protocol on a site identified as being of “very high sensitivity” for aquatic biodiversity on the national web based environmental screening tool must submit an Aquatic Biodiversity Impact Assessment.

However, where the information gathered from the Initial Site Sensitivity Verification identified in section 2.1 of this Protocol or the specialist assessment differs from the designation of “very high” aquatic biodiversity sensitivity from the national web based environmental screening tool, and it is found to be of a “low” sensitivity, an aquatic biodiversity impact assessment is not required. Because the site visit found out that there is not river nor wetland nearby the site, it means Aquatic Biodiversity Compliance Statement will have to be prepared and submitted.

An Aquatic Biodiversity Compliance Statement is to be provided. An Environmental Assessment Practitioner or a suitably qualified and SACNASP registered specialist, as appropriate, must append to the Aquatic Biodiversity Compliance Statement a motivation and evidence (e.g., photographs) of the changed Aquatic Biodiversity sensitivity.

3.7. Archaeological and Cultural Heritage Theme (Low Sensitivity)

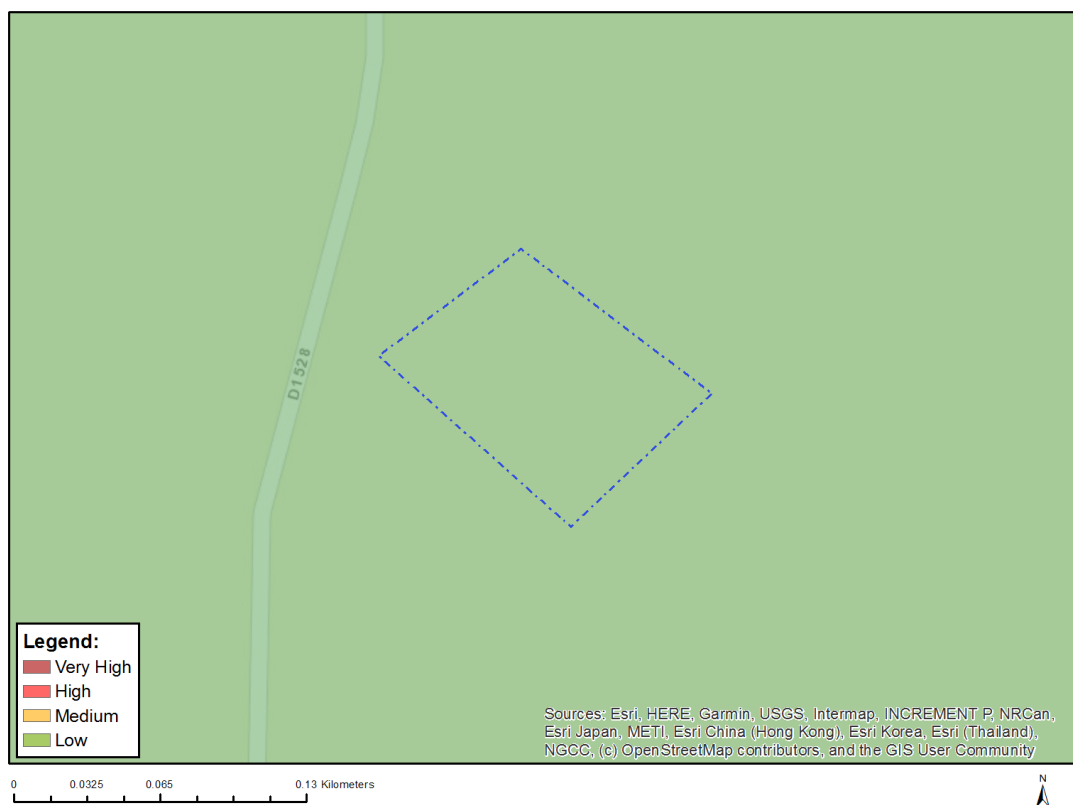


Figure 1. 21: Map of relative archaeological and cultural heritage theme sensitivity



Figure 1. 22: Map showing how the site ground looks like throughout the 100m-by-100m.

The web based environmental screening tool have marked the study area to be low sensitivity with regard to archaeological and cultural heritage theme. Cultural (heritage) resources are all non-physical and physical human-made occurrences, and natural features that are associated with human activity. These can be singular or in groups and include significant sites, structures, features, ecofacts and artefacts of importance associated with the history, architecture, or archaeology of human development. None of these were observed during the site visit, and due to the agricultural activities on the site, none of this are likely to occur.

Archaeological site/materials are remains or traces of human activity that are in a state of disuse and are in, or on, land and which are older than 100 years, including artefacts, human and hominid remains, and artificial features and structures. According to the National Heritage Resources Act (NHRA) (Act No. 25 of 1999), no archaeological artefact, assemblage, or settlement (site) and no historical building or structure older than 60 years may be altered, moved, or destroyed without the necessary authorisation from the South African Heritage Resources Agency (SAHRA) or a provincial heritage resources authority. However, none of these were observed during the site visit.

Concluding Statement

The low rating given by the web based environmental screening tool allocated for Archaeological and Cultural Heritage Theme is hereby confirmed. The reason for this is that no significant sites, structures, features, ecofacts and artefacts of importance associated with the history, architecture, or archaeology of human development occurrence has been identified during the site visit.

3.8. Civil Aviation Theme (Medium Sensitivity)

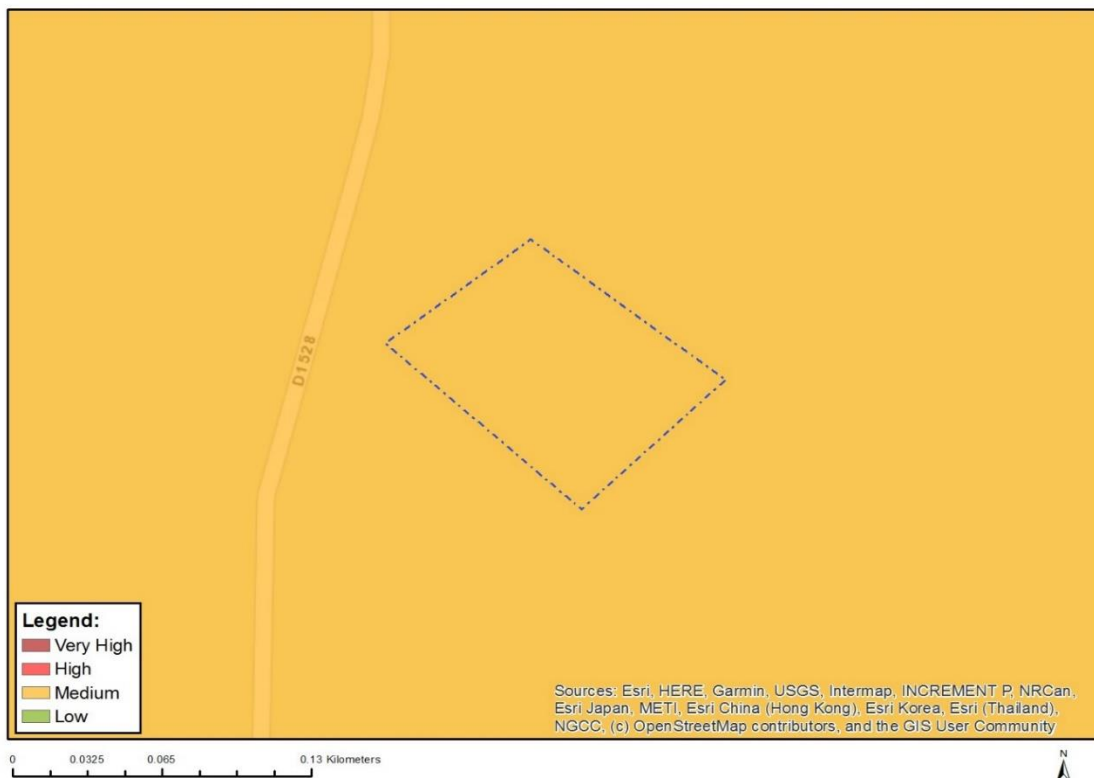


Figure 1. 23: Screening Tool Map showing the Ocheni Substation Site in terms of Civil Aviation Medium Sensitivity.

According to this specific protocol, a Civil Aviation Compliance Statement must be included in proposed developments that take place on sites that are recognized as having Very High, High, or medium sensitivity as shown on the National Web-Based Environmental Screening Tool. Furthermore, it indicates that no obligations apply if the proposed developments take place on areas that the Screening Tool classified as Low sensitivity. For the Civil Aviation Protocol, a Site Sensitivity Verification is necessary, nevertheless.

Thus, GN 320 must be followed because the planned EGI projects must comply with the 2014 NEMA EIA Rules (as amended), an EA is necessary, and civil aviation was selected as a pertinent issue for the General Methodology on the Screening Tool as well as required research.

3.8.1. Methodology

The methodology used to generate the Site Sensitivity Verification Procedure and Report is as follows:

- In order to locate civil aviation installations in connection to the project area and to identify preliminary areas of concern regarding impacts to civil aviation installations, spatial databases that already exist were employed.

- To determine the sensitivity assigned, the planned project sites and footprints were plotted on the screening tool.
- A site visit was conducted to confirm the present land use and environmental sensitivity with regard to civil aviation.
- To support the Site Sensitivity Verification process, more research was conducted; and
- A report on the site's sensitivity was created (i.e., in this section of the report).

Table 1. 5: The Site Sensitivity Verification procedure made use of the information source.

Data / Information	Source	Date	Type	Description
National Web-Based Environmental Screening Tool (Screening Tool)	Department of Environment, Forestry and Fisheries (DEFF)	2020	Spatial / Online Assessment	The Screening Tool is a geographically based web-enabled application which allows a proponent intending to submit an Application for EA in terms of the 2014 NEMA EIA Regulations (as amended) to screen the proposed site for any environmental sensitivity ¹ .
Airport, Airfields and Obstacle Datasets	Civil Aviation Authority (CAA)	2018	Spatial Vector Dataset	Location of airfields in RSA.
Transmission Strategic Corridors (EGI) Strategic Environmental Assessment (SEA)	Department of Environmental Affairs (DEA)	2021	Report	SEA commissioned by the DFFE [identification in terms of sections 24(3), 24(5)(a) and 24(5)(b) of the National Environmental Management Act, 1998 of Expanded Geographical Areas of strategic importance for the development of electricity transmission and distribution infrastructure and of procedures to be followed when applying for or deciding on environmental authorisations for large scale electricity transmission or distribution development activities identified in terms of section 24(2)(a) of the National Environmental Management Act, 1998 when occurring in geographical areas of strategic importance
RSA Airspaces in 3D	Air Traffic and Navigation Services SOC Limited (ATNS)	2020	Google Earth KMZ File	The RSA Airspaces in 3D data KMZ file is an initiative undertaken by the ATNS to illustrate the definitions and complexities of airspace, routes,

				aerodromes, and navigational facilities within South Africa to the public in the interest of safety.
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In order to complete the Site Sensitivity Verification, desktop analysis, satellite imaging, a preliminary on-site examination, and other pertinent information were used.

The map of civil aviation combined sensitivity generated and included in the Screening Tool depicted that the falls within a medium sensitivity area. The medium sensitivity area is based on the following trigger:

- Other Civil Aviation Aerodrome 8 and 15 km buffer in relation to commercial scale wind energy installations.
- However, based on the descriptions and motivations provided below, the proposed Substation will fall not within an area of Medium Sensitivity as per Screening Tool in terms of civil aviation.
- However, in terms of GN 320, no further requirements are applicable i.e., a Compliance Statement is required, since the site visit and research found the site to be of low sensitivity and it is so after reviewing all other research data sources like ATNS records. The medium rating is disputed, and a low sensitivity rating is deemed appropriate based on all evidence.

The site visit verified that the Ocheni Substation Site, is currently used for Agricultural farming, and cows as well as goats are using it for grazing. The Ocheni Substation site also has a 22kV powerline traversing the site from North to South-eastern direction. There are currently no crops, or any cultivation taken place, most likely, no sugar cane cultivation and plantation for the past 5 years.

- Within the proposed project footprint for Ocheni Substation project, no civil aviation installations were discovered.



Figure 1. 24: Site view from the Northern to the Southern direction

Putting things into perspective: The construction of new buildings and infrastructure like masts and power lines, in and around the vicinity of airports could potentially effect flight safety, and therefore require assessments to be conducted to determine if these new buildings and infrastructure infringes on the obstacle limitation surfaces established around each airport.

Furthermore, the Screening Tool uses Ocheni Substation sensitivities and related infrastructure like a mast that will be at most 35 metres, and the actual power lines structures will only be 30 m high. Therefore, the sensitivity and impact of substation mast, gantries, bus bars and related feeder power lines is expected to be much lower.

According to Air Traffic and Navigation Services SOC Limited (ATNS), RSA Airspaces in 3D the proposed site for Ocheni substation. There is not Aviation Installation nearby. The only Avian Installation is an airport located ± 27 km away at Hermannsburg.

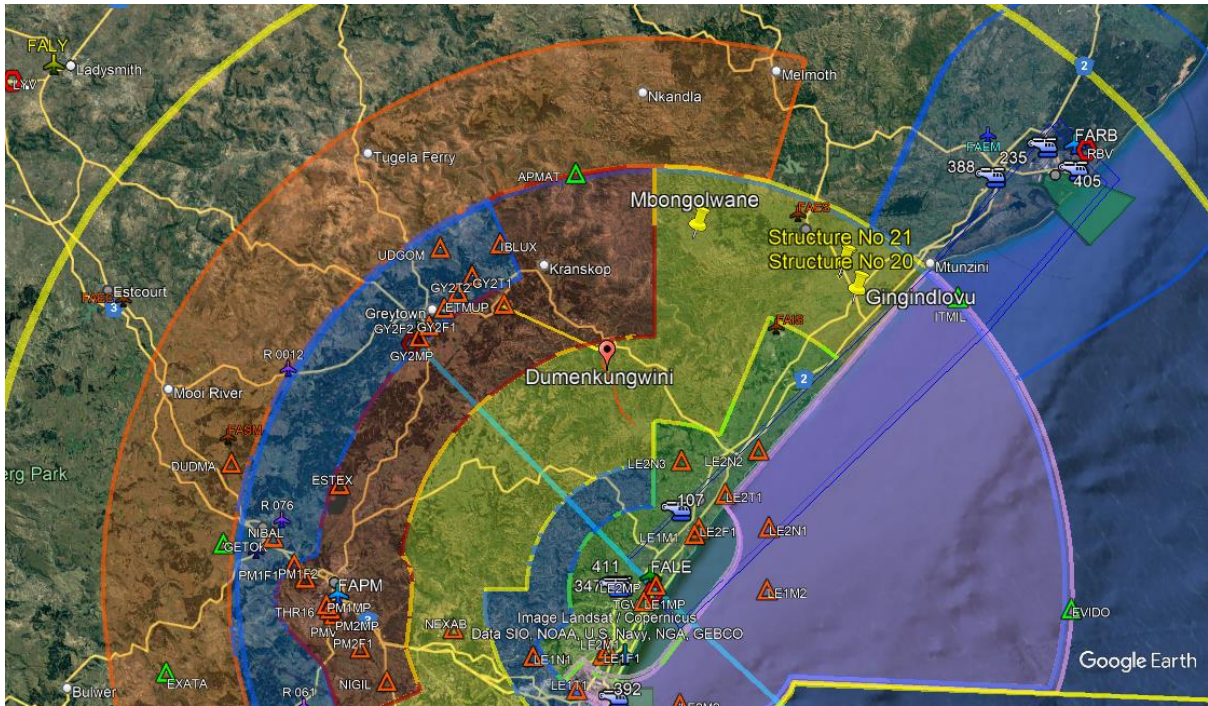


Figure 1. 25: Showing the Ocheni Substation site (Ocheni/Dumenkungwini) with relation to nearest airport at Hermansburg 27 kilometres away according to ATNS.

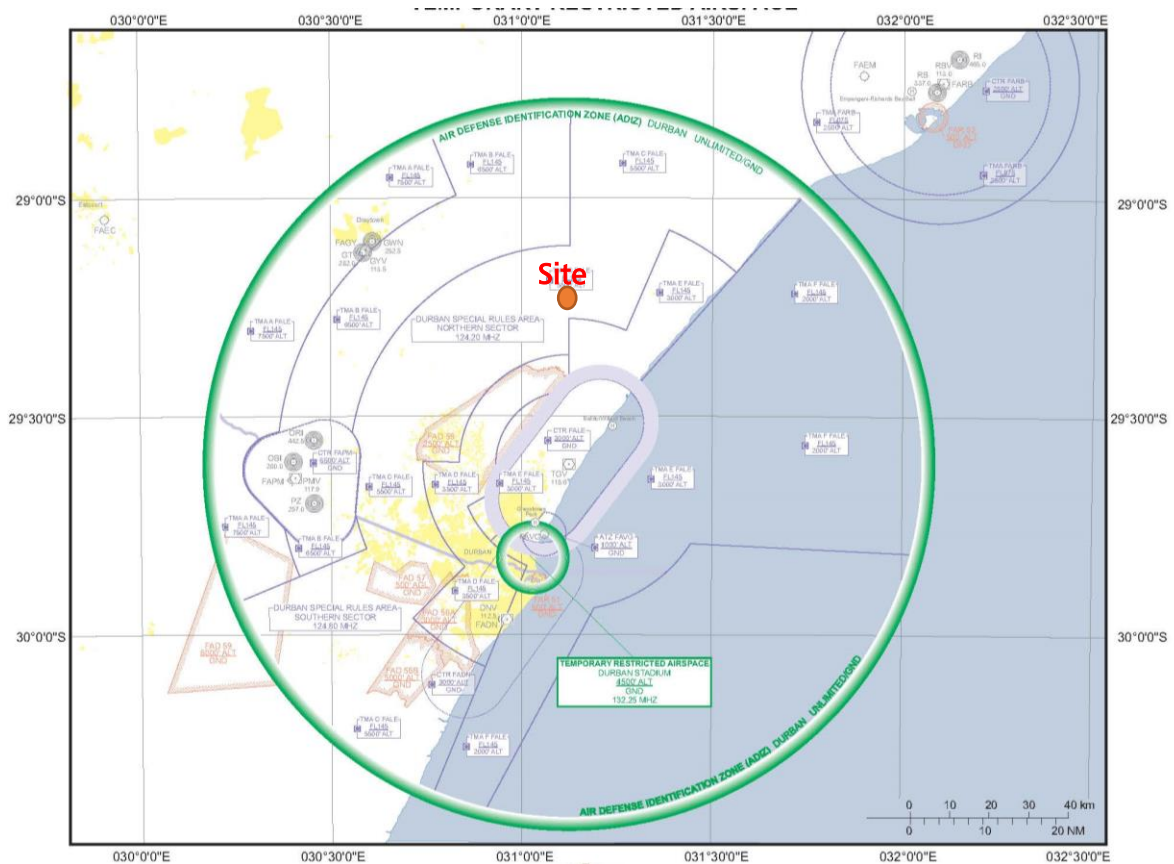


Figure 1. 26: Showing the flying restriction zone of 5500 feet altitude due to mountain ranges around the site, TMA C FALE FL. 145 5500'ALT.

The other factor is that the site according to Air Traffic and Navigation Services SOC Limited (ATNS), RSA Airspaces in 3D is not located on the flight route of any airport, in fact the site is located within what is classified as Restricted Air Space with a Restricted Flying Altitude of 5500 feet altitude above ground level due to vast mountain ranges occurring in around the site. This is equivalent to 1.6764km above ground level. By inference, the Ocheni Substation and its related infrastructure will in no way infringe on any form of aviation. The longest structure will be the Mast at 35 metres above ground, and any related Powerline Structure will be at 30 metres above ground which is way to lower than the required 1.6764km altitude.

Concluding Statement:

The Ocheni Substation project site was determined and verified to be of low sensitivity (as it relates to civil aviation, the medium sensitivity is therefore disputed). This was determined through a site visit and based on existing databases, and confirms the sensitivity allocated on the Screening Tool, Air Traffic and Navigation Services SOC Limited (ATNS), RSA Airspaces in 3D. Based on the above, in terms of GN 320, no further requirements are applicable i.e., a Compliance Statement is not required.

According to Published in Government Notice No. 320 Government Gazette 43110 20 March 2020, An applicant intending to undertake an activity identified in the scope of this protocol for which a specialist assessment has been identified on the screening tool: On a site identified as being of: "very high", "high" or "medium" sensitivity for civil aviation, must submit a Civil Aviation Compliance Statement; or "low" sensitivity, no further assessment requirements are identified. For this project, no further assessment requirements are identified.

3.9. Defence Theme (Low Sensitivity)

This report serves as the Site Sensitivity Verification for Defence for proposed Ocheni Substation and associated infrastructure. The proposed project is located within the EGI Expanded Eastern Corridor.

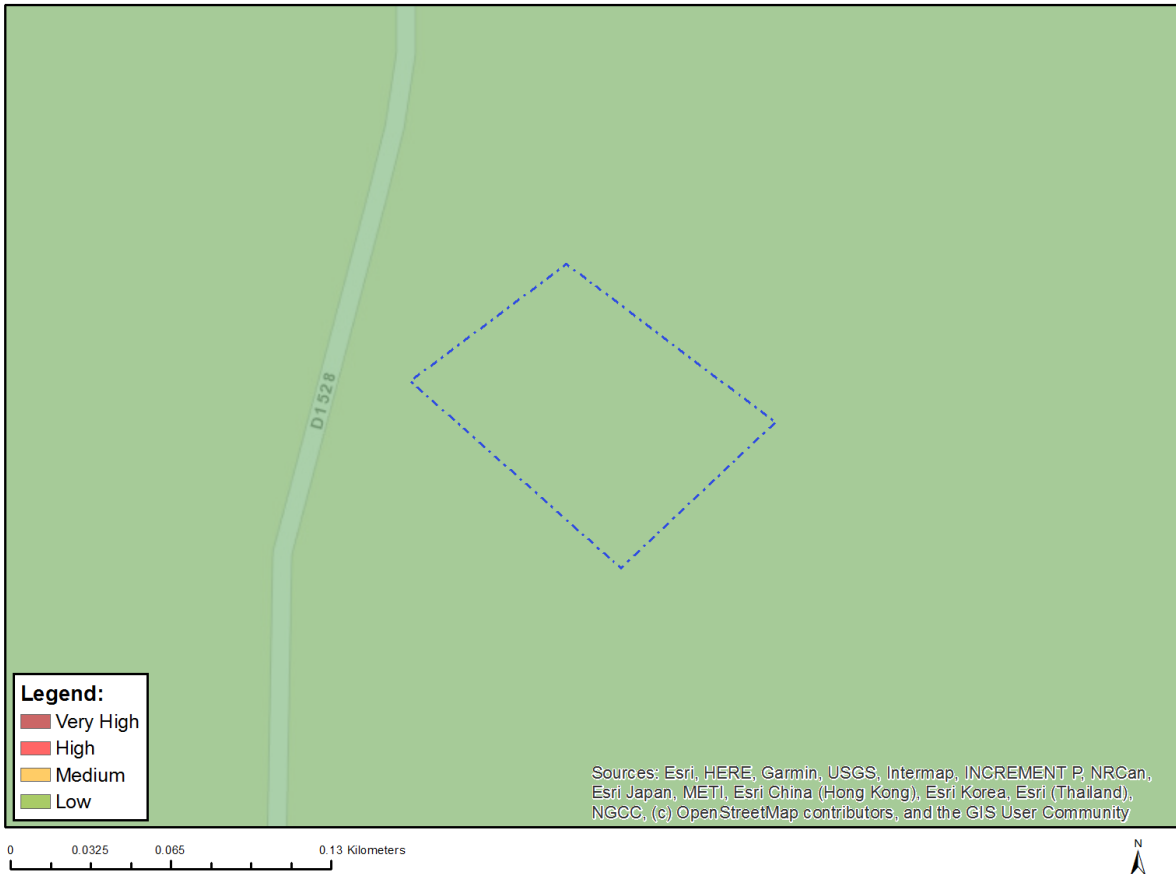


Figure 1. 27: Showing map of relative defence theme Low sensitivity.

The site visit confirmed that the proposed project site is dominated by grass species and recovering from agricultural activities and that there are no areas of cultivation present on site. There are several farmsteads around the site. No defence installations were found within the proposed project assessed area and footprint for the Ocheni Substation Site.



Figure 1. 28: Showing the overall look of the site from the site centre towards north-eastern direction.

The planned project area within a 30-kilometer radius do not contain any defence installations, according to the Air Traffic and Navigation Services SOC Limited (ATNS) data. The suggested project area is not shown to have any defence installations by the screening tool, which also rates the area as low sensitive.

Concluding Statement

The Proposed Ocheni Substation site relocation project site was found to have low sensitivity with regard to Defence Theme, and this was confirmed (as it relates to defence installations). This verifies the sensitivity assigned on the Screening Tool and was determined through a site visit and based on already-existing databases. Based on the aforementioned, no additional requirements are relevant under GN 320, so a Compliance Statement is not necessary.

According to Published in Government Notice No. 320 Government Gazette 43110 20 March 2020, An applicant intending to undertake an activity identified in the scope of this protocol for which a specialist assessment has been identified on the screening tool: On a site identified as being of: "very high", "high" or "medium" sensitivity for civil aviation, must submit a Civil Aviation Compliance Statement; or "low" sensitivity, no further assessment requirements are identified. No further assessment is required.

3.10. Palaeontology Theme (Low Sensitivity)

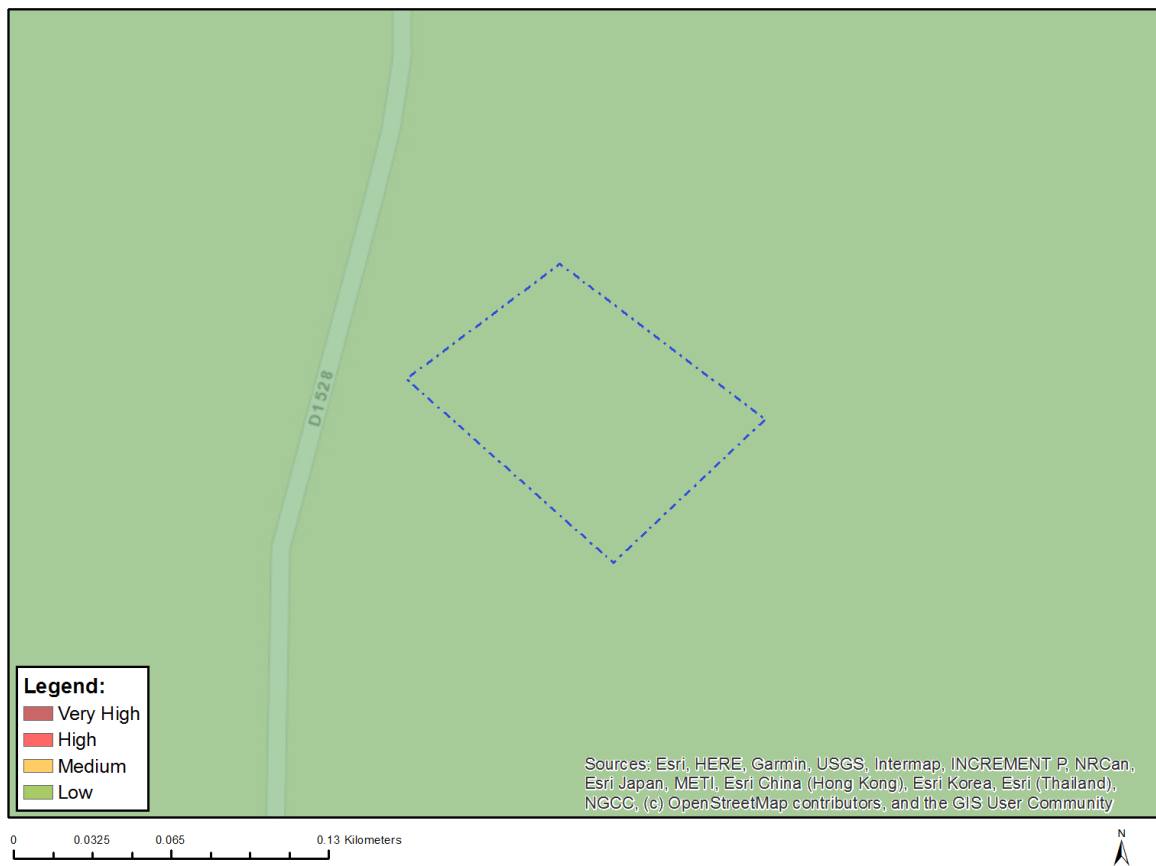


Figure 1. 29: Showing map of relative Palaeontology Theme sensitivity.

The significance of potential impacts to palaeontological resources was assessed to be low sensitivity during the site visit. This means, before construction it is low sensitivity and still low after construction. It is therefore the opinion of the EAP that development of the proposed Ocheni Substation and associated infrastructure is considered acceptable from a palaeontological perspective and hereby confirm the Low Sensitivities as stated by the Web based Environmental Screening Tool.

Information sources

The combined desktop and field-based palaeontological heritage Screening and Site Sensitivity Verification Study of the proposed Ocheni Substation Site was based on the following information resources:

- A brief project outline, kmz files, screening report and maps provided by CSIR -Environmental Management Services.
- A desktop review of (a) the relevant 1:50 000 and 1:250 000 scale topographic maps, (b) Google Earth© satellite imagery, (c) published geological and palaeontological literature, including 1:250 000 geological maps as well as (d) several previous and on-going fossil heritage (PIA) assessments in the iLembe region of KZN.

Concluding Statement

The low sensitivity of Palaeontological theme is hereby confirmed. Considering the fact that the site has been for a while used for sugarcane plantation, based on the above, in terms of GN 320, no further requirements are applicable i.e., a Compliance Statement is not required.

3.11. Plant Species Theme (Low Sensitivity)

The Initial Site Sensitivity Verification must be undertaken through the use of:

- (a) a desktop analysis, using satellite imagery; and

Desktop Analysis

- A review of easily accessible plans, records, and documents, including geotechnical data, was used to help identify potentially hazardous environmental conditions on site and to assist in identifying previous land uses.
- An evaluation of aerial photographs was also readily available, to assist in assessing historical land uses and conditions on and adjacent to the property.

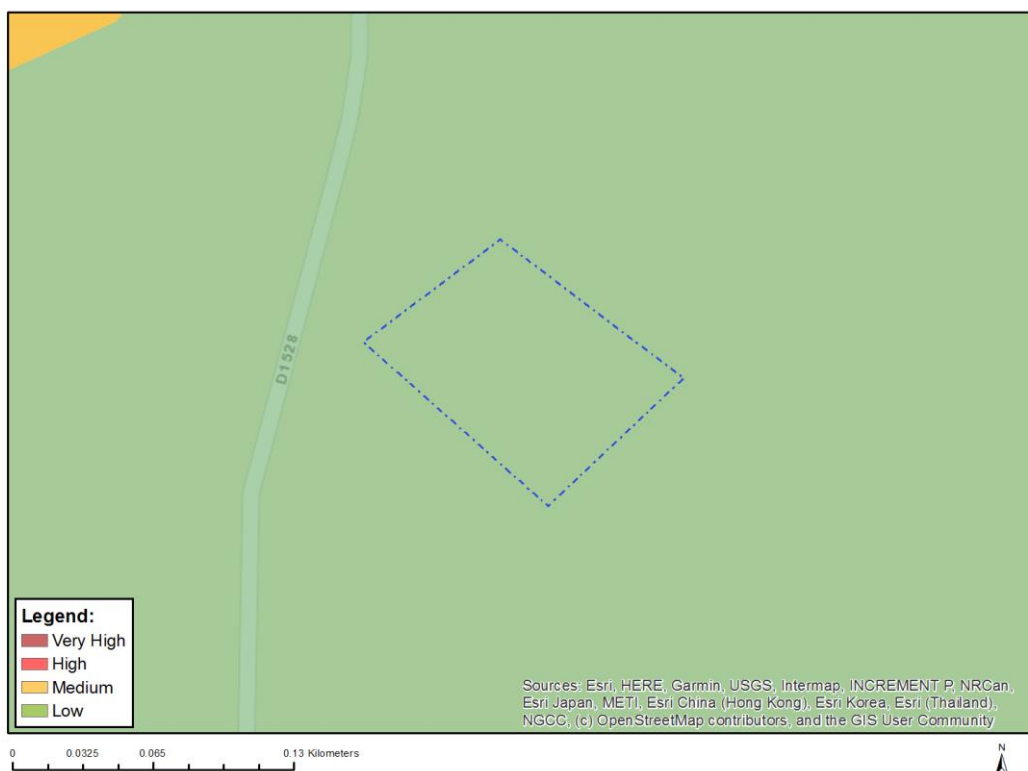


Figure 1. 30: Showing Plant Species Theme (Low Sensitivity)

The site visit was conducted 1 day in summer on 23 February 2023. The site covered predominantly by grass. The most dominant grass species on the site are *Panicum natalense* (Natal Buffalo Grass), *Imperata cylindrica* (Cotton wool grass), *Aristida junciformis* (Ngongoni grass). No portion of the grassland areas remain as pure grasslands since so many of them have been altered by farming activities, excessive grazing, or plant invasions from foreign species. Several formerly cultivated regions around the site have been left fallow, where they have become infected with exotic weeds, native pioneer plants, or both.

Only two *Lantana camara* shrubs alien invasive species present clustered together. See photographs in **Figure 1.31** below showing that the site does not contain such sensitive plant species as listed in the screening tool report. Furthermore, the neighbouring land contains similar grassland as they all were used for agricultural activities, and the area is not considered an ecological support area or natural area. The species of Conservation Concern (SCC) are not envisaged to be affected by this project.



Figure 1. 31: Showing a shrub of *Lantana camara* located on site.

Although the general surrounding area may have sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented. However, none of the species' numbers were allocated meaning that those species do not occur on the specific site.

Concluding Statement

The Proposed Ocheni Substation site relocation project site was found to have low sensitivity with regard to Plant Species Theme, and therefore the, the Low Sensitivity plant species theme as per national web based Environmental Screening tool is hereby confirmed. This verifies the sensitivity assigned on the Screening Tool and was determined through a site visit and based on already-existing databases. Based on the aforementioned, no additional requirements are relevant under GN 320, so a Compliance Statement is not necessary. The project is not expected to impact on the species of conservation concern.

An applicant intending to undertake an activity identified in the scope of this protocol, on a site identified by the screening tool as being of "very high" or "high" sensitivity for terrestrial animal species must submit a Terrestrial Animal Species Specialist Assessment Report. An applicant intending to undertake an activity identified in the scope of this protocol on a site identified by the screening tool as being of "medium sensitivity" for terrestrial animal species must submit either a Terrestrial Animal Species Specialist Assessment Report or a Terrestrial Animal Species Compliance Statement, depending on the outcome of a site inspection undertaken in accordance with paragraph 4. An applicant intending to undertake an activity identified in the scope of this protocol on a site identified by the screening tool as being of "low" sensitivity for terrestrial animal species must submit a Terrestrial Animal Species Compliance Statement. A Terrestrial Animal Species Compliance Statement will be submitted.

3.12. Terrestrial Biodiversity Theme (Very High Sensitivity)

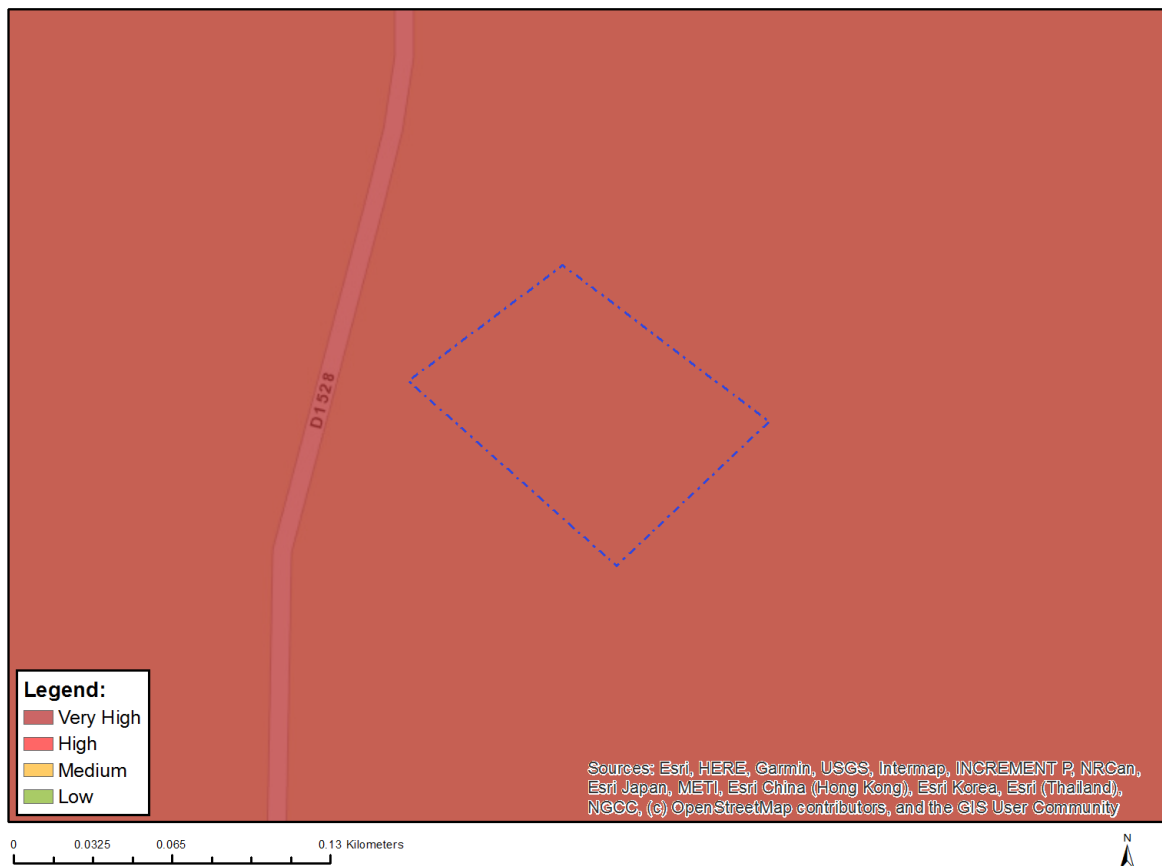


Figure 1. 32: Map of relative terrestrial biodiversity theme sensitivity

Threatened Ecosystems (Terrestrial)

The National Department of Environmental Affairs has published a list of threatened terrestrial ecosystems (DEA, 2011), which classifies all threatened or protected ecosystems in South Africa in terms of four categories: Critically Endangered (CR), Endangered (EN), Vulnerable (VU), or protected.

The purpose of categorising these ecosystems was to prioritise conservation areas, to reduce the rates of ecosystem and species extinction, as well as to prevent further degradation and loss of structure, function, and composition of these ecosystems (BGIS).

Table 1. 6: Threatened Terrestrial Ecosystems within iLembe District.

ECOSYSTEM	BIOME	PROVINCE
Critically Endangered (CR)		
Interior North Coast Grasslands (KZN 6)	Indian Ocean Coastal Belt, Savanna and Forest	KwaZulu-Natal
North Coast Forest Collective (KZN 15)	Indian Ocean Coastal Belt and Forest	KwaZulu-Natal
Northern Coastal Grasslands (KZN16)	Indian Ocean Coastal Belt and Forest	KwaZulu-Natal
Umvoti Valley Complex (KZN 19)	Fynbos	KwaZulu-Natal
New Hanover Plateau (KZN 12)	Grassland, Savanna, and Forest	KwaZulu-Natal
Endangered		
KwaZulu-Natal Coastal Forest (FOz VII1)	Forest	KwaZulu-Natal
KwaZulu-Natal Sandstone Sourveld (SVs 5)	Savanna	KwaZulu-Natal
Ntunjambili Valley Complex (KZN 32)	Savanna/Grassland	KwaZulu-Natal
Vulnerable (VU)		
KwaZulu-Natal Coastal Belt (CB 3)	Indian Ocean Coastal Belt	KwaZulu-Natal
Eastern Scarp Forest (FOz V1)	Forest	KwaZulu-Natal
Midlands Mistbelt Grassland (Gs 9)	Grassland	KwaZulu-Natal, Eastern Cape
Ngongoni Veld (SVs 4)	Savanna	KwaZulu-Natal, Eastern Cape

The planned development's location on the project site is sensitive to terrestrial biodiversity, dominated by Ngongoni veld from the viewpoint of conservation planning because:

- 'Endangered' vegetation type (Moist Coast Hinterland Grassland).
- 'Vulnerable' wetland habitat (Subtropical Freshwater Wetlands).
- The Moist Coast Hinterland Grassland biodiversity hotspot.
- NPAES focus area.
- National and provincial CBA areas.

3.12.1. Critical endangered ecosystem types

- Eshowe Mtunzini Hilly Grasslands - CR
- Moist Coast Hinterland Grasslands- CR

- Ngoye Scarp Forests and Grasslands - CR

From a fauna and flora perspective, the sensitivities relating to the project site included the potential occurrence of:

- 13 Flora species of conservation significance.
- 12 Fauna species of conservation significance.

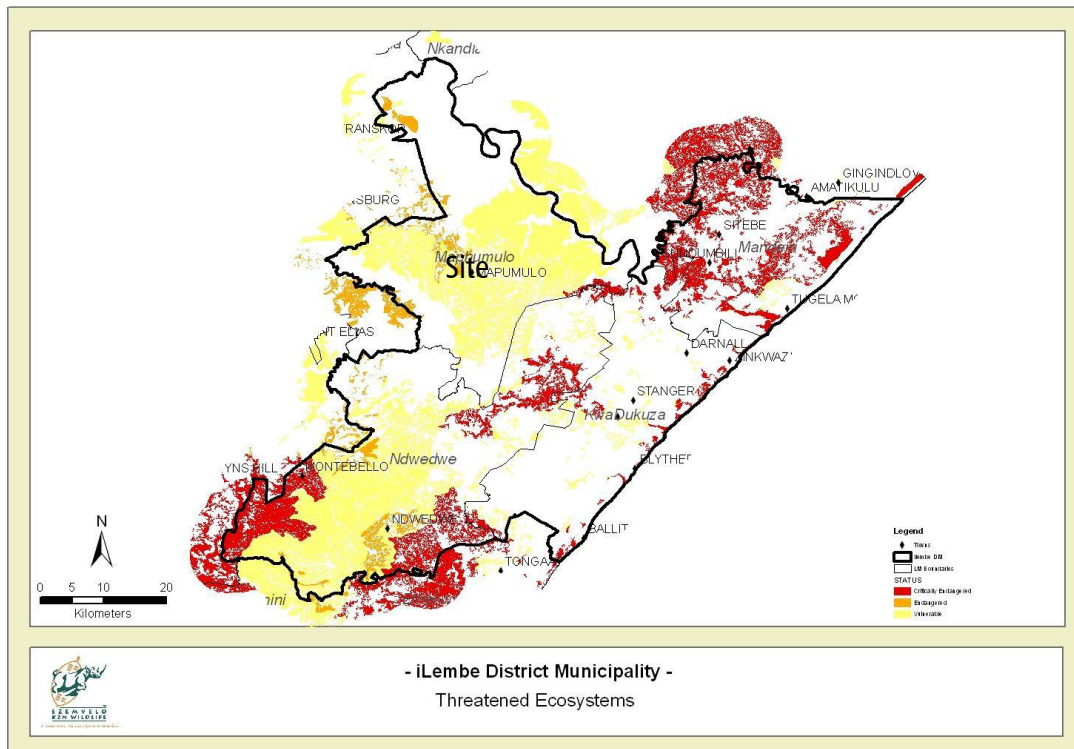


Figure 1. 33: showing various threatened ecosystem, the Ocheni Substation site sitting at Vulnerable rating.

It was discovered that the project site was situated in degraded grasslands as a result of agricultural activities. The majority of the site had just been degraded due to agricultural activities, giving it a uniform appearance. The entire area is covered in grass. However, only a few invasive plant species, two shrubs of *Lantana camara* clustered together, were noted.

These results indicates that the terrestrial biodiversity of the project location is not typical of the environmental sensitivity areas discovered during the desktop study. Even though it is likely possible in a smaller degree that some Species of Conservation Concern (SCC) fauna and flora species exist, the probability of their occurrence will still be considered low for the majority of the species. The web-based environmental screening tool gave the site's ecological relevance a Very High sensitivity rating since it is prudent to assume that the listed species are present.

Provincial scale data layers (KZN CBA Irreplaceable version 26012016) and national scale data layers (Skowno et al., 2018) revealed CBA areas overlapping with the project site. The Critically Endangered Kwambonambi Hygrophilous Grassland ecosystem and NPAES target areas are two significant biodiversity features found within the CBA areas. The project location is not surrounded by any provincial or national ESA designated areas.

Table 5: summarizes the results of a review of the regional systematic planning framework, which took into consideration the following characteristics: that included the following features:

- Critical Biodiversity Areas
- Critical Habitat for Red Listed, Endemic or Protected Species.
- Critically Endangered and Endangered Ecosystems
- Ecological Support Areas
- Protected Areas (and buffers) and NPAES
- River, Estuarine and Wetland Freshwater Ecosystem Priority Areas (FEPAs) and buffers
- Vulnerable Ecosystems

National Environmental Screening Tool

The DFFE Screening Tool indicates the following:

- Terrestrial Biodiversity is Very High Sensitivity due to the likelihood of the occurrence of Endangered Ecosystem

3.12.2 Vegetation Assessment

3.12.2.1. Review of existing environmental information

Prior to the field assessment, a comprehensive desktop assessment was conducted to document all baseline ecological information relating to the project area and mapped at a desktop level. Mapping was informed by available digital imagery and other supporting datasets. The following spatial data sets were included (available from the SANBI BGIS website; www.sanbi.org):

3.12.2.2. National Biodiversity Assessment (NBA, 2011)

- NBA 2011 Terrestrial Ecosystem Protection Level – SANBI BGIS Terrestrial Ecosystem Protection Level [vector geospatial dataset].
- NBA 2011 Terrestrial Formal Protected Areas – SANBI BGIS [vector geospatial dataset].
- National List of Threatened Ecosystems 2011 – SANBI [vector geospatial dataset].

3.12.3. National Protected Areas Expansion Strategy (NPAES, 2010)

- NPAES Protected Areas – Formal land-based 2010 - SANParks/SANBI [vector geospatial dataset].
- NPAES Protected Areas – Informal 2010 - SANParks/SANBI [vector geospatial dataset].

Table 1. 7: Summary of Regional Planning Biodiversity features.

National Environmental Screening Tool (Terrestrial Biodiversity)	Low & Very High Terrestrial Biodiversity Medium Animal Species Medium & Low Plant Species Very High & Low Aquatic Sensitivity	CBA 1 & 2, ESA, FEPA quaternary catchments Animal & Plant species potentially present (refer species assessment section). Wetland features potentially present.
National Vegetation Map (NVM, 2018) & National Biodiversity Assessment (2018)	coastal grassland and estuary KZN Coastal grassland	Least Concern Least Concern
Critically Endangered and Endangered Ecosystems (NBA, 2018)	None	None
Vulnerable Ecosystems (NBA, 2018)	None	None
Regional Planning: Succulent Karoo Ecosystem Planning (SKEP, 2002)	Outside of planning domain	None
Namakwa CBA	None affected	None

Table 1. 8: Potentially affected terrestrial ecosystem and implications.

FEATURE	DESCRIPTION	IMPLICATIONS/COMMENT
---------	-------------	----------------------

Protected Areas (SAPAD, 2020)	None directly affected, there are five nature reserves within iLembe District Municipality, namely the Harold Johansson Nature Reserve 41 km away from site, Amatigulu located 51km away from the proposed site, Verbara Forest located 31 km away from the proposed site, Rainy Farm (located 36km away from the proposed site and Prince's Grant Game Park located 41km away from site.	These protected areas nor any ecological processes associated with them are affected by the proposed development.
NPAES (2018)	None directly affected but are in proximity (> 30 km) to the south and Southeast.	No NPAES or ecological processes within are likely affected.
Regional Hotspots & Regions of Endemism	<p>Flora: The iLembe District is recorded as supporting several Red List species including the Endangered <i>Dahlgrenodendron natalense</i> (Natal Quince Tree) which occurs in forest margins and the Vulnerable <i>Brachystelma franksiae</i> which occurs in grassland/savanna areas. A detailed list of plant species recorded for the district, none of this occur on the proposed site.</p> <p>Fauna: There are about 123 species of fauna that are known to occur or likely to occur within the district, including 10 species that are threatened or rare . Threatened species include two frog species, <i>Afrivalus spinifrons</i> (Natal leaf-folding frog) and <i>Hyperolius pickersgilli</i> (Pickers gill's reed frog) which are listed as vulnerable and endangered</p>	<p>Several endemic species, occur in the general area, the presence and close proximity of the residential dwelling to the site as well as grazing and agricultural activities as well as the footpath together with the lack of presence of any stream makes the possibility of the occurrence of this species on site very unlikely.</p>

	respectively. The Endangered Southern Ground-Hornbill and the rare, Yellow-banded Sapphire (<i>Lolaus diametra natalica</i>) butterfly which occurs along forest edges, as well as several fish species including the <i>Sibayi Gobi</i> which is listed as both rare and Endangered.	
Important Bird Areas (IBA's)	The site is not located closer to any Important Bird Areas	The activity will not overlap with a designated IBA's.
Designated Heritage Sites	The site is not located within any Heritage Sites.	None
Key Biodiversity Areas (KBA's)	None	None
Marine/Coastal areas	None	None
RAMSAR sites	None	None
Strategic Water Source Areas (SWSA)	Not situated within any designated SWSA	None
Freshwater Ecosystem Priority Areas (FEPA's)	The proposed Ocheni Substation will not affect any perennial or non-perennial watercourse. It is Situated within Priority 4 Catchment	The specific activity is unlikely to pose any significant risk to watercourses as the substation activities is not going to be placed within any watercourse. Any access roads should use existing tracks.
Within 32 m of Watercourses	No stream or water course located on or near site	Terrestrial impact to any non-perennial watercourse will be negligible associated with construction of the proposed facility, which will most likely avoid such areas.
Within 100 m of Rivers	The substation site does not have any water course located within 100 metres	None. Closest perennial watercourse

Within 500 m of Wetlands	Site is surrounded by residential dwellings	Most of the site is outside of functional zones of these features, which, may provide habitat for several species including birds and amphibians. The proposed activity is not anticipated to have any direct or indirect impact of significance. Closest natural pan is situated 1.3 km north- east of the proposed BESS at the southern end of the powerline route.
Estuaries	The site is outside of any estuarine functional zone.	None
Forest	None directly affected.	No forest pockets nor any ecological processes associated with them are affected by the proposed agricultural project.
Surrounding Land Uses	Mostly is residential dwellings and agriculture, cultivation and (grazing)	Low to Moderate levels of disturbance are present in surrounding landscape associated agriculture.
Critical Habitat for listed endemic/ protected species	Several endemic or other protected species are known from the broader area including populations of threatened species.	

Concluding Statement

Although Terrestrial Biodiversity Theme is depicted as Very High Sensitivity, unfortunately the facts on the ground with regard to the proposed development site does not agree and there the veery high sensitivity is rather low. And this is specifically with regards to the proposed site of 100m-by-100m substation perimeter.

- No vegetation units affected have an elevated conservation status.
- The Substation Site does affect any Critical Biodiversity Area and Ecological Support Areas.

According to the Published in Government Notice No. 1150 Government Gazette 43855 30 October 2020, an applicant intending to undertake an activity identified in the scope of this protocol, on a site identified by the screening tool as being of "very high" or "high" sensitivity for terrestrial plant species, must submit a Terrestrial Plant Species Specialist Assessment Report.

An applicant intending to undertake an activity identified in the scope of this protocol, on a site identified by the screening tool as being of "medium sensitivity" for terrestrial plant species, must submit either a Terrestrial Plant Species Specialist Assessment Report or a Terrestrial Plant Species Compliance Statement, depending on the outcome of a site inspection undertaken in accordance with paragraph 4.

An applicant intending to undertake an activity identified in the scope of this protocol, on a site identified by the screening tool as being of “low” sensitivity for terrestrial plant species, must submit a Terrestrial Plant Species Compliance Statement.

Where the information gathered from the site sensitivity verification differs from the screening tool designation of “very high” or “high” for terrestrial plant species sensitivity on the screening tool, and it is found to be of a “low” sensitivity, then a Terrestrial Plant Species Compliance Statement must be submitted. For this project, a Terrestrial Plant Species Compliance Statement must be submitted.

4. CONCLUSION AND RECOMMENDATIONS

The proposed site for Ocheni substation site area falls within the Strategic Transmission Corridors (EGI) as gazetted by Government Notice No. 114 in Government Gazette No. 41445. This EGI identified 5 strategic transmission corridors important for the planning of electricity transmission and distribution infrastructure as well as procedure to be followed when applying for environmental authorisation for electricity transmission and distribution expansion when occurring in these corridors. Ocheni substation is the most relevant development that suits well with EGIs as it meant to strengthen the weakened energy supply in the area.

Although the web based environmental screening tool identified certain areas, plant, and animal species of conservation concern, that might exist on the site and more species based on historical records from SANBI databases, none were observed during site field investigations.

The location is not anticipated to be of significant importance for large-scale ecological processes, according to the field evaluation conducted. Also, because it lacks many distinctive characteristics of species, its irreplaceability value is poor. Given that the 100m-by-100m substation overall footprint takes up less than 1% of the area, the development is thought to be generally compatible with the goals of ESAs as long as negative effects like erosion can be effectively addressed with an EMP.

The Site Visit have revealed that the area is already deteriorated, making it unlikely to support significant levels of biodiversity and not indicative of the environmental sensitivities discovered during the desktop assessment and also disputed Very high, High and Mediums that were suggested by the web based Environmental screening tool.

Nonetheless, a number of Species of Conservation Concern (SCC) (animal and flora species) could conceivably exist, even though most of them have a low probability of doing so. The precautionary approach would assume the presence of the listed species, however considering the site visit findings and the presence of the residential dwelling surrounding the

site, any of their presence is highly negligible. The 100m-by-100m substation site was found not to have the Species of Conservation Concern and nevertheless seldom present throughout the site, making a significant impact on features or SCC unlikely.

Although the entire footprint is very small in comparison to the overall extent of the Ocheni/Dumenkungwini village and as there are still significant regions around the site that would not be affected, there are no local populations of wildlife within the site that are likely to be jeopardized by the Ocheni Substation construction.

There are no concerns about the development's potential effects on ecological processes and options for future conservation expansion in the region raised by the fact that the site is located within a CBA 2, an NC-NPAES focus area, and it is not located within the close proximity of any conservation area.

4.1. Environmental Impact Statement:

The proposed Ocheni Substation site is viewed as generally appropriate for the building of a substation looking at electricity strengthening in the area since the demand is increasing. There are not any specific long-term effects that are likely to be connected to the substation that cannot be avoided or mitigated to a manageable level. Despite the fact that the development will have an impact on areas that are ESAs, CBAs, and the NC-PAES Focus Area, the site's conservation value is not thought to be exceptional, and its location and context suggest that these impacts are likely to be more acceptable and won't significantly impede future conservation efforts.

After the proposed construction's footprint has been evaluated by the site visit:

This Ocheni Substation project is recommended to be approved on a condition that the EAP to enforce the contractor to fully:

- comply with the generic environmental management programme (EMPR) for the development and expansion of substation infrastructure for the transmission and distribution of electricity.

5. PUBLIC PARTICIPATION PROCESS

Public Participation is a process that is designed to enable all interested and affected parties (I&APs) to voice their opinions and concerns that enable the practitioner to evaluate all aspects of the proposed development, with the objective of improving the project by maximising its benefits while minimising the adverse effects. I&APs include all interested stakeholders, technical specialists, and the various relevant organs of state (Table 9) who work together to produce an informed and sound decisions.

Public Participation plays a significant role in the compilation of environmental reports as well as the planning, design, and ultimately the implementation of the project. Public Participation is a process leading to informed decision-making, through joint effort by the proponent (Eskom), technical experts, governmental authorities, and systematically identified I&APs.

The purpose of the public participation process for the Ocheni 20MVA Substation infrastructure Proposed substation project was:

- to ensure inclusivity (the needs, interests and values of I&APs must be considered in the decision-making process by DFFE).
- to focus on issues relevant to the project, and issues considered important by I&APs and key stakeholders.
- to identify issues and concerns of key stakeholders and I&APs with regards to the application
- to inform I&APs and key stakeholders of the proposed application and environmental studies.
- to initiate meaningful and timeous participation of I&APs.
- to promote transparency and an understanding of the project and its potential
- to provide a structure for liaison and communication with I&APs and key stakeholders.
- to provide information used for decision-making.
- to provide responses to I&AP queries.

The following process was undertaken to facilitate the public participation for the Proposed Ocheni Substation site relocation project:

5.1. PUBLIC PARTICIPATION PROCESS DETAILS

Newspaper Names	1. isiZulu – Isolezwe Newspaper 2. English – Zululand Observer Newspaper
Date Published	Thursday, 01 June 2023
Site Notices	03, A2 size Site Notices were placed on site

Date Site Notices Placed	June 01, 2023 –July 07, 2023
Public Open Day Meeting	23 June 2023
Background Information Documents	Background Information Documents were sent to I&APs via email, and some who did not have emails were given hard copies.

Table 7: Process was undertaken to facilitate the public participation.

5.3. Newspaper Advertisement

An advertisement, notifying the public of the Environmental Authorisation application and Impact Assessment Process, and requesting Interested and Affected Parties (I&APs) to register their comments with Ourbiosphere Environmental (Pty) Ltd, the isiZulu advert was placed on Isolezwe newspaper, and the English advert was placed in the Zululand Observer on June 01, 2023 -see Figure 16G. The advertisement was placed in accordance with regulation 41(2) (c) of the Impact Assessment Regulations of 2014 (as amended).

5.4. Site Notices

In order to inform surrounding communities and adjacent landowners of the proposed development, site notice boards in accordance with regulation 41(2)(a) and 41(3) of the Impact Assessment Regulations (as amended) were placed at the following locations on June 01, 2023: The site notice was written in both English and isiZulu. There were 03, A2 Size site notices, which were placed on various conspicuous location in the Ocheni villages that are affected by the project.

ISAZISO NGOHLELO LOKUCWANINGA UKUVIKELA EZEMVELO ELAZIWA NGOKUTHI UKWAKHIWA KWENQALASIZINDA YOKUH AMBISA UGESI

NOTICE OF IMPACT ASSESSMENT PROCESS (ELECTRICITY GRID INFRASTRUCTURE PROCESS -EGI)

Lesi saziso sikhishwa ngoko Mthetho-ngomo 40(3) wemigomo eshicilelwe kwi Saziso sikaHulumeni No. R982 nakwisigaba 41(c)(i) sifundwa ngokuhlenganiswa nesigaba 43 soMthetho kazwelonke wezokunakekelwa nokuphathwa kwezemvelo (umthetho 107 ka 1998), mayelana nenhloso yokwenza lomsebenzi olandelayo:

Notice is hereby given in terms of Regulation 40(3) of the regulations published in Government Notice No. R 982 and Section 41(c)(i) read together with Section 43 of the National Environmental Management Act (Act 107 of 1998) of intent to carry out the following Activity:

DFFE EGI REF NO: 2023-01-0006

Umsebenzi kanye nendawo: Kuhlongozwa ukuphambuka kukalayini kagesi ngama mitha awu 873m endaweni yaseVekeya kulayini ogunyaziwe osuka eGingindlovu usiya eMbongolwane, lolayini unamandla awu 132 kV. Futhi kuhlongozwa ukwenzelwa kombhoshongo wezokuxhumana ozokwakhiwa phakathi esiteshini sikagesi iMbongolwane ongaphazu kamamitha awu 35 ubude. UMyango Wezamahlathi, Ezokudoba kanye ezemvelo wakhipha imvume yokwakha lesiteshi ngaphansi kwenombolo (DFFE) : 14/12/16/3/3/1/1918.

Activity & Locality: The proposed project will entail the location change of the new 20MVA 132/22kV Ocheni Substation on the authorised 20MVA 132/22kV OCHENI Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the KwaZulu-Natal Province. DFFE Environmental Authorisation NO: 12/12/20/2271/AM3

Project Coordinates Details:

North-West Corner	North-East Corner	South-West Corner	North-East Corner
S: 29°08'45.88" E: 31°00'49.46"	S: 29°08'49.09" E: 31°00'47.64"	S: 29°08'48.71" E: 31°00'52.79"	S: 29°08'51.22" E: 31°00'50.33"

Inkampani yezokuhambisa ugesi uEskom KwaZulu Natal uqoke inkampani ezimele yezokucwaninga ezemvelo i-Our Biosphere Environmental ukuthi afake isicelo sokwakha isiteshi i-Ocheni kwenye indawo, futhi enze ucwaningo olufanele ngokwemigomo ethintekayo eMnyangweni kazwelonke Wezamahlathi, ezokudoba kanye nezemvelo (DFFE). Ngokuthobela umgomo 41 wemigomo yokucwaninga ukuthinteka kwezemvelo, uyamenywa emhlanganweni womphakathi olandelayo;

The activity: The proposed change finding new 20MVA 132/22kV Ocheni Substation on the authorised 20MVA 132/22kV OCHENI Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the KwaZulu-Natal Province.

Proponent: Eskom Distribution (Eskom, KwaZulu-Natal Operating Unit)
Umhlongozi: Eskom Distribution (Eskom, KwaZulu Natal Operating Unit)
Consultants: Ourbiosphere Environmental (Pty) Ltd
Umcwaningi: Ourbiosphere Environmental (Pty) Ltd
Thinta: Mr. Musa Netshivhambe

Umhlangano womphakathi: 23 June 2023
Public Open Day Meeting:

Indawo: Hlimbithwa Community Hall
(Venue) (Dumenkungwini -KZN)

Usuku lokugcina lokufaka imibono: 6 July 2023
Deadline:
Contact: Musa Netshivhambe

Isikhathi: 09H30am to 16h00pm
(Time):

Tel: 073 977 9414 Calls/WhatsApp
Fax: 086 567 5523

Email: musa@ourbiosphere.co.za
website: www.ourbiosphere.co.za



Ukuqinisekisa ukuthi uyafakwa kuhlu lwabantu abanentshisekelo futhi abathintekayo iloku okuhlangezwayo, sicela uthumele igama lakho, neminingwane yokuthinteka kwakho email: musa@ourbiosphere.co.za, Cell: 073 977 9414 zingakapheli izinsuku ezingama-30 kusukela ngelanga lesikhangiso. Usuku lokugcina lokuetha imiboni ngumhlaka 6 July 2023 nge hora 23:59pm.

To ensure that you are identified as an Interested and/or Affected Party (I&AP) ONLY in terms of the IA process, please submit your name, contact information and Interest (comments) to email: musa@ourbiosphere.co.za, Cell: 073 977 9414 30 days from publication of this notice. **Deadline for Comments 06 July 2023 at 23:59pm**



Figure 16a: Showing the Actual English and isiZulu Notice that was placed on site.

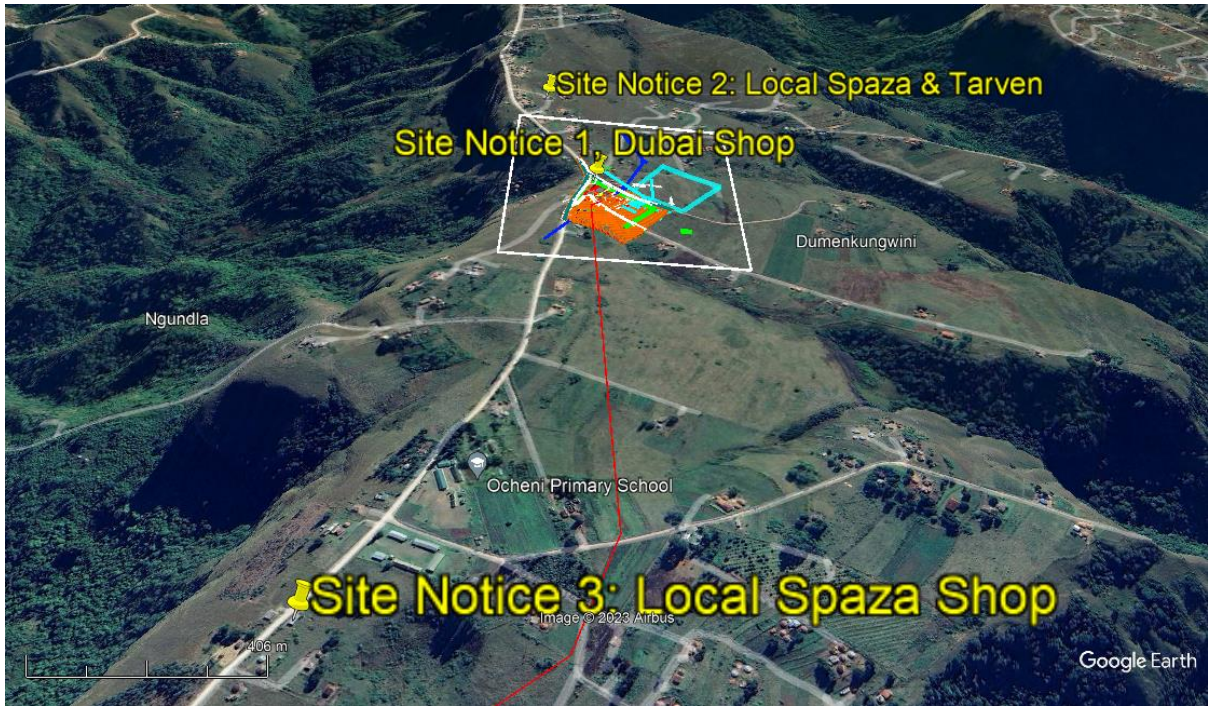


Figure 16b: Showing the locations where site notices were placed.



Figure 16 D: Showing location of site notice 2 at local spaza and Tavern.

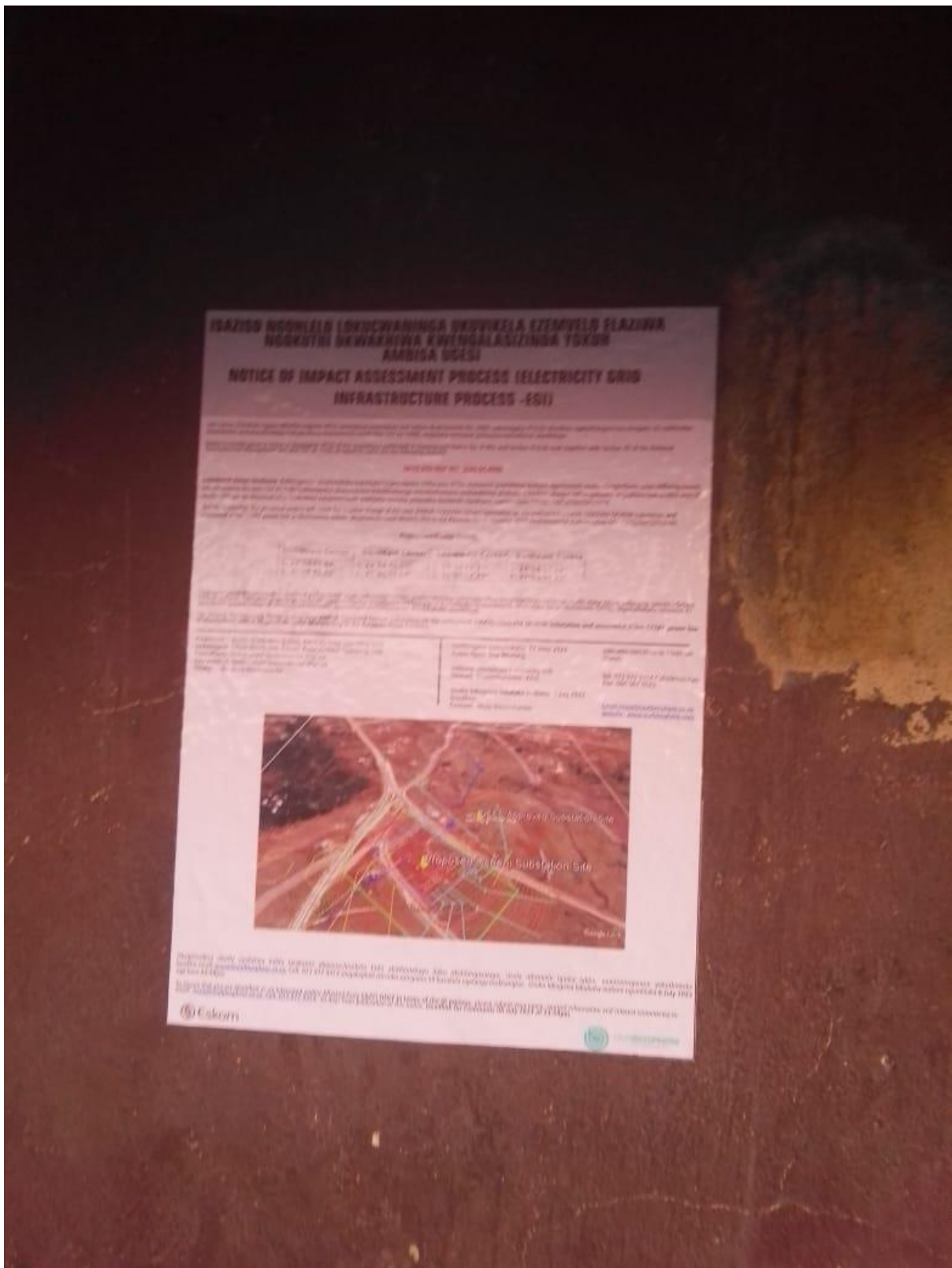


Figure 16 E: Showing site notice no 3 at the local Spaza Shop

ISAZISO NGOHLELO LOKUCWANINGA UKUVIKELA EZEMVELO ELAZIWA NGOKUTHI UKWAKHIWA KWENQALASIZINDA YOKUHAMBISA UGESI (ELECTRICITY GRID INSTRUCTURE- EGI)

Lesi saziro sikhishwa ngoko Mthetho-mgomo 40(3) wemigomo eshicilelwe kwi Saziro sikaHulumeni No. R982 nakwisigaba 41(c)(i) sifundwa ngokuhlenganiswa nesigaba 43 soMthetho kazwelonke wezokunakekelwa nokuphathwa kwezemvelo (umthetho 107 ka 1998), mayelana nenhloso yokwenza lomsebenzi olandelayo:

DFFE EGI REF NO: 2023-01-0009

Umsebenzi kanye nendawo: Kuhlangozwa ukuphambuka kukalayini kagesi ngama mitha awu 873m endaweni yaseVekeya kulayini ogunyaziwe osuka eGingindlovu usiya eMbongolwane, lolayini unamandla awu 132 kV. Futhi kuhlangozwa ukwenzelwa kombhoshongo wezokuxhumana ozokwakhiwa phakathi esiteshini sikagesi iMbongolwane ongaphezu kamamitha awu 35 ubude. UMyango Wezamaqhathi, Ezokudoba kanye Nezemvelo wakhapha imvume yokwakha lesiteshi ngaphansi kwenombolo (DFFE) : 14/12/16/3/3/1/1918.

Starting Point	Middle Point	End Point
S: 28°59'23.42" E: 31°33'19.02"	S: 28°59'23.11" E: 31°33'11.83"	S: 28°59'07.46" E: 31°33'07.19"

Lo msebenzi uzoqoka ukuphambuka kukalayini osugunyaziwe obizwa nge Gingindlovu-Mbongolwane 132kV ngezixobo ezimbili buqamama nezindlu zabantu endaweni yase Vekeya, kuzophinde futhi kwakhiwe umbhoshongo wezokuxhumana ongamamitha acishe adule u 35 ngaphakathi esiteshini sikagesi iMbongolwane.

Proponent: Eskom Distribution (Eskom, KwaZulu-Natal Operating Unit)
Umhongozi: Eskom Distribution (Eskom, KwaZulu Natal Operating Unit)
Consultants: Ourbiosphere Environmental (Pty) Ltd
Umcwaningi: Ourbiosphere Environmental (Pty) Ltd
Thinta: Musa Netshivhambe

Umhlangano womphakathi: 22nd June 2023
Indawo: Ngwenya Secondary School
Isikhathi: 09H30am to 16h00pm
Venue GPS Coordinates: S: 28°59'21.38" and E: 31°33'03.64"
Usuku lokucina lokufaka imibono: 1st July 2023 (23:59pm)
Contact: Musa Netshivhambe
Cell: Tel: 073 977 9414
Fax: 086 567 5523
Email: musa@ourbiosphere.co.za

Ukuqinisekisa ukuthi uyafakwa kuhl lwabantu abanentshisekelo futhi abathintekayo iloku okuhlangozwayo, sicela uthumele igama lakho, neminingwane yokuthinteka kwakho email: musa@ourbiosphere.co.za, Cell: 073 977 9414 zingakapheli izinsuku ezingama-30 kusukela ngelanga lesikhangiso. Usuku lokucina lokuletha imiboni ngumhlaka 1st July 2023 nge hora 23:59.

ISAZISO NGOHLELO LOKUCWANINGA UKUVIKELA EZEMVELO ELAZIWA NGOKUTHI UKWAKHIWA KWENQALASIZINDA YOKUHAMBISA UGESI (ELECTRICITY GRID INSTRUCTURE- EGI)

Lesi saziro sikhishwa ngoko Mthetho-mgomo 40(3) wemigomo eshicilelwe kwi Saziro sikaHulumeni No. R982 nakwisigaba 41(c)(i) sifundwa ngokuhlenganiswa nesigaba 43 soMthetho kazwelonke wezokunakekelwa nokuphathwa kwezemvelo (umthetho 107 ka 1998), mayelana nenhloso yokwenza lomsebenzi olandelayo:

DFFE EGI REF NO: 2023-01-0006

Umsebenzi kanye nendawo: Kuhlangozwa ukushintshwa kwendawo yokwakha isiteshi sikagesi esisha esibizwa ngokuthi i-Ocheni 132/22kV 20MVA no layini onamandla kagesi awu 132kV ongakhilomitha angamashumi amabili nanye (21km) oya esiteshini sikagesi iGlendale, isiteshi sizokwakhiwa kwaMaphumulo ngaphantsi komkhandlu womasipala iMaphumulo kwaZulu Natali. UMyango Wezamaqhathi, Ezokudoba kanye Nezemvelo wakhapha imvume yokwakha lesiteshi ngaphansi kwenombolo : 12/12/20/2271/AM3.

North-West Corner	North-East Corner	South-West Corner	North-East Corner
S: 29°08'45.88" E: 31°00'49.46"	S: 29°08'49.09" E: 31°00'47.64"	S: 29°08'48.71" E: 31°00'52.79"	S: 29°08'51.22" E: 31°00'50.33"

Inkampani yezokuhambisa ugesi uEskom KwaZulu Natal uqoke inkampani ezimele yezokucwaninga ezemvelo i-Our Biosphere Environmental ukuthi afake isicelo sokwakha isiteshi i-Ocheni kwenye indawo, futhi enze ucwaningo olufanele ngokwemigomo ethintekayo eMnyangweni kazwelonke Wezamaqhathi, Ezokudoba kanye Nezemvelo (DFFE). Ngokuthobela umgomo 41 wemigomo yokucwaninga ukuthinteka kwezemvelo, uyamenywa emhlanganweni womphakathi olandelayo;

Umhlangano womphakathi: 23rd June 2023
Indawo: Hlimbithwa Community Hall
 Dumenkungwini (KwaZulu-Natal)
Isikhathi: 10H00am to 16h00pm
Usuku lokucina lokufaka imibono: 1st July 2023 (23:59pm)
Contact Person: Musa Netshivhambe
Contact Details: Tel: 073 977 9414
Contact Email: musa@ourbiosphere.co.za

Ukuqinisekisa ukuthi uyafakwa kuhl lwabantu abanentshisekelo futhi abathintekayo iloku okuhlangozwayo, sicela uthumele igama lakho, neminingwane yokuthinteka kwakho zingakapheli izinsuku (Email:musa@ourbiosphere.co.za, Tel: 073 977 9414) ezingama-30 kusukela ngelanga lesikhangiso. Usuku lokucina lokuletha imiboni ngumhlaka 1st July 2023 nge hora 23:59.



Figure 16 F: isiZulu Newspaper Advertise

MISCELLANEOUS SALES

S.A.P.S GUNSHOP
SPECIALS STARTING FROM R400

JOHN WICK
• BLOCK 1 TL
• 223 SCORPION
• BENELLI SHOTGUN

CHARLES ANGELS
• GLOCK 44
• SHOTGUN
• 22 BOLT ACTION
• 22 BOLT ACTION

RAMBO
• M&K 23, 45 CAL
• 30 06

JOHN WAYNE
• COLET 45/38 SPECIAL
• SHOTGUN
• ORIGINAL RUSSIAN (44)

CALL: 081 814 0911 / 061 743 3028
SHOP 7, CROSSMOOR SHOPPING CENTRE, GRATSWORTH

MISCELLANEOUS SALES

ACCOUNTING & TAX CONSULTANTS
Your Business Driver

256 Poloka Drive, Bopone
Clatsburg, 3581 (Avenue 475)
031 400 0201, 031 405 7237
Email: info@jst.co.za

OUR SERVICES

- Computerized Accounting and Tax Services
- Compilation of Financials Statement, Mngt a/c
- Company & Personal Income Tax Submissions
- Tax Clearance & Filing of All SARS Returns
- VAT, BEE CERT, PAYE, COIDA, CIDB Registrations
- Shelf & VAT Shelf Companies - Ready to Trade
- Company Re-Instatements & Amendments done
- Payroll, Letter of Drawings, OD, Bonds Loan Assistance

RECRUITMENT

General workers / cleaners needed.
Sms your name
0611009287

RECRUITMENT

PLACING A CLASSIFIED AD
HAS NEVER BEEN EASIER
031 308 9904

LIQUOR ACT

ANNEXURE D NOTICE TO DISPLAY INTENTION TO APPLY FOR LIQUOR LICENCE IN TERMS OF SECTION 4(2)(1)(B)(III) OF ACT KWAZULU-NATAL LIQUOR LICENSING ACT, 2010 (ACT NO. 8 OF 2010)

(TO BE DISPLAYED IN A PROMINENT PLACE AT THE PROPOSED PREMISES USING A NOTICE BOARD 1M X 1M IN SIZE)

Name and surname of the applicant : Kaveri Sookun

Category of licence applied for : (on-off consumption/micro-manufacturer/ special event) : Off-Consumption

Type of premises for which licence is applied for : Liquor Store

Trading name of the premises : 4 Aces Liquors

Address of the premises : Lot 34 Lidgerton West Lidgerton, Kzn, 3270

Date of display : 01 June 2023

Expiry date of display : 04 July 2023

NB: Objections should be lodged with the local committee in the district from where the application emanates within 21 days from the date of the display.

KZN LIQUOR AUTHORITY
100 BARNES STREET
PIETERMARITZBURG
3201

MISCELLANEOUS SALES

EMPIRE LODGE
From R200

Aircon
En-suite
TV
Parking
24HR security

Address: 886 Umhlobo Road, Umhlobo, Durban
Tel: 031 460 1940 - 031 205 8196
Cell: 082 045 8483 - 072 3786 849
www.empirelodge.co.za

MINI BUSES

2004 TOYOTA SIYAYA 2.2 V SUPER 16 HI-ACE
Petrol, School Transportation Bus. Very good condition. No installments Required. Private Seller.

R43 000 Cash price

Contact
078 770 2211

PROPERTY FOR SALE

2 bedroom 11x12m
Kwa-Matsheni, Durban
4 room 11x12m
D.C.G.D. 21stanna title
bond

Kwa-matsheni 4 room, outside building 650 meters to school, 15 minutes to Umhlobo

Contact **Lindy**
073 921 8233
068 499 0103

PROPERTY FOR SALE

UMZINYATHI DURBAN

Uma udinga iproperty eyayisayo amaram aww! eGugwini Emzinyathi Maduzane Nanda Dam Phuthuma Price **R299 000**

079 411 3218
067 165 3655

ROAD ACCIDENT FUND CLAIMS

Contact Zahera Ameen
Tel: 021 209 7761
Cell: 084 052 1575
zahera@durbanlaw.co.za

M.A.K. AMEEN & CO.

Suite 311, 3rd Floor Lornegray Medical Centre,
280 Dr Yusuf Dadoo (Grey) Street, Durban
We are situated at the corner
of Lorne Street and Grey Street
Near City Hospital.

LIQUOR ACT

ANNEXURE D NOTICE TO DISPLAY INTENTION TO APPLY FOR LIQUOR LICENCE IN TERMS OF SECTION 4(2)(1)(B)(III) OF ACT KWAZULU-NATAL LIQUOR LICENSING ACT, 2010 (ACT NO. 8 OF 2010)

(TO BE DISPLAYED IN A PROMINENT PLACE AT THE PROPOSED PREMISES USING A NOTICE BOARD 1M X 1M IN SIZE)

Name and surname of the applicant : Kaveri Sookun

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Date of display : 01 June 2023

Expiry date of display : 04 July 2023

NB: Objections should be lodged with the local committee in the district from where the application emanates within 21 days from the date of the display.

KZN LIQUOR AUTHORITY
100 BARNES STREET
PIETERMARITZBURG
3201

USED CARS

ALL CARS

UDINGA IMOTO
Zingaphezu kuka 30 izimoto onqaketha kuzo. Uhlelo Lwezi mali Lyutholokala kuwo wonke amabhangwe Thintana

Mdu Xulu
082 387 0734
031 701 5292
All Cars PINETOWN

PROPERTY FOR SALE

NEWLANDS West.
Hillgrove 3 bedroom R850K
LLOVU B 3 bedroom R85K
UMLAZI CC 1 bedroom, kitchen, diningroom. R255K
Senzo 0734918400 / Simphwe 0727536297

PROPERTY FOR SALE

UMZINYATHI DURBAN

Uma udinga iproperty eyayisayo amaram aww! eGugwini Emzinyathi Maduzane Nanda Dam Phuthuma Price **R299 000**

079 411 3218
067 165 3655

ACCOMMODATION

MONTCLAIR 1 Bed unit F/enced, Parking, Single / Couple R2000 pm. Whatsapp Call 0731550497

LOST DEED

FORM JJJ LOST OR DESTROYED DEED

Notice is hereby in terms of regulation 68 of the Deeds Registries Act 1937 of the intention to apply for the issue of a certified copy of Deed of Transfer No. T 16551/1995 passed by CLIVE THEMINKOSI MANGILE in favour of CLIVE THEMINKOSI MANGILE in respect of certain ERV 50 CLERMONT Registration Division F1 Province of KwaZulu-Natal, in Extent 769 Square Metres of property, omitting extent which has been lost or destroyed.

All interested person having objection to the issue of such cop are hereby required to lodge the same in writing with the Registrar of Deeds at Pietermaritzburg within two weeks from the date of the publication of this notice.

Dated at this day of 2023
CLIVE THEMINKOSI MANGILE
Applicant Address: MTL Building 5th Floor, 75 Crompton Street, Pinetown
E-mail address: conveyancing@mtlpartners.co.za Contact number: 031 304 7040

PUBLIC NOTICES

TRANSFORMATION FUND
Application for Tier 1 Funding

Kuminywa izicelo zokuthola uhusho oluvela esikhwameni sohusho lwezimali kubantu abanyama (Transformation Fund) ngokweSigaiba Sokusaka (Tier 1 Funding) neyogaba kusikelelwe ngokweSigaiba 137 soMthetho owezwa nge Kwazulu-Natal Gaming and Betting Act, 2010 (Act No. 08 of 2010) nokuthiyayiswa kwawo. Uhusho luhusho luhusho oluvela ngokweSigaiba oluvela, oluvalele kuwotholokala okungaweni nasekuphazamisekile ukusama kwamabandisa asafutisa, amancane, namafeladawonye asungulwe namona ngayithi imihloko okumbandanyayo umsho wamabhathi, ukuzalazala kwamabhathi, imihloko eminyaka nokubheka nokuthokozela kwemihloko nomo ukugqongilela kwezingqophelo embonini yokuphila nokubheka.

Izicelo ziyaminywa ngokweSigaiba Sokusaka Sozhosho lwezimali (R1 - R 200, 000.00)

Amafomula okuthola izicelo engathobakala lwezimali ezithi www.kznob.gov.za kusuka ngomhaka 1 June 2023 kuya ku 31 July 2023.

Ngeminye imisingaweni, ungapheleli no Nkik: Barbara Chetty kwinombolo ebiti 083 498 77991, chettyb@kznob.gov.za, uMuz: Silekile Thabede ku 033-3452714, thabedes@kznob.gov.za or noma Nkik: Clansia Nando 031 5831800, nando@kznob.gov.za

Barbara Chetty @ 083 498 7799

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Barbara Chetty @ 083 498 7799

USED CARS

2007 TOYOTA SIYAYA CASH : R58 000 DEPOSIT : R15 000

2018 Toyota Quantum R135 000
2015 Toyota Avanza R65 000
2015 Toyota Hilux R75 000
2004 Ingulube R35 000
2007 Toyota RunX R35 000

Siphesihle Gwala
071 908 0380

VEHICLES WANTED

1000 CARS AND BAKKIES WANTED!!!

WE BUY CARS

Accident Damaged / Runners / Non Runners / Rustled

Call or
084 600 8565

PROPERTY FOR SALE

4 ROOM HOUSE

Y Section Umlazi, Philiati, Fenced, driveway R529 000
Call 0847997006

EDUCATION & TRAINING

SAHARA Firearm Competency & PSIRA E/D/C/B/A Training for Security Officers. I-Sahara College (yaphamba, ikheli yi 41 Woodford Grove, ikhoneni leUmgeni Rd futhi Adrian Road, Okuphambene Midas Izingxenywe Zemoto Ph: 031 3010449

EDUCATION & TRAINING

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TRANSFORMATION FUND
Application for Tier 1 Funding

Kuminywa izicelo zokuthola uhusho oluvela esikhwameni sohusho lwezimali kubantu abanyama (Transformation Fund) ngokweSigaiba Sokusaka (Tier 1 Funding) neyogaba kusikelelwe ngokweSigaiba 137 soMthetho owezwa nge Kwazulu-Natal Gaming and Betting Act, 2010 (Act No. 08 of 2010) nokuthiyayiswa kwawo. Uhusho luhusho luhusho oluvela ngokweSigaiba oluvela, oluvalele kuwotholokala okungaweni nasekuphazamisekile ukusama kwamabandisa asafutisa, amancane, namafeladawonye asungulwe namona ngayithi imihloko okumbandanyayo umsho wamabhathi, ukuzalazala kwamabhathi, imihloko eminyaka nokubheka nokuthokozela kwemihloko nomo ukugqongilela kwezingqophelo embonini yokuphila nokubheka.

Izicelo ziyaminywa ngokweSigaiba Sokusaka Sozhosho lwezimali (R1 - R 200, 000.00)

Amafomula okuthola izicelo engathobakala lwezimali ezithi www.kznob.gov.za kusuka ngomhaka 1 June 2023 kuya ku 31 July 2023.

Ngeminye imisingaweni, ungapheleli no Nkik: Barbara Chetty kwinombolo ebiti 083 498 77991, chettyb@kznob.gov.za, uMuz: Silekile Thabede ku 033-3452714, thabedes@kznob.gov.za or noma Nkik: Clansia Nando 031 5831800, nando@kznob.gov.za

Barbara Chetty @ 083 498 7799

USED CARS

2017 TOYOTA AVANZA 1.5 SX
7 Seater Immaculate condition with all paperwork available. Accident free. No scratches on board.

R45 000 Cash

Contact
083 815 9339

EDUCATION & TRAINING

DURBAN SECONDARY AND FEET ACADEMY

Excellent Pass Rates (NSC Results 2021 95.5% & 2022 - 92.58%)

OLD/AMENDED MATRIC

REGISTER NOW AND WRITE EXAMS IN MAY/JUNE 2023.

Full Time classes Mon-Fri Part Time classes Saturdays only

Tel: 031 301 9457
081 514 0221/067 681 2856
N Woodley: 0837938060

EDUCATION & TRAINING

EDUCATION & TRAINING

SAHARA Firearm Competency & PSIRA E/D/C/B/A Training for Security Officers. I-Sahara College (yaphamba, ikheli yi 41 Woodford Grove, ikhoneni leUmgeni Rd futhi Adrian Road, Okuphambene Midas Izingxenywe Zemoto Ph: 031 3010449

EDUCATION & TRAINING

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There's WARMTH In Classified advertising

Classified advertising provides the hottest leads for your residential search.

Whether you're looking for a flat or a cosy cottage - CLASSIFIED offers the options to warm up your search

Classifieds
031 308 2004

ISAZISO NGOHLELO LOKUCHAMKISA UKUKHOLELA EZEMVELO ELAZWA NGOKUTHI UKUCHAMKISA KWENKALASIZHWA YOKUCHAMKISA UGESI (ELECTRICITY GRID INFRASTRUCTURE - EGI)

Lesi saziso sibandisa ngokweSigaiba Sokusaka Sozhosho lwezimali kubantu abanyama (Transformation Fund) ngokweSigaiba Sokusaka (Tier 1 Funding) neyogaba kusikelelwe ngokweSigaiba 137 soMthetho owezwa nge Kwazulu-Natal Gaming and Betting Act, 2010 (Act No. 08 of 2010) nokuthiyayiswa kwawo. Uhusho luhusho luhusho oluvela ngokweSigaiba oluvela, oluvalele kuwotholokala okungaweni nasekuphazamisekile ukusama kwamabandisa asafutisa, amancane, namafeladawonye asungulwe namona ngayithi imihloko okumbandanyayo umsho wamabhathi, ukuzalazala kwamabhathi, imihloko eminyaka nokubheka nokuthokozela kwemihloko nomo ukugqongilela kwezingqophelo embonini yokuphila nokubheka.

Izicelo ziyaminywa ngokweSigaiba Sokusaka Sozhosho lwezimali (R1 - R 200, 000.00)

Amafomula okuthola izicelo engathobakala lwezimali ezithi www.kznob.gov.za kusuka ngomhaka 1 June 2023 kuya ku 31 July 2023.

Ngeminye imisingaweni, ungapheleli no Nkik: Barbara Chetty kwinombolo ebiti 083 498 77991, chettyb@kznob.gov.za, uMuz: Silekile Thabede ku 033-3452714, thabedes@kznob.gov.za or noma Nkik: Clansia Nando 031 5831800, nando@kznob.gov.za

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ISAZISO NGOHLELO LOKUCHAMKISA UKUKHOLELA EZEMVELO ELAZWA NGOKUTHI UKUCHAMKISA KWENKALASIZHWA YOKUCHAMKISA UGESI (ELECTRICITY GRID INFRASTRUCTURE - EGI)

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Izicelo ziyaminywa ngokweSigaiba Sokusaka Sozhosho lwezimali (R1 - R 200, 000.00)

Amafomula okuthola izicelo engathobakala lwezimali ezithi www.kznob.gov.za kusuka ngomhaka 1 June 2023 kuya ku 31 July 2023.

Ngeminye imisingaweni, ungapheleli no Nkik: Barbara Chetty kwinombolo ebiti 083 498 77991, chettyb@kznob.gov.za, uMuz: Silekile Thabede ku 033-3452714, thabedes@kznob.gov.za or noma Nkik: Clansia Nando 031 5831800, nando@kznob.gov.za

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Izicelo ziyaminywa ngokweSigaiba Sokusaka Sozhosho lwezimali (R1 - R 200, 000.00)

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Barbara Chetty @ 083 498 7799

Figure 16, G: Actual isiZulu Newspaper

**NOTICE OF IMPACT ASSESSMENT PROCESS
(ELECTRICITY GRID INFRASTRUCTURE-EGI)**

Notice is hereby given in terms of Regulation 40(3) of the regulations published in Government Notice No. R 982 and Section 41(c)(i) read together with Section 43 of the National Environmental Management Act (Act 107 of 1998) of intent to carry out the following Activity:

DFFE EGI REF NO:2022-09-0009

Activity & Locality: The proposed deviation of the 132kv power line at Vekeya on the authorised Gingindlovu-Mbongolwane 132kV from Gingindlovu to Mbongolwane substation and addition of a ±35 metre telecommunication tower at the authorised Mbongolwane Substation. DEA Environmental Authorisation NO: 14/12/16/3/31/1918

Starting Point	Middle Point	End Point
S: 28°59'23.42" E: 31°33'19.02"	S: 28°59'23.11" E: 31°33'11.83"	S: 28°59'07.46" E: 31°33'07.19"

The activity will include the deviation of the authorised Gingindlovu-Mbongolwane 132kV powerline by two Electricity Lattice Structures away from residential house's at Vekeya Village and the addition of a ±35 metre telecommunication tower at the authorised Mbongolwane Substation.

Proponent: Eskom Distribution (Eskom, KwaZulu-Natal Operating Unit)
Consultants: Ourbiosphere Environmental (Pty) Ltd
Contact: Musa Netshivhambe
Tel: 073 977 9414 **Fax:** 086 567 5523
Email: musa@ourbiosphere.co.za

Public Open Day Meeting: 22 June 2023
Venue: Ngwenya Secondary School (Vekeya Village)
Time: 09H30am to 16h00pm
Venue GPS Coordinates: S: 28°59'21.41" and E: 31°33'03.65"

Deadline for Comments Submissions: 06 July 2023 (23:59pm)

To ensure that you are identified as an Interested and/or Affected Party (I&AP) **ONLY in terms of the IA process**, please submit your name, contact information and Interest (comments) to **email: musa@ourbiosphere.co.za** **Tel: 0739779414** within 30 days from publication of this notice. **Deadline for Comments 06 July 2023 at 23:59pm**

**NOTICE OF IMPACT ASSESSMENT PROCESS
(ELECTRICITY GRID INFRASTRUCTURE-EGI)**

DFFE EGI REF NO: 2023-01-0006

Activity & Locality: The proposed project will entail the location change of the new 20MVA 132/22kV Ocheni Substation on the authorised 20MVA 132/22kV OCHENI Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province. DFFE Environmental Authorisation NO: 12/12/20/2271/A M3

Substation Project Boundary Coordinates:

North-West Corner	North-East Corner	South-West Corner	North-East Corner
S: 29°08'45.88" E: 31°00'49.46"	S: 29°08'49.09" E: 31°00'47.64"	S: 29°08'48.71" E: 31°00'52.79"	S: 29°08'51.22" E: 31°00'50.33"

Eskom Distribution in KwaZulu Natal Operating unit has appointed Ourbiosphere Environmental to undertake the application process for the change of location of the Ocheni Substation in terms of the Electrical Grid Infrastructure process to the Department of Forestry Fisheries and Environment. In compliance with regulation 41 of the NEMA EIA Regulations, you are invited to following public meeting:

Proponent: Eskom Distribution (Eskom, KwaZulu-Natal Operating Unit)
Consultants: Ourbiosphere Environmental (Pty) Ltd
Contact: Musa Netshivhambe
Tel: 073 977 9414 **Fax:** 086 567 5523
Email: musa@ourbiosphere.co.za

Public Open Day Meeting: 23 June 2023
Venue: Hlimbithwa Community Hall Dumenkungwini (KwaZulu-Natal)
Time: 09H30am to 16h00pm
Venue GPS Coordinates: S: 28°59'21.41" and E: 31°33'03.65"

Deadline for Comments Submissions: 06 July 2023 (23:59pm)

To ensure that you are identified as an Interested and/or Affected Party (I&AP) **ONLY in terms of the IA process**, please submit your name, contact information and Interest (comments) to **email: musa@ourbiosphere.co.za** **Tel: 0739779414** within 30 days from publication of this notice. **Deadline for Comments 06 July 2023 at 23:59pm.**



Figure 16, H: English advertisement

0500
PROPERTY TO LET

0501
ESTATE AGENCIES

FOSPROPS
PROPERTIES
SHOPS, OFFICES & FACTORIES TO LET / FOR SALE
R/Boy: 035 789 8583
Emp: 035 772 4011

HOUSES/FLATS TO LET/FOR SALE
R/Boy: 035 789 1481
Emp: 035 772 4011

BODY CORPORATE ADMINISTRATION
R/Boy: 035 789 6730
Emp: 035 772 4011

0515
FLATS/UNITS TO LET

BRAND NEW GOLF COURSE FLAT
Central Empangeni, St Andrews, Umlaas, 2 bfr fully fitted, top security, R7 150 includes water, refuse, sewerage and VAT.
083 630 5074

0535
OFFICES & SHOPS TO LET

EMPANGENI CENTRAL BUSINESS OFFICE PREMISES TO LET
60m² includes water, refuse and sewerage.
083 630 5074

0700
MOTORING

0710
COMMERCIAL VEHICLES

COMMERCIAL VEHICLES
2nd-Hand trucks, tractors, LDV's, plant & machinery bought for cash. Any model, any condition.
We don't hassle, we buy!!!
095 772 5876
083 786 3332

0740
USED CARS

Beware, do not pay any money in advance for any cars and bakkies advertised privately. Don't pay any holding deposits or full payments before seeing the vehicle.

Sicela uqaphela, ungaqali ngokukhokha imali uma uthenga izimoto namaveni akhangiswa ngasese. Ungaqali ukhokhe imali yesibambiso noma ukhokhe imali egcwele ngaphambi kokuthi uyibone leyomoto.

0800
VACANCIES

0803
ACCOUNTING

Bookkeeper required for busy workshop to control admin.

- Must be computer literate.
- Debtors, Creditors, E-Filing, Quotes etc.
- Pleasant personality

Contact: 083 625 8778

0827
GENERAL

Company seeking services of a receptionist

- General Admin duties with knowledge of computer skills
- With minimum 2 years experience

Email CV to infopanelbeaters@gmail.com

HIV
"I thought it could never happen to me"

0839
MANAGEMENT

LODGE MANAGEMENT INTERN POSITION AVAILABLE

INTERESTED SEND CV TO recruitingofficer468@gmail.com

• VACANCIES •

WE ARE HIRING!

Medical secretary / receptionist required for specialist practise at Melomed Hospital

email CV to vacancymelomed@gmail.com

• VACANCIES •

KZ 281
ADVERTISEMENT

Applications are invited from suitably qualified applicants for the permanent position which exist within uMfolozi Local Municipality.

EXECUTIVE SECRETARY: MUNICIPAL MANAGER
SALARY: 167 712.36 (Excl benefits)
TASK GRADE LEVEL 7 OF A CATEGORY 1 MUNICIPALITY
PERMANENT POSITION

REQUIREMENTS: Grade 12 • Computer Literacy. MS Office • 2-5 years relevant Secretarial/Administrative experience.

RESPONSIBILITIES:

- **Scheduling and planning executive diary and events** (liaising with superior in establishing the priorities for scheduling purposes, to interact internally and externally to confirm arrangement and programmes, confirming travel and accommodation details, attending to specific business arrangements and briefings on itinerary prior to departure, co-ordinating all protocol requirements for internal executive's events and functions)
- **Provision of administration and secretarial support** (searching for information on specific topics using the internet and library resources, copying, typing and formatting the documents and routine reports and create presentations using related office applications, providing support during the Management meetings by recording discussions and resolutions with respect to agenda items, perusing Council and Committee agenda and minutes of meetings and forwarding items requiring attention of the superior)
- **Information record keeping** (updating the correspondence register inserting reference numbers of correspondence received, referencing source documentations and seeking approval on the destruction of old & out dated correspondence)
- **Reception/ telephone and office support** (attending to telephone calls and visitors, recording details of enquiries, messages in the absence of the superior, maintaining stocks of standard forms, stationary and completing requisition orders to facilitate the replenishment of items prior to depletion)

Applications consisting of a Comprehensive CV in English and completed application form, certified copies of ID and qualifications should be deposited in the Municipal CV Box which is located at the Council Chamber building at No. 25 Bredelia Street, Kwa-Mbonambi, 3915 or be addressed to the Municipal Manager, P. O. Box 96 Kwa-Mbonambi 3915 on or before 21st of June 2023 Application forms are obtainable at the reception or at the uMfolozi Municipal website: www.umfolozi.gov.za. Failure to attach the required documentation will lead to your application being disqualified.

Enquiries may be directed to the Human Resources Officer, Ms NG Mngomezulu at (035) 580 -1421. The Municipality subscribes to an Affirmative Action Programme, which is non-racist, non-sexist, and non-discriminatory and based on merit. Should you not hear from the Municipality within 60 days of the closing date of the advert, please consider your application as being unsuccessful.

MR L.S. JILI
MUNICIPAL MANAGER

• VACANCIES •

PHOENIX
CASH & CARRY EMPANGENI

WE HAVE THE FOLLOWING VACANCIES

- Admin Clerk
- GRV Clerk
- Sales Rep
- Cash Office Clerk
- Dispatch Clerk
- Stock Controller

• Minimum 2 years' experience • Traceable reference • Must be honest and reliable • Transport can be arranged

Forward 2 page CV to niresh@phoenixgroup.co.za.
Fax: 035 787 1410

• VACANCIES •

WE ARE HIRING!

Medical secretary / receptionist required for specialist practise at Melomed Hospital

email CV to vacancymelomed@gmail.com

• VACANCIES •

Uthojaneni Local Municipality

FINAL MTHONJANENI INTEGRATED DEVELOPMENT PLAN (IDP) FOR 2023/24 FINANCIAL YEAR

Notice is hereby given that, in terms of section 25(4) of the Municipal Systems Act: 2000 (No.32 of 2000), that the Municipal Council of Mthonjaneni Local Municipality has adopted its Final IDP for the 2023/24 financial year. The Final IDP 2023/24 financial year was tabled by the Worship the Mayor Cllr MN Blythe in the Council meeting held on 25 May 2023, resolution number MLMSC 23/798.

TABLING OF THE FINAL MTRFEE ANNUAL BUDGET FOR 2023/24 FINANCIAL YEAR AND TWO OVER YEARS (2024/25 & 2025/26)

Notice is hereby given in terms of section 21A and section 34 of the Municipal Systems Act: No. 32 of 2000; Section 22 of the Municipal Finance Management Act; no.56 of 2003 read together with Section 15 of Municipal Budget and Reporting Regulations (Gazette 32141 of 17 April 2009) that the Municipal Council of Mthonjaneni Local Municipality has approved its Final MTRFEE Budget 2023/24.

The Final MTRFEE Budget 2023/24 financial year and two other years (2024/25 & 2025/26) was tabled by the Worship the Mayor Cllr MN Blythe in the Council meeting held on 25 May 2023, resolution number MLMSC 23/798.

Copies of the above-mentioned documents can be obtained from the Municipal Website www.mthonjaneni.org.za or Municipal Offices, 21 Reinhold Street, Melmoth, 3835.

2023/2024 Final IDP related enquiries can be directed to the IDPPMS Manager, Mr L Nyamose on 035 450 2082 ext. 6207 or pmmanager@mthonjaneni.org.za during office hours.

2023/2024 Final MTRFEE Budget related enquiries can be directed to the CFO, Mr N.M Myeni on 035 450 2082 ext. 0205 or cfo@mthonjaneni.org.za during office hours.

MIL 25 Mthethwa
Municipal Manager: Mthonjaneni Municipality

NOTICE OF IMPACT ASSESSMENT PROCESS (ELECTRICITY GRID INFRASTRUCTURE-EGI)

Notice is hereby given in terms of Regulation 40(3) of the regulations published in Government Notice No. R 982 and Section 41(c)(i) read together with Section 43 of the National Environmental Management Act (Act 107 of 1998) of intent to carry out the following Activity:

DFFE EGI REF NO: 2022-09-0009

Activity & Locality: The proposed deviation of the 132kV power line at Vekeya on the authorised Gingindlovu-Mbongolwane 132kV from Gingindlovu to Mbongolwane substation and addition of a 335 metre telecommunication tower at the authorised Mbongolwane Substation. DEA Environmental Authorisation NO: 14/12/16/33/1/1918

Starting Point	Middle Point	End Point
S: 28°59'23.42" E: 31°33'19.02"	S: 28°59'23.11" E: 31°33'11.83"	S: 28°59'07.46" E: 31°33'07.19"

The activity will include the deviation of the authorised Gingindlovu-Mbongolwane 132kV powerline by two Electricity Lattice Structures away from residential house's at Vekeya Village and the addition of a 335 metre telecommunication tower at the authorised Mbongolwane Substation.

Proponent: Eskom Distribution (Eskom, KwaZulu-Natal Operating Unit)
Consultants: Ourbiosphere Environmental (Pty) Ltd
Contact: Musa Nelshivhamba
Tel: 073 977 9414 Fax: 086 567 5523
Email: musa@ourbiosphere.co.za

Public Open Day Meeting: 22 June 2023
Venue: Ngwenya Secondary School (Vekeya Village)
Time: 09H30am to 16H00pm
Venue GPS Coordinates: S: 28°59'21.41" and E: 31°33'03.65"

Deadline for Comments Submissions: 06 July 2023 (23:59pm)

To ensure that you are identified as an interested and/or Affected Party (I&AP) ONLY in terms of the IA process, please submit your name, contact information and interest (comments) to email: musa@ourbiosphere.co.za Tel: 0739779414 within 30 days from publication of this notice. **Deadline for Comments 06 July 2023 at 23:59pm**

NOTICE OF IMPACT ASSESSMENT PROCESS (ELECTRICITY GRID INFRASTRUCTURE-EGI)

DFFE EGI REF NO: 2023-01-0006

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Substation Project Boundary Coordinates:

North-West Corner	North-East Corner	South-West Corner	North-East Corner
S: 29°08'45.88" E: 31°00'49.46"	S: 29°08'49.09" E: 31°00'47.64"	S: 29°08'48.71" E: 31°00'52.79"	S: 29°08'51.22" E: 31°00'50.33"

Eskom Distribution in KwaZulu Natal Operating unit has appointed Ourbiosphere Environmental to undertake the application process for the change of location of the Ocheni Substation in terms of the Electrical Grid infrastructure process to the Department of Forestry Fisheries and Environment. In compliance with regulation 41 of the NEMA/EIA Regulations, you are invited to following public meeting.

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Consultants: Ourbiosphere Environmental (Pty) Ltd
Contact: Musa Nelshivhamba
Tel: 073 977 9414 Fax: 086 567 5523
Email: musa@ourbiosphere.co.za

Public Open Day Meeting: 23 June 2023
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To ensure that you are identified as an interested and/or Affected Party (I&AP) ONLY in terms of the IA process, please submit your name, contact information and interest (comments) to email: musa@ourbiosphere.co.za Tel: 0739779414 within 30 days from publication of this notice. **Deadline for Comments 06 July 2023 at 23:59pm.**

Figure 16, I: Actual English Advert as published on Zululand Observer

5.4.1. Further Public Participation

On November 22, 2023, DFFE Sindiswa Dlomo requested a meeting with regard to the submission of another project which was running concurrently with this and also had followed the Impact Assessment report to DFFE. It was then indicated that a wrong application form was used for the application for that project, meaning also the application for the Ocheni project used a wrong application form. And that the Standard for the Development of the Powerlines and Substations within identified Geographical Areas must be used. Sindiswa also requested that a further site Notice to notify the local communities with regard to the EGI registration of the other project, that also meant the same must happen for the Ocheni project, and in the end the site notices were affixed on site at Ocheni for another 30 days period.

EGI Registration Public Notice	08 December 2023 – 29 January 2024 (The prolonged days were due to the regulated time frame of December 15, to January 05 where public participation is not allowed)
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NOTICE OF APPLICATION OF PROJECT REGISTRATION AS PER THE STANDARD FOR THE DEVELOPMENT OF POWER LINES AND SUBSTATION WITHIN IDENTIFIED GEOGRAPHICAL AREAS (ELECTRICITY GRID INFRASTRUCTURE - EGI)

PROJECT NAME: The proposed Construction of a new 20MVA 132/22kV OCHENI Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province. Notice is hereby given in terms of Regulation 40(3) of the regulations published in Government Notice No. R 982 and Section 41(c)(i) read together with Section 43 of the National Environmental Management Act (Act 107 of 1998) of intent to carry out the following Activity DFFE REF 12/12/20/2271/AM3:

Umsebenzi kanye nendawo: Kuhlongozwa ukushintshwa kwendawo yokwakha isiteshi sikagesi esisha esibizwa ngokuthi i-Ocheni 132/22kV 20MVA no layini onamandla kagesi awu 132kV ongamakhilomitha angamashumi amabili nanye (21km) oya esitishini sikagesi iGlendale, isiteshi sizokwakhiwa kwaMaphumulo ngaphantsi komkhandlu womasipala iMaphumulo kwaZulu Natali. UMnyango Wezamalathi, Ezokudoba kanye Nezemvelo wakhapha imvume yokwakha lesiteshi ngaphansi kwenombolo : 12/12/20/2271/AM3

Please note that the project application to the Department of Forestry, Fisheries and Environment (DFFE) applied for and will be as per the Standard for the Development of Power Lines and Substations within Identified Geographical Areas.

Sicela niqaphele ukuthi lesisicelo semvume esifakiwe eMnyangweni weZamalathi, ezokuDoba kanye nezeMvelo sifakwe ngaphansi kwemigomo yokwakhiwa kuka kolayini neziteshi zikagesi ezakhiwe ezindaweni ezithize eziqokwe.

Project Coordinates Details:

North-West Corner	North-East Corner	South-West Corner	North-East Corner
S: 29°08'45.88" E: 31°00'49.46"	S: 29°08'49.09" E: 31°00'47.64"	S: 29°08'48.71" E: 31°00'52.79"	S: 29°08'51.22" E: 31°00'50.33"



Ukuqinisekisa ukuthi uyafakwa kuhlu lwabantu abanentshisekelo futhi abathintekayo iloku okuhlongozwayo, sicela uthumele igama lakho, neminingwane yokuthinteka kwakho email: musa@ourbiosphere.co.za, Cell: 073 977 9414 zingakapheli izinsuku ezingama-30 kusukela ngelanga lesikhangiso. Usuku lokucina lokuletha imiboni ngumhlaka 29 January 2024 nge hora 23:59pm.

To ensure that you are identified as an Interested and/or Affected Party (I&AP) ONLY in terms of the EGI process, please submit your name, contact information and Interest (comments) to email: musa@ourbiosphere.co.za, Cell: 073 977 9414. 30 days from publication of this notice. **Deadline for Comments 29 January 2024 at 23:59pm**



Figure 16J: Showing the EGI Project Registration Site Notice

5.5. Interested and Affected Parties (I&APs)

A register of IAPs has been compiled as per Section 42 of the Impact Assessment Regulations, 2014 as amended. This includes all relevant authorities, Government Departments, the Municipality, non-governmental organisations (NGOs), and members of the public that had requested to be registered. The IAP register was updated to include those IAPs responding to the newspaper advertisement, site notice boards and Notification Letters. A copy of the I&AP Register is included in Annexure 4 of this report, and the full list of identified I&APs is on Annexure 4.

5.6. Background Information Document (BID)

The Background Information Document (BID) containing the details about the Impact Assessment process and all the project details was compiled. The majority of BIDs were distributed to the landowners mainly via email and WhatsApp service. The local ward councillors were also sent the BID as well as the comment sheet. The copy of the BID is attached on this report as Annexure 1.

5.7. Public Meeting

A public open day meeting was conducted at Ngwenya Secondary School at Ocheni from 09h00am to 16h30pm on July 22, 2023.

5.8. Comments Received and Responses

		I&AP/Stakeholder		
No	Name	Capacity	Comments	EAPs' Response
1	Chief Piluswa Costa Zubane	Local Chief– Ocheni Village	People are suffering due to endless loadshedding, will this project help?	Yes indeed, this is one of the strategic projects aimed at addressing unnecessary power cuts in the area due to lack of enough power.
			The field where the substations is going to build belonged to my mother, will we get compensation for it since we will no longer be able to use it	Yes, off course. Eskom will engage you as soon as the Environmental authorisation has been issued by DFFE. Their land and Rights Department will engage you so that the normal land and right process will be followed until the resolution is found.
			How long will the approval take?	This will depend on DFFE, on whether they have assessed the application, and if they are satisfied, then they will issue the authorisation.

			How is this project going to benefit the people of Ocheni?	
2	Mr	Local Ward Councillor, Ward 11	How soon are we going to have electricity substation built, there is a lot of electricity problems in this area	It will depend on how fast we are going to finalise the impact assessment report, and the rest will also depend on the time taken by DFFE to assess the application
3			Will you give local the chance to have their plant hired by the main contractor	Eskom always have a percentage upon which they will enforce to have the Main contractor apportion and afford local to supplies certain services or even hire plant. But that time will only come after all other processes are completed.
4			Will this substation be able to carry the load that we have here, because for years we have been outraged with	The substation will be powered by a 132kV powerline from Glendale, and it will be enough for the next 20 years and everyone should have enough power capacity.

			Eskom and the municipality to have them help us?	
5			Why cannot you just build the substation already, what these studies, we are tired of endless power cuts during winds and rains and loadshedding.	No, we cannot just build the substation, According to NEMA 107 of 1998, this kind of electricity is a listed activity that need to have this kind of study done before commencement, if we can just go ahead and study, it will be a legal contravention with substantial repercussions to Eskom.
6	Mr Dumisani Maphumulo	Resident – Ocheni Village	Will you give us general labourers jobs?	Yes, but it will be done through your own tribal authority, Eskom will only say how many employees are required.
7	Ms. Hlelizwe Mhlongo	Resident – Ocheni Village	Will you also appoint women labours?	Yes
8	Mr Xolani Cebekhulu	Resident – Ocheni Village	How long will your study take? Power shortage is bad here?	We will be done shortly with the studies, but what is key is that DFFE will also have to assess the report

9	Sipho Zubane	Resident - Ocheni	Can the Department say no	Yes, it is possible, but they will also provide reasons, so that we can fix and resubmit
10	Nkosinathi Mthembu	Resident - Ocheni	Can the substation construction start this year already, my house cannot be connected, Eskom said there is not enough load.	Unfortunately, maybe early next year.

Table 8: Comments from I&APs and EAP's Responses

5.9. Circulation of Draft Impact Assessment Report (IAR) for Comments

Notification of the availability of the Draft Impact Assessment Report was circulated on **7 July 2023** to all the I&APs and the following Key Organs of State for review and comments:

No	I&APS/STAKEHOLDERS
1	KZN Economic Development, Environment and Tourism
2	Amafa Heritage Resource Agency
3	Department of Minerals and Energy
4	Department of Transport
5	KZN Department of Transport
6	Department of Rural Development and Land Reform: Land Reform Office
7	Department of Agriculture,
8	Department of Water Affairs: Water Resources & Water Quality Management
9	Department of Rural Development and Land Reform: Land Claims Commissioner
10	Landowners and all other I&APs
11	King Cetshwayo District Municipality
12	Maphumulo Local Municipality
13	Air Traffic Navigation Services (ATNS)

Table 9: List of Organs of State



5.10. Background Information Document

The copy of the BID and Comments Sheet had also been uploaded onto Ourbiosphere Environmental (Pty) Ltd website and the I & APs were notified about this links via email.

5.11. Authority Participation

For all the authorities and organs of state identified as key stakeholders, proof of Draft Impact Assessment Report Link was distributed via email and has been attached on this report as Annexure 2 for the email proof for the availability of the Draft Impact Assessment and EMPr and to the Organ of state as (Table 9).

5.12. Consultation with other stakeholders

An attendance register of all registered I&APs is included as Annexure 2. Copies of correspondence are included in Annexure 6.

5.13. Draft Environmental Impact Report

The Impact Assessment Regulations specify that I&AP's must have an opportunity to comment, in writing, on all reports or plans submitted to such party during the public participation process. A period of 30 days (1 June 2023 to 07 July 2023) was made available to allow for public comment on the Draft Impact Assessment Report and the Draft EMPr. The availability of the Draft Impact Assessment Report and EMPr was announced via personal notification letters distributed via emails and SMS to all the identified stakeholders on the distribution list. The following methods were made available for I&APs to access the reports:

- EMPr and Draft Impact Assessment Report were also uploaded on the EAPs website, and the link was also sent to all the registered I&APs and Organs of State. I &APs and Organs of state were given 30 days to comment on the Draft IA and EMPr. The comment period was from July 10, 2023, to August 10, 2023.

6. IMPACT ASSESSMENT METHODOLOGY

The nature and extent of expected negative impacts are described directly under the heading for each impact.

A table has been created to make it easier to evaluate the projected negative impact in terms of significance (intensity), duration, probability, and significance after mitigation. It is located below this description for each impact. The numerical values used for "Impact Severity" (significance / intensity) are being evaluated and scored on a scale from 0 to 5, where

the following values apply. These values correspond to the possible severity of the proposed project on the particular environmental component without any mitigation.

SEVERITY LEVEL	DESCRIPTION
0	No Impact
1	Low Impact
2	Medium Impact
3	Significant Impact
4	Severe Impact
5	Catastrophic Impact

Table 10: Showing the measuring parameters for determining the severity of the impact.

Likelihood Level	Descriptor	Consequence Level				
		1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
5	Almost Certain	5	10	15	20	25
4	Likely	4	8	12	16	20
3	Possible	3	6	9	12	15
2	Unlikely	2	4	6	8	10
1	Rare	1	2	3	4	5
0	No Impact	0	0	0	0	0

Risk Rating	
Catastrophic Impact	20-25
Severe Impact	16-19
Significant Impact	10-15
Medium Impact	6-9
Low Impact	2-5
No Impact	0

Impact Severity

Figure 22: Showing the Consequences Level and Impact of Severity

The duration of the expected negative impact is supplied as either "temporary" 0-3 years (usually during construction) or "permanent". The probability that the expected negative impact would occur if not mitigated is rated as "low," "medium" or "high." The negative impacts are also evaluated in terms of the effectiveness with which it could be mitigated: "Severity of Impact after Mitigation" is rated on a scale from 0 to 5, with a severe (Catastrophic) impact after mitigation



receiving a rating of 5 (and can therefore influence the viability of the project) and no impact after mitigation receiving a rating of 0.



6.1. Mitigation

The potential to mitigate negative impacts is determined and rated for each identified impact. Similarly, the mitigation objective that results in a measurable reduction or enhancement of the impact, is determined, and rated.

6.2. POTENTIAL IMPACT DURING THE PLANNING AND DESIGN PHASE

Impact	Site	Extent	Duration	Probability	Severity/ Significance without mitigation	Severity/ Significance with mitigation	Proposed mitigation
Impact on natural habitat	Ocheni 20MVA Substation Infrastructure Proposed substation project	Local	Permanent	Low	0	0	The Ocheni 20MVA Substation infrastructure Proposed substation project is recommended for construction. It has low ecological sensitivity and less . Although there has been vegetation growing in some of the existing servitude, much of the Powerline structure are running on the road reserve which is heavily disturbed,
Visual Impact	Ocheni 20MVA Substation	Local	Permanent	Low	1	1	During this phase, there will be no Powerline structures onsite already hence there will be no visual impact. The only visual impact will arise



	infrastructure Proposed substation project						from the site visit by various Engineers and client and vehicles during site visits
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5. CONCLUSION AND RECOMMENDATIONS

The Strategic Transmission Corridors (EGI) are designated by Government Notice No. 114 in Government Gazette No. 41445 and include the proposed site for the Proposed Ocheni Substation Infrastructure site region. EGI identified five strategic transmission corridors that are crucial for the planning of electricity transmission and distribution infrastructure. It also outlined the process to follow when requesting environmental authorization for electricity transmission and distribution expansion in these corridors. Ocheni 20MVA Substation infrastructure is one the most significant development that is suited to EGI core and is because it was designed to bolster the area's deficient energy supply and construction of the project has already commenced and a decision by the competent authority to grant proposed substation project is of paramount importance under the circumstance.

Despite the fact that the web-based environmental screening tool suggested a number of potential habitats, threatened or endangered plant and animal species, and more species based on historical data of the general area from SANBI databases, none were found during site field investigations. The area has undergone a significant transformation from natural habitat to agricultural landscape dominated by sugarcane plantation, crops cultivation and residential dwellings.

A site visit have found that the proposed substation project site is significantly deteriorated and transformed, making it unlikely to support significant levels of biodiversity and to a certain extent not indicative of the environmental sensitivities discovered during the desktop assessment and also disputed some of the stated environmental sensitivities themes that were suggested by the web based Environmental screening tool from Very high, High and Mediums to the relevant Low sensitivities that represent the correct current land use. On the same note, some environmental sensitivities were confirmed to be either a Very High, High, Medium or Low Sensitivity as suggested by the web based environmental screening tool as they truly represent the current land use on site.

Nonetheless, no Species of Conservation Concern (SCC) (animal and flora species) could conceivably exist, even though most of them have a low probability of doing so. The precautionary approach would assume the presence of the listed species, however considering the site visit findings and the presence of the residential dwelling surrounding the site, any of their presence is highly negligible. The proposed Ocheni Substation Infrastructure location is characterised by heavily transformed habitat and ecosystem from natural state to agricultural fields that are laying fallow and was found not to have the Species of Conservation Concern and nevertheless seldom present throughout the site. The presence of the residential dwellings contributes significantly to the fact that the presence of SCC be highly unlikely.

It is hereby recommended that the substation location change be authorised, in any case, the similar circumstances apply with regard to environmental impact since the new site is located almost 20 -25 metres away from the authorised substation site. Meaning similarities in terms of less environmental impacts applies.



The proposed substation project development's is not envisaged to have significant potential effects on ecological processes due to the fact that the overall area is significantly transformed, and it is not located within the close proximity of any conservation area.

4.1. Environmental Impact Statement:

The proposed Ocheni Substation site is viewed as generally appropriate for the supply and electricity strengthening in the area as electricity demand has increased exponentially over the years. Proposed substation project may have some localised minimum impact during construction phase, but there are not any specific long-term effects that are likely to be connected to the Proposed Ocheni Substation Infrastructure that cannot be avoided or mitigated to a manageable level by the already approved EMPr.

After the proposed construction's footprint has been evaluated by the site visit: Proposed Ocheni Substation site relocation project is hereby recommended to be approved by DFFE on a condition that the contractor to fully:

- comply with the environmental management programme (EMPR) for the development and expansion of Proposed Ocheni Substation Infrastructure for the transmission and distribution of electricity.





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ANNEXURES 1

BACKGROUND INFORMATION DOCUMENT (BID)

BACKGROUND INFORMATION DOCUMENT (BID)

**Department of Forestry, Fisheries and
Environment (DFFE) Consultation Meeting
(Ref No: 2023-01-0006)**

**Strategic Transmission Corridor (EGI)
Application for the Construction of a new
20MVA 132/22kV OCHENI Substation in
Maphumulo within Maphumulo Local
Municipality in the Kwazulu-Natal Province.**





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(A) PURPOSE OF THE BACKGROUND INFORMATION DOCUMENT (BID)

This document aims to provide you, as an Interested and/or Affected Party (I&AP), with background information regarding the application for Environmental Authorisation in terms of the National Environmental Management Act, 1998: GN R. 982 and 983 for the proposed Ocheni 20MVA 132/22KV Substation site at Dumenkungwini within Maphumulo Local Municipality in KwaZulu Natal Province (See attached Map), as well as the required Impact Assessment studies to be undertaken. Any person, company, authority, or other entities that might be directly or indirectly affected by the proposed activity can register as an Interested or Affected Party (I&AP). This includes, but is not limited to landowners, tenants, municipal and provincial authorities, interest groups, Non-Government Organisations, and conservation groups.

This document outlines how to get engaged in the project, get information, and identify areas of interest and/or concern.. You have the chance to participate actively in the project right away through the information exchange that serves as the foundation of the public participation process. With collaboration from I&APs, we can make sure that the intended development is taken into account while addressing any environmental concerns.

1.1. Environmental Studies

An Impact Assessment is an effective planning and decision-making tool, which allows for the identification of potential environmental consequences of a proposed project. This study will be conducted in accordance with the Department of Forestry, Fisheries and the Environment, 2021 Standard for the development of Power Lines and substations within Identified Geographical Areas Revision 1.

When read in conjunction with as expansion of the Strategic Transmission Corridors published in Government Notice No. 113 under Government Gazette No. 41445 on 16 February 2018, as set out In the Schedule hereto. Eskom intends to be excluded through exclusions and/ or specific requirements of Basic Assessment Process. The EGI process is in accordance to Notice of identification in terms of Section 24(5)(a) and (b) of the National Environmental Management Act, 1998, of the procedure to be followed in applying for Environmental Authorisation for large scale Electricity Transmission and Distribution Development activities identified in terms of Section 24(2)(a) of the National Environmental Management Act, 1998 when occurring in geographical areas of strategic importance.

In this instance, the proposed Construction of a new 20MVA 132/22kV Ocheni Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province falls within the Strategic Transmission Corridors (EGI), Expanded Eastern Corridor.

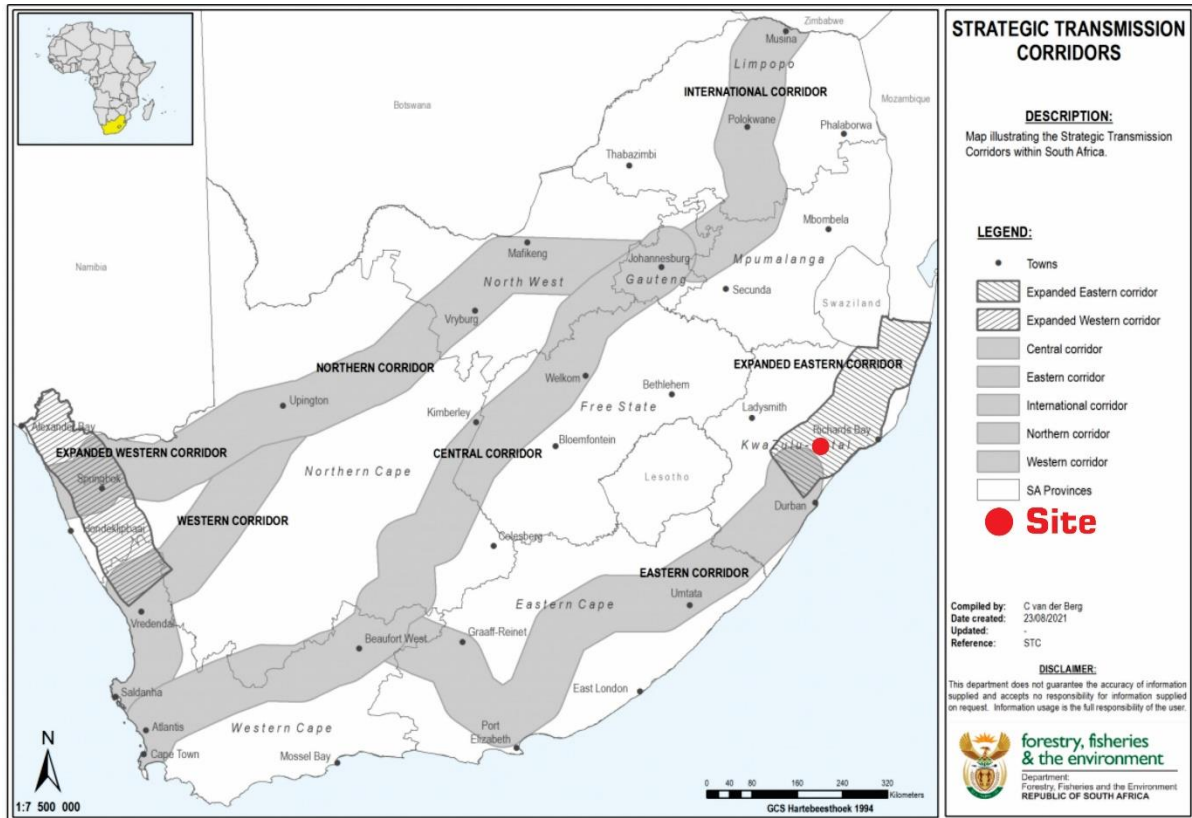


Figure 1: Showing the location of Ocheni substation within the Expanded Eastern Strategic Transmission Corridors

1.1.1 DFFE Request

To this effect, The Department requested the following, that: for the Department to consider Eskom's request to follow the EGI process, Eskom must:

- Utilise the Web Based Environmental Screening Tool to determine the sensitivity of the substation site.
- Eskom's Environmental Assessment Practitioner to conduct a ground truthing to confirm or contrast the sensitivity as shown by the National web based Environmental Screening tool.
- A feedback report be prepared and be subjected to a public participation period of 30 days and all comments be included and then be submitted to the DFFE for decision.

This report contains the site's various sensitivities as per National Web based Environmental Screening Tool and The ground truthing feedback and other measures as suggested by the Environmental Assessment Practitioner (EAP).



1.2. Web Based Environmental Screening Tool

The site's environmental sensitivities were identified using the web-based environmental screening program. Prior to the site inspection, the initial environmental screening was completed on February 15, 2023. After the site visit, the final environmental screening report was created on March 4th, 2023, simply to make sure the environmental sensitivity had not altered.

1.3. Site Visit (Ground Verification)

The site visit was conducted for 1 day in summer on **23 February 2023**. The reason for the site visit was to confirm/verify or dispute the different environmental sensitivity themes that has been generated by the web-based environmental screening tool.

13.1. Methodology followed to assess all themes sensitivities:

1.3.1.1. Site sensitivity verification and minimum report content requirements

Prior to commencing with a specialist assessment, the current use of the land and the environmental sensitivity of the site under consideration identified by the screening tool has been confirmed by the undertaking a site sensitivity verification.

1.3.1.2. The site sensitivity verification was undertaken by an environmental assessment practitioner.

1.3.1.3 The site sensitivity verification was undertaken through the use of:

- (a) a desk top analysis, using satellite imagery.
- (b) a preliminary site inspection; and
- (c) any other available and relevant information.

1.3.1.4 The outcome of the site sensitivity verification was recorded in the form of a report this that:

- (a) confirms or disputes the current use of the 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 together with the relevant assessment report prepared in accordance with the requirements of the Environmental Impact Assessment Regulations.

1.4. Receiving Environment

Land cover: The preferred substation location is currently found amid grassland that the neighbourhood occasionally uses for animal grazing. The vegetation on the proposed substation site is dominated by grassland, with isolated shrubs and small indigenous trees (i.e. Sickle Bush, Sweet Thorn etc.) present. The grasses in this veld are palatable for the grazing of livestock, and areas of the proposed site have been noted to have been used by the local community for subsistence farming. The vegetation along the length of the proposed corridors is characterised by good quality grassland, shrubbery and small trees.

The substation site descends progressively from west to east while being placed on top of an escarpment, and a severe slope is located 500 meters away. Since the site's existing grassland will serve to reduce soil erosion and excessive storm water runoff, only vegetation that is directly impeding the substation's construction may be eliminated. The area that the proposed corridor servitude for the Ocheni substation runs through has a mountainous topography.

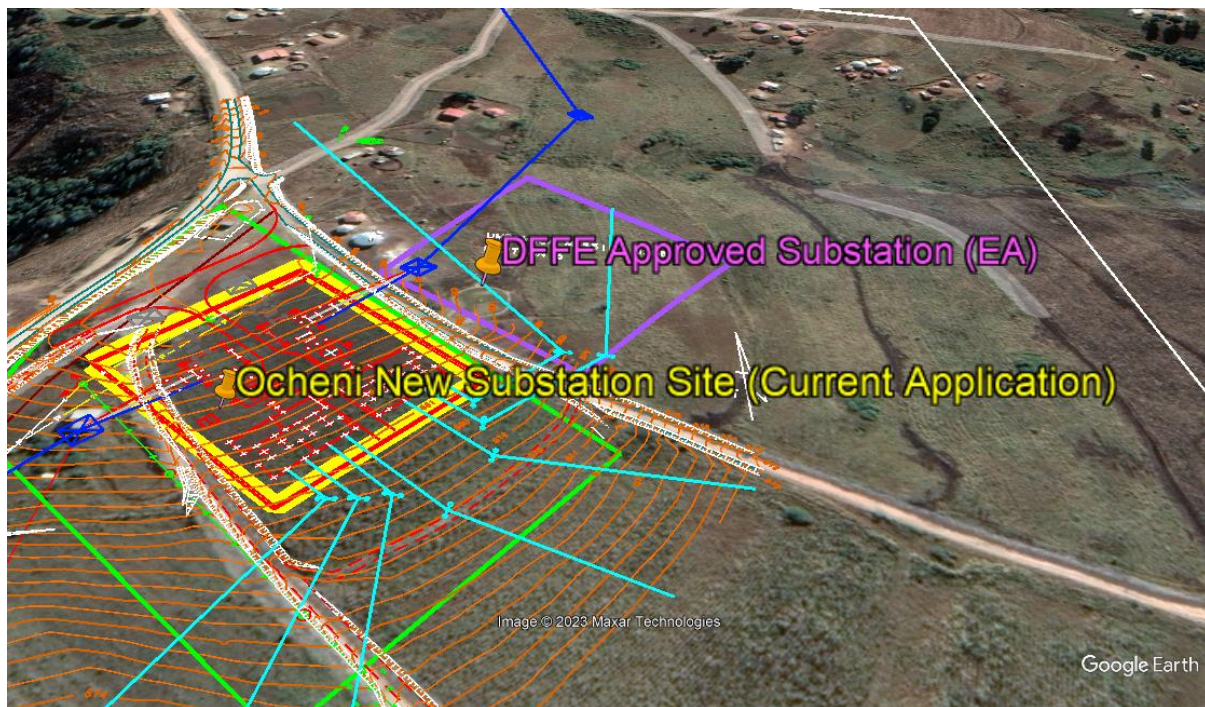


Figure 2: Showing the DFFE approved substation site versus the Eskom Current Application site.

1.5. New Substation Coordinates

North-West Corner	North-East Corner	South-West Corner	North-East Corner
S: 29°08'45.88" E: 31°00'49.46"	S: 29°08'49.09" E: 31°00'47.64"	S: 29°08'48.71" E: 31°00'52.79"	S: 29°08'51.22" E: 31°00'50.33"



(B) LEGAL CONTEXT

Activities likely to be triggered by the National Environmental Management Act 107 of 1998

An Environmental Impact Assessment for the proposed Ocheni 20MVA 132/22KV Substation site at Dumenkungwini within Maphumulo Local Municipality in KwaZulu Natal Province is being undertaken in accordance with the EIA Regulations published in Government Notice No 38282 of December 2014, read with section 24(5) of the National Environmental Management Act (Act No. 107 of 1998).

In terms of Government Notice No. 338282 of December 2014, the following listed activities are applicable, which may have an impact on the environment:

LISTING NOTICE	DESCRIPTION
Listing Notice 1	11. The construction of facilities or infrastructure for the transmission and distribution of electricity – (i) Outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts.

The Impact Assessment application and assessments will be submitted to the Department of Forestry, Fisheries and Environment for review and approval. An Impact Assessment process would be followed based on the Environmental Impact Assessment Regulations 2014, in terms of chapter 5 of the National Environmental Management Act (Act 107 of 1998).

B.1. Overview of Strategic Transmission Corridors (EGI)

On the 16 February 2018 Minister Edna Molewa published Government Notice No. 113 in Government Gazette No. 41445 which identified 5 strategic transmission corridors important for the planning of electricity transmission and distribution infrastructure as well as procedure to be followed when applying for environmental authorisation for electricity transmission and distribution expansion when occurring in these corridors.

In March 2019, a generic Environmental Management Programme (EMPr) relevant to an application for Environmental Authorisation for substations and overhead transmission and distribution electricity transmission infrastructure was published in Government Notice No. 435 in Government Gazette No, 42323. The EMPr is relevant to substations or



overhead transmission and distribution infrastructure when developed within or outside of the strategic transmission corridors.

On 29 April 2021, Minister Barbara Dallas Creecy published Government Notice No. 383 in Government Gazette No. 44504, which expanded the eastern and western transmission corridors and gave notice of the applicability of the application procedures identified in Government Notice No. 113, to these expanded corridors.

The transmission corridors and their expansion were identified through the undertaking of 2 Strategic Environmental Assessments as was the development of the generic EMPr for substations and overhead powerlines. The first Strategic Environmental Assessment was finalised in 2016 and second in 2019.

The Minister through Government Gazette Notice No. 383 of 21 April 2021 published an identification in terms of Sections 24(3), 24(5)(1) and 24(5)(b) of the National Environmental Management Act, 1998 of expanded geographical areas of strategic importance for the development of electricity transmission and distribution infrastructure and of procedures to be followed when applying for or deciding on environmental authorisations for large scale electricity transmission or distribution development activities identified in terms of section 24(2)(a) of the National Environmental Management Act, 1998 when occurring in geographical areas of strategic importance.

(C) BACKGROUND AND PROJECT DESCRIPTION.

Eskom Distribution KwaZulu Natal Operating Unit (hereinafter referred to as Eskom) received an Environmental Authorization(EA) for the Construction of a new 20MVA 132/22kV Ocheni Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province in terms of the National Environmental Management Act, 1998: GN R543, R544 and R546 on 22 August 2012. Due to a number of constraints Eskom was unable to construct the substation within the period specified in the EA and has subsequently applied for a number of amendments for the extension of the validity period of the EA which were approved on the 23 February 2015 and the 08 June 2017 respectively. The last amendment that was made on the project was for the change of the project name from Mt Elias to Ocheni Substation, and this was approved on the 29 August 2017.

Application of Environmental Authorisation



Eskom commenced with construction through the final survey and final tower positioning within the approved corridor for this project. Eskom discovered that the initial site approved for the substation is currently utilised by the community as a temple.

Eskom has appointed an independent Environmental Assessment Practitioner (EAP), Ourbiosphere Environmental (Pty) Ltd to undertake an amendment application for the change in location of the Ocheni Substation. The new proposed site for the location of the substation was not one of the alternative sites assessed during the Basic Assessment phase of the project.

On January 27, 2023, Eskom, the EAP and officials from the Department of Forestry, Fisheries and Environment (DFFE) held a meeting (ref: 2023-01-0006) to discuss the scope of the amendment and to seek advice on the relevant process for this type of amendment. The DFFE advised that a new application will have to be lodged for the new location, and Eskom requested to have the substation follow the Electricity Grid Infrastructure (Strategic Transmission Corridors) Process.

(D) PROCESS AND TIMELINE;

D1. Public Participation

Public participation is the cornerstone of the Impact Assessment Process. The principles of the National Environmental Management Act (NEMA) govern most aspects of EIAs, including public participation. These include the ongoing provision of sufficient information (in a transparent manner) to Interested and Affected Parties (I&APs).

During the Public Participation Process, input from the proponent, technical experts, government authorities and the general public will be gathered to result in a better understanding of the project for all involved, and more informed decision-making throughout the process.

The key objective of public participation is to provide I&APs with an opportunity to provide comment and input in the planning phase of the project. Issues of concern and suggestions raised by I&APs will be addressed and responded to as required in the Impact Assessment Report.

I&APs will also be given the opportunity to comment on the findings of Impact Assessment (IA) Report during the specified comment periods I&APs will be provided with a **30-day comment period** in which to raise issues and / or concerns in response to the Background Information Document.



A resulting EGI Draft Impact Assessment Report comprising of site findings and compliance statements will be compiled and will be available for public comment for a period of 30 days, where after the Final Impact Assessment Report including Comments and Responses from the public will be submitted to DFFE for decision. I&APs will be notified in writing of any decisions made by DFFE.

Please note that communications regarding the process and the availability of reports will only be sent to registered I&APs. To register for the process, and thus receive further communications regarding this development, please register by sending the signed registration sheet at the back of this document, together with your contact details and nature of interest, to Ourbiosphere Environmental (Pty) Ltd on the details shown above.

(E) THE SCREENING REPORT GENERATED FROM THE SCREENING TOOL FOR THE PRELIMINARY CORRIDOR AND/OR PROPOSED SUBSTATION SITE

Kindly refer to Annexure 1 for the Web Based Environmental Screening Report.

(F) LOCATION OF THE PRELIMINARY CORRIDOR AND/OR PROPOSED SUBSTATION SITE

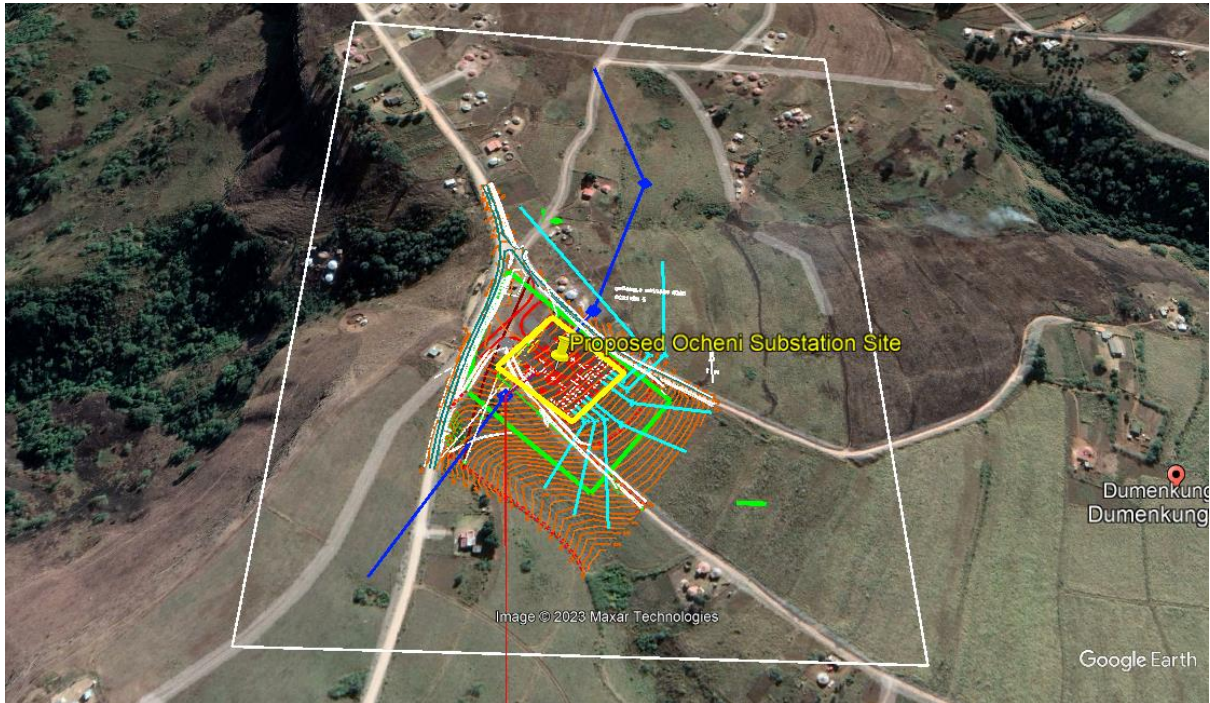


Figure 3: Showing the location of the proposed Ocheni Substation site



(G) CONTACT DETAILS OF THE EAP

Herewith the contact details of the Environmental Assessment Practitioner:

Company Name:	Ourbiosphere Environmental (Pty) Ltd
EAP Name:	Musa Netshivhambe (EAPASA, SACNASP)
Telephone:	086 001 82 55
Cell:	073 977 94 14
WhatsApp Number:	064 744 69 43
Fax:	086 567 55 23
Email Address:	musa@ourbiosphere.co.za
Postal Address:	5228 Letsobe Close, Windmill Park, Boksburg, Johannesburg, 1459
Website:	www.ourbiosphere.co.za
Public Meeting:	Date: 23 June 2023 Venue: Hlimbithwa Community Hall Time: 09h30am to 16h30pm

(H) I&AP REGISTRATION FORMS.



We invite you to use the opportunity provided by the Public Participation Process to get involved in the process and raise the problems and concerns that affect and/or interest you and about which you want more information if you identify as an I&AP for the proposed project.

By completing and submitting the accompanying registration form, we will ensure that you are registered as an I&AP for the project, and that your concerns or queries regarding the project will be noted and assessed as part of the process. We will also ensure that you are provided with future information pertaining to the project as well as the availability of the draft and final Impact Assessment Report for comment.

A notice has been placed in a Zululand Observer and Isolezwe newspapers notifying interested and affected parties and the general public of a public meeting in due course. Registered Interested and Affected Party (I&AP) will be notified directly of this meeting.



ANNEXURES 2

ATTENDANCE REGISTER: PUBLIC OPEN DAY MEETING (I&APs)



Address: 5228 Letsobe Close, Windmill Park, Boksburg, 1459
 Enquiries: Musa Netshivhambe, Tel: 086 001 82 55, Cell: 073 977 9414, Fax: 086 567 5523
 Email: musa@ourbiosphere.co.za, Website: www.ourbiosphere.co.za

OUR BIOSPHERE

ENVIRONMENTAL

ATTENDANCE REGISTER

VENUE		OCHENI SUBSTATION PUBLIC OPEN DAY			
DATE		23 JUNE 2023			
TIME		09:30am - 16:30PM			
No.	Name	Surname	Entity	Phone No	Signature
1	MUSA	NETSHIVHAMBE	OUR BIOSPHERE	0739779414	[Signature]
2	Siphwe	Mhlongo	Ocheni Area	0794998583	[Signature]
3	Zahire	Zondo	Ocheni Area	0727787608	[Signature]
4	NGCAMU	MZOPHAKEME	Ocheni Area	0648325443	[Signature]
5	ERNEST	ERNEST	OCHENI AREA	0736198129	[Signature]
6	Vusi	Sithole	OCHENI	0849759678	[Signature]
7	Ngesi	MAKHABA	OCHENI	0798538772	[Signature]
8	Nyandla	Zubane	Ocheni	0790271132	[Signature]
9	Nontshakelo	Monzini	Ocheni	0767896648	[Signature]
10	Bhekani	Ngcamu	Ocheni	0202465931	[Signature]
11	Noripha	Mkhize	Ocheni	0839666700	[Signature]
12	Kwanele	mthemba	Ocheni	0648119616	[Signature]
13	Jankelo	MPANZA	OCHENI	0670469774	[Signature]
14	MANASA	MAHZINI	OCHENI	0609405724	[Signature]
15	SAKHILE	NGEMA	OCHENI	0767484720	[Signature]
16	Busisiwe G	Mzolo	OCHENI	0718625683	[Signature]
17	Zamani	Ndimande	Ocheni	0823559543	[Signature]
18	Sibusiso	Moloto	Ocheni	0734126370	[Signature]
19	XOLANI	CEBOKHULU	OCHENI	066920367	[Signature]
20	Lungani	Ngcamu	Ocheni	0795709875	[Signature]
21	MTHABANZIMA	CELE	OCHENI	0795438670	[Signature]
22	MFOFNATHI	Mthemba	OCHENI	0823559517	[Signature]
23	Yolani	Dlamini	OCHENI	0799055477	[Signature]
24	MAZWANDILE	Zulu	OCHENI	0730131679	[Signature]
25	Sipho P.	Zubane	Ocheni	076177076	[Signature]
26	Sibongile	Shezi	Ocheni	072457932	[Signature]
27	Nkhwazi	Zubane	Ocheni	0785653015	[Signature]
28	Melusiwe	Ngcamu	OCHENI	0725090314	[Signature]
29	Mzokhanyayo	CEBOKHULU	Ocheni	0797397362	[Signature]
30	Jakobale	Nzuza	Ocheni	0638835418	[Signature]
31	Nephtile	Hadebe	Ocheni	0766706527	[Signature]
32	ELETHA	Dumbe	Ocheni	0717992854	[Signature]
33	Mama Liso	Mkhakha	Ocheni	073126179	[Signature]
34	Zandile	Nzuza	Ocheni	0638172839	[Signature]
35	Sinangele	Ngcamu	Ocheni	0710690360	[Signature]



Address: 5228 Letsobe Close, Windmill Park, Boksburg, 1459
 Enquiries: Musa Netshivhambe, Tel: 086 001 82 55, Cell: 073 977 9414, Fax: 036 567 5523
 Email: musa@ourbiosphere.co.za, Website: www.ourbiosphere.co.za

OURBIOSPHERE

ENVIRONMENTAL

ATTENDANCE REGISTER

VENUE		OCHENI SUBSTATION PUBLIC OPEN DAY			
DATE		23 JUNE 2023			
TIME		09:30am - 16:30PM			
No	Name	Surname	Entity	Phone No	Signature
36	MABOJA	SITOLI	OCHENI AREA	0711083743	[Signature]
37	THOLAKELE	MCHUMI	OCHENI	0714520007	[Signature]
38	DUMSAM	MAPHUMULO	OCHENI	0713870777	DM
39	ANONGUMUSA	CEBEKHULA	OCHENI	0714042977	[Signature]
40	THANDAZILE	HADEBA	OCHENI	0711913416	LP
41	PANGISILE	BUTHAZI	OCHENI	0712679027	[Signature]
42	PHELEANI	NTULI	OCHENI	0792123275	P.H. NTULI
43	SELO	MTHIYANE	OCHENI	0763545037	[Signature]
44	ANDILE	MKHIZE	OCHENI	0633679254	AK
45	THAMBELE	NGALI	OCHENI	0648495197	TNECK
46	THABEKANI	BUTHLEZI	OCHENI	0799863665	[Signature]
47	PHILE	NGEMA	OCHENI	0702804462	[Signature]
48	SEAZO	MHLONGO	OCHENI	0794674979	[Signature]
49	HLELIWE	MHLONGO	WARSI	0735483060	[Signature]
50	DUMSAM	ZUBA	OCHENI	0730213442	[Signature]
51	DUMSILE	MCHUNU	OCHENI	0711526873	[Signature]
52	NONDUMISO	MHLONGA	OCHENI	0762747993	[Signature]
53	ZONDILE	NYIDE	OCHENI	0713592576	[Signature]
54	BHEKONHLE	SHEZI	OCHENI	0767637308	[Signature]
55	MTHOKOZIS	CHAMAUC	OCHENI	0823323448	[Signature]
56	ZIBUYILE	BUTHAZI	OCHENI	0604194135	[Signature]
57	MIRENHLI	MAJITA	OCHENI	0781602519	[Signature]
58	MATA	NGEMA	OCHENI	072205079	[Signature]
59	MILABA	MHLONGA	OCHENI	0713558775	[Signature]
60	MHLANHIS	NGEMA	OCHENI	063624250	[Signature]
61	MALAFHE	CEBEKHULA	OCHENI	0667449320	[Signature]
62	ZANILE	MPOUNGASE	OCHENI	0602073529	X
63	THANDAZILE	MPOUNGASE	OCHENI	0730012998	[Signature]
64					
65					
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67					
68					
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70					



ANNEXURES 3

NEWSPAPER ADVERTISEMENTS ISIZULU AND ENGLISH

202 MISCELLANEOUS SALES

S.A.P.S GUNSHOP
SPECIALS STARTING FROM R400

JOHN WICK
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• C7 SCORPION
• 223 REMINGTON
• BENELLI SHOTGUN

CHARLES ANGELS
• GLOCK 44
• SHOTGUN
• 22 BOLT ACTION
• 22 BOLT ACTION

RAMBO
• LM6
• SHOTGUN
• H&K 23, 45 CAL
• 30 06

JOHN WAYNE
• COLT 45/38 SPECIAL
• SHOTGUN
• ORIGINAL RUSSIAN AK47

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• En-suite
• TV
• Parking
• 24HR security

Address: 806 Umbilo Road, Umbilo, Durban
Tel: 031 460 1040 - 031 205 8196
Cell: 082 065 8403 - 072 5786 849
www.empirelodge.co.za

401 BUSINESS

ACCOUNTING & TAX CONSULTANTS
Your Business Driver

290 Pelican Drive, Bayview Chatsworth, DBN (Above KFC)
031 400 0231, 082 405 7237
Email: info@jjatc.co.za

OUR SERVICES

- Computerized Accounting and Tax Services
- Compilation of Financials Statement, Mngt a/c
- Company & Personal Income Tax Submissions
- Tax Clearance & Filing of All SARS Returns
- VAT, BEE Cert, PAYE, COIDA, CIDB Registrations
- Shelf & VAT Shelf Companies - Ready to Trade
- Company Re-instatements & Amendments done
- Payroll, Letter of Drawings, OD, Bonds Loan Assistance

401 BUSINESS

PROPERTY FOR SALE

2 bedroom eMlazi kwa F R250K kuhlalanga ne site

4 room Mlazi kwa Q, C, E, D zinama title deed

Kwamashu 4 room, outside building 650 nansenana zikhona izindlu if ufuna more info

Contact Lindy
073 921 8233
068 499 0103

606 RECRUITMENT

General workers / cleaners needed.
Sms your name
0611009287

606 RECRUITMENT

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031 308 2004

710 LIQUOR ACT

ANNEXURE D NOTICE TO DISPLAY INTENTION TO APPLY FOR LIQUOR LICENCE IN TERMS OF SECTION (42)(1)(B)(III) OF ACT KWAZULU-NATAL LIQUOR LICENSING ACT, 2010 (ACT NO. 6 OF 2010)

KZNLA3
(TO BE DISPLAYED IN A PROMINENT PLACE AT THE PROPOSED PREMISES USING A NOTICE BOARD 1M X 1M IN SIZE)

Name and surname of the applicant : Kaveer Sookun

Category of licence applied for : (on-off-consumption/micro-Manufacturer/ special event) : Off-Consumption

Type of premises for which licence is applied for : Liquor Store

Trading name of the premises : 4 Aces Liquors

Address of the premises : Lot 34 Lidgett West Lidgett, Kzn, 3270

Date of display : 01 June 2023

Expiry date of display : 04 July 2023

NB: Objections should be lodged with the local committee in the district from where the application emanates within 21 days from the date of the display.

KZN LIQUOR AUTHORITY
217 BURGER STREET
PIETERMARITZBURG
3201

707 LEGAL SERVICES

ROAD ACCIDENT FUND CLAIMS

Contact: Zaheera Ameen
Tel: 031 309 7761
Cell: 084 852 1675
zaheera@durbanlaw.co.za

M.A.K. AMEEN & Co.

Suite 31, 3rd Floor Lornegrey Medical Centre, 280 Dr Yusuf Dadoo (Grey) Street, Durban
We are situated at the corner of Lorne Street and Grey Street - Near City Hospital.

707 LEGAL SERVICES

ROAD ACCIDENT FUND CLAIMS

Contact: Zaheera Ameen
Tel: 031 309 7761
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202 MISCELLANEOUS SALES

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From R200

• Aircon
• En-suite
• TV
• Parking
• 24HR security

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Tel: 031 460 1040 - 031 205 8196
Cell: 082 065 8403 - 072 5786 849
www.empirelodge.co.za

303 MINI BUSES

2004 TOYOTA SIYAYA 2.2 Y SUPER 16 HI-ACE

Petrol. School Transportation Bus. Very good condition. No installments Required. Private Seller.

R43 000 Cash price

Contact 078 770 2211

426 PROPERTY FOR SALE

PROPERTY FOR SALE

2 bedroom eMlazi kwa F R250K kuhlalanga ne site

4 room Mlazi kwa Q, C, E, D zinama title deed

Kwamashu 4 room, outside building 650 nansenana zikhona izindlu if ufuna more info

Contact Lindy
073 921 8233
068 499 0103

426 PROPERTY FOR SALE

UMZINYATHI DURBAN

Uma udinga iproperty edayisayo amaroom awu7 eGugwini Emzinyathi Maduzane Nanda Dam Phuthuma Price **R299 000**

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067 165 3655

304 USED CARS

UDINGA IMOTO

Zingaphezu kuka 80 izimoto ongakhetha kuzo. Uhlelo Lwezi mali Luyatholakala kuwo wonke amabhange Thintana

Mdu Xulu
082 367 0734
031 701 5292
All Cars PINETOWN

305 PRE-OWNED VEHICLES

TOYOTA D4D

With canopy **R57 000 Cash Deposit R10 000**

Whatsapp or Call

MLUNGISI
073 440 1359

426 PROPERTY FOR SALE

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Hillgrove 3 bedroom R880K. ILLOVU B 3 bedroom R685K. UMLAZI CC 1 bedroom, kitchen, diningroom. R285K Senzo 0734918400 / Simphoene 0727536297

561 ACCOMMODATION

MONTCLAIR 1 Bed unit F/fenced, Parking. Single / Couple R2000 pm. Whatsapp / Call 0731550497

426 PROPERTY FOR SALE

4 ROOM HOUSE

Y Section Umlazi. Philani. Fenced, driveway. R529 000. Call 0847997006

601 EDUCATION & TRAINING

UMLAZI - Q SECTION

Single cottages to rent.

R1600 pm incl. water, own prepaid electricity meter.

Free parking.

(We welcome any buyer for building of these 18 single cottages).

Ph : 0728763805

711 LOST DEED

FORM JJJ LOST OR DESTROYED DEED

Notice is hereby in terms of regulation 68 of the Deeds Registries Act, 1937, of the intention to apply for the intention to apply for the issued of a certified copy of Deed of Transfer No. T 7665/1995 passed by CLIVE THEMBINKOSI MANQELE in favour of CLIVE THEMBINKOSI MANQELE in respect of certain ERF 50 CLERMONT, Registration Division FT, Province of KwaZulu-Natal. In Extent 769 Square Metre of property, (omitting extent) which has been lost or destroyed.

All interested person having objection to the issue of such cop are hereby required to lodge the same in writing with the Registrar of Deeds at Pietermaritzburg within two weeks from the date of the publication of this notice.

Dated at this day of 2023

CLIVE THEMBINKOSI MANQELE
Applicant Address: MTL Building, 5th Floor, 75 Crompton Street, Pinetown
E-mail address: conveyancing@nxumalalanpartners.co.za Contact number: 031 304 7040

714 PUBLIC NOTICES

TRANSFORMATION FUND Application for Tier 1 Funding

Kumenywa izicelo zokuthola uxhaso olulwela esikhaweni soxhaso lwezimali kubantu abamnyama (Transformation Fund) ngokweSiga Sokuqala [Tier 1 Funding] ngenobaba kushicilelwe ngokweSiga 137 soMthetho owazwa nge KwaZulu-Natal Gaming and Betting Act, 2010 (Act No. 08 of 2010) nokuchibiyelwa kwawo. Uhlaka loxhaso lwezimali luhihose ukwenza isiqiniseko ukuthi ukusekwa okwanelle kuyatholaka ekusungulweni nasekugququzeleni ukusimama kwamabhizinisi asafufusa, amancane, nemifelandawonye asungulwe namona ngayiphi inhloso okumbandakanya umjaho wamahashi, ukuzalalisa kwamahashi, inhloso emayelana nokubheka nokuthuthukiswa kwemidlalo noma ukugqoqulwa kwezinguquko embonini yokugumbula nokubheka.

Izicelo ziyamenywa ngokweSiga Sokuqala Soxhaso lwezimali (R 1 – R 200, 000.00)

Amafomu okufaka Izicelo engatholaka kwisizindalwazi esithi www.kznqbb.org.za kusuka ngomhla 1 June 2023 kuya ku 31 July 2023.

Ngeminye imihlatholwane, ungaxhumana no Nkz. Barbara Chetty kwinombolo ethi 083 498 77991, chettyb@kznqbb.org.za, uMnuz. Sluleko Thabede ku 033-3452714, thabedes@kznqbb.org.za or noma Nkz. Clarissa Naidoo 031 5831800, naidoo@kznqbb.org.za Burning Spear e@oe 0758

714 PUBLIC NOTICES

TRANSFORMATION FUND Application for Tier 1 Funding

Kumenywa izicelo zokuthola uxhaso olulwela esikhaweni soxhaso lwezimali kubantu abamnyama (Transformation Fund) ngokweSiga Sokuqala [Tier 1 Funding] ngenobaba kushicilelwe ngokweSiga 137 soMthetho owazwa nge KwaZulu-Natal Gaming and Betting Act, 2010 (Act No. 08 of 2010) nokuchibiyelwa kwawo. Uhlaka loxhaso lwezimali luhihose ukwenza isiqiniseko ukuthi ukusekwa okwanelle kuyatholaka ekusungulweni nasekugququzeleni ukusimama kwamabhizinisi asafufusa, amancane, nemifelandawonye asungulwe namona ngayiphi inhloso okumbandakanya umjaho wamahashi, ukuzalalisa kwamahashi, inhloso emayelana nokubheka nokuthuthukiswa kwemidlalo noma ukugqoqulwa kwezinguquko embonini yokugumbula nokubheka.

Izicelo ziyamenywa ngokweSiga Sokuqala Soxhaso lwezimali (R 1 – R 200, 000.00)

Amafomu okufaka Izicelo engatholaka kwisizindalwazi esithi www.kznqbb.org.za kusuka ngomhla 1 June 2023 kuya ku 31 July 2023.

Ngeminye imihlatholwane, ungaxhumana no Nkz. Barbara Chetty kwinombolo ethi 083 498 77991, chettyb@kznqbb.org.za, uMnuz. Sluleko Thabede ku 033-3452714, thabedes@kznqbb.org.za or noma Nkz. Clarissa Naidoo 031 5831800, naidoo@kznqbb.org.za Burning Spear e@oe 0758

714 PUBLIC NOTICES

TRANSFORMATION FUND Application for Tier 1 Funding

Kumenywa izicelo zokuthola uxhaso olulwela esikhaweni soxhaso lwezimali kubantu abamnyama (Transformation Fund) ngokweSiga Sokuqala [Tier 1 Funding] ngenobaba kushicilelwe ngokweSiga 137 soMthetho owazwa nge KwaZulu-Natal Gaming and Betting Act, 2010 (Act No. 08 of 2010) nokuchibiyelwa kwawo. Uhlaka loxhaso lwezimali luhihose ukwenza isiqiniseko ukuthi ukusekwa okwanelle kuyatholaka ekusungulweni nasekugququzeleni ukusimama kwamabhizinisi asafufusa, amancane, nemifelandawonye asungulwe namona ngayiphi inhloso okumbandakanya umjaho wamahashi, ukuzalalisa kwamahashi, inhloso emayelana nokubheka nokuthuthukiswa kwemidlalo noma ukugqoqulwa kwezinguquko embonini yokugumbula nokubheka.

Izicelo ziyamenywa ngokweSiga Sokuqala Soxhaso lwezimali (R 1 – R 200, 000.00)

Amafomu okufaka Izicelo engatholaka kwisizindalwazi esithi www.kznqbb.org.za kusuka ngomhla 1 June 2023 kuya ku 31 July 2023.

Ngeminye imihlatholwane, ungaxhumana no Nkz. Barbara Chetty kwinombolo ethi 083 498 77991, chettyb@kznqbb.org.za, uMnuz. Sluleko Thabede ku 033-3452714, thabedes@kznqbb.org.za or noma Nkz. Clarissa Naidoo 031 5831800, naidoo@kznqbb.org.za Burning Spear e@oe 0758

2007 TOYOTA SIYAYA CASH : R58 000 DEPOSIT : R15 000

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2015 Toyota Avanza R65 000
2015 Toyota Hilux R75 000
2004 Ingulube R35 000
2007 Toyota RunX R35 000

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601 EDUCATION & TRAINING

EYABANTU firearm R995 E/D/C from R400 B/A/CIT/RO from R600. Salisbury Centre 347 West St, DBN. Tel: (031) 304 0360 / R/Bay (035)7891538 Whatsapp 0843910167

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304 USED CARS

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401 BUSINESS

Thola Isinxephezelo

Uma Walimala Engozini Yemoto (RAF CLAIM)

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- PSIRA Company Registrations
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Register for a Security or Firearm course Today! To help You, get employed, in the industry.

Register & qualify for R400 off any course CALL NOW! Special ends 2 June 2023
Whatsapp info to: 073 285 9610 or call (031) 902 2533 / (031) 836 0879

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We Improve employment opportunities, Faster!

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ISAZISO NGOHLELO LOKUCWANGINA UKUVIKELA EZEMVELO ELAZIWA NGOKUTHI UKWAKHWA KWENQALASIZINDA YOKUHAMBISA UGESI (ELECTRICITY GRID INFRASTRUCTURE- EGI)

Lesi saziso sikhishwa ngoko Mthetho-mgomo 40(3) wemigomo eshicilelwe kwi Saziso sikaHulumeni No. R882 nakwisigaba 41(c)(i) sitfundwa ngokuhlanganiswa nesigaba 43 soMthetho kazwelonke wezokunakekela nokuphathwa kwezemvelo (umthetho 107 ka 1998), mayelana nenhloso yokwenza komebenzi olandelayo:

DFFE EGI REF NO: 2023-01-0009

Umsebenzi kanye nendawo: Kuhlangozwa ukuphambuka kukalayini kagesi ngama mitha awu 873m endaweni yaseVekeya kulayini ogunyazive osuka eGingindlovu usiya eMbongolwane, lolayini unamandla awu 132 kV. Futhi kuhlangozwa ukwenzelwa kombioshongo wezokukhuluma ozokwakhiwa phakathi esitshini sikagesi eMbongolwane ongaphesha kwamathla awu 35 ubude. UHmyango Wezamaqhathi, Ezokudoba kanye Nezemvelo wakhipha imvume yokwakha lesitshini ngaphansi kwenombolo (DFFE) : 14/12/16/33/1/1918.

Starting Point	Middle Point	End Point
S: 28°59'23.42" E: 31°33'19.02"	S: 28°59'23.11" E: 31°33'11.83"	S: 28°59'07.46" E: 31°33'07.19"

Lo msebenzi uzoqoka ukuphambuka kukalayini ogunyazive obizwa nge Gingindlovu-Mbongolwane 132kV ngezixobho ezimbili buqamama nezindlu zabantu endaweni yase Vekeya, kuzophinde futhi kwakhiwe umbioshongo wezokukhuluma ongamaqhathi acishe adule u 35 ngaphakathi esitshini sikagesi eMbongolwane.

Proponent: Eskom Distribution (Eskom, KwaZulu-Natal Operating Unit)
Umlongozi: Eskom Distribution (Eskom, KwaZulu Natal Operating Unit)
Consultants: Ourbiosphere Environmental (Pty) Ltd
Umcwangini: Ourbiosphere Environmental (Pty) Ltd
Thinta: Musa Netshirhambé

Umhlangano womphakathi: 22nd June 2023
Indawo: Ngwenya Secondary School
Isikhathi: 06H30am to 16H00pm
Usuku lokugcina lokufaka imibono: S: 28°59'21.38" and E: 31°33'03.64"
06th July 2023 (2:35:59pm)
Contact: Musa Netshirhambé
Cell: 073 977 9414
Fax: 086 567 5523
Email: musa@ourbiosphere.co.za

ISAZISO NGOHLELO LOKUCWANGINA UKUVIKELA EZEMVELO ELAZIWA NGOKUTHI UKWAKHWA KWENQALASIZINDA YOKUHAMBISA UGESI (ELECTRICITY GRID INFRASTRUCTURE- EGI)

Lesi saziso sikhishwa ngoko Mthetho-mgomo 40(3) wemigomo eshicilelwe kwi Saziso sikaHulumeni No. R882 nakwisigaba 41(c)(i) sitfundwa ngokuhlanganiswa nesigaba 43 soMthetho kazwelonke wezokunakekela nokuphathwa kwezemvelo (umthetho 107 ka 1998), mayelana nenhloso yokwenza komebenzi olandelayo:

DFFE EGI REF NO: 2023-01-0006

Umsebenzi kanye nendawo: Kuhlangozwa ukushintshwa kwendawo yokwakha isitshini sikagesi esisha esibizwa ngokuthi i-Ocheni 132/22kV 20MVA no kyini onamandla kagesi awu 132kV ongamaqhulomthha angamashumi amabili nanye (21km) oya esitshini sikagesi eGlenndale, isitshini sizokwakhiwa kwabaphumulo ngaphantsi komkhandlu womasipala iMaphumulo kwaZulu Natal. UHmyango Wezamaqhathi, Ezokudoba kanye Nezemvelo wakhipha imvume yokwakha lesitshini ngaphansi kwenombolo : 12/12/20/22/1/AM3.

North-West Corner	North-East Corner	South-West Corner	North-East Corner
S: 29°08'45.88" E: 31°00'49.46"	S: 29°08'49.09" E: 31°00'47.64"	S: 29°08'48.71" E: 31°00'52.79"	S: 29°08'51.22" E: 31°00'50.33"

Inkampani yezokuhambisa ugesi uEskom KwaZulu Natal uqoke inkampani ezimle yezokucwangina ezemvelo i-Our Biosphere Environmental ukuthi afake isicelo sokwakha isitshini i-Ocheni kwenye indawo, futhi enze ucwangino olufanele ngokwemigomo ethintekayo eMnyangweni kazwelonke Wezamaqhathi, Ezokudoba kanye nezemvelo (DFFE). Ngokuthobela umjongo 41 wemigomo yokucwangina ukuthinteka kwezemvelo, uyam enyanya emhlanganweni womphakathi olandelayo;

Umhlangano womphakathi: 23rd June 2023
Indawo: Hlambithwa Community Hall
Isikhathi: Dumenkungweni (KwaZulu-Natal)
10H00am to 16H00pm
Usuku lokugcina lokufaka imibono: 06th July 2023 (2:35:59pm)
Contact Person: Musa Netshirhambé
Contact Details: Tel: 073 977 9414
musa@ourbiosphere.co.za

Ukugcinisekisa ukuthi uyafakwa kuhlwa bantu abanentshisekelo futhi abathintekayo iloku okuhlongozwayo, sicela uthumele igama lakho, neminingwane yokuthinteka kwakho zingakapheli izinsuku (Email: musa@ourbiosphere.co.za, Tel: 073 977 9414) ezingama-30 kusukela ngelanga lesikhangiso. Usuku lokugcina lokufaka imibono ngumhla 06th July 2023 nge hora 23:59.

0500
PROPERTY TO LET

0501
ESTATE AGENCIES

FOSPROPS PROPERTIES
SHOPS, OFFICES & FACTORIES TO LET / FOR SALE
R/Boy: 035 789 8583
Emp: 035 772 4011
HOUSES/FLATS TO LET/FOR SALE
R/Boy: 035 789 1481
Emp: 035 772 4011
BODY CORPORATE ADMINISTRATION
R/Boy: 035 789 6730
Emp: 035 772 4011

0515
FLATS/ UNITS TO LET

BRAND NEW GOLF COURSE FLAT
Central Empangeni, St Andrews, upmarket, 2 b/r fully fitted, top security, R7 150 includes water, refuse, sewerage and VAT.
083 630 5074

0535
OFFICES & SHOPS TO LET

EMPANGENI CENTRAL BUSINESS OFFICE PREMISES TO LET
80m² includes water, refuse and sewage.
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0700
MOTORING

0710
COMMERCIAL VEHICLES

COMMERCIAL VEHICLES

2nd-Hand trucks, tractors, LDV's, plant & machinery bought for cash. Any model, any condition.

We don't hassle, we buy!!!
035 772 5876
083 786 3332

0740
USED CARS

Beware, do not pay any money in advance for any cars and bakkies advertised privately. Don't pay any holding deposits or full payments before seeing the vehicle.

Sicela uqaphele, ungaqali ngokukhokha imali uma uthenga izimoto namaveni akhangiswa ngase. Ungaqali ukhokhe imali yesibambiso noma ukhokhe imali egcwele ngaphambi kokuthi uyibone leyomoto

0800
VACANCIES

0803
ACCOUNTING

Bookkeeper required for busy workshop to control admin.
• Must be computer literate.
• Debtors, Creditors, E-Filing, Quotes etc.
• Pleasant personality

Contact: 083 625 8778

0827
GENERAL

Company seeking services of a receptionist

• General Admin duties with knowledge of computer skills
• With minimum 2 years experience

Email CV to infopanelbeaters@gmail.com

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0839
MANAGEMENT

LODGE MANAGEMENT INTERN POSITION AVAILABLE

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SR011650

• VACANCIES •

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WE HAVE THE FOLLOWING VACANCIES
• Admin Clerk • Cash Office Clerk
• GRV Clerk • Dispatch Clerk
• Sales Rep • Stock Controller
• Minimum 2 years' experience • Traceable reference • Must be honest and reliable • Transport can be arranged
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Fax: 035 787 1410

• VACANCIES •

WE ARE HIRING!
Medical secretary / receptionist required for specialist practise at Melomed Hospital
email CV to vacancymelomed@gmail.com

• VACANCIES •

KZ 281 ADVERTISEMENT
Applications are invited from suitably qualified applicants for the permanent position which exist within uMfolozi Local Municipality.
EXECUTIVE SECRETARY: MUNICIPAL MANAGER
SALARY: 167 712.36 (Excl benefits)
TASK GRADE LEVEL 7 OF A CATEGORY 1 MUNICIPALITY PERMANENT POSITION
REQUIREMENTS: Grade 12 • Computer Literacy: MS Office • 2-5 years relevant Secretarial/Administrative experience.
RESPONSIBILITIES:
• **Scheduling and planning executive diary and events** (liaising with superior in establishing the priorities for scheduling purposes, to interact internally and externally to confirm arrangement and programmes, confirming travel and accommodation details, attending to specific business arrangements and briefings on itinerary prior to departure, co-ordinating all protocol requirements for internal executive's events and functions)
• **Provision of administration and secretarial support** (searching for information on specific topics using the internet and library resources, copying, typing and formatting the documents and routine reports and create presentations using related office applications, providing support during the Management meetings by recording discussions and resolutions with respect to agenda items, perusing Council and Committee agenda and minutes of meetings and forwarding items requiring attention of the superior)
• **Information record keeping** (updating the correspondence register inserting reference numbers of correspondence received, referencing source documentations and seeking approval on the destruction of old & out dated correspondence)
• **Reception/ telephone and office support** (attending to telephone calls and visitors, recording details of enquiries, messages in the absence of the superior, maintaining stocks of standard forms, stationery and completing requisition orders to facilitate the replenishment of items prior to depletion)
Applications consisting of a Comprehensive CV in English and completed application form, certified copies of ID and qualifications should be deposited in the Municipal CV Box which is located at the Council Chamber building at No. 25 Bredelia Street, Kwa-Mbonambi, 3915 or be addressed to the Municipal Manager, P. O. Box 96 Kwa-Mbonambi 3915 on or before **21st of June 2023** Application forms are obtainable at the reception or at the uMfolozi Municipal website: www.umfolozi.gov.za. Failure to attach the required documentation will lead to your application being disqualified.
Enquiries may be directed to the Human Resources Officer, Ms NC Mngomezulu at (035) 580 -1421. The Municipality subscribes to an Affirmative Action Programme, which is non-racist, non-sexist, and non-discriminatory and based on merit. Should you not hear from the Municipality within 60 days of the closing date of the advert, please consider your application as being unsuccessful.
MR L.S. JILI
MUNICIPAL MANAGER

Mthonjaneni Local Municipality
FINAL MTHONJANENI INTEGRATED DEVELOPMENT PLAN (IDP) FOR 2023/24 FINANCIAL YEAR
Notice is hereby given that, in terms of section 25(4) of the Municipal Systems Act; 2000 (No.32 of 2000), that the Municipal Council of Mthonjaneni Local Municipality has adopted its Final IDP for the 2023/24 financial year. The Final IDP 2023/24 financial year was tabled by his Worship the Mayor Cllr MN Biyela in the Council meeting held on 25 May 2023, resolution number MLMSC 23/758
TABLING OF THE FINAL MTREF ANNUAL BUDGET FOR 2023/24 FINANCIAL YEAR AND TWO OUTER YEARS (2024/25 & 2025/26)
Notice is hereby given in terms of section 21A and section 34 of the Municipal Systems Act; No.32 of 2000; Section 22 of the Municipal Finance Management Act; no.56 of 2003 read together with Section 15 of Municipal Budget and Reporting Regulations (Gazette 32141 of 17 April 2009) that the Municipal Council of Mthonjaneni Local Municipality has approved its Final MTREF Budget 2023/24.
The Final MTREF Budget 2023/24 financial year and two outer years (2024/25 & 2025/26) was tabled by his Worship the Mayor Cllr MN Biyela in the Council meeting held on 25 May 2023, resolution number MLMSC 23/759.
Copies of the above-mentioned documents can be obtained from the Municipal Website www.mthonjaneni.org.za or Municipal Offices, 21 Reinhold Street, Melmoth, 3535.
2023/2024 Final IDP related enquiries can be directed to the IDP/PMS Manager, Mr L Nyawose on 035 450 2082 ext. 0207 or pmsmanager@mthonjaneni.org.za during office hours.
2023/2024 Final MTREF Budget related enquiries can be directed to the CFO, Mr N.M Myeni on 035 450 2082 ext. 0205 or cfo@mthonjaneni.org.za during office hours.
MR. ZS Mthethwa
Municipal Manager: Mthonjaneni Municipality

NOTICE OF IMPACT ASSESSMENT PROCESS (ELECTRICITY GRID INFRASTRUCTURE-EGI)

Notice is hereby given in terms of Regulation 40(3) of the regulations published in Government Notice No. R 982 and Section 41(c)(i) read together with Section 43 of the National Environmental Management Act (Act 107 of 1998) of intent to carry out the following Activity:

DFFE EGI REF NO:2022-09-0009

Activity & Locality: The proposed deviation of the 132kV power line at Vekeya on the authorised Gingindlovu-Mbongolwane 132kV from Gingindlovu to Mbongolwane substation and addition of a ±35 metre telecommunication tower at the authorised Mbongolwane Substation. DEA Environmental Authorisation NO: 14/12/16/3/3/1 /1918

Starting Point	Middle Point	End Point
S: 28°59'23.42"	S: 28°59'23.11"	S: 28°59'07.46"
E: 31°33'19.02"	E: 31°33'11.83"	E: 31°33'07.19"

The activity will include the deviation of the authorised Gingindlovu-Mbongolwane 132kV powerline by two Electricity Lattice Structures away from residential house's at Vekeya Village and the addition of a ±35 metre telecommunication tower at the authorised Mbongolwane Substation.

Proponent: Eskom Distribution (Eskom, KwaZulu-Natal Operating Unit)
Consultants: Ourbiosphere Environmental (Pty) Ltd
Contact: Musa Netshivhambe
Tel: 073 977 9414 **Fax:** 086 567 5523
Email: musa@ourbiosphere.co.za

Public Open Day Meeting: 22 June 2023
Venue: Ngwenya Secondary School (Vekeya Village)
Time: 09H30am to 16h00pm
Venue GPS Coordinates: S: 28°59'21.41" and E: 31°33'03.65"

Deadline for Comments Submissions: 06 July 2023 (23:59pm)

To ensure that you are identified as an Interested and/or Affected Party (I&AP) **ONLY in terms of the IA process**, please submit your name, contact information and Interest (comments) to email: musa@ourbiosphere.co.za **Tel:** 0739779414 within 30 days from publication of this notice. **Deadline for Comments 06 July 2023 at 23:59pm**

NOTICE OF IMPACT ASSESSMENT PROCESS (ELECTRICITY GRID INFRASTRUCTURE-EGI)

DFFE EGI REF NO: 2023-01-0006

Activity & Locality: The proposed project will entail the location change of the new 20MVA 132/22kV Ocheni Substation on the authorised 20MVA 132/22kV OCHENI Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the KwaZulu-Natal Province. DFFE Environmental Authorisation NO: 12/12/20/2271/AM3

Substation Project Boundary Coordinates:

North-West Corner	North-East Corner	South-West Corner	North-East Corner
S: 29°08'45.88"	S: 29°08'49.09"	S: 29°08'48.71"	S: 29°08'51.22"
E: 31°00'49.46"	E: 31°00'47.64"	E: 31°00'52.79"	E: 31°00'50.33"

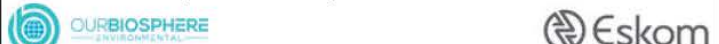
Eskom Distribution in KwaZulu Natal Operating unit has appointed Ourbiosphere Environmental to undertake the application process for the change of location of the Ocheni Substation in terms of the Electrical Grid Infrastructure process to the Department of Forestry Fisheries and Environment. In compliance with regulation 41 of the NEMA/EIA Regulations, you are invited to following public meeting:

Proponent: Eskom Distribution (Eskom, KwaZulu-Natal Operating Unit)
Consultants: Ourbiosphere Environmental (Pty) Ltd
Contact: Musa Netshivhambe
Tel: 073 977 9414 **Fax:** 086 567 5523
Email: musa@ourbiosphere.co.za

Public Open Day Meeting: 23 June 2023
Venue: Hlimbithwa Community Hall Dumenkungwini (KwaZulu-Natal)
Time: 09H30am to 16h00pm
Venue GPS Coordinates: S: 28°59'21.41" and E: 31°33'03.65"

Deadline for Comments Submissions: 06 July 2023 (23:59pm)

To ensure that you are identified as an Interested and/or Affected Party (I&AP) **ONLY in terms of the IA process**, please submit your name, contact information and Interest (comments) to email: musa@ourbiosphere.co.za **Tel:** 0739779414 within 30 days from publication of this notice. **Deadline for Comments 06 July 2023 at 23:59pm.**





ANNEXURES 4

LIST OF ORGANS OF STATE

LIST OF IDENTIFIED INTERESTED AND AFFECTED ORGANS OF STATE				
No	Organ of state name	Organization	Position	Contact Details and Address
1	Mr Kobus Bester	Department of Water and Sanitation	Deputy Chief Engineer, NWRP Options Analysis	084 517 5560 besterk@dws.gov.za
2	MsNtokozo Sosibo	Umgeni Water		033 341 1131
3	Mr Gavin Subramanian	Umgeni Water		033 341 1131 071 671 7764 Gavin.subramanian@umgeni.gov.za
4	Amafa Institute	Jabu Mazobuko		035-870 2050 jabu.mazobuko@amafainstitute.org.za
5	Amafa Institute	Zameka Yamile		035-870 2050 zameka.yamile@amafainstitute.org.za
6	Mr Muzi Mdamba			033 341 3300
7	Mr RM Mazibuko	King Cetshwayo District Municipality	Planning and Economic Development	0357992517
8		KwaZulu-Natal Department: Agriculture and Rural Development		033 355 9100
9		KwaZulu-Natal Department of Public Works		031 261 8997
10		Department of Roads and Transport		(033) 355 8600.
11	Muziwandile Mdamba	KZN Department of Economic Development, Tourism and Environment		(033) 343 8428 Muziwandile.Mdamba@kznedtea.gov.za
12	Mr Jeffrey Maivha	DAFF - Forestry Regulations and Support 185		JeffreyMAI@daff.gov.za
13	Nokwanda Mgwaba	DAFF - Forestry Regulations and Support		NokwandaM@daff.gov.za
14	Mulanga Fanele	Ezemvelo KZN Wildlife		033 845 1639
15	Zeph Dindikazi	Ezemvelo KZN Wildlife		073 911 8200
16	Siyabonga Buthelezi	Department of Water and Sanitation		buthelzis2@dwaf.gov.za
17	Justice Radebe	King Cetshwayo District Municipality	Environmental Officer	radebej@uthungulu.co.za Corner of Krugerrand &

				Barbados Bay Road CBD Richards Bay 3900
--	--	--	--	--



ANNEXURES 5

FINAL EMPR

APPENDIX 1
GENERIC ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr) FOR THE
DEVELOPMENT AND EXPANSION OF SUBSTATION INFRASTRUCTURE FOR THE
TRANSMISSION AND DISTRIBUTION OF ELECTRICITY



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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INTRODUCTION

1. Background

The National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) requires that an environmental management programme (EMPr) be submitted where an environmental impact assessment (EIA) has been identified as the environmental instrument to be utilised as the basis for a decision on an application for environmental authorisation (EA). The content of an EMPr must either contain the information set out in Appendix 4 of the Environmental Impact Assessment Regulations, 2014, as amended (EIA Regulations) or must be a generic EMPr relevant to an application as identified and gazetted by the Minister in a government notice. Once the Minister has identified, through a government notice that a generic EMPr is relevant to an application for EA, that generic EMPr must be applied by all parties involved in the EA process, including but not limited to the applicant and the competent authority (CA).

2. Purpose

This document constitutes a generic EMPr relevant to applications for the development or expansion of substation infrastructure for the transmission and distribution of electricity, and all listed and specified activities necessary for the realisation of such infrastructure.

3. Objective

The objective of this generic EMPr is to prescribe and pre-approve generally accepted impact management outcomes and impact management actions, which can commonly and repeatedly be used for the avoidance, management and mitigation of impacts and risks associated with the development or expansion of substation infrastructure for the transmission and distribution of electricity. The use of a generic EMPr is intended to reduce the need to prepare and review individual EMPrs for applications of a similar nature.

4. Scope

The scope of this generic EMPr applies to the development or expansion of substation infrastructure for the transmission and distribution of electricity requiring EA in terms of NEMA. This generic EMPr applies to activities requiring EA, mainly activity 11 and 47 of the Environmental Impact Assessment Regulations Listing Notice 1 of 2014, as amended, and activity 9 of the Environmental Impact Assessment Regulations Listing Notice 2 of 2014, as amended, and all associated listed or specified activities necessary for the realization of such infrastructure.

5. Structure of this document

This document is structured in three parts with an Appendix as indicated in the table below:

Part	Section	Heading	Content
A		Provides general guidance and information and is not legally binding	Definitions, acronyms, roles & responsibilities and documentation and reporting.
B	1	Pre-approved generic EMPr template	<p>Contains generally accepted impact management outcomes and impact management actions required for the avoidance, management and mitigation of impacts and risks associated with the development or expansion of substation infrastructure for the transmission and distribution of electricity, which are presented in the form of a template that has been pre-approved.</p> <p>The template in this section is to be completed by the contractor, with each completed page signed and dated by the holder of the EA prior to commencement of the activity.</p> <p>Where an impact management outcome is not relevant, the words "not applicable" can be inserted in the template under the "responsible persons" column.</p> <p>Once completed and signed, the template represents the EMPr for the activity approved by the CA and is legally binding. The template is not required to be submitted to the CA as once the generic EMPr is gazetted for implementation, it has been approved by the CA.</p> <p>To allow interested and affected parties access to the pre-approved EMPr template for consideration through the decision-making process, the EAP on behalf of the applicant /proponent must make the hard copy of this EMPr available at a public location and where the applicant has a website, the EMPr should also be made available on such publicly accessible website.</p>
	2	Site specific information	Contains preliminary infrastructure layout and a declaration that the applicant/holder of the EA

Part	Section	Heading	Content
			<p>will comply with the pre-approved generic EMPr template contained in <u>Part B: Section 1</u>, and understands that the impact management outcomes and impact management actions are legally binding. The preliminary infrastructure layout must be finalized to inform the final EMPr that is to be submitted with the basic assessment report (BAR) or environmental impact assessment report (EIAR), ensuring that all impact management outcomes and impact management actions have been either pre-approved or approved in terms of <u>Part C</u>.</p> <p>This section must be submitted to the CA together with the final BAR or EIAR. The information submitted to the CA will be considered to be incomplete should a signed copy of <u>Part B: section 2</u> not be submitted. Once approved, this Section forms part of the EMPr for the development and is legally binding.</p>
C		Site specific sensitivities/ attributes	<p>If any specific environmental sensitivities/ attributes are present on the site which require site specific impact management outcomes and impact management actions, not included in the pre-approved generic EMPr, to manage impacts, these specific impact management outcomes and impact management actions must be included in this section. These specific environmental attributes must be referenced spatially and impact management outcomes and impact management actions must be provided. These specific impact management outcomes and impact management actions must be presented in the format of the pre-approved EMPr template (<u>Part B: section 1</u>)</p> <p>This section will not be required should the site contain no specific environmental sensitivities or attributes. However, if <u>Part C</u> is applicable to the site, it is required to be submitted together with the BAR or EIAR, for consideration of, and decision on, the application for EA. The information in this section must be prepared by an EAP and must contain his/her name and expertise including a curriculum vitae. Once</p>

Part	Section	Heading	Content
			<p>approved, Part C forms part of the EMPr for the site and is legally binding.</p> <p>This section applies only to additional impact management outcomes and impact management actions that are necessary for the avoidance, management and mitigation of impacts and risks associated with the specific development or expansion and which are not already included in <u>Part B: section 1</u>.</p>
	Appendix 1		<p>Contains the method statements to be prepared prior to commencement of the activity. The method statements are not required to be submitted to the competent authority.</p>

6. Completion of part B: section 1: the pre-approved generic EMPr template

The template is to be completed prior to commencement of the activity, by providing the following information for each environmental impact management action:

- For implementation
 - a 'responsible person',
 - a method for implementation,
 - a timeframe for implementation
- For monitoring
 - a responsible person
 - frequency
 - evidence of compliance.

The completed template must be signed and dated by the holder of the EA prior to commencement of the activity. The method statements prepared and agreed to by the holder of the EA must be appended to the template as Appendix 1. Each method statement must be signed and dated on each page by the holder of the EA. This template once signed and dated is legally binding. The holder of the EA will remain responsible for its implementation.

7. Amendments of the impact management outcomes and impact management actions

Once the activity has commenced, a holder of an EA may make amendments to the impact management outcomes and impact management actions in the following manner:

- Amendment of the impact management outcomes: in line with the process contemplated in Regulation 37 of the EIA Regulations; and
- Amendment of the impact management actions: in line with the process contemplated in Regulation 36 of the EIA Regulations.

8. Documents to be submitted as part of part B: section 2 site specific information and declaration

Part B: Section 2 has three distinct sub-sections. The first and third sub-sections are in a template format. Sub-section two requires a map to be produced.

Sub-section 1 contains the project name, the applicant's name and contact details, the site information, which includes coordinates of the property or farm in which the proposed substation infrastructure is proposed as well as the 21-digit Surveyor General code of each cadastral land parcel and, where available, the farm name.

Sub-section 2 is to be prepared by an EAP and must contain his/her name and expertise including a curriculum vitae. This sub-section must include a map of the site sensitivity overlaid with the preliminary infrastructure layout using the national web based environmental screening tool, when available for compulsory use at: <https://screening.environment.gov.za/screeningtool>. The sensitivity map shall identify the nature of each sensitive feature e.g. threatened plant species, archaeological site, etc. Sensitivity maps shall identify features both within the planned working area and any known sensitive features and within 50 m from the development footprint.

Sub-section 3 is the declaration that the applicant (s)/proponent (s) or holder of the EA in the case of a change of ownership must complete which confirms that the applicant/EA holder will comply with the pre-approved 'generic EMPr' template in Section 1 and understands that the impact management outcomes and impact management actions are legally binding.

(a) Amendments to Part B: Section 2 – site specific information and declaration

Should the EA be transferred, Part B: Section 2 must be completed by the new applicant/proponent and submitted with the application for an amendment of the EA in terms of regulations 29 or 31 of the EIA Regulations, whichever applies. The information submitted as part of such an application for an amendment to an EA will be considered to be incomplete should a signed copy of Part B: Section 2 not be submitted. Once approved, Part B: Section 2 forms part of the EMPr for the development and the EMPr becomes legally binding to the new EA holder.

PART A – GENERAL INFORMATION

1. DEFINITIONS

In this EMPr any word or expression to which a meaning has been assigned in the NEMA or EIA Regulations has that meaning, and unless the context requires otherwise –

"clearing" means the clearing and removal of vegetation, whether partially or in whole, including trees and shrubs, as specified;

"construction camp" is the area designated for key construction infrastructure and services, including but not limited to offices, overnight vehicle parking areas, stores, the workshop, stockpile and lay down areas, hazardous storage areas (including fuels), the batching plant (if one is located at the construction camp), designated access routes, equipment cleaning areas and the placement of staff accommodation, cooking and ablution facilities, waste and wastewater management;

"contractor" - The Contractor has overall responsibility for ensuring that all work, activities, and actions linked to the delivery of the contract, are in line with the Environmental Management Programme and that Method Statements are implemented as described.

"hazardous substance" is a substance governed by the Hazardous Substances Act, 1973 (Act No. 15 of 1973) as well as the Hazardous Chemical and Substances Regulations, 1995;

"method statement" means a written submission by the Contractor to the Project Manager in response to this EMPr or a request by the Project Manager and ECO. The method statement must set out the equipment, materials, labour and method(s) the Contractor proposes using to carry out an activity identified by the Project Manager when requesting the Method Statement. This must be done in such detail that the Project Manager and ECO is able to assess whether the Contractor's proposal is in accordance with this specification and/or will produce results in accordance with this specification;

The method statement must cover as a minimum applicable details with regard to:

- (i) Construction procedures;
- (ii) Plant, materials and equipment to be used;
- (iii) Transporting the equipment to and from site;
- (iv) How the plant/ material/ equipment will be moved while on site;
- (v) How and where the plant/ material/ equipment will be stored;
- (vi) The containment (or action to be taken if containment is not possible) of leaks or spills of any liquid or material that may occur;
- (vii) Timing and location of activities;
- (viii) Compliance/ non-compliance; and
- (ix) Any other information deemed necessary by the Project Manager.

"slope" means the inclination of a surface expressed as one unit of rise or fall for so many horizontal units;

“**solid waste**” means all solid waste, including construction debris, hazardous waste, excess cement/ concrete, wrapping materials, timber, cans, drums, wire, nails, food and domestic waste (e.g. plastic packets and wrappers);

“**spoil**” means excavated material which is unsuitable for use as material in the construction works or is material which is surplus to the requirements of the construction works;

“**topsoil**” means a varying depth (up to 300 mm) of the soil profile irrespective of the fertility, appearance, structure, agricultural potential, fertility and composition of the soil;

“**works**” means the works to be executed in terms of the Contract

2. ACRONYMS and ABBREVIATIONS

CA	Competent Authority
cEO	Contractors Environmental Officer
dEO	Developer Environmental Officer
DPM	Developer Project Manager
DSS	Developer Site Supervisor
EAR	Environmental Audit Report
ECA	Environmental Conservation Act No. 73 of 1989
ECO	Environmental Control Officer
EA	Environmental Authorisation
EIA	Environmental Impact Assessment
ERAP	Emergency Response Action Plan
EMPr	Environmental Management Programme Report
EAP	Environmental Assessment Practitioner
FPA	Fire Protection Agency
HCS	Hazardous chemical Substance
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NEMBA	National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)
NEMWA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
MSDS	Material Safety Data Sheet
RI&AP's	Registered Interested and affected parties

3. ROLES AND RESPONSIBILITIES FOR ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr) IMPLEMENTATION

The effective implementation of this generic EMPr is dependent on established and clear roles, responsibilities and reporting lines within an institutional framework. This section of the EMPr gives guidance to the various environmental roles and reporting lines, however, project specific requirements will ultimately determine the need for the appointment of specific person(s) to undertake specific roles and or responsibilities. As such, it must be noted that in the event that no specific person, for example, an environmental control officer (ECO) is appointed, the holder of the EA remains responsible for ensuring that the duties indicated in this document for action by the ECO are undertaken.

Table 1: Guide to roles and responsibilities for implementation of an EMPr

Responsible Person(s)	Role and Responsibilities
Developer's Project Manager (DPM)	<p><u>Role</u> The Project Developer is accountable for ensuring compliance with the EMPr and any conditions of approval from the competent authority (CA). Where required, an environmental control officer (ECO) must be contracted by the Project Developer to objectively monitor the implementation of the EMPr according to relevant environmental legislation, and the conditions of the environmental authorisation (EA). The Project Developer is further responsible for providing and giving mandate to enable the ECO to perform responsibilities, and he must ensure that the ECO is integrated as part of the project team while remaining independent.</p> <p><u>Responsibilities</u></p> <ul style="list-style-type: none"> - Be fully conversant with the conditions of the EA; - Ensure that all stipulations within the EMPr are communicated and adhered to by the Developer and its Contractor(s); - Issuing of site instructions to the Contractor for corrective actions required; - Monitor the implementation of the EMPr throughout the project by means of site inspections and meetings. Overall management of the project and EMPr implementation; and - Ensure that periodic environmental performance audits are undertaken on the project implementation.

Responsible Person(s)	Role and Responsibilities
Developer Site Supervisor (DSS)	<p><u>Role</u> The DSS reports directly to the DPM, oversees site works, liaises with the contractor(s) and the ECO. The DSS is responsible for the day to day implementation of the EMPr and for ensuring the compliance of all contractors with the conditions and requirements stipulated in the EMPr.</p> <p><u>Responsibilities</u></p> <ul style="list-style-type: none"> - Ensure that all contractors identify a contractor's Environmental Officer (cEO); - Must be fully conversant with the conditions of the EA. Oversees site works, liaison with Contractor, DPM and ECO; - Must ensure that all landowners have the relevant contact details of the site staff, ECO and cEO; - Issuing of site instructions to the Contractor for corrective actions required; - Will issue all non-compliances to contractors; and - Ratify the Monthly Environmental Report.
Environmental Control Officer (ECO)	<p><u>Role</u> The ECO should have appropriate training and experience in the implementation of environmental management specifications. The primary role of the ECO is to act as an independent quality controller and monitoring agent regarding all environmental concerns and associated environmental impacts. In this respect, the ECO is to conduct periodic site inspections, attend regular site meetings, pre-empt problems and suggest mitigation and be available to advise on incidental issues that arise. The ECO is also required to conduct compliance audits, verifying the monitoring reports submitted by the cEO. The ECO provides feedback to the DSS and Project Manager regarding all environmental matters. The Contractor, cEO and dEO are answerable to the Environmental Control Officer for non-compliance with the Performance Specifications as set out in the EA and EMPr.</p> <p>The ECO provides feedback to the DSS and Project Manager, who in turn reports back to the Contractor and potential and Registered Interested & Affected Parties' (RI&AP's), as required. Issues of non-compliance raised by the ECO must be taken up by the Project Manager, and resolved with the Contractor as per the conditions of his contract. Decisions regarding environmental procedures, specifications and requirements which have a cost implication (i.e. those that are deemed to be a variation, not allowed for in the</p>

Responsible Person(s)	Role and Responsibilities
	<p>Performance Specification) must be endorsed by the Project Manager. The ECO must also, as specified by the EA, report to the relevant CA as and when required.</p> <p><u>Responsibilities</u> The responsibilities of the ECO will include the following:</p> <ul style="list-style-type: none"> - Be aware of the findings and conclusions of all EA related to the development; - Be familiar with the recommendations and mitigation measures of this EMPr; - Be conversant with relevant environmental legislation, policies and procedures, and ensure compliance with them; - Undertake regular and comprehensive site inspections / audits of the construction site according to the generic EMPr and applicable licenses in order to monitor compliance as required; - Educate the construction team about the management measures contained in the EMPr and environmental licenses; - Compilation and administration of an environmental monitoring plan to ensure that the environmental management measures are implemented and are effective; - Monitoring the performance of the Contractors and ensuring compliance with the EMPr and associated Method Statements; - In consultation with the Developer Site Supervisor order the removal of person(s) and/or equipment which are in contravention of the specifications of the EMPr and/or environmental licenses; - Liaison between the DPM, Contractors, authorities and other lead stakeholders on all environmental concerns; - Compile a regular environmental audit report highlighting any non-compliance issues as well as satisfactory or exceptional compliance with the EMPr; - Validating the regular site inspection reports, which are to be prepared by the contractor Environmental Officer (cEO); - Checking the cEO's record of environmental incidents (spills, impacts, legal transgressions etc.) as well as corrective and preventive actions taken; - Checking the cEO's public complaints register in which all complaints are recorded, as well as action taken;

Responsible Person(s)	Role and Responsibilities
<p>developer Environmental Officer (dEO)</p>	<ul style="list-style-type: none"> - Assisting in the resolution of conflicts; - Facilitate training for all personnel on the site – this may range from carrying out the training, to reviewing the training programmes of the Contractor; - In case of non-compliances, the ECO must first communicate this to the Senior Site Supervisor, who has the power to ensure this matter is addressed. Should no action or insufficient action be taken, the ECO may report this matter to the authorities as non-compliance; - Maintenance, update and review of the EMPr; - Communication of all modifications to the EMPr to the relevant stakeholders. <p><u>Role</u></p> <p>The dEOs will report to the Project Manager and are responsible for implementation of the EMPr, environmental monitoring and reporting, providing environmental input to the Project Manager and Contractor's Manager, liaising with contractors and the landowners as well as a range of environmental coordination responsibilities.</p> <p><u>Responsibilities</u></p> <ul style="list-style-type: none"> - Be fully conversant with the EMPr; - Be familiar with the recommendations and mitigation measures of this EMPr, and implement these measures; - Ensure that all stipulations within the EMPr are communicated and adhered to by the Employees, Contractor(s) ; - Confine the development site to the demarcated area; - Conduct environmental internal audits with regards to EMPr and authorisation compliance (on cEO); - Assist the contractors in addressing environmental challenges on site; - Assist in incident management; - Reporting environmental incidents to developer and ensuring that corrective action is taken, and lessons learnt shared; - Assist the contractor in investigating environmental incidents and compile investigation reports; - Follow-up on pre-warnings, defects, non-conformance reports;

Responsible Person(s)	Role and Responsibilities
	<ul style="list-style-type: none"> - Measure and communicate environmental performance to the Contractor; - Conduct environmental awareness training on site together with ECO and cEO; - Ensure that the necessary legal permits and / or licenses are in place and up to date; - Acting as Developer's Environmental Representative on site and work together with the ECO and contractor;
Contractor	<p><u>Role</u></p> <p>The Contractor appoints the cEO and has overall responsibility for ensuring that all work, activities, and actions linked to the delivery of the contract are in line with the EMPr and that Method Statements are implemented as described. External contractors must ensure compliance with this EMPr while performing the onsite activities as per their contract with the Project Developer. The contractors are required, where specified, to provide Method Statements setting out in detail how the impact management actions contained in the EMPr will be implemented during the development or expansion of substation infrastructure for the transmission and distribution of electricity activities.</p> <p><u>Responsibilities</u></p> <ul style="list-style-type: none"> - project delivery and quality control for the development services as per appointment; - employ a suitably qualified person to monitor and report to the Project Developer's appointed person on the daily activities on-site during the construction period; - ensure that safe, environmentally acceptable working methods and practices are implemented and that equipment is properly operated and maintained, to facilitate proper access and enable any operation to be carried out safely; - attend on site meeting(s) prior to the commencement of activities to confirm the procedure and designated activity zones; - ensure that contractors' staff repair, at their own cost, any environmental damage as a result of a contravention of the specifications contained in EMPr, to the satisfaction of the ECO.

Responsible Person(s)	Role and Responsibilities
contractor Environmental Officer (cEO)	<p><u>Role</u> Each Contractor affected by the EMPr should appoint a cEO, who is responsible for the on-site implementation of the EMPr (or relevant sections of the EMPr). The Contractor's representative can be the site agent; site engineer; a dedicated environmental officer; or an independent consultant. The Contractor must ensure that the Contractor's Representative is suitably qualified to perform the necessary tasks and is appointed at a level such that she/he can interact effectively with other site Contractors, labourers, the Environmental Control Officer and the public. As a minimum the cEO shall meet the following criteria:</p> <p><u>Responsibilities</u></p> <ul style="list-style-type: none"> - Be on site throughout the duration of the project and be dedicated to the project; - Ensure all their staff are aware of the environmental requirements, conditions and constraints with respect to all of their activities on site; - Implementing the environmental conditions, guidelines and requirements as stipulated within the EA, EMPr and Method Statements; - Attend the Environmental Site Meeting; - Undertaking corrective actions where non-compliances are registered within the stipulated timeframes; - Report back formally on the completion of corrective actions; - Assist the ECO in maintaining all the site documentation; - Prepare the site inspection reports and corrective action reports for submission to the ECO; - Assist the ECO with the preparing of the monthly report; and - Where more than one Contractor is undertaking work on site, each company appointed as a Contractor will appoint a cEO representing that company.

4. ENVIRONMENTAL DOCUMENTATION REPORTING AND COMPLIANCE

To ensure accountable and demonstrated implementation of the EMPr, a number of reporting systems, documentation controls and compliance mechanisms must be in place for all substation infrastructure projects as a minimum requirement.

4.1 Document control/Filing system

The holder of the EA is solely responsible for the upkeep and management of the EMPr file. As a minimum, all documentation detailed below will be stored in the EMPr file. A hard copy of all documentation shall be filed, while an electronic copy may be kept where relevant. A duplicate file will be maintained in the office of the DSS (where applicable). This duplicate file must remain current and up-to-date. The filing system must be updated and relevant documents added as required. The EMPr file must be made available at all times on request by the CA or other relevant authorities. The EMPr file will form part of any environmental audits undertaken as prescribed in the EIA Regulations.

4.2 Documentation to be available

At the outset of the project the following preliminary list of documents shall be placed in the filing system and be accessible at all times:

- Full copy of the signed EA from the CA in terms of NEMA, granting approval for the development or expansion;
- Copy of the generic and site specific EMPr as well as any amendments thereof;
- Copy of declaration of implementing generic EMPr and subsequent approval of site specific EMPr and amendments thereof;
- All method statements;
- Completed environmental checklists;
- Minutes and attendance register of environmental site meetings;
- An up-to-date environmental incident log;
- A copy of all instructions or directives issued;
- A copy of all corrective actions signed off. The corrective actions must be filed in such a way that a clear reference is made to the non-compliance record;
- Complaints register.

4.3 Weekly Environmental Checklist

The ECOs are required to complete a Weekly Environmental Checklist, the format of which is to be agreed prior to commencement of the activity. The ECOs are required to sign and date the checklist, retain a copy in the EMPr file and submit a copy of the completed checklist to the DSS on a weekly basis.

The checklists will form the basis for the Monthly Environmental Reports. Copies of all completed checklists will be attached as Annexures to the Environmental Audit Report as required in terms of the EIA Regulations.

4.4 Environmental site meetings

Minutes of the environmental site meetings shall be kept. The minutes must include an attendance register and will be attached to the Monthly Report that is distributed to attendees. Each set of minutes must clearly record "Matters for Attention" that will be reviewed at the next meeting.

4.5 Required Method Statements

The method statement will be done in such detail that the ECOs are enabled to assess whether the contractor's proposal is in accordance with the EMPr.

The method statement must cover applicable details with regard to:

- development procedures;
- materials and equipment to be used;
- getting the equipment to and from site;
- how the equipment/ material will be moved while on site;
- how and where material will be stored;
- the containment (or action to be taken if containment is not possible) of leaks or spills of any liquid or material that may occur;
- timing and location of activities;
- compliance/ non-compliance with the EMPr; and
- any other information deemed necessary by the ECOs.

Unless indicated otherwise by the Project Manager, the Contractor shall provide the following method statements to the Project Manager no less than 14 days prior to the commencement date of the activity:

- Site establishment – Camps, Lay-down or storage areas, satellite camps, infrastructure;
- Batch plants;
- Workshop or plant servicing;
- Handling, transport and storage of Hazardous Chemical Substance's;
- Vegetation management – Protected, clearing, aliens, felling;
- Access management – Roads, gates, crossings etc.;
- Fire plan;
- Waste management – transport, storage, segregation, classification, disposal (all waste streams);
- Social interaction – complaints management, compensation claims, access to properties etc.;
- Water – use (source, abstraction and disposal), access and all related information, crossings and mitigation;
- Emergency preparedness – Spills, training, other environmental emergencies;
- Dust and noise management methodologies;
- Fauna interaction and risk management – only if the risk was identified – wildlife interaction especially on game farms; and
- Heritage and palaeontology management.

The ECOs shall monitor and ensure that the contractors perform in accordance with these method statements. Completed and agreed method statements between the holder of the EA and the contractor shall be captured in Appendix 1.

4.6 Environmental Incident Log (Diary)

The ECOs are required to maintain an up-to-date and current Environmental Incident Log (environmental diary). The Environmental Incident Log is a means to record all environmental incidents and/or all non-compliance notice would not be issued. An environmental incident is defined as:

- Any deviation from the listed impact management actions (listed in this EMPr) that may be addressed immediately by the ECOs. (For example a contractor's staff member littering or a drip tray that has not been emptied);
- Any environmental impact resulting from an action or activity by a contractor in contravention of the environmental stipulations and guidelines listed in the EMPr which as a single event would have a minor impact but which if cumulative and continuous would have a significant effect (for example no toilet paper available in the ablutions for an afternoon); and
- General environmental information such as road kills or injured wildlife.

The ECOs are to record all environmental incidents in the Environmental Incident Log. All incidents regardless of severity must be reported to the Developer. The Log is to be kept in the EMPr file and at a minimum the following will be recorded for each environmental incident:

- The date and time of the incident;
- Description of the incident;
- The name of the Contractor responsible;
- The incident must be listed as significant or minor;
- If the incident is listed as significant, a non-compliance notice must be issued, and recorded in the log;
- Remedial or corrective action taken to mitigate the incident; and
- Record of repeat minor offences by the same contractor or staff member.

The Environmental Incident Log will be captured in the EAR.

4.7 Non-compliance

A non-compliance notice will be issued to the responsible contractor by the ECOs via the DSS or Project Manager. The non-compliance notice will be issued in writing; a copy filed in the EMPr file and will at a minimum include the following:

- Time and date of the non-compliance;
- Name of the contractor responsible;
- Nature and description of the non-compliance;
- Recommended / required corrective action; and
- Date by which the corrective action to be completed.
- The contractors shall act immediately when a notice of non-compliance is received and correct whatever is the cause for the issuing of the notice. Complaints received regarding activities on the development site pertaining to the environment shall be

recorded in a dedicated register and the response noted with the date and action taken. The ECO should be made aware of any complaints. Any non-compliance with the agreed procedures of the EMPr is a transgression of the various statutes and laws that define the manner by which the environment is managed. Failure to redress the cause shall be reported to the relevant CA for them to deal with the transgression, as it deems fit. The contractor is deemed not to have complied with the EMPr if, inter alia, There is a deviation from the environmental conditions, impact management outcomes and impact management actions activities, as approved in generic and site specific EMPr as relevant as set out in the EMPr, which deviation has, or may cause, an environmental impact.

4.8 Corrective action records

For each non-compliance notice issued, a documented corrective action must be recorded. On receiving a non-compliance notice from the DSS, the contractor's cEO will ensure that the corrective actions required take place within the stipulated timeframe. On completion of the corrective action the cEO is to issue a Corrective Action Report in writing to the ECOs. If satisfied that the corrective action has been completed, the ECOs are to sign-off on the Corrective Action Report, and attach the report to the non-compliance notice in the EMPr file. A corrective action is considered complete once the report has signed off by the ECOs.

4.9 Photographic record

A digital photographic record will be kept. The photographic record will be used to show before, during and post rehabilitation evidence of the project as well used in cases of damages claims if they arise. Each image must be dated and a brief description note attached.

The Contractor shall:

1. Allow the ECOs access to take photographs of all areas, activities and actions.

The ECOs shall keep an electronic database of photographic records which will include:

1. Pictures of all areas designated as work areas, camp areas, development sites and storage areas taken before these areas are set up;
2. All bunding and fencing;
3. Road conditions and road verges;
4. Condition of all farm fences;
5. Topsoil storage areas;
6. All areas to be cordoned off during construction;
7. Waste management sites;
8. Ablution facilities (inside and out);
9. Any non-conformances deemed to be "significant";
10. All completed corrective actions for non-compliances;
11. All required signage;
12. Photographic recordings of incidents;
13. All areas before, during and post rehabilitation; and
14. Include relevant photographs in the Final Environmental Audit Report.

4.10 Complaints register

The ECOs shall keep a current and up-to-date complaints register. The complaints register is to be a record of all complaints received from communities, stakeholders and individuals. The Complaints Record shall:

1. Record the name and contact details of the complainant;
2. Record the time and date of the complaint;
3. Contain a detailed description of the complaint;
4. Where relevant and appropriate, contain photographic evidence of the complaint or damage (ECOs to take relevant photographs); and
5. Contain a copy of the ECOs written response to each complaint received and keep a record of any further correspondence with the complainant. The ECO's written response will include a description of any corrective action to be taken and must be signed by the Contractor, ECO and affected party. Where a damage claim is issued by the complainant, the ECOs shall respond as described in **(section 4.11)** below.

4.11 Claims for damages

In the event that a Claim for Damages is submitted by a community, landowner or individual, the ECOs shall:

1. Record the full detail of the complaint as described in **(section 4.10)** above;
2. The DPM will evaluate the claim and associated damage and submit the evaluation to the Senior Site Representative for approval;
3. Following consideration by the DPM, the claim is to be resolved and settled immediately, or the reason for not accepting the claim communicated in writing to the claimant. Should the claimant not accept this, the ECO shall, in writing report the incident to the Developer's negotiator and legal department; and
4. A formal record of the response by the ECOs to the claimant as well as the rectification of the method of making payments not amount will be recorded in the EMPr file.

4.12 Interactions with affected parties

Open, transparent and good relations with affected landowners, communities and regional staff are an essential aspect to the successful management and mitigation of environmental impacts.

The ECOs shall:

1. Ensure that all queries, complaints and claims are dealt within an agreed timeframe;
2. Ensure that any or all agreements are documented, signed by all parties and a record of the agreement kept in the EMPr file;
3. Ensure that a complaints telephone numbers are made available to all landowners and affected parties; and
4. Ensure that contact with affected parties is courteous at all times;

4.13 Environmental audits

Internal environmental audits of the activity and implementation of the EMPr must be undertaken. The findings and outcomes included in the EMPr file and submitted to the CA at intervals as indicated in the EA.

The ECOs must prepare a monthly EAR. The report will be tabled as the key point on the agenda of the Environmental Site Meeting. The Report is submitted for acceptance at the meeting and the final report will be circulated to the Project Manager and filed in the EMPr file. At a frequency determined by the EA, the ECOs shall submit the monthly reports to the CA. At a minimum the monthly report is to cover the following:

- Weekly Environmental Checklists;
- Deviations and non-compliances with the checklists;
- Non-compliances issued;
- Completed and reported corrective actions;
- Environmental Monitoring;
- General environmental findings and actions; and
- Minutes of the Bi-monthly Environmental Site Meetings.

4.14 Final environmental audits

On final completion of the rehabilitation and/or requirements of the EA a final EAR is to be prepared and submitted to the CA. The EAR must comply with Appendix 7 of the EIA Regulations.

PART B: SECTION 1: Pre-approved generic EMPr template**5. IMPACT MANAGEMENT OUTCOMES AND IMPACT MANAGEMENT ACTIONS**

This section provides a pre-approved generic EMPr template with aspects that are common to the development of substation infrastructure for the transmission and distribution of electricity. There is a list of aspects identified for the development or expansion of substation infrastructure for the transmission and distribution of electricity, and for each aspect a set of prescribed impact management outcomes and associated impact management actions have been identified. Holders of EAs are responsible to ensure the implementation of these outcomes and actions for all projects as a minimum requirement, in order to mitigate the impact of such aspects identified for the development or expansion of substation infrastructure for the transmission and distribution of electricity.

The template provided below is to be completed by providing the information under each heading for each environmental impact management action.

The completed template must be signed and dated on each page by both the contractor and the holder of the EA prior to commencement of the activity. The method statements prepared and agreed to by the holder of the EA must be appended to the template as Appendix 1. Each method statement must also be duly signed and dated on each page by the contractor and the holder of the EA. This template, once signed and dated, is legally binding. The holder of the EA will remain responsible for its implementation.

5.1 Environmental awareness training

Impact management outcome: All onsite staff are aware and understands the individual responsibilities in terms of this EMPr.						
Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - All staff must receive environmental awareness training prior to commencement of the activities; - The Contractor must allow for sufficient sessions to train all personnel with no more than 20 personnel attending each course; - Refresher environmental awareness training is available as and when required; - All staff are aware of the conditions and controls linked to the EA and within the EMPr and made aware of their individual roles and responsibilities in achieving compliance with the EA and EMPr; - The Contractor must erect and maintain information posters at key locations on site, and the posters must include the following information as a minimum: <ul style="list-style-type: none"> a) Safety notifications; and b) No littering. - Environmental awareness training must include as a minimum the following: <ul style="list-style-type: none"> a) Description of significant environmental impacts, actual or potential, related to their work activities; b) Mitigation measures to be implemented when carrying out specific activities; 						

5.2 Site Establishment development

<p>Impact management outcome: Impacts on the environment are minimised during site establishment and the development footprint are kept to demarcated development area.</p>							
Impact Management Actions		Implementation			Monitoring		
		Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - A method statement must be provided by the contractor prior to any onsite activity that includes the layout of the construction camp in the form of a plan showing the location of key infrastructure and services (where applicable), including but not limited to offices, overnight vehicle parking areas, stores, the workshop, stockpile and lay down areas, hazardous materials storage areas (including fuels), the batching plant (if one is located at the construction camp), designated access routes, equipment cleaning areas and the placement of staff accommodation, cooking and ablution facilities, waste and wastewater management; - Location of camps must be within approved area to ensure that the site does not impact on sensitive areas identified in the environmental assessment or site walk through; - Sites must be located where possible on previously disturbed areas; - The camp must be fenced in accordance with Section 5.5: Fencing and gate installation; and - The use of existing accommodation for contractor staff, where possible, is encouraged. 							

5.3 Access restricted areas

Impact management outcome: Access to restricted areas prevented.						
Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Identification of access restricted areas is to be informed by the environmental assessment, site walk through and any additional areas identified during development; - Erect, demarcate and maintain a temporary barrier with clear signage around the perimeter of any access restricted area, colour coding could be used if appropriate; and - Unauthorised access and development related activity inside access restricted areas is prohibited. 						

5.4 Access roads

Impact management outcome: Minimise impact to the environment through the planned and restricted movement of vehicles on site.						
Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - An access agreement must be formalised and signed by the DPM, Contractor and landowner before commencing with the activities; 						

<ul style="list-style-type: none"> - All private roads used for access to the servitude must be maintained and upon completion of the works, be left in at least the original condition - All contractors must be made aware of all these access routes. - Any access route deviation from that in the written agreement must be closed and re-vegetated immediately, at the contractor's expense; - Maximum use of both existing servitudes and existing roads must be made to minimize further disturbance through the development of new roads; - In circumstances where private roads must be used, the condition of the said roads must be recorded in accordance with section 4.9: photographic record; prior to use and the condition thereof agreed by the landowner, the DPM, and the contractor; - Access roads in flattish areas must follow fence lines and tree belts to avoid fragmentation of vegetated areas or croplands - Access roads must only be developed on a pre-planned and approved roads. 						
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5.5 Fencing and Gate installation

<p>Impact management outcome: Minimise impact to the environment and ensure safe and controlled access to the site through the erection of fencing and gates where required.</p>						
<p>Impact Management Actions</p>						
<p>Implementation</p>			<p>Monitoring</p>			
<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>	<p>Frequency</p>	<p>Evidence of compliance</p>	

<ul style="list-style-type: none"> - Use existing gates provided to gain access to all parts of the area authorised for development, where possible; - Existing and new gates to be recorded and documented in accordance with section 4.9: photographic record; - All gates must be fitted with locks and be kept locked at all times during the development phase, unless otherwise agreed with the landowner; - At points where the line crosses a fence in which there is no suitable gate within the extent of the line servitude, on the instruction of the DPM, a gate must be installed at the approval of the landowner; - Care must be taken that the gates must be so erected that there is a gap of no more than 100 mm between the bottom of the gate and the ground; - Where gates are installed in jackal proof fencing, a suitable reinforced concrete sill must be provided beneath the gate; - Original tension must be maintained in the fence wires; - All gates installed in electrified fencing must be re-electrified; - All demarcation fencing and barriers must be maintained in good working order for the duration of the development activities; - Fencing must be erected around the camp, batching plants, hazardous storage areas, and all designated access restricted areas, where applicable; - Any temporary fencing to restrict the movement of life-stock must only be erected with the permission of the land owner. - All fencing must be developed of high quality material bearing the SABS mark; - The use of razor wire as fencing must be avoided; 						
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<ul style="list-style-type: none"> - Fenced areas with gate access must remain locked after hours, during weekends and on holidays if staff is away from site. Site security will be required at all times; - On completion of the development phase all temporary fences are to be removed; - The contractor must ensure that all fence uprights are appropriately removed, ensuring that no uprights are cut at ground level but rather removed completely. 					
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5.6 Water Supply Management

<p>Impact management outcome: Undertake responsible water usage.</p>								
<p>Impact Management Actions</p>			<p>Monitoring</p>					
<p>Implementation</p>			<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>	<p>Frequency</p>	<p>Evidence of compliance</p>
<ul style="list-style-type: none"> - All abstraction points or bore holes must be registered with the DWS and suitable water meters installed to ensure that the abstracted volumes are measured on a daily basis; - The Contractor must ensure the following: <ul style="list-style-type: none"> a. The vehicle abstracting water from a river does not enter or cross it and does not operate from within the river; b. No damage occurs to the river bed or banks and that the abstraction of water does not entail stream diversion activities; and c. All reasonable measures to limit pollution or sedimentation of the downstream watercourse are implemented. - Ensure water conservation is being practiced by: <ul style="list-style-type: none"> a. Minimising water use during cleaning of equipment; 								

b. Undertaking regular audits of water systems; and					
c. Including a discussion on water usage and conservation during environmental awareness training.					
d. The use of grey water is encouraged.					

5.7 Storm and waste water management

Impact management outcome: Impacts to the environment caused by storm water and wastewater discharges during construction are avoided.						
Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Runoff from the cement/ concrete batching areas must be strictly controlled, and contaminated water must be collected, stored and either treated or disposed of off-site, at a location approved by the project manager; - All spillage of oil onto concrete surfaces must be controlled by the use of an approved absorbent material and the used absorbent material disposed of at an appropriate waste disposal facility; - Natural storm water runoff not contaminated during the development and clean water can be discharged directly to watercourses and water bodies, subject to the Project Manager's approval and support by the ECO; - Water that has been contaminated with suspended solids, such as soils and silt, may be released into watercourses or water bodies only once all suspended solids have been removed from the water by settling out these solids in settlement ponds. The release of settled water back into the 						

environment must be subject to the Project Manager's approval and support by the ECO.							
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5.8 Solid and hazardous waste management

Impact management outcome: Wastes are appropriately stored, handled and safely disposed of at a recognised waste facility.							
Impact Management Actions				Monitoring			
Implementation		Monitoring		Implementation		Monitoring	
Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance		
<ul style="list-style-type: none"> - All measures regarding waste management must be undertaken using an integrated waste management approach; - Sufficient, covered waste collection bins (scavenger and weatherproof) must be provided; - A suitably positioned and clearly demarcated waste collection site must be identified and provided; - The waste collection site must be maintained in a clean and orderly manner; - Waste must be segregated into separate bins and clearly marked for each waste type for recycling and safe disposal; - Staff must be trained in waste segregation; - Bins must be emptied regularly; - General waste produced onsite must be disposed of at registered waste disposal sites/ recycling company; - Hazardous waste must be disposed of at a registered waste disposal site; - Certificates of safe disposal for general, hazardous and recycled waste must be maintained. 							

5.9 Protection of watercourses and estuaries

Impact management outcome: Pollution and contamination of the watercourse environment and or estuary erosion are prevented.						
Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - All watercourses must be protected from direct or indirect spills of pollutants such as solid waste, sewage, cement, oils, fuels, chemicals, aggregate tailings, wash and contaminated water or organic material resulting from the Contractor's activities; - In the event of a spill, prompt action must be taken to clear the polluted or affected areas; - Where possible, no development equipment must traverse any seasonal or permanent wetland - No return flow into the estuaries must be allowed and no disturbance of the Estuarine functional Zone should occur; - Development of permanent watercourse or estuary crossing must only be undertaken where no alternative access to tower position is available; - There must not be any impact on the long term morphological dynamics of watercourses or estuaries; - Existing crossing points must be favored over the creation of new crossings (including temporary access) - When working in or near any watercourse or estuary, the following environmental controls and consideration must be taken: <ul style="list-style-type: none"> a) Water levels during the period of construction; 						

<p>No altering of the bed, banks, course or characteristics of a watercourse</p> <p>b) During the execution of the works, appropriate measures to prevent pollution and contamination of the riparian environment must be implemented e.g. including ensuring that construction equipment is well maintained;</p> <p>c) Where earthwork is being undertaken in close proximity to any watercourse, slopes must be stabilised using suitable materials, i.e. sandbags or geotextile fabric, to prevent sand and rock from entering the channel; and</p> <p>d) Appropriate rehabilitation and re-vegetation measures for the watercourse banks must be implemented timeously. In this regard, the banks should be appropriately and incrementally stabilised as soon as development allows.</p>						
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5.10 Vegetation clearing

<p>Impact management outcome: Vegetation clearing is restricted to the authorised development footprint of the proposed infrastructure.</p>								
<p>Impact Management Actions</p>			<p>Monitoring</p>					
<p>General:</p> <ul style="list-style-type: none"> - Indigenous vegetation which does not interfere with the development must be left undisturbed; - Protected or endangered species may occur on or near the development site. Special care should be taken not to damage such species; 			<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>	<p>Frequency</p>	<p>Evidence of compliance</p>

<ul style="list-style-type: none"> - Search, rescue and replanting of all protected and endangered species likely to be damaged during project development must be identified by the relevant specialist and completed prior to any development or clearing; - Permits for removal must be obtained from the relevant CA prior to the cutting or clearing of the affected species, and they must be filed; - The Environmental Audit Report must confirm that all identified species have been rescued and replanted and that the location of replanting is compliant with conditions of approvals; - Trees felled due to construction must be documented and form part of the Environmental Audit Report; - Rivers and watercourses must be kept clear of felled trees, vegetation cuttings and debris; - Only a registered pest control operator may apply herbicides on a commercial basis and commercial application must be carried out under the supervision of a registered pest control operator, supervision of a registered pest control operator or is appropriately trained; - A daily register must be kept of all relevant details of herbicide usage; - No herbicides must be used in estuaries; - All protected species and sensitive vegetation not removed must be clearly marked and such areas fenced off in accordance to Section 5.3: Access restricted areas. <p>Alien invasive vegetation must be removed and disposed of at a licensed waste management facility.</p>						
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5.11 Protection of fauna

Impact Management Actions		Implementation				Monitoring		
		Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance	
<p>Impact management outcome: Disturbance to fauna is minimised.</p>								
<ul style="list-style-type: none"> - No interference with livestock must occur without the landowner's written consent and with the landowner or a person representing the landowner being present; - The breeding sites of raptors and other wild birds species must be taken into consideration during the planning of the development programme; - Breeding sites must be kept intact and disturbance to breeding birds must be avoided. Special care must be taken where nestlings or fledglings are present; - Special recommendations of the avian specialist must be adhered to at all times to prevent unnecessary disturbance of birds; - No poaching must be tolerated under any circumstances. All animal dens in close proximity to the works areas must be marked as Access restricted areas; - No deliberate or intentional killing of fauna is allowed; - In areas where snakes are abundant, snake deterrents to be deployed on the pylons to prevent snakes climbing up, being electrocuted and causing power outages; and - No Threatened or Protected species (ToPs) and/or protected fauna as listed according NEMBA (Act No. 10 of 2004) and relevant provincial ordinances may be removed and/or relocated without appropriate authorisations/permits. 								

5.12 Protection of heritage resources

Impact management outcome: Impact to heritage resources is minimised.						
Impact Management Actions		Implementation			Monitoring	
		Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Evidence of compliance
	<ul style="list-style-type: none"> - Identify, demarcate and prevent impact to all known sensitive heritage features on site in accordance with the No-Go procedure in Section 5.3: Access restricted areas; - Carry out general monitoring of excavations for potential fossils, artefacts and material of heritage importance; - All work must cease immediately, if any human remains and/or other archaeological, palaeontological and historical material are uncovered. Such material, if exposed, must be reported to the nearest museum, archaeologist/palaeontologist (or the South African Police Services), so that a systematic and professional investigation can be undertaken. Sufficient time must be allowed to remove/collect such material before development recommences. 					

5.13 Safety of the public

Impact management outcome: All precautions are taken to minimise the risk of injury, harm or complaints.	
Impact Management Actions	Monitoring

	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Identify fire hazards, demarcate and restrict public access to these areas as well as notify the local authority of any potential threats e.g. large brush stockpiles, fuels etc.; - All unattended open excavations must be adequately fenced or demarcated; - Adequate protective measures must be implemented to prevent unauthorised access to and climbing of partly constructed towers and protective scaffolding; - Ensure structures vulnerable to high winds are secured; - Maintain an incidents and complaints register in which all incidents or complaints involving the public are logged. 						

5.14 Sanitation

<p>Impact management outcome: Clean and well maintained toilet facilities are available to all staff in an effort to minimise the risk of disease and impact to the environment.</p>						
Implementation			Monitoring			
<p>Impact Management Actions</p> <ul style="list-style-type: none"> - Mobile chemical toilets are installed onsite if no other ablation facilities are available; - The use of ablation facilities and or mobile toilets must be used at all times and no indiscriminate use of the veld for the purposes of ablations must be permitted under any circumstances; 	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance

<ul style="list-style-type: none"> - Where mobile chemical toilets are required, the following must be ensured: a) Toilets are located no closer than 100 m to any watercourse or water body; b) Toilets are secured to the ground to prevent them from toppling due to wind or any other cause; c) No spillage occurs when the toilets are cleaned or emptied and the contents are managed in accordance with the EMP; and d) Toilets have an external closing mechanism and are closed and secured from the outside when not in use to prevent toilet paper from being blown out; e) Toilets are emptied before long weekends and workers holidays, and must be locked after working hours; f) Toilets are serviced regularly and the ECO must inspect toilets to ensure compliance to health standards; 					
<ul style="list-style-type: none"> - A copy of the waste disposal certificates must be maintained. 					

5.15 Prevention of disease

<p>Impact Management outcome: All necessary precautions linked to the spread of disease are taken.</p>						
<p>Impact Management Actions</p>						
<p>Implementation</p>			<p>Monitoring</p>			
<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>	<p>Frequency</p>	<p>Evidence of compliance</p>	
<ul style="list-style-type: none"> - Undertake environmentally-friendly pest control in the camp area; - Ensure that the workforce is sensitised to the effects of sexually transmitted diseases, especially HIV AIDS; 						

<ul style="list-style-type: none"> - The Contractor must ensure that information posters on AIDS are displayed in the Contractor Camp area; - Information and education relating to sexually transmitted diseases to be made available to both construction workers and local community, where applicable; - Free condoms must be made available to all staff on site at central points; - Medical support must be made available; - Provide access to Voluntary HIV Testing and Counselling Services. 	
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5.16 Emergency procedures

<p>Impact management outcome: Emergency procedures are in place to enable a rapid and effective response to all types of environmental emergencies.</p>						
Implementation			Monitoring			
Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance	
<ul style="list-style-type: none"> - Compile an Emergency Response Action Plan (ERAP) prior to the commencement of the proposed project; - The Emergency Plan must deal with accidents, potential spillages and fires in line with relevant legislation; - All staff must be made aware of emergency procedures as part of environmental awareness training; - The relevant local authority must be made aware of a fire as soon as it starts; - In the event of emergency necessary mitigation measures to contain the spill or leak must be implemented (see Hazardous Substances section 5.17). 						

5.17 Hazardous substances

Impact management outcome: Safe storage, handling, use and disposal of hazardous substances.						
Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - The use and storage of hazardous substances to be minimised and non-hazardous and non-toxic alternatives substituted where possible; - All hazardous substances must be stored in suitable containers as defined in the Method Statement; - Containers must be clearly marked to indicate contents, quantities and safety requirements; - All storage areas must be bunded. The bunded area must be of sufficient capacity to contain a spill / leak from the stored containers; - Bunded areas to be suitably lined with a SABS approved liner; - An Alphabetical Hazardous Chemical Substance (HCS) control sheet must be drawn up and kept up to date on a continuous basis; - All hazardous chemicals that will be used on site must have Material Safety Data Sheets (MSDS); - All employees working with HCS must be trained in the safe use of the substance and according to the safety data sheet; - Employees handling hazardous substances / materials must be aware of the potential impacts and follow appropriate safety measures. Appropriate personal protective equipment must be made available; 						

<ul style="list-style-type: none"> - The Contractor must ensure that diesel and other liquid fuel, oil and hydraulic fluid is stored in appropriate storage tanks or in bowers; - The tanks/ bowers must be situated on a smooth impermeable surface (concrete) with a permanent bund. The impermeable lining must extend to the crest of the bund and the volume inside the bund must be 130% of the total capacity of all the storage tanks/ bowers (110% statutory requirement plus an allowance for rainfall); - The floor of the bund must be sloped, draining to an oil separator; - Provision must be made for refueling at the storage area by protecting the soil with an impermeable groundcover. Where dispensing equipment is used, a drip tray must be used to ensure small spills are contained; - All empty externally dirty drums must be stored on a drip tray or within a banded area; - No unauthorised access into the hazardous substances storage areas must be permitted; - No smoking must be allowed within the vicinity of the hazardous storage areas; - Adequate fire-fighting equipment must be made available at all hazardous storage areas; - Where refueling away from the dedicated refueling station is required, a mobile refueling unit must be used. Appropriate ground protection such as drip trays must be used; - An appropriately sized spill kit kept onsite relevant to the scale of the activity/s involving the use of hazardous substance must be available at all times; - The responsible operator must have the required training to make use of the spill kit in emergency situations; 						
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<ul style="list-style-type: none"> - An appropriate number of spill kits must be available and must be located in all areas where activities are being undertaken; - In the event of a spill, contaminated soil must be collected in containers and stored in a central location and disposed of according to the National Environmental Management: Waste Act 59 of 2008. Refer to Section 5.7 for procedures concerning storm and waste water management and 5.8 for solid and hazardous waste management. 						
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5.18 Workshop, equipment maintenance and storage

<p>Impact management outcome: Soil, surface water and groundwater contamination is minimised.</p>						
<p>Impact Management Actions</p>			<p>Implementation</p>		<p>Monitoring</p>	
<ul style="list-style-type: none"> - Where possible and practical all maintenance of vehicles and equipment must take place in the workshop area; - During servicing of vehicles or equipment, especially where emergency repairs are effected outside the workshop area, a suitable drip tray must be used to prevent spills onto the soil. The relevant local authority must be made aware of a fire as soon as it starts; - Leaking equipment must be repaired immediately or be removed from site to facilitate repair; - Workshop areas must be monitored for oil and fuel spills; - Appropriately sized spill kit kept onsite relevant to the scale of the activity taking place must be available; - The workshop area must have a bunded concrete slab that is sloped to facilitate runoff into a collection sump or suitable oil 	<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>	<p>Frequency</p>	<p>Evidence of compliance</p>

<p>/ water separator where maintenance work on vehicles and equipment can be performed; - Water drainage from the workshop must be contained and managed in accordance Section 5.7: Storm and waste water management.</p>						
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5.19 Batching plants

<p>Impact management outcome: Minimise spillages and contamination of soil, surface water and groundwater.</p>						
<p>Impact Management Actions</p>			<p>Monitoring</p>			
<p>Implementation</p>			<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>
						<p>Frequency</p>
						<p>Evidence of compliance</p>
<ul style="list-style-type: none"> - Concrete mixing must be carried out on an impermeable surface; - Batching plants areas must be fitted with a containment facility for the collection of cement laden water. - Dirty water from the batching plant must be contained to prevent soil and groundwater contamination - Bagged cement must be stored in an appropriate facility and at least 10 m away from any water courses, gullies and drains; - A washout facility must be provided for washing of concrete associated equipment. Water used for washing must be restricted; - Hardened concrete from the washout facility or concrete mixer can either be reused or disposed of at an appropriate licenced disposal facility; - Empty cement bags must be secured with adequate binding material if these will be temporarily stored on site; 						

<ul style="list-style-type: none"> - Sand and aggregates containing cement must be kept damp to prevent the generation of dust (Refer to Section 5.20: Dust emissions) - Any excess sand, stone and cement must be removed or reused from site on completion of construction period and disposed at a registered disposal facility; - Temporary fencing must be erected around batching plants in accordance with Section 5.5: Fencing and gate installation. 						
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5.20 Dust emissions

<p>Impact management outcome: Dust prevention measures are applied to minimise the generation of dust.</p>						
<p>Impact Management Actions</p>			<p>Implementation</p>		<p>Monitoring</p>	
<ul style="list-style-type: none"> - Take all reasonable measures to minimise the generation of dust as a result of project development activities to the satisfaction of the ECO; - Removal of vegetation must be avoided until such time as soil stripping is required and similarly exposed surfaces must be re-vegetated or stabilised as soon as is practically possible; - Excavation, handling and transport of erodible materials must be avoided under high wind conditions or when a visible dust plume is present; - During high wind conditions, the ECO must evaluate the situation and make recommendations as to whether dust-damping measures are adequate, or whether working will cease altogether until the wind speed drops to an acceptable level; 						

<ul style="list-style-type: none"> - Where possible, soil stockpiles must be located in sheltered areas where they are not exposed to the erosive effects of the wind; - Where erosion of stockpiles becomes a problem, erosion control measures must be implemented at the discretion of the ECO; - Vehicle speeds must not exceed 40 km/h along dust roads or 20 km/h when traversing unconsolidated and non-vegetated areas; - Straw stabilisation must be applied at a rate of one bale/10 m² and harrowed into the top 100 mm of top material, for all completed earthworks; - For significant areas of excavation or exposed ground, dust suppression measures must be used to minimise the spread of dust. 						
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5.21 Blasting

<p>Impact management outcome: Impact to the environment is minimised through a safe blasting practice.</p>						
<p>Impact Management Actions</p>			<p>Implementation</p>		<p>Monitoring</p>	
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Any blasting activity must be conducted by a suitably licensed blasting contractor; and - Notification of surrounding landowners, emergency services site personnel of blasting activity 24 hours prior to such activity taking place on Site. 						

5.22 Noise

Impact Management outcome: Prevent unnecessary noise to the environment by ensuring that noise from development activity is mitigated.					
Impact Management Actions					
Implementation		Monitoring			
Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - The Contractor must keep noise level within acceptable limits, Restrict the use of sound amplification equipment for communication and emergency only; - All vehicles and machinery must be fitted with appropriate silencing technology and must be properly maintained; - Any complaints received by the Contractor regarding noise must be recorded and communicated. Where possible or applicable, provide transport to and from the site on a daily basis for construction workers; - Develop a Code of Conduct for the construction phase in terms of behaviour of construction staff. Operating hours as determined by the environmental authorisation are adhered to during the development phase. Where not defined, it must be ensured that development activities must still meet the impact management outcome related to noise management. 					

5.23 Fire prevention

Impact management outcome: Prevention of uncontrollable fires.	
Impact Management Actions	
Implementation	Monitoring

	Implementation				Evidence of compliance
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	
<ul style="list-style-type: none"> - Designate smoking areas where the fire hazard could be regarded as insignificant; - Firefighting equipment must be available on all vehicles located on site; - The local Fire Protection Agency (FPA) must be informed of construction activities; - Contact numbers for the FPA and emergency services must be communicated in environmental awareness training and displayed at a central location on site; - Two way swap of contact details between ECO and FPA. 					

5.24 Stockpiling and stockpile areas

Impact management outcome: Reduce erosion and sedimentation as a result of stockpiling.					
Impact Management Actions	Implementation			Monitoring	
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency
<ul style="list-style-type: none"> - All material that is excavated during the project development phase (either during piling (if required) or earthworks) must be stored appropriately on site in order to minimise impacts to watercourses, watercourses and water bodies; - All stockpiled material must be maintained and kept clear of weeds and alien vegetation growth by undertaking regular weeding and control methods; 					

<ul style="list-style-type: none"> - Topsoil stockpiles must not exceed 2 m in height; - During periods of strong winds and heavy rain, the stockpiles must be covered with appropriate material (e.g. cloth, tarpaulin etc.); - Where possible, sandbags (or similar) must be placed at the bases of the stockpiled material in order to prevent erosion of the material. 						
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5.25 Civil works

<p>Impact management outcome: Impact to the environment minimised during civil works to create the substation terrace.</p>						
<p>Impact Management Actions</p>	<p>Implementation</p>			<p>Monitoring</p>		
	<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>	<p>Frequency</p>	<p>Evidence of compliance</p>
<ul style="list-style-type: none"> - Where terracing is required, topsoil must be collected and retained for the purpose of re-use later to rehabilitate disturbed areas not covered by yard stone; - Areas to be rehabilitated include terrace embankments and areas outside the high voltage yards; - Where required, all sloped areas must be stabilised to ensure proper rehabilitation is effected and erosion is controlled; - These areas can be stabilised using design structures or vegetation as specified in the design to prevent erosion of embankments. The contract design specifications must be adhered to and implemented strictly; - Rehabilitation of the disturbed areas must be managed in accordance with Section 5.35: Landscaping and rehabilitation; 						

<ul style="list-style-type: none"> - All excess spoil generated during terracing activities must be disposed of in an appropriate manner and at a recognised landfill site; and - Spoil can however be used for landscaping purposes and must be covered with a layer of 150 mm topsoil for rehabilitation purposes. 						
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5.26 Excavation of foundation, cable trenching and drainage systems

<p>Impact management outcome: No environmental degradation occurs as a result of excavation of foundation, cable trenching and drainage systems.</p>						
<p>Impact Management Actions</p>			<p>Implementation</p>		<p>Monitoring</p>	
<ul style="list-style-type: none"> - All excess spoil generated during foundation excavation must be disposed of in an appropriate manner and at a licensed landfill site, if not used for backfilling purposes; - Spoil can however be used for landscaping purposes and must be covered with a layer of 150 mm topsoil for rehabilitation purposes; - Management of equipment for excavation purposes must be undertaken in accordance with Section 5.18: Workshop, equipment maintenance and storage; and - Hazardous substances spills from equipment must be managed in accordance with Section 5.17: Hazardous substances. 	<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>	<p>Frequency</p>	<p>Evidence of compliance</p>

5.27 Installation of foundations, cable trenching and drainage systems

Impact management outcome: No environmental degradation occurs during the installation of foundation, cable trenching and drainage system.					
Impact Management Actions			Monitoring		
Implementation		Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
Responsible person	Method of implementation				
<ul style="list-style-type: none"> - Batching of cement to be undertaken in accordance with Section 5.19: Batching plants; and - Residual solid waste must be disposed of in accordance with Section 5.8: Solid waste and hazardous management. 					

5.28 Installation of equipment (circuit breakers, current Transformers, Isolators, Insulators, surge arresters, voltage transformers, earth switches)

Impact management outcome: No environmental degradation occurs as a result of installation of equipment.					
Impact Management Actions			Monitoring		
Implementation		Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
Responsible person	Method of implementation				
<ul style="list-style-type: none"> - Management of dust must be conducted in accordance with Section 5.20: Dust emissions; - Management of equipment used for installation must be conducted in accordance with Section 5.18: Workshop, equipment maintenance and storage; - Management hazardous substances and any associated spills must be conducted in accordance with Section 5.17: Hazardous substances; and 					

<ul style="list-style-type: none"> - Residual solid waste must be recycled or disposed of in accordance with Section 5.8: Solid waste and hazardous management. 					
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5.29 Steelwork Assembly and Erection

<p>Impact management outcome: No environmental degradation occurs as a result of steelwork assembly and erection.</p>						
<p>Impact Management Actions</p>			<p>Implementation</p>		<p>Monitoring</p>	
<ul style="list-style-type: none"> - During assembly, care must be taken to ensure that no wasted/unused materials are left on site e.g. bolts and nuts - Emergency repairs due to breakages of equipment must be managed in accordance with Section 5.18: Workshop, equipment maintenance and storage and Section 5.16: Emergency procedures. 			<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>
						<p>Evidence of compliance</p>

5.30 Cabling and Stringing

<p>Impact management outcome: No environmental degradation occurs as a result of stringing.</p>						
<p>Impact Management Actions</p>			<p>Implementation</p>		<p>Monitoring</p>	
			<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>
						<p>Evidence of compliance</p>

<ul style="list-style-type: none"> - Residual solid waste (off cuts etc.) shall be recycled or disposed of in accordance with Section 6.8: Solid waste and hazardous Management; - Management of equipment used for installation shall be conducted in accordance with Section 5.18: Workshop, equipment maintenance and storage; - Management hazardous substances and any associated spills shall be conducted in accordance with Section 5.17: Hazardous substances. 						
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5.31 Testing and Commissioning (all equipment testing, earthing system, system integration)

<p>Impact management outcome: No environmental degradation occurs as a result of Testing and Commissioning.</p>						
<p>Impact Management Actions</p>			<p>Implementation</p>		<p>Monitoring</p>	
<ul style="list-style-type: none"> - Residual solid waste must be recycled or disposed of in accordance with Section 5.8: Solid waste and hazardous management. 	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance

5.32 Socio-economic

<p>Impact management outcome: enhanced socio-economic development.</p>	
<p>Impact Management Actions</p>	<p>Implementation</p>
	<p>Monitoring</p>

	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Develop and implement communication strategies to facilitate public participation; - Develop and implement a collaborative and constructive approach to conflict resolution as part of the external stakeholder engagement process; - Sustain continuous communication and liaison with neighboring owners and residents - Create work and training opportunities for local stakeholders; and - Where feasible, no workers, with the exception of security personnel, must be permitted to stay over-night on the site. This would reduce the risk to local farmers. 						

5.33 Temporary closure of site

<p>Impact management outcome: Minimise the risk of environmental impact during periods of site closure greater than five days.</p>						
<p>Impact Management Actions</p>						
<p>Implementation</p>			<p>Monitoring</p>			
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Bunds must be emptied (where applicable) and need to be undertaken in accordance with the impact management actions included in sections 5.17: Hazardous substances and 5.18: Workshop, equipment maintenance and storage; - Hazardous storage areas must be well ventilated; 						

<ul style="list-style-type: none"> - Fire extinguishers must be serviced and accessible. Service records to be filed and audited at last service; - Emergency and contact details displayed must be displayed; - Security personnel must be briefed and have the facilities to contact or be contacted by relevant management and emergency personnel; - Night hazards such as reflectors, lighting, traffic signage etc. must have been checked; - Fire hazards identified and the local authority must have been notified of any potential threats e.g. large brush stockpiles, fuels etc.; - Structures vulnerable to high winds must be secured; - Wind and dust mitigation must be implemented; - Cement and materials stores must have been secured; - Toilets must have been emptied and secured; - Refuse bins must have been emptied and secured; - Drip trays must have been emptied and secured. 						
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5.34 Dismantling of old equipment

<p>Impact management outcome: Impact to the environment to be minimised during the dismantling, storage and disposal of old equipment commissioning.</p>						
<p>Impact Management Actions</p>			<p>Implementation</p>		<p>Monitoring</p>	
<ul style="list-style-type: none"> - All old equipment removed during the project must be stored in such a way as to prevent pollution of the environment; 	<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>	<p>Frequency</p>	<p>Evidence of compliance</p>

<ul style="list-style-type: none"> - Oil containing equipment must be stored to prevent leaking or be stored on drip trays; - All scrap steel must be stacked neatly and any disused and broken insulators must be stored in containers; - Once material has been scrapped and the contract has been placed for removal, the disposal Contractor must ensure that any equipment containing pollution causing substances is dismantled and transported in such a way as to prevent spillage and pollution of the environment; - The Contractor must also be equipped to contain and clean up any pollution causing spills; and - Disposal of unusable material must be at a licensed waste disposal site. 							
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5.35 Landscaping and rehabilitation

<p>Impact management outcome: Areas disturbed during the development phase are returned to a state that approximates the original condition.</p>						
Impact Management Actions		Implementation			Monitoring	
		Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Evidence of compliance
<ul style="list-style-type: none"> - All areas disturbed by construction activities must be subject to landscaping and rehabilitation; All spoil and waste must be disposed of to a registered waste site; - All slopes must be assessed for contouring, and to contour only when the need is identified in accordance with the Conservation of Agricultural Resources Act, No 43 of 1983 						

<ul style="list-style-type: none"> - All slopes must be assessed for terracing, and to terrace only when the need is identified in accordance with the Conservation of Agricultural Resources Act, No 43 of 1983; - Berms that have been created must have a slope of 1:4 and be replanted with indigenous species and grasses that approximates the original condition; - Where new access roads have crossed cultivated farmlands, that lands must be rehabilitated by ripping which must be agreed to by the holder of the EA and the landowners; - Rehabilitation of access roads outside of farmland; - Indigenous species must be used for with species and/grasses to where it compliments or approximates the original condition; - Stockpiled topsoil must be used for rehabilitation (refer to Section 5.24: Stockpiling and stockpiled areas); - Stockpiled topsoil must be evenly spread so as to facilitate seeding and minimise loss of soil due to erosion; - Before placing topsoil, all visible weeds from the placement area and from the topsoil must be removed; - Subsoil must be ripped before topsoil is placed; - The rehabilitation must be timed so that rehabilitation can take place at the optimal time for vegetation establishment; - Where impacted through construction related activity, all sloped areas must be stabilised to ensure proper rehabilitation is effected and erosion is controlled; - Sloped areas stabilised using design structures or vegetation as specified in the design to prevent erosion of embankments. The contract design specifications must be adhered to and implemented strictly; - Spoil can be used for backfilling or landscaping as long as it is covered by a minimum of 150 mm of topsoil. 					
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<p>- Where required, re-vegetation including hydro-seeding can be enhanced using a vegetation seed mixture as described below. A mixture of seed can be used provided the mixture is carefully selected to ensure the following:</p> <ul style="list-style-type: none"> a) Annual and perennial plants are chosen; b) Pioneer species are included; c) Species chosen must be indigenous to the area with the seeds used coming from the area; d) Root systems must have a binding effect on the soil; e) The final product must not cause an ecological imbalance in the area 						
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6 ACCESS TO THE GENERIC EMPr

Once completed and signed, to allow the public access to the generic EMPr, the holder of the EA must make the EMPr available to the public in accordance with the requirements of Regulation 26(h) of the EIA Regulations.

PART B: SECTION 2**7 SITE SPECIFIC INFORMATION AND DECLARATION****7.1 Sub-section 1: contact details and description of the project**

7.1.1 Details of the applicant:

Name of applicant:

Tel No:

Fax No:

Postal Address:

Physical Address:

7.1.2 Details and expertise of the EAP:

Name of applicant:

Tel No:

Fax No:

E-mail address:

Expertise of the EAP (Curriculum Vitae included):

7.1.3 Project name:

7.1.4 Description of the project:

7.1.5 Project location:

NO	FARM NAME(if applicable)	FARM NUMBER(if applicable)	PORTION NAME	PORTION NUMBER	LATITUDE	LONGITUDE

7.2 Sub-section 2: Development footprint site map

This sub-section must include a map of the site sensitivity overlaid with the preliminary infrastructure layout. The sensitivity map must be prepared from the national web based environmental screening tool, when available for compulsory use at: <https://screening.environment.gov.za/screeningtool>. The sensitivity map shall identify the nature of each sensitive feature e.g. threatened plant species, archaeological site, etc. Sensitivity maps shall identify features both within the planned working area and any known sensitive features within 50 m from the development footprint.

7.3 Sub-section 3: Declaration

The proponent/applicant or holder of the EA affirms that he/she will abide and comply with the prescribed impact management outcomes and impact management actions as stipulated in part B: section 1 of the generic EMPr and have the understanding that the impact management outcomes and impact management actions are legally binding. The proponent/applicant or holder of the EA affirms that he/she will provide written notice to the CA 14 day prior to the date on which the activity will commence of commencement of construction to facilitate compliance inspections.

Signature Proponent/applicant/ holder of EA

Date:

7.4 Sub-section 4: amendments to site specific information (Part B; section 2)

Should the EA be transferred to a new holder, Part B: Section 2 must be completed by the new holder and submitted with the application for an amendment of the EA in terms of Regulations 29 or 31 of the EIA Regulations, whichever applies. The information submitted for an amendment to an environmental authorisation will be considered to be incomplete should a signed copy of Part B: Section 2 not be submitted. Once approved, Part B: Section 2 forms part of the EMPr for the development and the EMPr becomes legally binding to the new EA holder.

PART C

8 SITE SPECIFIC ENVIRONMENTAL ATTRIBUTES

If any specific environmental sensitivities/attributes are present on the site which require more specific impact management outcomes and actions, not included in the pre-approved generic EMPr template, to manage impacts, those impact management outcomes and impact management actions must be included in this section. These specific management controls must be referenced spatially, and must include impact management outcomes and impact management actions. The management controls including impact management outcomes and impact management actions must be presented in the format of the pre-approved generic EMPr template. This applies only to additional impact management outcomes and impact management actions that are necessary.

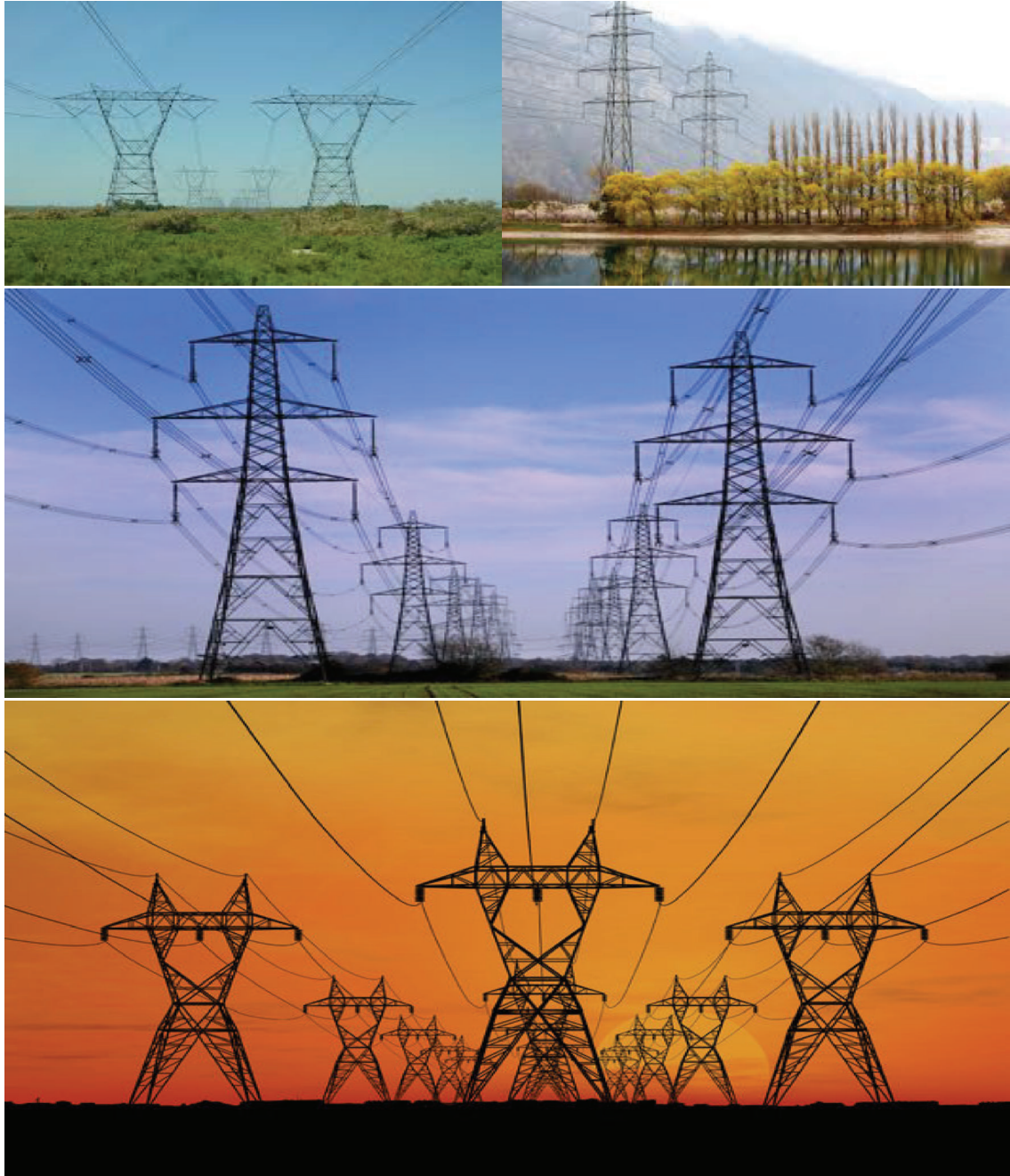
If Part C is applicable to the development as authorised in the EA, it is required to be submitted to the CA together with the BAR or EIAR, for consideration of, and decision on, the application for EA. The information in this section must be prepared by an EAP and the name and expertise of the EAP, including the curriculum vitae are to be included. Once approved, Part C forms part of the EMPr for the site and is legally binding.

This section will **not be required** should the site contain no specific environmental sensitivities or attributes.

APPENDIX 1: METHOD STATEMENTS

To be prepared by the contractor prior to commencement of the activity. The method statements are **not required** to be submitted to the CA.

APPENDIX 2
GENERIC ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr) FOR THE
DEVELOPMENT AND EXPANSION FOR OVERHEAD ELECTRICITY
TRANSMISSION AND DISTRIBUTION INFRASTRUCTURE



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

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INTRODUCTION

1. Background

The National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) requires that an environmental management programme (EMPr) be submitted where an environmental impact assessment (EIA) has been identified as the environmental instrument to be utilised as the basis for a decision on an application for environmental authorisation (EA). The content of an EMPr must either contain the information set out in Appendix 4 of the Environmental Impact Assessment Regulations, 2014, as amended, (EIA Regulations) or must be a generic EMPr relevant to an application as identified and gazetted by the Minister in a government notice. Once the Minister has identified, through a government notice, that a generic EMPr is relevant to an application for EA, that generic EMPr must be applied by all parties involved in the EA process, including, but not limited to, the applicant and the competent authority (CA).

2. Purpose

This document constitutes a generic EMPr relevant to applications for the development or expansion of overhead electricity transmission and distribution infrastructure, and all listed and specified activities necessary for the realisation of such infrastructure.

3. Objective

The objective of this generic EMPr is to prescribe and pre-approve generally accepted impact management outcomes and impact management actions, which can commonly and repeatedly be used for the avoidance, management and mitigation of impacts and risks associated with the development or expansion of overhead electricity transmission and distribution infrastructure. The use of a generic EMPr is intended to reduce the need to prepare and review individual EMPrs for applications of a similar nature.

4. Scope

The scope of this generic EMPr applies to the development or expansion of overhead electricity transmission and distribution infrastructure requiring EA in terms of NEMA, i.e. with a capacity of 33 kilovolts or more. This generic EMPr applies to activities requiring EA, mainly activity 11 and 47 of the Environmental Impact Assessment Regulations Listing Notice 1 of 2014, as amended, and activity 9 of the Environmental Impact Assessment Regulations Listing Notice 2 of 2014, as amended, and all associated listed or specified activities necessary for the realisation of such infrastructure.

5. Structure of this document

This document is structured in three parts with an Appendix as indicated in the table below:

Part	Section	Heading	Content
A		Provides general guidance and information and is not legally binding	Definitions, acronyms, roles & responsibilities and documentation and reporting.
B	1	Pre-approved generic EMPr template	<p>Contains generally accepted impact management outcomes and impact management actions required for the avoidance, management and mitigation of impacts and risks associated with the development or expansion of overhead electricity transmission and distribution infrastructure, which are presented in the form of a template that has been pre-approved.</p> <p>The template in this section is to be completed by the contractor, with each completed page signed and dated by the holder of the EA prior to commencement of the activity.</p> <p>Where an impact management outcome is not relevant, the words "not applicable" can be inserted in the template under the "responsible persons" column.</p> <p>Once completed and signed, the template represents the EMPr for the activity approved by the CA and is legally binding. The template is not required to be submitted to the CA as once the generic EMPr is gazetted for implementation, it has been approved by the CA.</p> <p>To allow interested and affected parties access to the pre-approved EMPr template for consideration through the decision-making process, the EAP on behalf of the applicant /proponent must make the hard copy of this EMPr available at a public location and where the applicant has a website, the EMPr should also be made available on such publicly accessible website.</p>
	2	Site specific information	Contains preliminary infrastructure layout and a declaration that the applicant/holder of the EA will comply with the pre-approved generic EMPr template contained in <u>Part B: Section 1</u> , and understands that the impact management

Part	Section	Heading	Content
			<p>outcomes and impact management actions are legally binding. The preliminary infrastructure layout must be finalized to inform the final EMPr that is to be submitted with the basic assessment report (BAR) or environmental impact assessment report (EIAR), ensuring that all impact management outcomes and actions have been either pre-approved or approved in terms of <u>Part C</u>.</p> <p>This section must be submitted to the CA together with the final BAR or EIAR. The information submitted to the CA will be considered to be incomplete should a signed copy of <u>Part B: section 2</u> not be submitted. Once approved, this Section forms part of the EMPr for the development and is legally binding.</p>
C		Site specific sensitivities/ attributes	<p>If any specific environmental sensitivities/ attributes are present on the site which require site specific impact management outcomes and impact management actions, not included in the pre-approved generic EMPr, to manage impacts, these specific impact management outcomes and impact management actions must be included in this section. These specific environmental attributes must be referenced spatially and impact management outcomes and impact management actions must be provided. These specific impact management outcomes and impact management actions must be presented in the format of the pre-approved EMPr template (<u>Part B: section 1</u>)</p> <p>This section will not be required should the site contain no specific environmental sensitivities or attributes. However, if <u>Part C</u> is applicable to the site, it is required to be submitted together with the BAR or EIAR, for consideration of, and decision on, the application for EA. The information in this section must be prepared by an EAP, and must contain his/her name and expertise including a curriculum vitae. Once approved, Part C forms part of the EMPr for the site and is legally binding.</p> <p>This section applies only to additional impact management outcomes and impact</p>

Part	Section	Heading	Content
			management actions that are necessary for the avoidance, management and mitigation of impacts and risks associated with the specific development or expansion and which are not already included in <u>Part B: section 1</u> .
	Appendix 1		Contains the method statements to be prepared prior to commencement of the activity. The method statements are not required to be submitted to the competent authority.

6. Completion of part B: section 1: the pre-approved generic EMPr template

The template is to be completed prior to commencement of the activity, by providing the following information for each environmental impact management action:

- For implementation
 - a 'responsible person',
 - a method for implementation,
 - a timeframe for implementation
- For monitoring
 - a responsible person
 - frequency
 - evidence of compliance.

The completed template must be signed and dated by the holder of the EA prior to commencement of the activity. The method statements prepared and agreed to by the holder of the EA must be appended to the template as Appendix 1. Each method statement must be signed and dated on each page by the holder of the EA. This template, once signed and dated, is legally binding. The holder of the EA will remain responsible for its implementation.

7. Amendments of the impact management outcomes and impact management actions

Once the activity has commenced, a holder of an EA may make amendments to the impact management outcomes and impact management actions in the following manner:

- Amendment of the impact management outcomes: in line with the process contemplated in regulation 37 of the EIA Regulations; and
- Amendment of the impact management actions: in line with the process contemplated in regulation 36 of the EIA Regulations.

8. Documents to be submitted as part of part B: section 2 site specific information and declaration

Part B: Section 2 has three distinct sub-sections. The first and third sub-sections are in a template format. Sub-section two requires a map to be produced.

Sub-section 1 contains the project name, the applicant's name and contact details, the site information, which includes coordinates of the corridor in which the proposed overhead electricity transmission and distribution infrastructure is proposed as well as the 21-digit Surveyor General code of each cadastral land parcel and, where available, the farm name.

Sub-section 2 is to be prepared by an EAP and must contain his/her name and expertise including a curriculum vitae. This sub-section must include a map of the site sensitivity overlaid with the preliminary infrastructure layout using the national web based environmental screening tool, when available for compulsory use at: <https://screening.environment.gov.za/screeningtool>. The sensitivity map shall identify the nature of each sensitive feature e.g. raptor nest, threatened plant species, archaeological site, etc. Sensitivity maps must identify features both within the planned working area and any known sensitive features in the surrounding landscape within 50m from the development footprint. The overhead transmission and distribution profile must be illustrated at an appropriate resolution to enable fine scale interrogation. It is recommended that <20 km of overhead transmission and distribution length is illustrated per page in A3 landscape format. Where considered appropriate, photographs of sensitive features in the context of tower positions must be used.

Sub-section 3 is the declaration that the applicant/proponent or holder of the EA in the case of a change of ownership must complete, which confirms that the applicant/EA holder will comply with the pre-approved generic EMPr template in Section 1 and understands that the impact management outcomes and actions are legally binding.

(a) Amendments to Part B: Section 2 – site specific information and declaration

Should the EA be transferred, Part B: Section 2 must be completed by the new applicant/proponent and submitted with the application for an amendment of the EA in terms of Regulations 29 or 31 of the EIA Regulations, whichever applies. The information submitted as part of such an application for an amendment to an EA will be considered to be incomplete should a signed copy of Part B: Section 2 not be submitted. Once approved, Part B: Section 2 forms part of the EMPr for the development and the EMPr becomes legally binding to the new EA holder.

PART A – GENERAL INFORMATION**1. DEFINITIONS**

In this EMPr any word or expression to which a meaning has been assigned in the NEMA or EIA Regulations has that meaning, and unless the context requires otherwise –

"clearing" means the clearing and removal of vegetation, whether partially or in whole, including trees and shrubs, as specified;

"construction camp" is the area designated for key construction infrastructure and services, including but not limited to offices, overnight vehicle parking areas, stores, the workshop, stockpile and lay down areas, hazardous storage areas (including fuels), the batching plant (if one is located at the construction camp), designated access routes, equipment cleaning areas and the placement of staff accommodation, cooking and ablution facilities, waste and wastewater management;

"contractor" - The Contractor has overall responsibility for ensuring that all work, activities, and actions linked to the delivery of the contract, are in line with the Environmental Management Programme and that Method Statements are implemented as described.

"hazardous substance" is a substance governed by the Hazardous Substances Act, 1973 (Act No. 15 of 1973) as well as the Hazardous Chemical and Substances Regulations, 1995;

"method statement" means a written submission by the Contractor to the Project Manager in response to this EMPr or a request by the Project Manager and ECO. The method statement must set out the equipment, materials, labour and method(s) the Contractor proposes using to carry out an activity identified by the Project Manager when requesting the Method Statement. This must be done in such detail that the Project Manager and ECO is able to assess whether the Contractor's proposal is in accordance with this specification and/or will produce results in accordance with this specification;

The method statement must cover applicable details with regard to:

- (i) Construction procedures;
- (ii) Plant, materials and equipment to be used;
- (iii) Transporting the equipment to and from site;
- (iv) How the plant/ material/ equipment will be moved while on site;
- (v) How and where the plant/ material/ equipment will be stored;
- (vi) The containment (or action to be taken if containment is not possible) of leaks or spills of any liquid or material that may occur;
- (vii) Timing and location of activities;
- (viii) Compliance/ non-compliance; and
- (ix) Any other information deemed necessary by the Project Manager.

"slope" means the inclination of a surface expressed as one unit of rise or fall for so many horizontal units;

“**solid waste**” means all solid waste, including construction debris, hazardous waste, excess cement/ concrete, wrapping materials, timber, cans, drums, wire, nails, food and domestic waste (e.g. plastic packets and wrappers);

“**spoil**” means excavated material which is unsuitable for use as material in the construction works or is material which is surplus to the requirements of the construction works;

“**topsoil**” means a varying depth (up to 300 mm) of the soil profile irrespective of the fertility, appearance, structure, agricultural potential, fertility and composition of the soil; and

“**works**” means the works to be executed in terms of the Contract

2. ACRONYMS and ABBREVIATIONS

CA	Competent Authority
cEO	Contractors Environmental Officer
dEO	Developer Environmental Officer
DPM	Developer Project Manager
DSS	Developer Site Supervisor
EAR	Environmental Audit Report
ECA	Environmental Conservation Act No. 73 of 1989
ECO	Environmental Control Officer
EA	Environmental Authorisation
EIA	Environmental Impact Assessment
ERAP	Emergency Response Action Plan
EMPr	Environmental Management Programme Report
EAP	Environmental Assessment Practitioner
FPA	Fire Protection Agency
HCS	Hazardous chemical Substance
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NEMBA	National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)
NEMWA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
MSDS	Material Safety Data Sheet
RI&AP's	Registered interested and affected parties

3. ROLES AND RESPONSIBILITIES FOR ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr) IMPLEMENTATION

The effective implementation of this generic EMPr is dependent on established and clear roles, responsibilities and reporting lines within an institutional framework. This section of the EMPr gives guidance to the various environmental roles and reporting lines; however, project specific requirements will ultimately determine the need for the appointment of specific person(s) to undertake specific roles and or responsibilities. As such, it must be noted that in the event that no specific person, for example, an environmental control officer (ECO) is appointed, the holder of the EA remains responsible for ensuring that the duties indicated in this document for action by the ECO are undertaken.

Table 1: Guide to roles and responsibilities for implementation of an EMPr

Responsible Person (s)	Role and Responsibilities
Developer's Project Manager (DPM)	<p><u>Role</u> The Project Developer is accountable for ensuring compliance with the EMPr and any conditions of approval from the competent authority (CA). Where required, an environmental control officer (ECO) must be contracted by the Project Developer to objectively monitor the implementation of the EMPr according to relevant environmental legislation, and the conditions of the environmental authorisation (EA). The Project Developer is further responsible for providing and giving mandate to enable the ECO to perform responsibilities, and he must ensure that the ECO is integrated as part of the project team while remaining independent.</p> <p><u>Responsibilities</u></p> <ul style="list-style-type: none"> - Be fully conversant with the conditions of the EA; - Ensure that all stipulations within the EMPr are communicated and adhered to by the Developer and its Contractor(s); - Issuing of site instructions to the Contractor for corrective actions required; - Monitor the implementation of the EMPr throughout the project by means of site inspections and meetings. Overall management of the project and EMPr implementation; and - Ensure that periodic environmental performance audits are undertaken on the project implementation.
Developer Site Supervisor (DSS)	<p><u>Role</u></p>

Responsible Person (s)	Role and Responsibilities
Environmental Control Officer (ECO)	<p>The DSS reports directly to the DPM, oversees site works, liaises with the contractor(s) and the ECO. The DSS is responsible for the day to day implementation of the EMPr and for ensuring the compliance of all contractors with the conditions and requirements stipulated in the EMPr.</p> <p><u>Responsibilities</u></p> <ul style="list-style-type: none"> - Ensure that all contractors identify a contractor's Environmental Officer (cEO); - Must be fully conversant with the conditions of the EA. Oversees site works, liaison with Contractor, DPM and ECO; - Must ensure that all landowners have the relevant contact details of the site staff, ECO and cEO; - Issuing of site instructions to the Contractor for corrective actions required; - Will issue all non-compliances to contractors; and - Ratify the Monthly Environmental Report.
	<p><u>Role</u></p> <p>The ECO should have appropriate training and experience in the implementation of environmental management specifications. The primary role of the ECO is to act as an independent quality controller and monitoring agent regarding all environmental concerns and associated environmental impacts. In this respect, the ECO is to conduct periodic site inspections, attend regular site meetings, pre-empt problems and suggest mitigation and be available to advise on incidental issues that arise. The ECO is also required to conduct compliance audits, verifying the monitoring reports submitted by the cEO. The ECO provides feedback to the DSS and Project Manager regarding all environmental matters. The Contractor, cEO and dEO are answerable to the Environmental Control Officer for non-compliance with the Performance Specifications as set out in the EA and EMPr.</p> <p>The ECO provides feedback to the DSS and Project Manager, who in turn reports back to the Contractor and potential and Registered Interested & Affected Parties' (RI&AP's), as required. Issues of non-compliance raised by the ECO must be taken up by the Project Manager, and resolved with the Contractor as per the conditions of his contract. Decisions regarding environmental procedures, specifications and requirements which have a cost implication (i.e. those that are deemed to be a variation, not allowed for in the Performance Specification) must be endorsed by the Project Manager. The ECO must also, as specified by the EA, report to the relevant CA as and when required.</p>

Responsible Person (s)	Role and Responsibilities
	<p><u>Responsibilities</u></p> <p>The responsibilities of the ECO will include the following:</p> <ul style="list-style-type: none"> - Be aware of the findings and conclusions of all EA related to the development; - Be familiar with the recommendations and mitigation measures of this EMPr; - Be conversant with relevant environmental legislation, policies and procedures, and ensure compliance with them; - Undertake regular and comprehensive site inspections / audits of the construction site according to the generic EMPr and applicable licenses in order to monitor compliance as required; - Educate the construction team about the management measures contained in the EMPr and environmental licenses; - Compilation and administration of an environmental monitoring plan to ensure that the environmental management measures are implemented and are effective; - Monitoring the performance of the Contractors and ensuring compliance with the EMPr and associated Method Statements; - In consultation with the Developer Site Supervisor order the removal of person(s) and/or equipment which are in contravention of the specifications of the EMPr and/or environmental licenses; - Liaison between the DPM, Contractors, authorities and other lead stakeholders on all environmental concerns; - Compile a regular environmental audit report highlighting any non-compliance issues as well as satisfactory or exceptional compliance with the EMPr; - Validating the regular site inspection reports, which are to be prepared by the contractor Environmental Officer (cEO); - Checking the cEO's record of environmental incidents (spills, impacts, legal transgressions etc) as well as corrective and preventive actions taken; - Checking the cEO's public complaints register in which all complaints are recorded, as well as action taken; - Assisting in the resolution of conflicts; - Facilitate training for all personnel on the site – this may range from carrying out the training, to reviewing the training programmes of the Contractor; - In case of non-compliance, the ECO must first communicate this to the Senior Site Supervisor, who has the power to ensure this matter is addressed. Should no action or insufficient action be taken, the ECO may report this matter to the authorities as non-compliance; - Maintenance, update and review of the EMPr; - Communication of all modifications to the EMPr to the relevant stakeholders.

Responsible Person (s)	Role and Responsibilities
developer Environmental Officer (dEO)	<p><u>Role</u></p> <p>The dEOs will report to the Project Manager and are responsible for implementation of the EMPr, environmental monitoring and reporting, providing environmental input to the Project Manager and Contractor's Manager, liaising with contractors and the landowners as well as a range of environmental coordination responsibilities.</p> <p><u>Responsibilities</u></p> <ul style="list-style-type: none"> - Be fully conversant with the EMPr; - Be familiar with the recommendations and mitigation measures of this EMPr, and implement these measures; - Ensure that all stipulations within the EMPr are communicated and adhered to by the Employees, Contractor(s) ; - Confine the development site to the demarcated area; - Conduct environmental internal audits with regards to EMPr and authorisation compliance (on cEO); - Assist the contractors in addressing environmental challenges on site; - Assist in incident management; - Reporting environmental incidents to developer and ensuring that corrective action is taken, and lessons learnt shared; - Assist the contractor in investigating environmental incidents and compile investigation reports; - Follow-up on pre-warnings, defects, non-conformance reports; - Measure and communicate environmental performance to the Contractor; - Conduct environmental awareness training on site together with ECO and cEO; - Ensure that the necessary legal permits and / or licenses are in place and up to date; - Acting as Developer's Environmental Representative on site and work together with the ECO and contractor;
Contractor	<p><u>Role</u></p> <p>The Contractor appoints the cEO and has overall responsibility for ensuring that all work, activities, and actions linked to the delivery of the contract are in line with the EMPr and that Method Statements are implemented as described. External contractors must ensure compliance with this EMPr while performing the onsite activities as per their contract with the Project Developer. The contractors are required, where</p>

Responsible Person (s)	Role and Responsibilities
	<p>specified, to provide Method Statements setting out in detail how the impact management actions contained in the EMPr will be implemented during the development or expansion for overhead electricity transmission and distribution infrastructure activities.</p> <p><u>Responsibilities</u></p> <ul style="list-style-type: none"> - project delivery and quality control for the development services as per appointment; - employ a suitably qualified person to monitor and report to the Project Developer's appointed person on the daily activities on-site during the construction period; - ensure that safe, environmentally acceptable working methods and practices are implemented and that equipment is properly operated and maintained, to facilitate proper access and enable any operation to be carried out safely; - attend on site meeting(s) prior to the commencement of activities to confirm the procedure and designated activity zones; - ensure that contractors' staff repair, at their own cost, any environmental damage as a result of a contravention of the specifications contained in EMPr, to the satisfaction of the ECO.
contractor Environmental Officer (cEO)	<p><u>Role</u></p> <p>Each Contractor affected by the EMPr should appoint a cEO, who is responsible for the on-site implementation of the EMPr (or relevant sections of the EMPr). The Contractor's representative can be the site agent; site engineer; a dedicated environmental officer; or an independent consultant. The Contractor must ensure that the Contractor's Representative is suitably qualified to perform the necessary tasks and is appointed at a level such that she/he can interact effectively with other site Contractors, labourers, the Environmental Control Officer and the public. As a minimum the cEO shall meet the following criteria:</p> <p><u>Responsibilities</u></p> <ul style="list-style-type: none"> - Be on site throughout the duration of the project and be dedicated to the project; - Ensure all their staff are aware of the environmental requirements, conditions and constraints with respect to all of their activities on site; - Implementing the environmental conditions, guidelines and requirements as stipulated within the EA, EMPr and Method Statements; - Attend the Environmental Site Meeting;

Responsible Person (s)	Role and Responsibilities
	<ul style="list-style-type: none"> - Undertaking corrective actions where non-compliances are registered within the stipulated timeframes; - Report back formally on the completion of corrective actions; - Assist the ECO in maintaining all the site documentation; - Prepare the site inspection reports and corrective action reports for submission to the ECO; - Assist the ECO with the preparing of the monthly report; and - Where more than one Contractor is undertaking work on site, each company appointed as a Contractor will appoint a cEO representing that company.

4. ENVIRONMENTAL DOCUMENTATION REPORTING AND COMPLIANCE

To ensure accountable and demonstrated implementation of the EMPr, a number of reporting systems, documentation controls and compliance mechanisms must be in place for all overhead electricity transmission and distribution infrastructure projects as a minimum requirement.

4.1 Document control/Filing system

The holder of the EA is solely responsible for the upkeep and management of the EMPr file. At a minimum, all documentation detailed below will be stored in the EMPr file. A hard copy of all documentation shall be filed, while an electronic copy may be kept where relevant. A duplicate file will be maintained in the office of the DSS (where applicable). This duplicate file must remain current and up-to-date. The filing system must be updated and relevant documents added as required. The EMPr file must be made available at all times on request by the CA or other relevant authorities. The EMPr file will form part of any environmental audits undertaken as prescribed in the EIA Regulations.

4.2 Documentation to be available

At the outset of the project the following preliminary list of documents shall be placed in the filing system and be accessible at all times:

- Full copy of the signed EA from the CA in terms of NEMA, granting approval for the development or expansion;
- Copy of the generic and site specific EMPr as well as any amendments thereof;
- Copy of declaration of implementing generic EMPr and subsequent approval of site specific EMPr and amendments thereof;
- All method statements;
- Completed environmental checklists;
- Minutes and attendance register of environmental site meetings;
- An up-to-date environmental incident log;
- A copy of all instructions or directives issued;
- A copy of all corrective actions signed off. The corrective actions must be filed in such a way that a clear reference is made to the non-compliance record;
- Complaints register.

4.3 Weekly Environmental Checklist

The ECOs are required to complete a Weekly Environmental Checklist, the format of which is to be agreed prior to commencement of the activity. The ECOs are required to sign and date the checklist, retain a copy in the EMPr file and submit a copy of the completed checklist to the DSS on a weekly basis.

The checklists will form the basis for the Monthly Environmental Reports. Copies of all completed checklists will be attached as Annexures to the Environmental Audit Report as required in terms of the EIA Regulations.

4.4 Environmental site meetings

Minutes of the environmental site meetings shall be kept. The minutes must include an attendance register and will be attached to the Monthly Report that is distributed to attendees. Each set of minutes must clearly record "Matters for Attention" that will be reviewed at the next meeting.

4.5 Required Method Statements

The method statement will be done in such detail that the ECOs are enabled to assess whether the contractor's proposal is in accordance with the EMPr.

The method statement must cover applicable details with regard to:

- development procedures;
- materials and equipment to be used;
- getting the equipment to and from site;
- how the equipment/ material will be moved while on site;
- how and where material will be stored;
- the containment (or action to be taken if containment is not possible) of leaks or spills of any liquid or material that may occur;
- timing and location of activities;
- compliance/ non-compliance with the EMPr; and
- any other information deemed necessary by the ECOs.

Unless indicated otherwise by the Project Manager, the Contractor shall provide the following method statements to the Project Manager no less than 14 days prior to the commencement date of the activity:

- Site establishment – Camps, Lay-down or storage areas, satellite camps, infrastructure;
- Batch plants;
- Workshop or plant servicing;
- Handling, transport and storage of Hazardous Chemical Substance's;
- Vegetation management – Protected, clearing, aliens, felling;
- Access management – Roads, gates, crossings etc.;
- Fire plan;
- Waste management – transport, storage, segregation, classification, disposal (all waste streams);
- Social interaction – complaints management, compensation claims, access to properties etc.;
- Water – use (source, abstraction and disposal), access and all related information, crossings and mitigation;
- Emergency preparedness – Spills, training, other environmental emergencies;
- Dust and noise management methodologies;
- Fauna interaction and risk management – only if the risk was identified – wildlife interaction especially on game farms; and
- Heritage and palaeontology management.

The ECOs shall monitor and ensure that the contractors perform in accordance with these method statements. Completed and agreed method statements between the holder of the EA and the contractor shall be captured in Appendix 1.

4.6 Environmental Incident Log (Diary)

The ECOs are required to maintain an up-to-date and current Environmental Incident Log (environmental diary). The Environmental Incident Log is a means to record all environmental incidents and/or all non-compliance notice would not be issued. An environmental incident is defined as:

- Any deviation from the listed impact management actions (listed in this EMPr) that may be addressed immediately by the ECOs. (For example a contractor's staff member littering or a drip tray that has not been emptied);
- Any environmental impact resulting from an action or activity by a contractor in contravention of the environmental stipulations and guidelines listed in the EMPr which as a single event would have a minor impact but which if cumulative and continuous would have a significant effect (for example no toilet paper available in the ablutions for an afternoon); and
- General environmental information such as road kills or injured wildlife.

The ECOs are to record all environmental incidents in the Environmental Incident Log. All incidents regardless of severity must be reported to the Developer. The Log is to be kept in the EMPr file and at a minimum the following will be recorded for each environmental incident:

- The date and time of the incident;
- Description of the incident;
- The name of the Contractor responsible;
- The incident must be listed as significant or minor;
- If the incident is listed as significant, a non-compliance notice must be issued, and recorded in the log;
- Remedial or corrective action taken to mitigate the incident; and
- Record of repeat minor offences by the same contractor or staff member.

The Environmental Incident Log will be captured in the EAR.

4.7 Non-compliance

A non-compliance notice will be issued to the responsible contractor by the ECOs via the DSS or Project Manager. The non-compliance notice will be issued in writing; a copy filed in the EMPr file and will at a minimum include the following:

- Time and date of the non-compliance;
- Name of the contractor responsible;
- Nature and description of the non-compliance;
- Recommended / required corrective action; and
- Date by which the corrective action to be completed.
- The contractors shall act immediately when a notice of non-compliance is received and correct whatever is the cause for the issuing of the notice. Complaints received regarding activities on the development site pertaining to the environment shall be

recorded in a dedicated register and the response noted with the date and action taken. The ECO should be made aware of any complaints. Any non-compliance with the agreed procedures of the EMPr is a transgression of the various statutes and laws that define the manner by which the environment is managed. Failure to redress the cause shall be reported to the relevant CA for them to deal with the transgression, as it deems fit. The contractor is deemed not to have complied with the EMPr if, inter alia, There is a deviation from the environmental conditions, impact management outcomes and impact management actions , as approved in generic and site specific EMPr as relevant as set out in the EMPr, which deviation has, or may cause, an environmental impact.

4.8 Corrective action records

For each non-compliance notice issued, a documented corrective action must be recorded. On receiving a non-compliance notice from the DSS, the contractor's cEO will ensure that the corrective actions required take place within the stipulated timeframe. On completion of the corrective action the cEO is to issue a Corrective Action Report in writing to the ECOs. If satisfied that the corrective action has been completed, the ECOs are to sign-off on the Corrective Action Report, and attach the report to the non-compliance notice in the EMPr file. A corrective action is considered complete once the report has signed off by the ECOs.

4.9 Photographic record

A digital photographic record will be kept. The photographic record will be used to show before, during and post rehabilitation evidence of the project as well used in cases of damages claims if they arise. Each image must be dated and a brief description note attached.

The Contractor shall:

1. Allow the ECOs access to take photographs of all areas, activities and actions.

The ECOs shall keep an electronic database of photographic records which will include:

1. Pictures of all areas designated as work areas, camp areas, development sites and storage areas taken before these areas are set up;
2. All bunding and fencing;
3. Road conditions and road verges;
4. Condition of all farm fences;
5. Topsoil storage areas;
6. All areas to be cordoned off during construction;
7. Waste management sites;
8. Ablution facilities (inside and out);
9. Any non-conformances deemed to be "significant";
10. All completed corrective actions for non-compliances;
11. All required signage;
12. Photographic recordings of incidents;
13. All areas before, during and post rehabilitation; and
14. Include relevant photographs in the Final Environmental Audit Report.

4.10 Complaints register

The ECOs shall keep a current and up-to-date complaints register. The complaints register is to be a record of all complaints received from communities, stakeholders and individuals. The Complaints Record shall:

1. Record the name and contact details of the complainant;
2. Record the time and date of the complaint;
3. Contain a detailed description of the complaint;
4. Where relevant and appropriate, contain photographic evidence of the complaint or damage (ECOs to take relevant photographs); and
5. Contain a copy of the ECOs written response to each complaint received and keep a record of any further correspondence with the complainant. The ECO's written response will include a description of any corrective action to be taken and must be signed by the Contractor, ECO and affected party. Where a damage claim is issued by the complainant, the ECOs shall respond as described in **(section 4.11)** below.

4.11 Claims for damages

In the event that a Claim for Damages is submitted by a community, landowner or individual, the ECOs shall:

1. Record the full detail of the complaint as described in **(section 4.10)** above;
2. The DPM will evaluate the claim and associated damage and submit the evaluation to the Senior Site Representative for approval;
3. Following consideration by the DPM, the claim is to be resolved and settled immediately, or the reason for not accepting the claim communicated in writing to the claimant. Should the claimant not accept this, the ECO shall, in writing report the incident to the Developer's negotiator and legal department; and
4. A formal record of the response by the ECOs to the claimant as well as the rectification of the method of making payments not amount will be recorded in the EMPr file.

4.12 Interactions with affected parties

Open, transparent and good relations with affected landowners, communities and regional staff are an essential aspect to the successful management and mitigation of environmental impacts.

The ECOs shall:

1. Ensure that all queries, complaints and claims are dealt within an agreed timeframe;
2. Ensure that any or all agreements are documented, signed by all parties and a record of the agreement kept in the EMPr file;
3. Ensure that a complaints telephone numbers are made available to all landowners and affected parties; and
4. Ensure that contact with affected parties is courteous at all times;

4.13 Environmental audits

Internal environmental audits of the activity and implementation of the EMPr must be undertaken. The findings and outcomes must be included in the EMPr file and be submitted to the CA at intervals as indicated in the EA.

An Environmental Audit Report must be prepared monthly. The report will be tabled as the key point on the agenda of the Environmental Site Meeting. The Report is submitted for acceptance at the meeting and the final report will be circulated to the Project Manager and filed in the EMPr file. At a frequency determined by the EA, the ECOs shall submit the monthly reports to the CA. At a minimum the monthly report is to cover the following:

- Weekly Environmental Checklists;
- Deviations and non-compliances with the checklists;
- Non-compliances issued;
- Completed and reported corrective actions;
- Environmental Monitoring;
- General environmental findings and actions; and
- Minutes of the Bi-monthly Environmental Site Meetings.

4.14 Final environmental audits

On final completion of the rehabilitation and/or requirements of the EA a final EAR is to be prepared and submitted to the CA. The EAR must comply with Appendix 7 of the EIA Regulations.

PART B: SECTION 1: Pre-approved generic EMPr template**5. IMPACT MANAGEMENT OUTCOMES AND IMPACT MANAGEMENT ACTIONS**

This section provides a pre-approved generic EMPr template with aspects that are common to the development of overhead electricity transmission and distribution infrastructure. There is a list of aspects identified for the development or expansion of overhead electricity transmission and distribution infrastructure, and for each aspect a set of prescribed impact management outcomes and associated impact management actions have been identified. Holders of EAs are responsible to ensure the implementation of these outcomes and actions for all projects as a minimum requirement, in order to mitigate the impact of such aspects identified for the development or expansion of overhead electricity transmission and distribution infrastructure.

The template provided below is to be completed by providing the information under each heading for each environmental impact management action.

The completed template must be signed and dated on each page by both the contractor and the holder of the EA prior to commencement of the activity. The method statements prepared and agreed to by the holder of the EA must be appended to the template as Appendix 1. Each method statement must also be duly signed and dated on each page by the contractor and the holder of the EA. This template, once signed and dated, is legally binding. The holder of the EA will remain responsible for its implementation.

5.1 Environmental awareness training

Impact management outcome: All onsite staff are aware and understands the individual responsibilities in terms of this EMPr.

Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - All staff must receive environmental awareness training prior to commencement of the activities; - The Contractor must allow for sufficient sessions to train all personnel with no more than 20 personnel attending each course; - Refresher environmental awareness training is available as and when required; - All staff are aware of the conditions and controls linked to the EA and within the EMPr and made aware of their individual roles and responsibilities in achieving compliance with the EA and EMPr; - The Contractor must erect and maintain information posters at key locations on site, and the posters must include the following information as a minimum: a) Safety notifications; and b) No littering. - Environmental awareness training must include as a minimum the following: a) Description of significant environmental impacts, actual or potential, related to their work activities; b) Mitigation measures to be implemented when carrying out specific activities; 						

<p>c) Emergency preparedness and response procedures; d) Emergency procedures; e) Procedures to be followed when working near or within sensitive areas; f) Wastewater management procedures; g) Water usage and conservation; h) Solid waste management procedures; i) Sanitation procedures; j) Fire prevention; and k) Disease prevention.</p>							
<ul style="list-style-type: none"> - A record of all environmental awareness training courses undertaken as part of the EMP must be available; - Educate workers on the dangers of open and/or unattended fires; - A staff attendance register of all staff to have received environmental awareness training must be available. - Course material must be available and presented in appropriate languages that all staff can understand. 							

5.2 Site Establishment development

<p>Impact management outcome: Impacts on the environment are minimised during site establishment and the development footprint are kept to demarcated development area.</p>							
<p>Implementation</p>				<p>Monitoring</p>			
Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance		

<ul style="list-style-type: none"> - A method statement must be provided by the contractor prior to any onsite activity that includes the layout of the construction camp in the form of a plan showing the location of key infrastructure and services (where applicable), including but not limited to offices, overnight vehicle parking areas, stores, the workshop, stockpile and lay down areas, hazardous materials storage areas (including fuels), the batching plant (if one is located at the construction camp), designated access routes, equipment cleaning areas and the placement of staff accommodation, cooking and ablution facilities, waste and wastewater management; - Location of camps must be within approved area to ensure that the site does not impact on sensitive areas identified in the environmental assessment or site walk through; - Sites must be located where possible on previously disturbed areas; - The camp must be fenced in accordance with Section 5.5: Fencing and gate installation; and - The use of existing accommodation for contractor staff, where possible, is encouraged. 						
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5.3 Access restricted areas

Impact management outcome: Access to restricted areas prevented.						
Impact Management Actions						
Implementation		Monitoring				
Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance	
<ul style="list-style-type: none"> - Identification of access restricted areas is to be informed by the environmental assessment, site walk through and any additional areas identified during development; - Erect, demarcate and maintain a temporary barrier with clear signage around the perimeter of any access restricted area, colour coding could be used if appropriate; and - Unauthorised access and development related activity inside access restricted areas is prohibited. 						

5.4 Access roads

Impact management outcome: Minimise impact to the environment through the planned and restricted movement of vehicles on site.						
Impact Management Actions						
Implementation		Monitoring				
Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance	
<ul style="list-style-type: none"> - Access to the servitude and tower positions must be negotiated with the relevant landowner and must fall within the assessed and authorised area; 						

	<ul style="list-style-type: none"> - An access agreement must be formalised and signed by the DPM, Contractor and landowner before commencing with the activities; - The access roads to tower positions must be signposted after access has been negotiated and before the commencement of the activities; - All private roads used for access to the servitude must be maintained and upon completion of the works, be left in at least the original condition - All contractors must be made aware of all these access routes. - Any access route deviation from that in the written agreement must be closed and re-vegetated immediately, at the contractor's expense; - Maximum use of both existing servitudes and existing roads must be made to minimize further disturbance through the development of new roads; - In circumstances where private roads must be used, the condition of the said roads must be recorded in accordance with section 4.9: photographic record; prior to use and the condition thereof agreed by the landowner, the DPM, and the contractor; - Access roads in flatfish areas must follow fence lines and tree belts to avoid fragmentation of vegetated areas or croplands - Access roads must only be developed on pre-planned and approved roads.

5.5 Fencing and Gate installation

Impact management outcome: Minimise impact to the environment and ensure safe and controlled access to the site through the erection of fencing and gates where required.

Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Use existing gates provided to gain access to all parts of the area authorised for development, where possible; - Existing and new gates to be recorded and documented in accordance with section 4.9: photographic record; - All gates must be fitted with locks and be kept locked at all times during the development phase, unless otherwise agreed with the landowner; - At points where the line crosses a fence in which there is no suitable gate within the extent of the line servitude, on the instruction of the DPM, a gate must be installed at the approval of the landowner; - Care must be taken that the gates must be so erected that there is a gap of no more than 100 mm between the bottom of the gate and the ground; - Where gates are installed in jackal proof fencing, a suitable reinforced concrete sill must be provided beneath the gate; - Original tension must be maintained in the fence wires; - All gates installed in electrified fencing must be re-electrified; - All demarcation fencing and barriers must be maintained in good working order for the duration of overhead transmission and distribution electricity infrastructure development activities; 						

<ul style="list-style-type: none"> - Fencing must be erected around the camp, batching plants, hazardous storage areas, and all designated access restricted areas, where appropriate and would not cause harm to the sensitive flora; - Any temporary fencing to restrict the movement of life-stock must only be erected with the permission of the land owner. - All fencing must be developed of high quality material bearing the SABS mark; - The use of razor wire as fencing must be avoided; - Fenced areas with gate access must remain locked after hours, during weekends and on holidays if staff is away from site. Site security will be required at all times; - On completion of the development phase all temporary fences are to be removed; - The contractor must ensure that all fence uprights are appropriately removed, ensuring that no uprights are cut at ground level but rather removed completely. 					
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5.6 Water Supply Management

<p>Impact management outcome: Undertake responsible water usage.</p>						
<p>Impact Management Actions</p>			<p>Implementation</p>		<p>Monitoring</p>	
<ul style="list-style-type: none"> - All abstraction points or bore holes must be registered with the DWS and suitable water meters installed to ensure that the abstracted volumes are measured on a daily basis; - The Contractor must ensure the following: 	<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>	<p>Frequency</p>	<p>Evidence of compliance</p>

<p>a. The vehicle abstracting water from a river does not enter or cross it and does not operate from within the river;</p> <p>b. No damage occurs to the river bed or banks and that the abstraction of water does not entail stream diversion activities; and</p> <p>c. All reasonable measures to limit pollution or sedimentation of the downstream watercourse are implemented.</p> <p>– Ensure water conservation is being practiced by:</p> <p>a. Minimising water use during cleaning of equipment;</p> <p>b. Undertaking regular audits of water systems; and</p> <p>c. Including a discussion on water usage and conservation during environmental awareness training.</p> <p>d. The use of grey water is encouraged.</p>	
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5.7 Storm and waste water management

<p>Impact management outcome: Impacts to the environment caused by storm water and wastewater discharges during construction are avoided.</p>					
Implementation			Monitoring		
Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<p>– Runoff from the cement/ concrete batching areas must be strictly controlled, and contaminated water must be collected, stored and either treated or disposed of off-site, at a location approved by the project manager;</p> <p>– All spillage of oil onto concrete surfaces must be controlled by the use of an approved absorbent material and the used absorbent material disposed of at an appropriate waste disposal facility;</p>					

<ul style="list-style-type: none"> - Natural storm water runoff not contaminated during the development and clean water can be discharged directly to watercourses and water bodies, subject to the Project Manager's approval and support by the ECO; - Water that has been contaminated with suspended solids, such as soils and silt, may be released into watercourses or water bodies only once all suspended solids have been removed from the water by settling out these solids in settlement ponds. The release of settled water back into the environment must be subject to the Project Manager's approval and support by the ECO. 						
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5.8 Solid and hazardous waste management

<p>Impact management outcome: Waste is appropriately stored, handled and safely disposed of at a recognised waste facility.</p>						
<p>Impact Management Actions</p>			<p>Implementation</p>			
			<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Monitoring</p>
<ul style="list-style-type: none"> - All measures regarding waste management must be undertaken using an integrated waste management approach; - Sufficient, covered waste collection bins (scavenger and weatherproof) must be provided; - A suitably positioned and clearly demarcated waste collection site must be identified and provided; - The waste collection site must be maintained in a clean and orderly manner; - Waste must be segregated into separate bins and clearly marked for each waste type for recycling and safe disposal; 						<p>Responsible person</p> <p>Frequency</p> <p>Evidence of compliance</p>

<ul style="list-style-type: none"> - Staff must be trained in waste segregation; - Bins must be emptied regularly; - General waste produced onsite must be disposed of at registered waste disposal sites/ recycling company; - Hazardous waste must be disposed of at a registered waste disposal site; - Certificates of safe disposal for general, hazardous and recycled waste must be maintained. 					
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5.9 Protection of watercourses and estuaries

<p>Impact management outcome: Pollution and contamination of the watercourse environment and or estuary erosion are prevented.</p>						
<p>Impact Management Actions</p>	<p>Implementation</p>			<p>Monitoring</p>		
	<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>	<p>Frequency</p>	<p>Evidence of compliance</p>
<ul style="list-style-type: none"> - All watercourses must be protected from direct or indirect spills of pollutants such as solid waste, sewage, cement, oils, fuels, chemicals, aggregate tailings, wash and contaminated water or organic material resulting from the Contractor's activities; - In the event of a spill, prompt action must be taken to clear the polluted or affected areas; - Where possible, no development equipment must traverse any seasonal or permanent wetland - No return flow into the estuaries must be allowed and no disturbance of the Estuarine Functional Zone should occur; - Development of permanent watercourse or estuary crossing must only be undertaken where no alternative access to tower position is available; 						

<ul style="list-style-type: none"> - There must not be any impact on the long term morphological dynamics of watercourses or estuaries; - Existing crossing points must be favored over the creation of new crossings (including temporary access) - When working in or near any watercourse or estuary, the following environmental controls and consideration must be taken: <ul style="list-style-type: none"> a) Water levels during the period of construction; No altering of the bed, banks, course or characteristics of a watercourse b) During the execution of the works, appropriate measures to prevent pollution and contamination of the riparian environment must be implemented e.g. including ensuring that construction equipment is well maintained; c) Where earthwork is being undertaken in close proximity to any watercourse, slopes must be stabilised using suitable materials, i.e. sandbags or geotextile fabric, to prevent sand and rock from entering the channel; and d) Appropriate rehabilitation and re-vegetation measures for the watercourse banks must be implemented timeously. In this regard, the banks should be appropriately and incrementally stabilised as soon as development allows. 						
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5.10 Vegetation clearing

<p>Impact management outcome: Vegetation clearing is restricted to the authorised development footprint of the proposed infrastructure.</p>						
<p>Impact Management Actions</p>			<p>Monitoring</p>			
	<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>	<p>Frequency</p>	<p>Evidence of compliance</p>

<p>General:</p> <ul style="list-style-type: none"> - Indigenous vegetation which does not interfere with the development must be left undisturbed; - Protected or endangered species may occur on or near the development site. Special care should be taken not to damage such species; - Search, rescue and replanting of all protected and endangered species likely to be damaged during project development must be identified by the relevant specialist and completed prior to any development or clearing; - Permits for removal must be obtained from the Department of Agriculture, Forestry and Fisheries prior to the cutting or clearing of the affected species, and they must be filed; - The Environmental Audit Report must confirm that all identified species have been rescued and replanted and that the location of replanting is compliant with conditions of approvals; - Trees felled due to construction must be documented and form part of the Environmental Audit Report; - Rivers and watercourses must be kept clear of felled trees, vegetation cuttings and debris; - Only a registered pest control operator may apply herbicides on a commercial basis and commercial application must be carried out under the supervision of a registered pest control operator, supervision of a registered pest control operator or is appropriately trained; - A daily register must be kept of all relevant details of herbicide usage; - No herbicides must be used in estuaries; 						
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<p>- All protected species and sensitive vegetation not removed must be clearly marked and such areas fenced off in accordance to Section 5.3: Access restricted areas.</p> <p>Servitude:</p> <ul style="list-style-type: none"> - Vegetation that does not grow high enough to cause interference with overhead transmission and distribution infrastructures, or cause a fire hazard to any plantation, must not be cut or trimmed unless it is growing in the road access area, and then only at the discretion of the Project Manager; - Where clearing for access purposes is essential, the maximum width to be cleared within the servitude must be in accordance to distance as agreed between the land owner and the EA holder - Alien invasive vegetation must be removed according to a plan (in line with relevant municipal and provincial procedures, guidelines and recommendations) and disposed of at a recognised waste disposal facility; - Vegetation must be trimmed where it is likely to intrude on the minimum vegetation clearance distance (MVCD) or will intrude on this distance before the next scheduled clearance. MVCD is determined from SANS 10280; - Debris resulting from clearing and pruning must be disposed of at a recognised waste disposal facility, unless the landowners wish to retain the cut vegetation; - In the case of the development of new overhead transmission and distribution infrastructures, a one metre "trace-line" must be cut through the vegetation for stringing purposes only and no vehicle access must be cleared along the "trace-line". Alternative methods of stringing which limit impact to the environment must always be considered. 						
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5.11 Protection of fauna

Impact management outcome: Minimise disturbance to fauna.												
Impact Management Actions												
Implementation				Monitoring								
Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance							
<ul style="list-style-type: none"> - No interference with livestock must occur without the landowner's written consent and with the landowner or a person representing the landowner being present; - The breeding sites of raptors and other wild birds species must be taken into consideration during the planning of the development programme; - Breeding sites must be kept intact and disturbance to breeding birds must be avoided. Special care must be taken where nestlings or fledglings are present; - Nesting sites on existing parallel lines must documented; - Special recommendations of the avian specialist must be adhered to at all times to prevent unnecessary disturbance of birds; - Bird guards and diverters must be installed on the new line as per the recommendations of the specialist; - No poaching must be tolerated under any circumstances. All animal dens in close proximity to the works areas must be marked as Access restricted areas; - No deliberate or intentional killing of fauna is allowed; - In areas where snakes are abundant, snake deterrents to be deployed on the pylons to prevent snakes climbing up, being electrocuted and causing power outages; and - No Threatened or Protected species (ToPs) and/or protected fauna as listed according NEMBA (Act No. 10 of 2004) and 												

relevant provincial ordinances may be removed and/or relocated without appropriate authorisations/permits.							
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5.12 Protection of heritage resources

Impact management outcome: Minimise impact to heritage resources.							
Impact Management Actions				Monitoring			
Implementation		Implementation		Monitoring		Monitoring	
Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance		
<ul style="list-style-type: none"> - Identify, demarcate and prevent impact to all known sensitive heritage features on site in accordance with the No-Go procedure in Section 5.3: Access restricted areas; - Carry out general monitoring of excavations for potential fossils, artefacts and material of heritage importance; - All work must cease immediately, if any human remains and/or other archaeological, palaeontological and historical material are uncovered. Such material, if exposed, must be reported to the nearest museum, archaeologist/palaeontologist (or the South African Police Services), so that a systematic and professional investigation can be undertaken. Sufficient time must be allowed to remove/collect such material before development recommences. 							

5.13 Safety of the public

Impact management outcome: All precautions are taken to minimise the risk of injury, harm or complaints.					
Implementation			Monitoring		
Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
	<ul style="list-style-type: none"> - Identify fire hazards, demarcate and restrict public access to these areas as well as notify the local authority of any potential threats e.g. large brush stockpiles, fuels etc.; - All unattended open excavations must be adequately fenced or demarcated; - Adequate protective measures must be implemented to prevent unauthorised access to and climbing of partly constructed towers and protective scaffolding; - Ensure structures vulnerable to high winds are secured; - Maintain an incidents and complaints register in which all incidents or complaints involving the public are logged. 				

5.14 Sanitation

Impact management outcome: Clean and well maintained toilet facilities are available to all staff in an effort to minimise the risk of disease and impact to the environment.					
Implementation			Monitoring		
Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance

<ul style="list-style-type: none"> - Mobile chemical toilets are installed onsite if no other ablation facilities are available; - The use of ablation facilities and or mobile toilets must be used at all times and no indiscriminate use of the veld for the purposes of ablations must be permitted under any circumstances; - Where mobile chemical toilets are required, the following must be ensured: <ul style="list-style-type: none"> a) Toilets are located no closer than 100 m to any watercourse or waterbody; b) Toilets are secured to the ground to prevent them from toppling due to wind or any other cause; c) No spillage occurs when the toilets are cleaned or emptied and the contents are managed in accordance with the EMPr; d) Toilets have an external closing mechanism and are closed and secured from the outside when not in use to prevent toilet paper from being blown out; e) Toilets are emptied before long weekends and workers holidays, and must be locked after working hours; f) Toilets are serviced regularly and the ECO must inspect toilets to ensure compliance to health standards; - A copy of the waste disposal certificates must be maintained. 	
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AIDS HELPLINE: 0800-0123-22 Prevention is the cure

5.15 Prevention of disease

Impact Management outcome: All necessary precautions linked to the spread of disease are taken.

Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Undertake environmentally-friendly pest control in the camp area; - Ensure that the workforce is sensitised to the effects of sexually transmitted diseases, especially HIV AIDS; - The Contractor must ensure that information posters on AIDS are displayed in the Contractor Camp area; - Information and education relating to sexually transmitted diseases to be made available to both construction workers and local community, where applicable; - Free condoms must be made available to all staff on site at central points; - Medical support must be made available; - Provide access to Voluntary HIV Testing and Counselling Services. 						

5.16 Emergency procedures

Impact management outcome: Emergency procedures are in place to enable a rapid and effective response to all types of environmental emergencies.						
Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Compile an Emergency Response Action Plan (ERAP) prior to the commencement of the proposed project; - The Emergency Plan must deal with accidents, potential spillages and fires in line with relevant legislation; - All staff must be made aware of emergency procedures as part of environmental awareness training; - The relevant local authority must be made aware of a fire as soon as it starts; - In the event of emergency necessary mitigation measures to contain the spill or leak must be implemented (see Hazardous Substances section 5.17). 						

5.17 Hazardous substances

Impact management outcome: Safe storage, handling, use and disposal of hazardous substances.					
Impact Management Actions	Implementation			Monitoring	
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency
<ul style="list-style-type: none"> - The use and storage of hazardous substances to be minimised and non-hazardous and non-toxic alternatives substituted where possible; - All hazardous substances must be stored in suitable containers as defined in the Method Statement; - Containers must be clearly marked to indicate contents, quantities and safety requirements; - All storage areas must be bunded. The bunded area must be of sufficient capacity to contain a spill / leak from the stored containers; - Bunded areas to be suitably lined with a SABS approved liner; - An Alphabetical Hazardous Chemical Substance (HCS) control sheet must be drawn up and kept up to date on a continuous basis; - All hazardous chemicals that will be used on site must have Material Safety Data Sheets (MSDS); - All employees working with HCS must be trained in the safe use of the substance and according to the safety data sheet; - Employees handling hazardous substances / materials must be aware of the potential impacts and follow appropriate safety measures. Appropriate personal protective equipment must be made available; 					

<ul style="list-style-type: none"> - The Contractor must ensure that diesel and other liquid fuel, oil and hydraulic fluid is stored in appropriate storage tanks or in bowzers; - The tanks/ bowzers must be situated on a smooth impermeable surface (concrete) with a permanent bund. The impermeable lining must extend to the crest of the bund and the volume inside the bund must be 130% of the total capacity of all the storage tanks/ bowzers (110% statutory requirement plus an allowance for rainfall); - The floor of the bund must be sloped, draining to an oil separator; - Provision must be made for refueling at the storage area by protecting the soil with an impermeable groundcover. Where dispensing equipment is used, a drip tray must be used to ensure small spills are contained; - All empty externally dirty drums must be stored on a drip tray or within a banded area; - No unauthorised access into the hazardous substances storage areas must be permitted; - No smoking must be allowed within the vicinity of the hazardous storage areas; - Adequate fire-fighting equipment must be made available at all hazardous storage areas; - Where refueling away from the dedicated refueling station is required, a mobile refueling unit must be used. Appropriate ground protection such as drip trays must be used; - An appropriately sized spill kit kept onsite relevant to the scale of the activity/s involving the use of hazardous substance must be available at all times; - The responsible operator must have the required training to make use of the spill kit in emergency situations; 	
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<ul style="list-style-type: none"> - An appropriate number of spill kits must be available and must be located in all areas where activities are being undertaken; - In the event of a spill, contaminated soil must be collected in containers and stored in a central location and disposed of according to the National Environmental Management Waste Act 59 of 2008. Refer to Section 5.7 for procedures concerning storm and waste water management and 5.8 for solid and hazardous waste management. 						
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5.18 Workshop, equipment maintenance and storage

<p>Impact management outcome: Soil, surface water and groundwater contamination is minimised.</p>						
Impact Management Actions		Implementation			Monitoring	
<ul style="list-style-type: none"> - Where possible and practical all maintenance of vehicles and equipment must take place in the workshop area; - During servicing of vehicles or equipment, especially where emergency repairs are effected outside the workshop area, a suitable drip tray must be used to prevent spills onto the soil. The relevant local authority must be made aware of a fire as soon as it starts; - Leaking equipment must be repaired immediately or be removed from site to facilitate repair; - Workshop areas must be monitored for oil and fuel spills; - Appropriately sized spill kit kept onsite relevant to the scale of the activity taking place must be available; - The workshop area must have a bunded concrete slab that is sloped to facilitate runoff into a collection sump or suitable oil 	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance

<p>/ water separator where maintenance work on vehicles and equipment can be performed;</p> <ul style="list-style-type: none"> - Water drainage from the workshop must be contained and managed in accordance Section 5.7: storm and waste water management. 						
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5.19 Batching plants

<p>Impact management outcome: Minimise spillages and contamination of soil, surface water and groundwater.</p>						
<p>Impact Management Actions</p>			<p>Monitoring</p>			
<p></p>	<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>	<p>Frequency</p>	<p>Evidence of compliance</p>
<ul style="list-style-type: none"> - Concrete mixing must be carried out on an impermeable surface; - Batching plants areas must be fitted with a containment facility for the collection of cement laden water. - Dirty water from the batching plant must be contained to prevent soil and groundwater contamination - Bagged cement must be stored in an appropriate facility and at least 10 m away from any water courses, gullies and drains; - A washout facility must be provided for washing of concrete associated equipment. Water used for washing must be restricted; - Hardened concrete from the washout facility or concrete mixer can either be reused or disposed of at an appropriate licenced disposal facility; - Empty cement bags must be secured with adequate binding material if these will be temporarily stored on site; 						

<ul style="list-style-type: none"> - Sand and aggregates containing cement must be kept damp to prevent the generation of dust (Refer to Section 5.20: Dust emissions) - Any excess sand, stone and cement must be removed or reused from site on completion of construction period and disposed at a registered disposal facility; - Temporary fencing must be erected around batching plants in accordance with Section 5.5: Fencing and gate installation. 			
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5.20 Dust emissions

<p>Impact management outcome: Dust prevention measures are applied to minimise the generation of dust.</p>						
Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Take all reasonable measures to minimise the generation of dust as a result of project development activities to the satisfaction of the ECO; - Removal of vegetation must be avoided until such time as soil stripping is required and similarly exposed surfaces must be re-vegetated or stabilised as soon as is practically possible; - Excavation, handling and transport of erodible materials must be avoided under high wind conditions or when a visible dust plume is present; - During high wind conditions, the ECO must evaluate the situation and make recommendations as to whether dust-damping measures are adequate, or whether working will 						

5.22 Noise

Impact Management outcome: Unnecessary noise is prevented by ensuring that noise from construction activities is mitigated.						
Impact Management Actions			Implementation		Monitoring	
<ul style="list-style-type: none"> - The Contractor must keep noise level within acceptable limits. Restrict the use of sound amplification equipment for communication and emergency only; - All vehicles and machinery must be fitted with appropriate silencing technology and must be properly maintained; - Any complaints received by the Contractor regarding noise must be recorded and communicated. Where possible or applicable, provide transport to and from the site on a daily basis for construction workers; - Develop a Code of Conduct for the construction phase in terms of behaviour of construction staff. Operating hours as determined by the environmental authorisation are adhered to during the development phase. Where not defined, it must be ensured that development activities must still meet the impact management outcome related to noise management. 			Responsible person	Method of implementation	Timeframe for implementation	
			Responsible person	Method of implementation	Timeframe for implementation	Responsible person
			Responsible person	Method of implementation	Timeframe for implementation	Responsible person
			Responsible person	Method of implementation	Timeframe for implementation	Responsible person
			Frequency	Evidence of compliance		

5.23 Fire prevention

Impact management outcome: Prevention of uncontrollable fires.	
Impact Management Actions	Monitoring

Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Designate smoking areas where the fire hazard could be regarded as insignificant; - Firefighting equipment must be available on all vehicles located on site; - The local Fire Protection Agency (FPA) must be informed of construction activities; - Contact numbers for the FPA and emergency services must be communicated in environmental awareness training and displayed at a central location on site; - Two way swop of contact details between ECO and FPA. 					

5.24 Stockpiling and stockpile areas

<p>Impact management outcome: Erosion and sedimentation as a result of stockpiling are reduced.</p>					
Implementation			Monitoring		
Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - All material that is excavated during the project development phase (either during piling (if required) or earthworks) must be stored appropriately on site in order to minimise impacts to watercourses, watercourses and water bodies; - All stockpiled material must be maintained and kept clear of weeds and alien vegetation growth by undertaking regular weeding and control methods; - Topsoil stockpiles must not exceed 2 m in height; 					

<ul style="list-style-type: none"> - During periods of strong winds and heavy rain, the stockpiles must be covered with appropriate material (e.g. cloth, tarpaulin etc.); - Where possible, sandbags (or similar) must be placed at the bases of the stockpiled material in order to prevent erosion of the material. 						
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5.25 Finalising tower positions

<p>Impact management outcome: No environmental degradation occurs as a result of the survey and pegging operations.</p>						
<p>Impact Management Actions</p>			<p>Implementation</p>		<p>Monitoring</p>	
<ul style="list-style-type: none"> - No vegetation clearing must occur during survey and pegging operations; - No new access roads must be developed to facilitate access for survey and pegging purposes; - Project manager, botanical specialist and contractor to agree on final tower positions based on survey within assessed and approved areas; - The surveyor is to demarcate (peg) access roads/tracks in consultation with ECO. No deviations will be allowed without the prior written consent from the ECO. 	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance

5.26 Excavation and Installation of foundations

<p>Impact management outcome: No environmental degradation occurs as a result of excavation or installation of foundations.</p>
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Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - All excess spoil generated during foundation excavation must be disposed of in an appropriate manner and at a recognised disposal site, if not used for backfilling purposes; - Spoil can however be used for landscaping purposes and must be covered with a layer of 150 mm topsoil for rehabilitation purposes; - Management of equipment for excavation purposes must be undertaken in accordance with Section 5.18: Workshop equipment maintenance and storage; and - Hazardous substances spills from equipment must be managed in accordance with Section 5.17: Hazardous substances. - Batching of cement to be undertaken in accordance with Section 5.19 : Batching plants; - Residual cement must be disposed of in accordance with Section 5.8: Solid and hazardous waste management. 						

5.27 Assembly and erecting towers

<p>Impact management outcome: No environmental degradation occurs as a result of assembly and erecting of towers.</p>						
Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Prior to erection, assembled towers and tower sections must be stored on elevated surface (suggest wooden blocks) to minimise damage to the underlying vegetation; 						

	<ul style="list-style-type: none"> - In sensitive areas, tower assembly must take place off-site or away from sensitive positions; - The crane used for tower assembly must be operated in a manner which minimises impact to the environment; - The number of crane trips to each site must be minimised; - Wheeled cranes must be utilised in preference to tracked cranes; - Consideration must be given to erecting towers by helicopter or by hand where it is warranted to limit the extent of environmental impact; - Access to tower positions to be undertaken in accordance with access requirements in specified in Section 8.4: Access Roads; - Vegetation clearance to be undertaken in accordance with general vegetation clearance requirements specified in Section 8.10: Vegetation clearing; - No levelling at tower sites must be permitted unless approved by the Development Project Manager or Developer Site Supervisor; - Topsoil must be removed separately from subsoil material and stored for later use during rehabilitation of such tower sites; - Topsoil must be stored in heaps not higher than 1m to prevent destruction of the seed bank within the topsoil; - Excavated slopes must be no greater than 1:3, but where this is unavoidable, appropriate measures must be undertaken to stabilise the slopes; - Fly rock from blasting activity must be minimised and any pieces greater than 150 mm falling beyond the Working Area, must be collected and removed; - Only existing disturbed areas are utilised as spoil areas;

<ul style="list-style-type: none"> - Drainage is provided to control groundwater exit gradient with the spill areas such that migration of fines is kept to a minimum; - Surface water runoff is appropriately channeled through or around spoil areas; - During backfilling operations, care must be taken not to dump the topsoil at the bottom of the foundation and then put spoil on top of that; - The surface of the spoil is appropriately rehabilitated in accordance with the requirements specified in Section 5.29: Landscaping and rehabilitation; - The retained topsoil must be spread evenly over areas to be rehabilitated and suitably compacted to effect re-vegetation of such areas to prevent erosion as soon as construction activities on the site is complete. Spreading of topsoil must not be undertaken at the beginning of the dry season. 						
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5.28 Stringing

Impact management outcome: No environmental degradation occurs as a result of stringing.

Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Where possible, previously disturbed areas must be used for the siting of winch and tensioner stations. In all other instances, 						

<p>the siting of the winch and tensioner must avoid Access restricted areas and other sensitive areas;</p> <ul style="list-style-type: none"> - The winch and tensioner station must be equipped with drip trays in order to contain any fuel, hydraulic fuel or oil spills and leaks; - Refueling of the winch and tensioner stations must be undertaken in accordance with Section 5.17: Hazardous substances; - In the case of the development of overhead transmission and distribution infrastructure, a one metre "trace-line" may be cut through the vegetation for stringing purposes only and no vehicle access must be cleared along "trace-lines". <p>Vegetation clearing must be undertaken by hand, using chainsaws and hand held implements, with vegetation being cut off at ground level. No tracked or wheeled mechanised equipment must be used;</p> <ul style="list-style-type: none"> - Alternative methods of stringing which limit impact to the environment must always be considered e.g. by hand or by using a helicopter; - Where the stringing operation crosses a public or private road or railway line, the necessary scaffolding/ protection measures must be installed to facilitate access. If, for any reason, such access has to be closed for any period(s) during development, the persons affected must be given reasonable notice, in writing; - No services (electrical distribution lines, telephone lines, roads, railways lines, pipelines fences etc.) must be damaged because of stringing operations. Where disruption to services is unavoidable, persons affected must be given reasonable notice, in writing; 						
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<ul style="list-style-type: none"> - Where stringing operations cross cultivated land, damage to crops is restricted to the minimum required to conduct stringing operations, and reasonable notice (10 work days minimum), in writing, must be provided to the landowner; - Necessary scaffolding protection measures must be installed to prevent damage to the structures supporting certain high value agricultural areas such as vineyards, orchards, nurseries. 					
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5.29 Socio-economic

<p>Impact management outcome: Socio-economic development is enhanced.</p>						
<p>Impact Management Actions</p>			<p>Implementation</p>		<p>Monitoring</p>	
<ul style="list-style-type: none"> - Develop and implement communication strategies to facilitate public participation; - Develop and implement a collaborative and constructive approach to conflict resolution as part of the external stakeholder engagement process; - Sustain continuous communication and liaison with neighboring owners and residents - Create work and training opportunities for local stakeholders; and - Where feasible, no workers, with the exception of security personnel, must be permitted to stay over-night on the site. This would reduce the risk to local farmers. 	<p>Responsible person</p>	<p>Method of implementation</p>	<p>Timeframe for implementation</p>	<p>Responsible person</p>	<p>Frequency</p>	<p>Evidence of compliance</p>

5.30 Temporary closure of site

Impact management outcome: Minimise the risk of environmental impact during periods of site closure greater than five days.						
Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - Bunds must be emptied (where applicable) and need to be undertaken in accordance with the impact management actions included in sections 5.17: management of hazardous substances and 5.18 workshop, equipment maintenance and storage; - Hazardous storage areas must be well ventilated; - Fire extinguishers must be serviced and accessible. Service records to be filed and audited at last service; - Emergency and contact details displayed must be displayed; - Security personnel must be briefed and have the facilities to contact or be contacted by relevant management and emergency personnel; - Night hazards such as reflectors, lighting, traffic signage etc. must have been checked; - Fire hazards identified and the local authority must have been notified of any potential threats e.g. large brush stockpiles, fuels etc.; - Structures vulnerable to high winds must be secured; - Wind and dust mitigation must be implemented; - Cement and materials stores must have been secured; - Toilets must have been emptied and secured; - Refuse bins must have been emptied and secured; - Drip trays must have been emptied and secured. 						

5.31 Landscaping and rehabilitation

Impact management outcome: Areas disturbed during the development phase are returned to a state that approximates the original condition.						
Impact Management Actions	Implementation			Monitoring		
	Responsible person	Method of implementation	Timeframe for implementation	Responsible person	Frequency	Evidence of compliance
<ul style="list-style-type: none"> - All areas disturbed by construction activities must be subject to landscaping and rehabilitation; All spoil and waste must be disposed to a registered waste site and certificates of disposal provided; - All slopes must be assessed for contouring, and to contour only when the need is identified in accordance with the Conservation of Agricultural Resources Act, No 43 of 1983 - All slopes must be assessed for terracing, and to terrace only when the need is identified in accordance with the Conservation of Agricultural Resources Act, No 43 of 1983; - Berms that have been created must have a slope of 1:4 and be replanted with indigenous species and grasses that approximates the original condition; - Where new access roads have crossed cultivated farmlands, that lands must be rehabilitated by ripping which must be agreed to by the holder of the EA and the landowners; - Rehabilitation of tower sites and access roads outside of farmland; - Indigenous species must be used for with species and/grasses to where it compliments or approximates the original condition; 						

<ul style="list-style-type: none"> - Stockpiled topsoil must be used for rehabilitation (refer to Section 5.24: Stockpiling and stockpiled areas); - Stockpiled topsoil must be evenly spread so as to facilitate seeding and minimise loss of soil due to erosion; - Before placing topsoil, all visible weeds from the placement area and from the topsoil must be removed; - Subsoil must be ripped before topsoil is placed; - The rehabilitation must be timed so that rehabilitation can take place at the optimal time for vegetation establishment; - Where impacted through construction related activity, all sloped areas must be stabilised to ensure proper rehabilitation is effected and erosion is controlled ; - Sloped areas stabilised using design structures or vegetation as specified in the design to prevent erosion of embankments. The contract design specifications must be adhered to and implemented strictly; - Spoil can be used for backfilling or landscaping as long as it is covered by a minimum of 150 mm of topsoil. - Where required, re-vegetation including hydro-seeding can be enhanced using a vegetation seed mixture as described below. A mixture of seed can be used provided the mixture is carefully selected to ensure the following: <ul style="list-style-type: none"> a) Annual and perennial plants are chosen; b) Pioneer species are included; c) Species chosen must be indigenous to the area with the seeds used coming from the area; d) Root systems must have a binding effect on the soil; e) The final product must not cause an ecological imbalance in the area 						
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6 ACCESS TO THE GENERIC EMPr

Once completed and signed, to allow the public access to the generic EMPr, the holder of the EA must make the EMPr available to the public in accordance with the requirements of regulation 26(h) of the EIA Regulations.

PART B: SECTION 2**7 SITE SPECIFIC INFORMATION AND DECLARATION****7.1 Sub-section 1: contact details and description of the project**

7.1.1 Details of the applicant:

Name of applicant:

Tel No:

Fax No:

Postal Address:

Physical Address:

7.1.2 Details and expertise of the EAP:

Name of applicant:

Tel No:

Fax No:

E-mail address:

Expertise of the EAP (Curriculum Vitae included):

7.1.3 Project name:

7.1.4 Description of the project:

7.1.5 Project location:

NO	FARM NAME(if applicable)	FARM NUMBER(if applicable)	PORTION NAME	PORTION NUMBER	LATITUDE	LONGITUDE

7.1.6 Preliminary technical specification of the overhead transmission and distribution:

- Length
- Tower parameters
 - Number and types of towers
 - Tower spacing (mean and maximum)
 - Tower height (lowest, mean and height)
 - Conductor attachment height (mean)
 - Minimum ground clearance

7.2 Sub-section 2: Development footprint site map

This sub-section must include a map of the site sensitivity overlaid with the preliminary infrastructure layout. The sensitivity map must be prepared from the national web based environmental screening tool, when available for compulsory use at: <https://screening.environment.gov.za/screeningtool>. The sensitivity map shall identify the nature of each sensitive feature e.g. raptor nest, threatened plant species, archaeological site, etc. Sensitivity maps shall identify features both within the planned working area and any known sensitive features in the surrounding landscape. The overhead transmission and distribution profile shall be illustrated at an appropriate resolution to enable fine scale interrogation. It is recommended that <20 km of overhead transmission and distribution length is illustrated per page in A3 landscape format. Where considered appropriate, photographs of sensitive features in the context of tower positions shall be used.

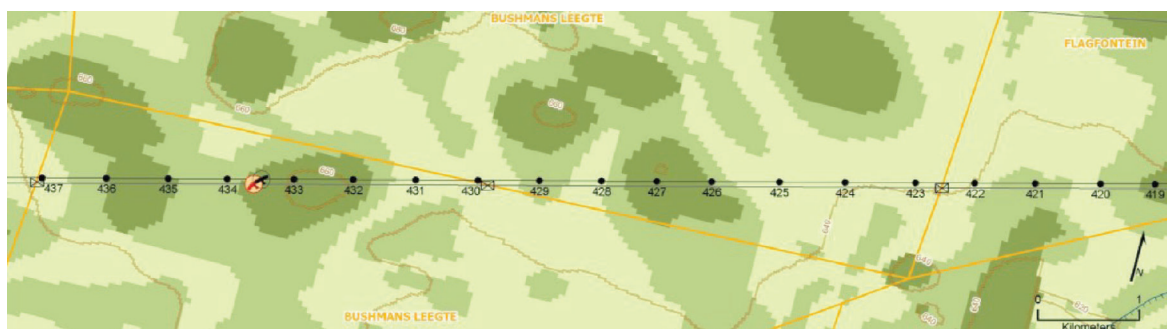


Figure 1: Example of an environmental sensitivity map in the context of a final overhead transmission and distribution profile

7.3 Sub-section 3: Declaration

The proponent/applicant or holder of the EA affirms that he/she will abide and comply with the prescribed impact management outcomes and impact management actions as stipulated in part B: section 1 of the generic EMPr and have the understanding that the impact management outcomes and impact management actions are legally binding. The proponent/applicant or holder of the EA affirms that he/she will provide written notice to the CA 14 days prior to the date on which the activity will commence of commencement of construction to facilitate compliance inspections.

Signature Proponent/applicant/ holder of EA

Date:

7.4 Sub-section 4: amendments to site specific information (Part B; section 2)

Should the EA be transferred to a new holder, Part B: Section 2 must be completed by the new holder and submitted with the application for an amendment of the EA in terms of Regulations 29 or 31 of the EIA Regulations, whichever applies. The information submitted for an amendment to an environmental authorisation will be considered to be incomplete should a signed copy of Part B: Section 2 not be submitted. Once approved, Part B: Section 2 forms part of the EMPr for the development and the EMPr becomes legally binding to the new EA holder.

PART C

8 SITE SPECIFIC ENVIRONMENTAL ATTRIBUTES

If any specific environmental sensitivities/attributes are present on the site which require more specific impact management outcomes and impact management actions, not included in the pre-approved generic EMPr template, to manage impacts, those impact management outcomes and actions must be included in this section. These specific management controls must be referenced spatially, and must include impact management outcomes and impact management actions. The management controls including impact management outcomes and impact management actions must be presented in the format of the pre-approved generic EMPr template. This applies only to additional impact management outcomes and impact management actions that are necessary.

If Part C is applicable to the development as authorised in the EA, it is required to be submitted to the CA together with the BAR or EIAR, for consideration of, and decision on, the application for EA. The information in this section must be prepared by an EAP and the name and expertise of the EAP, including the curriculum vitae are to be included. Once approved, Part C forms part of the EMPr for the site and is legally binding.

This section will **not be required** should the site contain no specific environmental sensitivities or attributes.

APPENDIX 1: METHOD STATEMENTS

To be prepared by the contractor prior to commencement of the activity. The method statements are **not required** to be submitted to the CA.

FINAL ENVIRONMENTAL MANAGEMENT PROGRAMME

DFFE REF NO : 12/12/20/2271

DFFE CONSULTATION REF: 2023-01-0006

**FOR OCHENI SUBSTATION AND ASSOCIATED 21KM 132KV POWER LINE POWERLINE
DEVIATION**

**CONSTRUCTION OF A NEW 20MVA 132/22KV OCHENI SUBSTATION AND ASSOCIATED 21KM
132KV POWER LINE IN MAPHUMULO WITHIN MAPHUMULO LOCAL MUNICIPALITY IN THE
KWAZULU-NATAL PROVINCE.**

**CLIENT: ESKOM DISTRIBUTION
KZWAZULU-NATAL OPERATING UNIT**

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OCTOBER 2023

AUTHORS

This Report was prepared by *Ourbiosphere Environmental (Pty) Ltd*

Musa Netshivhambe

Lead Environmental Consultant and Director

- Certifications:** Certified by the Environmental Assessment Practitioners Association of South Africa (EAPASA)
South African Council for Natural Scientific Professions (SACNASP)
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Bachelor of Environmental Management (2003)
Master of Environmental Sciences (2007)
- University of South Africa (Unisa)*
National Diploma Safety Management (Cum Laude)
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2009 - 2014 Senior Tech Environmental Supervisor (Eskom)
2008 – 2009 Environmental Management Officer (Eskom)
2009 – 2008 Environmental Consulting Manager (Mabesa Consulting)
2006 – 2008 Associate Environmental Consultant (Marsh Environmental Services)
2006 – 2006 Intern, Environmental Consultant)Council for Scientific and Industrial Research (CSIR)
2003 – 2006 Junior Part Time Lecturer, University of Venda (School of Environmental Sciences)

Contents:

Acronyms

DFFE	Department of Forestry, Fisheries and Environment
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EMPr	Environmental Management Programme I & AP Interested and Affected Party

1. INTRODUCTION

1.1. Background

Eskom Holdings SOC Ltd proposes to construct the new 20 MVA 132/22 kV Ocheni Substation and the associated 132kV powerline to be established to the West of Maphumulo. The construction of the new Ocheni Substation and associated powerline will help address the shortage in supply of electricity to the Maphumulo- Kranskop-Glendale area. Eskom Distribution has identified the need for the strengthening of supply to support the growing electrical demand in the Maphumulo area, KwaZulu Natal. The construction of the Ocheni Substation will reduce the pressure on the current network, as the Ocheni Substation will take over the electrification for the Maphumulo area. In doing this, the quality of supply to the Maphumulo area will increase, and the strain on the Glendale and Kranskop Substation will be alleviated. Eskom continually assess the projected demand for electricity through its Integrated Strategic Electricity Planning (ISEP) process. The National Energy Regulator (NER) has a parallel process called the National Integrated Resource Plan (NIRP) that also gives a long-term view of electricity demand and supply in South Africa.

1.2. Objectives of the EMPr

The objective of the Environmental Implementation Plan (EMPr) is to provide measures to mitigate and manage construction, operation and decommissioning activities in order to minimize potential negative impacts on the surrounding environment. This is achieved by;

- Assigning environmental impact mitigation responsibilities to key personnel;
- Developing specific action plans designed to ensure mitigation;
- Managing and auditing the specified action plans; and
- Managing stakeholder involvement.

In order to ensure a holistic approach to the management of environmental impacts during the construction and operation of the proposed substations and powerlines, this EMPr sets out the methods by which proper environmental controls are to be implemented by the Contractor and all other parties involved. The duration over which the contractor's controls shall be in place cover the construction period of the project as well as the limited time after contract completion defined by the General Conditions of Contract, and the project specifications, as the defects notification period (maintenance period).

The specifications outlined in this EMPr are thus applicable to all activities undertaken by the applicant as well as appointed contractors and all persons involved in the execution of the works including sub- contractors, the workforce, suppliers and volunteers for the duration of construction, operation and future maintenance. An Environmental Code of Conduct should also be developed that provides a simplified set of rules that should be adhered to by all persons involved with the project at all times. This is to be displayed at strategic points to ensure constant environmental awareness.

The EMPr has been compiled to provide recommendations and guidelines according to which compliance monitoring can be done during construction of the substations and the powerlines as well as to ensure that all relevant factors are considered to ensure for environmentally responsible development.

This EMPr relevant for this proposed project informs all relevant parties [the Project Coordinator, the Contractor, the Environmental Control Officer (ECO) and all other staff Employed by the contractor at the site] as to their duties in the fulfilment of the legal requirements for the construction and operation of the substations and powerlines with particular reference to the prevention and mitigation of anticipated potential environmental impacts. All parties should note that obligations imposed by the EMPr are legally binding in terms of the environmental authorisation granted by the relevant environmental permitting authority.

The primary objectives of an EMPr are to:

- To describe action plans for achieving the mitigation measures.

- To indicate responsibilities, schedules and staff resources regarding the Implementation of these action plans.
- To describe a monitoring programme, this will enable review of the success of the EMPr and the provision of such information to the relevant decision-makers.
- Appropriate Environmental Management measures and requirements are implemented from the start of the project
- Precautions against damage and claims arising from damage are taken timeously, and
- The completion date of the contract is not delayed due to problems with landowners arising during the course of construction.

Integrated Environmental Management Principles (IEM) have been used as a foundation for the development of this EMPr and must be strictly applied during its implementation.

1.3. Assigned responsibility.

In order for the EMPr to be effectively implemented the following inputs will be required;

Applicant – Eskom Holdings SOC Ltd are responsible for the following:

- Ensuring compliance with the provisions for duty of care and remediation of damage in accordance with section 28 of the National Environmental Management Act (NEMA), (No. 107 of 1998) and its obligations regarding the control of emergency incidents in terms of Section 30 of NEMA.
- Ensuring that the engineer and contractors comply with the approved EMPr.
- Notifying the DFFE of any incident as defined in subsection 30(1)(a) of NEMA.

Project Manager – Engineer is responsible for the following:

- Appointing the appropriately qualified contractor to co-ordinate, supervise and expedite different action plans.
- Avoiding and/or mitigating adverse impacts on the environment by the appropriate design and construction.
- Ensuring adherence to the DFFE conditions of authorization and any other laws and standards relevant to the construction of the facility.
- Ensuring all elements of the work undertaken are properly and competently directed, guided and executed at appointed stages of the project.
- Ensuring that the contractor has a copy of the EMPr and all agreed Method Statements.
- Ensuring the adherence to statutory safety, health, and environment (SHE) standards and ensuring the construction activities comply with the EMPr.
- Ensuring transparency in their operation and environmental management of the site and line corridor.
- Managing the contractor's compliance and ensure documentation management.
- Monitoring the site and line corridor on a daily basis to ensure compliance.

- Overall responsibility and accountability for the site during the construction phase.

Contractors are responsible for the following:

- Complying with all elements of the EMPr.
- Ensuring that stakeholder interest is reported to the ECO.
- Maintaining relevant documentation for review by the ECO.
- Managing and operating their activities with due care and diligence.

ECO (Environmental Control Officer) is responsible for the following:

- Advising the Project Manager and the contractors on environmental matters during the construction phase of the development.
- Advising the project manager on actions or issues impacting on the environment and provide appropriate recommendations to address and rectify these matters.
- Determining the conformance of the site with the EMPr criteria and compliance with the conditions of the EMPr.
- Identification of possible areas of improvement during construction.
- Monitor compliance with the EA.
- Monitoring implementation of the EMPr by the contractor.
- Undertaking ongoing monitoring of the construction site through regular site visits and record key findings. This includes photographic monitoring of the construction site. The frequency of these visits will be determined by the stage of the project.

1.4. Compliance

A copy of the EMPr must be available on site at all times. Compliance with all elements of the EMPr must be reviewed on a daily basis by the site engineer and all responsible parties must sign the acceptance letter in appendix 2. In addition, it must be noted as per the Environment Conservation Act, and the National Environmental Management Act No 107 of 1998 (Section 28) offending parties will be held financially accountable for any pollution or environmental damage.

1.5. Monitoring

The key to a successful EMPr is appropriate monitoring and review to ensure effective functioning of the EMPr and to identify and implement corrective measures in a timely manner. Monitoring for non-compliance must be done on a daily basis (using appendices 3-8) by the contractors under the guidance of the project manager

/ Engineer. An appropriately timed audit report should be compiled by the ECO. All monitoring reports must be completed by the ECO. Paramount to the reporting to the reporting of non-conformance and incidents is that appropriate corrective and preventative action plans are developed and adhered to. Photographic records of all incidents and non-conformances must be retained. All non-compliances and any deviation from the conditions set out in the EMPr must be reported within 14 days of occurrence.

1.6. Summary of the environmental process followed

The IMPACT ASSESSMENT process is a planning tool that assists with the assessment of social and environmental impacts through independent specialist input and public participation. The role of the EAP is to provide independent specialist input, manage the public participation and consolidate all relevant information culminating in the IMPACT ASSESSMENT REPORT and EMPr [Regulation 22 (2)].

The purpose of the IMPACT ASSESSMENT REPORT is to assess environmental impact and illustrate significance according to the extent, intensity and duration, taking into account specialist input and I & AP comment. All of this is done with the intent of making recommendations to reduce or avoid the negative impacts of the proposal. Ultimately a statement on whether or not the project should go ahead is made. Another important function of the IMPACT ASSESSMENT REPORT is the inclusion of the EMPr. The EMPr is a document where the findings of the IMPACT ASSESSMENT REPORT have been translated into measurable actions that must occur during construction and operation in order to mitigate identified environmental impacts. The EMPr is intended as a standalone, public document that becomes legally binding should the IMPACT ASSESSMENT be approved.

1.7. Summary of impacts associated with the proposed project

Below is a summary of anticipated impacts expected at different phases of the project lifecycle as identified in the Impact Assessment Report (IAR) The mitigation measures have been provided in section 10 of this EMPr.

Table 1 : Summary of Impacts

PLANNING AND DESIGN PHASE			
ASPECT	IMPACT	SIGNIFICANCE BEFORE MITIGATION	SIGNIFICANCE AFTER MITIGATION
Policy and legal requirements	Disregard of Environmental statutes leading to construction without environmental authorisation	Very High Negative Impact	Low Negative Impact

Site Establishment	Site Establishment and Demarcation leading to indiscriminate destruction of the environment	Medium Negative Impact	Low Negative Impact
Environmental Awareness	Lack of Environmental Awareness leading to destruction of the environment	Medium Negative Impact	Medium Negative Impact
Policy and legal requirements	Disregard of Environmental statutes leading to construction without environmental authorisation	Very High Negative Impact	Low Negative Impact
CONSTRUCTION PHASE			
ASPECT	IMPACT	SIGNIFICANCE BEFORE MITIGATION	SIGNIFICANCE AFTER MITIGATION
Biodiversity	Destruction of Legally protected species	Medium Negative Impact	Low Negative Impact
	Natural Habitat fragmentation, Habitat transformation	Medium Negative Impact	Low Negative Impact
	Soil Disturbance and Alien and Invader Plant Species proliferation	High Negative Impact	Low Negative Impact
	Degradation of Natural Habitats due to Pollution	Medium Negative Impact	Low Negative Impact
Geology and Soils	Disturbance of surface geology (Excavations)	Medium Negative Impact	Medium Negative Impact
Social	Job creation and injection to the local economy during the construction phase.	Very High Positive Impact	Very High Positive Impact
OPERATIONAL PHASE			
ASPECT	IMPACT	SIGNIFICANCE BEFORE MITIGATION	SIGNIFICANCE AFTER MITIGATION
	Increased Generation of Waste and increased need for waste Removal Services	Very High Impact	Medium Impact
Health, Safety and Security	Health and Safety impacts on employees	Medium Negative Impact	Low Negative Impact
Traffic	Traffic Volume Increase	Medium Negative Impact	Low Negative Impact
Social	Job creation as a result of construction and operation of the proposed Upgrade of informal settlement of informal settlement	Very High Positive Impact	Very High Positive Impact

1.8. LEGAL REQUIREMENTS

1.8.1. General Requirements

This section has attempted to identify relevant laws and regulations that are applicable to the proposed project. The purpose of this is to provide the applicant with understanding of how the different sections of legislations define and integrate the different spheres of the environment. Understanding these will ensure long term and continued alignment with their principals. The applicant should ensure that legislation applicable to the development is kept up to date.

The Contractor should note that obligations imposed by the EMPr are legally binding in terms of environmental statutory legislation. Further, the EMPr is enforceable through additional conditions to the general conditions of contract that pertain to this project. In the event that any rights and obligations contained in this document contradict those specified in the standard or project specifications then the latter shall prevail. It is expected that the Contractor is conversant with all legislation pertaining to the environment, including provincial and local government ordinances, which may be applicable to the contract. All prospective contractors must sign the declaration of acceptance of the EMPr, included at the end of this document.

1.9. Layout of the EMPr

1.10. This EMPr is site and impact specific. Sections 1 and 2 are introductory sections whilst section 3 forms the bulk of the report. Section 3 has been designed so that each element is investigated for the different phases of development i.e.: construction, operation and decommissioning. Where possible a photographic illustration has been included to assist with implementation of the EMPr. The layout of this EMPr allows for the users to locate and use relevant sections as the need arises quickly and efficiently. E.g.: In the event of a diesel spill on site the contractor can quickly locate and apply section F of the EMPr.

ACT, ORDINANCE, BY-LAW	SECTION	DESCRIPTION	RELEVANCE TO THIS PROJECT
National Environmental Management Act (No 107 of 1998) as amended December 2014	24 and 24D	List of activities requiring Authorisation before commencing	Environmental approvals and conditions are made in terms of this act. (refer to Environmental Authorisation) If any additional activities listed are planned, then permission to commence needs to be applied for.
	S 28(1)	Duty of care responsibilities	Responsible for the duty of care of natural assets
National Environmental Management: Waste Act (No 59 of 2008)	Chapter 4t3 and 5	Regulates waste management in order to protect health and the environment.	Calls for reduction, re-use, recycling and recovery of waste, sets out requirements for storage, collection and transportation of waste
National Water Act (No 36 of 1998)	S 3(3)	Regulation of flow and control of all water in South Africa	Ensure usage of water remains within limits
	S 19	Pollution prevention	Prevent pollution of water sources e.g. via storm-water

Conservation of Agricultural Resources Act (No 43 of 1983)	Reg 15	Declaration of weeds and invader plants	Listed invader plants
	Reg 15	Combating invader plants	Alien vegetation must be removed from premises.
Environment Conservation Act (No 73 of 1989)	Reg	Noise regulations	Legislation that governs noise limits
Occupational Health and Safety Act (No 85 of 1993)	All	Primarily aimed at ensuring the health and safety of persons at work and visitors. Specifies the basic systems that need to be in place and measures that need to be taken.	The staff and visitors to site need to be protected from health and safety risks.
	S 9(1)	Every Employer must conduct his undertaking so as to ensure that persons other than his Employees who may be directly affected by his	The development must minimise the hazards to both staff working on the site and visitors.

2.0. PROPOSAL

2.1. Site Description

Figure 1: Aerial photograph showing the location of the preferred Ocheni Substation site (Image source: Google Earth).

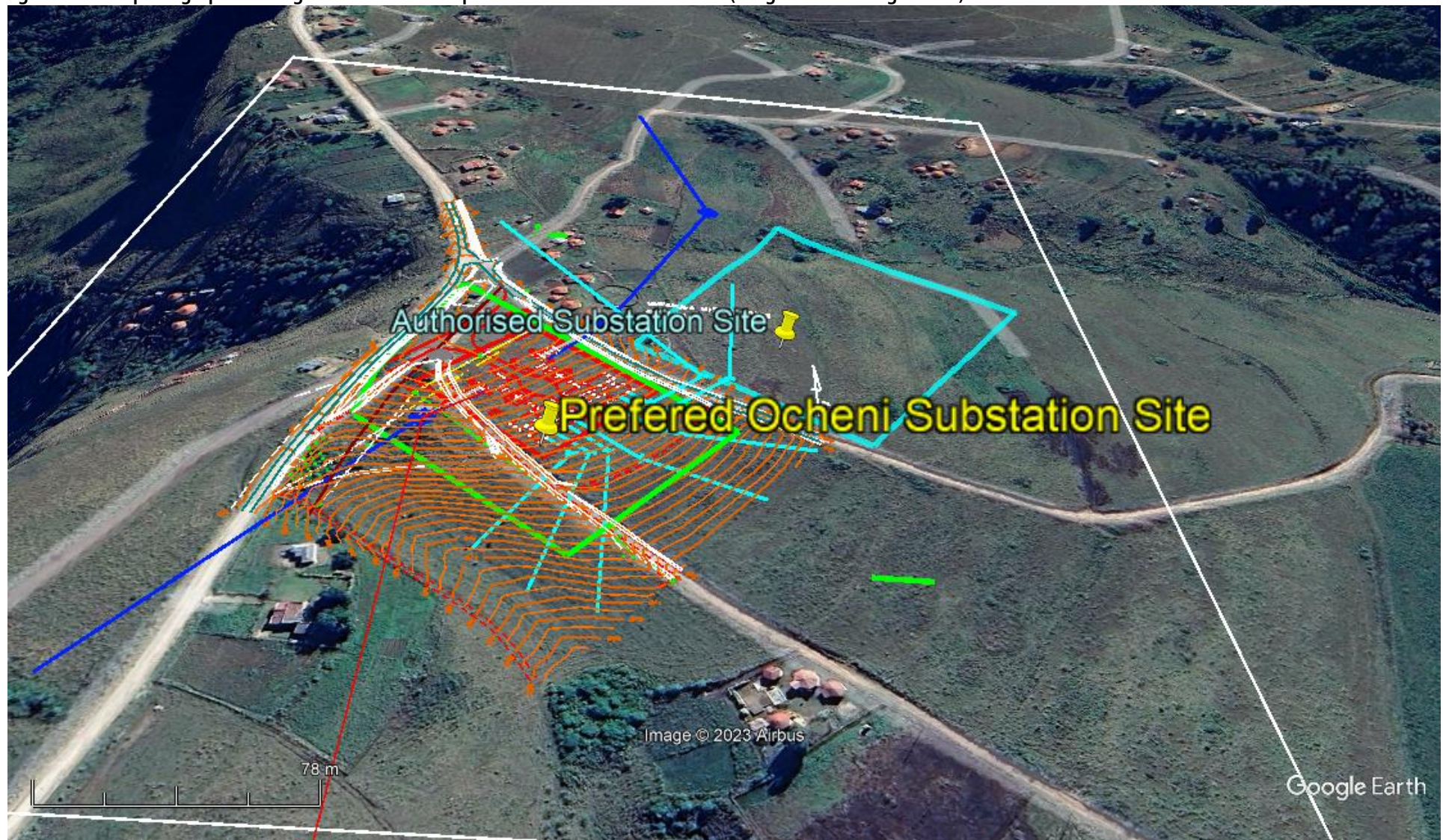
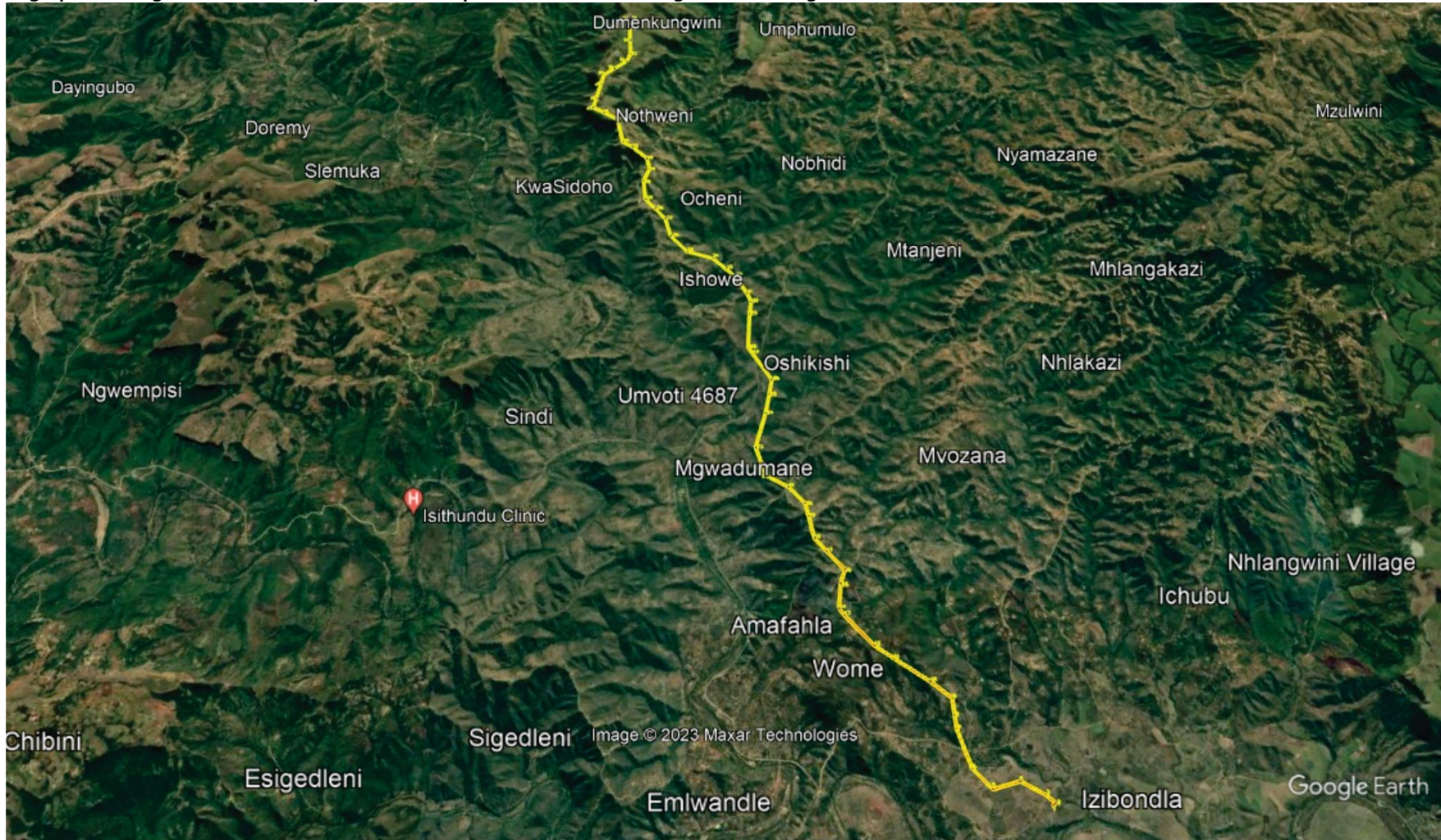


Figure 2: Aerial photograph showing the route of the preferred 132kV powerline corridor (Image source: Google Earth).



Legend

— Proposed Powerline



2.2. Procedures for environmental related emergencies and remediation

The purpose of this section is to anticipate a potential impact resulting in an environmental crisis which may occur due to unforeseen circumstances. Such events cannot be predicted and as such a procedure has been prepared. This procedure must be followed in the event of such an incident to prevent degradation to the surrounding environment and to contribute to the safety of the workers.

2.3. Potential environmental incidences / emergencies

The National Environmental Management Act (NEMA) defines an 'incident' as an unexpected sudden occurrence, including a major emission, fire or explosion leading to serious danger to the public or potentially serious pollution of or detriment to the **environment**, whether immediate or delayed. The following hazards have the potential to occur within the proposed site:

Time Frames

Phase 1 – Pre-construction activities (i.e. setting up site camp etc)

Phase 2 – Site camp establishment (i.e. site camp establishment, erection of temporary waste disposal facilities and ablutions, training programme for construction workers, creation of temporary stormwater facilities etc)

Phase 3 – Construction activities (i.e. construction of the substation and powerlines etc)

Phase 4 – Post Construction (i.e. removal of waste disposal facilities, removal of site camp, etc) Phase 5 – Rehabilitation (removal of alien vegetation around the substation and tower sites etc) Phase 6 – Operational phase (i.e. substation operational)

Construction impacts				
Nature of impact (potential)	Mitigation measure	Nature of impact (potential)	Mitigation measure	Nature of impact (potential)
Interruption or damage to services (electricity, water etc).	This Impact can be fully mitigated against by identifying services prior to construction and avoiding damage to existing services. Alternatively, if service disruption is unavoidable, the parties will be affected must be notified in advance.	Phase 3-Phase 6	Eskom/Contractor	The contractor / designated representative must monitor the site on a regular basis.
Onsite erosion of the drainage lines and link roads.	The exposure duration of exposed soil must be kept to a minimum and rehabilitation must be initiated as soon as construction is completed. The contractor must stabilise cleared areas to prevent and control erosion and/or sedimentation. Only vegetation that is required to be removed for the construction of the substation/tower sites/powerline corridor must be removed in a phased and controlled manner.	Phase 1- Phase 5	Contractor / ECO	The contractor / designated representative must monitor the site on a regular basis. Monthly audits must be conducted by an ECO.

Erosion of stockpiled material (stone, sand, and gravel).	Material must be stocked in such a way that it cannot fall or cause injury or damage to properties or the natural environment. Stockpiles must not exceed 2m in height and must be covered to prevent erosion caused by exposure to heavy wind or rain. Alternatively, low walls or berms must be constructed around the stockpiles.	Phase 3	Contractor / ECO	The contractor / designated representative must monitor the site on a regular basis. Monthly audits must be conducted by an independent ECO.
The onsite erosion of exposed soil before rehabilitation is completed.	The duration of exposed soil must be kept to a minimum and rehabilitation must be initiated as soon as construction is completed. The contractor must stabilise cleared areas to prevent and control erosion and/or sedimentation. Only vegetation that is required to be removed for the reconstruction of the substation/tower sites/ powerline corridor must be removed in a phased and controlled manner.	Phase 1-Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily during phase 1 through phase 4. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.
Poor stormwater management during construction can lead to erosion and loss of soil.	Stormwater control must be instituted during construction of the substation site; however this is a temporary impact of the proposal. A drainage system must be established for the construction camp. The drainage system must be regularly checked to ensure the unobstructed flow of water. The contractor must ensure that all construction methods adopted on site do not cause, or precipitate, soil erosion and must take adequate steps to ensure that the amount of stormwater is not significantly increased and can be appropriately DFFEl with. The designated responsible person on site (usually the contractor) must ensure that no construction work takes place before adequate stormwater control measures are in place.	Phase 1 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.

Generation of dust caused by construction vehicles moving over exposed soil.	Dust control must be implemented throughout the construction phase through the use of a water cart.	Phase 1 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be
				monitored on a monthly basis by the independent ECO.
Impacts on watercourses, water bodies or drainage lines.	Environmentally sensitive areas must be avoided where possible. The preferred substation site is located within a grassland biome and is not situated next to any watercourses or water bodies. The topography of site is generally flat. If the construction process is managed carefully and the sites graded to prevent channelled runoff, then the construction of the proposed substation is not expected to impact upon the nearby sensitive areas. No towers for the preferred powerline servitude may be constructed within a wetland area or riparian habitat. Access roads will need to be constructed and at some point will intersect with a wetland and riparian habitat. The wetland delineation assessment must be adhered to in respect to the construction of access roads through any wetland or riparian habitat and has been attached in Appendix D of the Assessment. No dumping will be allowed into any watercourse, drainage lines or water bodies. Site staff shall not be permitted to use the stream or natural water source adjacent to the construction of the tower sites for the purposes of bathing, washing of clothing or for any construction related activities. Municipal water (or another source approved by the	Phase 2 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.

	Engineer) should instead be used for all activities such as washing of equipment, dust suppression, concrete mixing, compacting etc. This impact can be mitigated against as long as the EMPr monitored, followed and enforced.			
Emissions generated from	Emissions generated from construction	Phase 1 – Phase 4	Contractor / Designated	The contractor / designated
construction vehicles and machinery.	vehicles will be minimal and it is not expected to significantly affect surrounding communities. This impact is only relevant during the construction phase. The construction vehicles used must be regularly maintained to ensure that excessive emissions are controlled.		Representative (i.e. Resident Engineer) and ECO	representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.
Noise generated by construction workers, machinery and construction vehicles disturbing surrounding residents.	Excessive noise must be controlled on site. Workers will be trained regarding noise on site and construction hours will be kept to working hours (07h00 to 17h00). The construction will need to be monitored by an ECO who will ensure compliance with the construction EMPr. All precautions must be taken to ensure that noise generation is kept to a minimum. If excessive noise is expected during certain stages of the construction, nearby residents must be notified prior to the event.	Phase 1 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.
Degradation and Contamination of watercourses, water bodies, wetlands or drainage lines. and the surrounding environment by cement and other hazardous materials.	Site workers will be trained in avoiding impacts in areas of potential concern. The preferred substation site has a gently slope from West to East which increases the potential of spills to contaminated a greater area, therefore the Contractor must submit a method statement to the RE for approval, detailing the location of the temporary bypasses, spill prevention measures, erosion and sedimentation control measures, surface water flow	Phase 1 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.

	diversion, reinstatement, etc. Hazardous material storage areas must not be within 32m from a stream/drainage line or local residential homesteads. Cement mixing must take place on a hard surface or on cement mixing trays. Cement mixing must not be permitted to occur where run off can enter storm water drains, watercourses, water bodies, wetlands or drainage lines. In addition cement and			
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	fuels must be stored within bunded and hard surfaced areas. If the creation of a permanent bunded area is not feasible, these materials must be stored on drip trays capable of holding at least 110% of the spilled volume.			
Improper disposal of toilet waste from chemical toilets resulting in contamination of surrounding drainage lines and stream.	The chemical toilets to be provided must be from a registered company and all sewage must be disposed of at an appropriate facility. Safe disposal certificates must be kept on record.	Phase 1 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.
Damage and removal of existing vegetation.	Workers must be educated on minimizing damage to vegetation during construction of the substation and tower sites. The substation site will require an area of approximately 110mX110m of land and thus vegetation within this area will need to be removed. The vegetation on the preferred site consists of disturbed grassland that has been used by the local community to graze cattle and has been cultivated in the past. The specialist has noted that the preferred substation site is situated in a grassland biome, and that very few of the grassland areas are still pure grasslands as many of the grassland land areas	Phase 1 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.

	<p>been transformed through cultivation and overgrazing or through the infestation of alien invader plants (Appendix D). Only the exact footprint of the substation should be cleared thus keeping the amount of vegetation cleared to a minimum. The proposed construction of the preferred powerline servitude is situated in an area that is created up from three different vegetation biomes. The majority of the area is made up of KwaZulu-Natal Coastal Belt, with areas of Scrap Forest and Eastern Valley</p>		
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	<p>Bushveld present throughout the area . The specialist has cited in the vegetation assessment (Appendix D) that the position of the towers for the powerline must not be positioned in the Scrap Forest. The Scrap Forest vegetation is present on the steep slopes of the hills throughout the region, access to these sites is near impossible and the damage to the habitat will be significant if tower sites and the powerline servitude is cut through it. Therefore any tower sites that fall within an area of Scrap Forest must be relocated to an area that is more accessible and will not impact on the Scrap Forest. The spanning of powerlines over areas of Scrap Forest should be avoided where possible, if the spanning of powerlines over the Scrap Forest has to be conducted then it should be conducted using a method that does not require the cutting of a servitude through the Scrap Forest as this will not be supported . Eskom should using a helicopter to conduct this or another way to get the drag line over the tree canopies.</p> <p>The removal of vegetation for the proposed towers and powerlines must be conducted by a bush clearing specialist to insure that the damage to vegetation is minimized. The area of land required to be cleared for each tower site is 20m X 20m, and the powerline servitude will require a 4m wide servitude over flat ground and 2m wide servitude over valleys. Rehabilitation of disturbed areas must be undertaken on completion of the project. Indiscriminate clearing of vegetation must be avoided and only</p>			
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	those areas directly affecting the construction site may be removed. Where possible removal of indigenous and protected trees must be avoided, permits must be obtained from the DAFF for the removal of these trees. All activities must be managed through a site specific EMPr (Appendix F).			
Encroachment of alien vegetation into disturbed areas.	The establishment or spread of alien plant species on the substation and corridor route and tower sites must be monitored and the correct removal and disposal of alien plant species must be followed. Rehabilitation of substation and tower sites must commence as soon as construction activities are completed in those areas.	Phase 5 – Phase 6	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	It is the responsibility of the Eskom to ensure that open spaces are maintained around the Substation and towers sites and corridor routes. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.
Poaching/Hunting/Fishing of wildlife by construction workers.	Hunting or poaching will be prohibited.	Phase 1 – Phase 5	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.
Littering around the site.	Littering must not be permitted on the site and general housekeeping must be enforced. General waste bins must be readily available for litter disposal and general housekeeping.	Phase 1 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.
Improper storage of waste resulting in possible contamination of the surrounding environment.	Waste must be stored in the bins within the waste collection area in the Construction Camp and must not be allowed to blow around the site, be accessible by animals, or be placed in piles adjacent the skips / bins and must be disposed of at an appropriate land fill site.	Phase 1 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.

Risk of spills from construction equipment (oils, fuels, cement etc) contaminating soil and	Any hazardous or dangerous goods utilized during the construction phase must be stored on an impermeable surface that is bunded, fenced, locked	Phase 2 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be
watercourse.	and covered. A spillkit must be clearly marked and visible when utilizing hazardous or dangerous materials to ensure the repaid containment of the spill. Spillkits must be regularly checked and maintained.			monitored on a monthly basis by the independent ECO.
Improper storage of hazardous waste i.e.: used oils from vehicles, old cement bags.	Hazardous waste must be stored on a hard surface within a bunded area and must not be allowed to enter watercourses, water bodies, wetlands or drainage lines and the surrounding environment.	Phase 1 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.
Improper disposal of rubble i.e.: burying or neglecting building rubble resulting in direct mechanical damage to surrounding vegetation and untidiness of the site.	All excess material and rubble must be removed from the site so not to restrict the rehabilitation process. All excess material and rubble must go to an approved, designated landfill and a safe disposal certificate must be obtained.	Phase 1 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.
Noise generated by construction workers, machinery and construction vehicles disturbing surrounding residents.	Excessive noise must be controlled on site. Workers will be trained regarding noise on site and construction hours will be kept to working hours (07h00 to 17h00). The construction will need to be monitored by an ECO who will ensure compliance with the construction EMPr. All precautions must be taken to ensure that noise generation is kept to a minimum. If excessive noise is expected during certain stages of the construction, nearby residents must be notified prior to the event.	Phase 1 – Phase 5	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.

Lack of toilet facilities resulting in unsanitary conditions.	Adequate toilet facilities must be provided for all staff members as standard construction practice. Safe disposal certificates must be kept on record.	Phase 1 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.
Speeding construction vehicles resulting in safety issues for surrounding residents.	Speeding will be prohibited. Construction vehicles must travel slowly along the access roads to the substation site and tower sites and adhere to all traffic laws.	Phase 1 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be
	Construction vehicles must not be permitted to park for extended periods of time on the roads or on road verges where they can block the roads and accesses. Flagmen must be kept in attendance to control traffic where road disruption is most likely.			monitored on a monthly basis by the independent ECO.
Sourcing of raw materials i.e.: (gravel, stone, sand, cement and water) from unsustainable sources resulting in illegal sand winning and mining operations causing significant environmental damage.	All materials must be obtained from a registered and sustainable source and all delivery notes and slips must be made available to the Environmental Control Officer if requested e.g. mined material such as stone must only be obtained from permitted quarries.	Phase 1 – Phase 4	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.
Increase waste to landfill site.	Recycling should be undertaken where possible to limit waste added to the Landfill site.	Phase 1 – Phase 5	Contractor / Designated Representative (i.e. Resident Engineer) and ECO	The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.
Loss of land due to additional lines requiring new servitudes	The land usage required for the proposed corridor servitude will be approximately 343.8km ² (19.1km X 18m).	This cannot be mitigated against.		

<p>Loss of vegetation and trees.</p>	<p>Only a few isolated shrubs and small indigenous trees (i.e. Sickle Bush, Sweet Thorn etc.) will need to be removed from the preferred substation site, as well as the removal of grasses from the site. The specialist has cited in the vegetation assessment (Appendix D) that the position of the towers for the powerline must not be positioned in the Scrap Forest. The Scrap Forest vegetation is present on the steep slopes of the hills throughout the region, access to these sites is near impossible and the damage to the habitat will be significant if tower sites and the powerline servitude is cut through it. Therefore any tower sites that</p>	<p>Phase 1 – Phase 4</p>	<p>Eskom/ Contractor / Designated Representative (i.e. Resident Engineer) and ECO</p>	<p>The contractor / designated representative must monitor the site daily / weekly. Compliance against the EMPr must be monitored on a monthly basis by the independent ECO.</p>
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	<p>fall within an area of Scrap Forest must be relocated to an area that is more accessible and will not impact on the Scrap Forest. The spanning of powerlines over areas of Scrap Forest should be avoided where possible, if the spanning of powerlines over the Scrap Forest has to be conducted then it should be conducted using a method that does not require the cutting of a servitude through the Scrap Forest as this will not be supported. Eskom should use a helicopter to conduct this or another way to get the drag line over the tree canopies (Appendix D).</p> <p>The removal of vegetation for the proposed towers and powerlines must be conducted by a bush clearing specialist to ensure that the damage to vegetation is minimized. The area of land required to be cleared for each tower site is 20m X 20m, and the powerline servitude will require a 4m wide servitude over flat ground and 2m wide servitude over valleys. Rehabilitation of disturbed areas must be undertaken on completion of the project. Indiscriminate clearing of vegetation must be avoided and only those areas directly affecting the construction site may be removed. Where possible removal of indigenous and protected trees must be avoided, permits must be obtained from the DAFF for the removal of these trees.</p>			
<p>Loss of open space.</p>	<p>Only limited earthworks will be required for the creation of the platform for preferred substation site as the site is fairly level. If areas of potential instability are identified before they become an erosion hazard and stabilized, it is not anticipated that earthworks will cause</p>	<p>This cannot be mitigated against.</p>		

	<p>significant impacts. During construction unchannelled flow should be controlled to avoid soil erosion. Where large areas of soil are left exposed, rows of straw / hay or bundles of cut vegetation should be dug into the soil in contours to slow surface wash and capture eroded soil. The spacing between rows will be dependent on the slope. The site should be contoured after construction has been completed. A stormwater management plan must be developed once one of the sites is approved by DFFE to manage stormwater runoff during construction and operation of the substation. Provided construction is well planned and the area immediately surrounding the substation rehabilitated these impacts can be fully mitigated provided the EMP is monitored, followed and enforced.</p>			
<p>Positive impact - Potential temporary employment during the construction phase.</p>	<p>Positive impact not requiring mitigation.</p>			
<p>Operational Impacts</p>		<p>Mitigation Measures</p>		
<p>Increase in hard surfaces leading to increased stormwater runoff.</p>	<p>The proposal is not expected to result in significant stormwater runoff. The substation site will mainly be gravelled allowing for infiltration of rainwater, thus preventing sheet runoff. The access road will also be gravelled, ensuring infiltration of rainwater into the subsoil. The extension should go directly to the proposed site and should be kept as narrow as possible. All vehicles accessing the site must travel along this designated road and no other access roads should be created. A designated turning area should be created so as to limit the impact of vehicles on the</p>	<p>Phase 6</p>	<p>Eskom/ ECO</p>	<p>The contractor / designated representative must monitor the site on a regular basis. Compliance against the EMP must be monitored by the independent ECO.</p>

surrounding environment. The tower sites

	will rehabilitated and areas that were disturbed will be rehabilitated and reseeded thus restoring the area around the tower sites to a grasslands habitat, which will allow for infiltration of rainwater thus preventing sheet runoff. The access roads to the various tower sites will be rehabilitated to allow the natural vegetation to re-establish its-self ensuring infiltration of rainwater into the subsoil.			
Risk of fire and explosion; Unauthorized access - third party interference (copper cable theft).	Fire can result from catastrophic failure of any item of electrical equipment, particularly those filled with mineral insulating oil, e.g. transformers. However, information provided by Eskom indicates that this is a very rare occurrence and would be contained within the bund wall area of the transformer. It is considered to be highly unlikely that a fire would be initiated by a flashover of the bushing except in the case of a direct lightning strike. Even internal faults are unlikely to cause a fire unless they cause the porcelain bushing to fracture and spew oil. Oil leaks would be contained by the bund wall entrapment area and sump arrangement which has been specially designed for that purpose. A standard "brick type" control room will be constructed inside the boundary of the substation yard for the protection of the line and substation equipment, as per Eskom's standard control room layout. In terms of lightening protection for the substation, overhead screening will be provided by protective cones afforded by A-frame peak and lightening/lighting mast peaks. Equipment within the substation yard will be shielded by the steelwork	Phase 6	Eskom/ Internal ECO	The contractor / designated representative must monitor the site on a regular basis.

	<p>(columns, beams and A-frames) structures and overhead steel wires. All steel work will be connected to an earthmat to prevent potentially high voltages from arising. The powerline towers will be protected by earthwires to dissipate lightning strikes and prevent lightning discharge to nearby objects. In addition to the towers being earthed, in terms of line design and construction, if a tower happened to fall over, the power would automatically be switched off in approximately 30 milli-seconds.</p> <p>In terms of risks of fire and/or explosion due to copper cable theft, Eskom have stated that the only cables to be installed are the high voltage 132kV cables required to feed the substation. It is extremely rare that 132kV cables would be stolen as these cables are difficult to cut through and are buried deeper than the medium voltage 11kV cables. The majority of cables that are stolen are the medium voltage 11kV cables. Eskom have also indicated that if any section of the high voltage cable is cut into, this will trigger the cable protection and an alarm will be signaled at Eskom control centre. The substation will be fenced and must be locked at all times.</p>			
Spillage of oil from transformers during operations.	Oil leaks will be contained by the catchment bund arrangement installed around each transformer that is connected via a concrete pipe manifold system to a separate concrete oil containment tank (oil holding dam) positioned towards the outer extremity of the substation yard. Transformer plinths are surrounded by bund walls and potential spillages are drained into	Phase 6	Eskom/ Internal ECO	The contractor / designated representative must monitor the site on a regular basis.

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	sumps.			
Increase in electricity supply to the Mt Elias, Maphumulo area.	Positive impact not requiring mitigation.			
Risk to neighbours- Exposure to electromagnetic fields.	Information provided by Eskom stated that the electromagnetic field values are negligible at 15m from the source of the electromagnetic field, after which exposure levels are significantly reduced. Given that the nearest neighbours are approximately 150m away, there should be very limited risk.	Phase 6	Eskom/ Internal ECO	The contractor / designated representative must monitor the site on a regular basis.
Risk to neighbours- Risk of electrocution.	The substation site must be fenced and gated such that access will be restricted. The towers will be fitted with anti personnel devises which will stop individuals from climbing on them. Children should be warned not to play near electrical substations, not to fly kites in the vicinity of powerlines, not to climb up pylons or over in to the substation. Safety warning signs are placed around the perimeter of the fenced areas. The perimeter fences must be kept clear of equipment or materials to prevent people from illegally accessing the substation. Ensure that access is restricted at all times and that damaged fencing is repaired immediately.	Phase 6	Eskom/ Internal ECO	The contractor / designated representative must monitor the site on a regular basis.

Potential for impact on ground/ surface water resources as a result of oil spills from the transformers.	Oil leaks will be contained by the catchment bund arrangement installed around each transformer that is connected via a concrete pipe manifold system to a separate concrete oil containment tank (oil holding dam) positioned towards the outer extremity of the substation yard.	Phase 6	Eskom/ Internal ECO	The contractor / designated representative must monitor the site on a regular basis.
Aesthetic or visual impacts arising from the substation.	The preferred substation site is situated on the top of the escarpment and the site is approximately 3,5km from the R74. The site is positioned on the edge of the	This cannot be mitigated against.		

	local housing boundary and such should not significantly impact the aesthetics of the area. However, it is recommended that a vegetation buffer be considered along the D1528 and neighboring properties.			
Potential impact on property values.	The preferred substation site is situated in an area with little or no infrastructure in the surrounding area. There are only rural homesteads located in the surrounding area and therefore the proposed substation will not be significantly impact the aesthetics of the area. However, it is recommended that a vegetation buffer be considered along the D1528 and neighboring properties. The substation sites and corridors have been chosen because of the level topography and to limit the impact on the environment. Thus, while the impact on property values cannot be mitigated against, it is not expected that the presence of the substation will significantly impact on property values.	This cannot be mitigated against.		

<p>Impacts on ecology (fauna and flora).</p>	<p>There will be a loss of grassland and indigenous trees as a result of the proposal. Certain insects and small mammals may frequent the site and depending on their mobility will be able to move once disturbed. Negative interactions between wildlife and electricity structures take many forms, but two common problems in southern Africa are electrocution of birds and birds colliding with power lines. In general, large, heavy flying birds are more vulnerable to collision with over-head powerlines, while perching Raptors are more vulnerable to electrocution (EWT; 2011). Electrocution is possible on 132kV lines, depending on the exact pole</p>	<p>Phase 6</p>	<p>Eskom/ Internal ECO</p>	<p>The contractor / designated representative must monitor the site on a regular basis.</p>
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	<p>structure used. For this study, it is assumed that a bird friendly structure will be used, and the detailed impact assessment below, is based on this assumption. Therefore, the impact of electrocution is likely to be of low significance for the proposed power line (EWT; 2011).</p> <p>The specialist has cited collisions as the biggest single threat posed by transmission lines to birds for this development. Most heavily impacted upon are bustards, storks, cranes and various species of water birds. These species are mostly heavy-bodied birds with limited manoeuvrability, which makes it difficult for them to take the necessary evasive action to avoid colliding with power lines. Collision with the proposed line of certain large flying bird species such as Blue Crane, Grey- Crowned Crane, Black Stork, and Southern Bald Ibis is a possibility (EWT; 2011).</p> <p>The following recommendations have been made: Mark the identified sections of line with anti collision marking devices on the earth wire to increase the visibility of the line and reduce likelihood of collisions. Marking devices should be spaced 10m apart. The sections of line that pose a concern and require marking should be finalised in a site "walkthrough" by EWT once final route is decided and towers/pylons pegged. A "Bird Friendly" steel lattice structure (248 series type) should be used for the tower structures. Any deviation should be reported to EWT as it will alter this impact rating. Strict control should be maintained over all activities during</p>			
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	<p>construction, in particular heavy machinery and vehicle movements, and staff. It is difficult to mitigate properly for this as some disturbance is inevitable. During Construction, if any of the "Focal Species" identified in this report are observed to be roosting and/or breeding in the vicinity, the EWT is to be contacted for further instruction.</p> <p>Strict control should be maintained over all activities during construction, in particular heavy machinery and vehicle movements, and staff. It is difficult to mitigate properly for this as some habitat destruction is inevitable. All activities must be managed through a site specific EMPr (Appendix F) and monitored by an ECO.</p>			
Disposal of coolant oils used by transformers.	<p>The transformers will not use PCB oils and will instead use an oil called nylrolibra which is in accordance with IEC 60296 (03 General specification). Used oils will need to be disposed of in an appropriate manner. These oils can be recycled provided this is done by a responsible and licensed operator and safe disposal certificates are obtained.</p>	Phase 6	Eskom/ Internal ECO	The contractor / designated representative must monitor the site on a regular basis.
Improved storm water management and prevention of erosion.	Positive impact not requiring mitigation.			

Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
Topsoil and associated stockpiles	<ul style="list-style-type: none"> The topsoil should be stripped off so that material can be re-used during the rehabilitation phase. Areas chosen for the topsoil stockpiles should be kept to a minimum and should involve the least disturbance to vegetation. Translocation of topsoil stockpiles from one place to another or importing topsoil from other sources that may contain alien plant material should be avoided. 	<ul style="list-style-type: none"> Minimise disturbance and loss of soil Remain within construction footprint 	<ul style="list-style-type: none"> Erosion is avoided or kept to a minimum Re-use of topsoil during rehabilitation process 	Daily monitoring	ESO ECO Contractor
Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
Pollution of groundwater through rainwater infiltrating stockpiles	<ul style="list-style-type: none"> Compact footprint area of stockpiles to minimize groundwater infiltration At the Ocheni substation site storm water run-off from stockpiles must be diverted into storm water systems with silt traps to avoid contamination 	<ul style="list-style-type: none"> Minimise storm water runoff Minimise groundwater contamination 	<ul style="list-style-type: none"> Storm water is controlled 	Daily monitoring	Contractor r ECO ESO

Loss of plant communities, natural habitats and fragmentation thereof	<ul style="list-style-type: none"> • Ensure that workers do not unnecessarily trample vegetation. • All infrastructures should be confined to the areas demarcated for such and no infrastructure should be permitted in areas not correctly prepared. • The project should retain as small footprint as possible to minimise impacts to surrounding vegetation and soil. • All areas not within the footprint of the project area where soil has been compacted or vegetation disturbed, should be immediately ripped and re-vegetated immediately. 	<ul style="list-style-type: none"> • Minimise impacts on vegetation during construction process • Keep within construction footprint 	<ul style="list-style-type: none"> • Impacts to vegetation and soil beyond what is necessary are avoided. 	Daily monitoring	ESO ECO Contractor
Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party

oil and diesel spillages	<ul style="list-style-type: none"> • Proper handling and storage practices, as well as readily available oil-spill kits should minimise the risks associated with such spills. • Spills should be cleaned up immediately by removing the polluted soil and disposing thereof at an appropriate registered waste facility • Drip trays to be placed under vehicles that stand for more than 24 hours. Size of drip trays must be sufficient to contain the amount of oil in the vehicle • Suitable covered containers should be provided for disposal of waste. All used oils, grease or hydraulic fluid should be placed therein and these containers should be removed from the site on a regular basis for disposal at an appropriate registered waste facility. 	<ul style="list-style-type: none"> • Minimising occurrence of such impacts 	<ul style="list-style-type: none"> • Comprehensive method statement addressing handling and storage of oil and emergency spills procedure • <input type="checkbox"/> No complaints from Applicant or DFFE 		CONTRACTOR
Dust	<ul style="list-style-type: none"> • Keep vegetation clearance to a minimum. • Regular wetting of access roads to reduce dust generated by vehicles. • Wetting of project site to reduce dust generated by construction activities 	<ul style="list-style-type: none"> • Minimise nuisance factor of construction activities on School and Rand water & surrounding 	<ul style="list-style-type: none"> • No complaints from School and Rand water management • No complaints from surrounding communities and landowners 	Daily monitoring	ESO ECO Contractor
Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party

		communities and landowners	<ul style="list-style-type: none"> Method statement regarding dust control in place 		
Increased potential of invasion by alien invasive species	<ul style="list-style-type: none"> Early detection and eradication of alien vegetation species through on-going monitoring and eradication programme Control and manage the removal of vegetation 	<ul style="list-style-type: none"> Avoid legal infringements by preventing spread of alien vegetation 	<ul style="list-style-type: none"> No noticeable spread of alien vegetation on site 	Ongoing monitoring	ESO ECO Contractor
Dust	<ul style="list-style-type: none"> Keep vegetation clearance to a minimum. Regular wetting of access roads to reduce dust generated by vehicles. Wetting of project site to reduce dust generated by construction activities Vegetation removal to be undertaken in consultation with the ECO 	<ul style="list-style-type: none"> Minimise nuisance factor of construction activities on School and Rand water & surrounding communities and landowners 	<ul style="list-style-type: none"> No complaints from School and Rand water management No complaints from surrounding communities and landowners Method statement regarding dust control in place 	Daily monitoring	ESO ECO Contractor
Fauna	<ul style="list-style-type: none"> Workforce to be instructed that no animals or birds may be caught or killed Workforce to be informed that poaching is illegal and if they are 	<ul style="list-style-type: none"> Minimise disturbance and mortality to animals and birds 	<ul style="list-style-type: none"> No complaints from School and Rand water management and surrounding 	Daily monitoring	ESO ECO Contractor
Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party

	<p>caught poaching they will be dismissed</p> <ul style="list-style-type: none"> Construction vehicles to keep to speed limits to limit killing animals and birds on site Construction activities to take place during daylight hours to reduce risks to fauna 		landowners and communities		
Erosion	<ul style="list-style-type: none"> Monitoring for presence of rills and gullies in the soil. Limit disturbance to the construction footprint Prevent uncontrolled water flow through diverting water into run-off paths and storm water systems with silt traps 	<ul style="list-style-type: none"> Minimise disturbance and loss of topsoil Minimise scarring of earth Reduce sedimentation of storm water 	<ul style="list-style-type: none"> No erosion scars No loss of topsoil Construction footprint is not exceeded All damaged areas successfully rehabilitated 	As and when required but especially towards end of construction	CE ESO ECO Contractor
Lowering of groundwater levels	<ul style="list-style-type: none"> Foundations of any building on the proposed new Ocheni substation to be less than 5 m to avoid going below water table if possible If excavation goes below 5m, then drains and cut-off trenches must be built around the proposed construction area to prevent run-off water from entering pit 	<ul style="list-style-type: none"> Avoid impacting on water table 	<ul style="list-style-type: none"> No complaints from surrounding landowners re lowering groundwater levels 	During excavation and construction of foundations	Engineer Contractor
Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party

Fire	<ul style="list-style-type: none"> No open fires are to be permitted on-site. Method statement by Contractor that indicates how wild fires will be DFFE It with from adjacent properties. Fire breaks should be done in accordance with the station's fire breaks procedure. Sufficient fire extinguishers and other fire-fighting equipment to be supplied in construction area 	<ul style="list-style-type: none"> Maintain safety on site and in surrounding community Reduce risk of veld fires and destruction of natural habitat 	<ul style="list-style-type: none"> No veld fires started by the workforce No claims from landowners for damages due to veld fires Method statement in place and adhered to 	Daily monitoring	ECO ESO Contractor
Noise	<ul style="list-style-type: none"> All construction vehicles must be in good working order The use of construction machinery should be limited between 06h00 and 18h00 on weekdays only. Work hours must be strictly enforced unless permission is given to work beyond these hours No construction should occur during weekends, unless the adjacent residents have been notified in writing at least three days in advance. Noise reduction is essential and the Contractor must endeavor to limit unnecessary noise, especially loud 	<ul style="list-style-type: none"> Minimise nuisance factor of construction of substations and powerlines 	<ul style="list-style-type: none"> No complaints from surrounding landowners and residents 	As and when required	ECO ESO Contractor

Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
	<p>talking, shouting or whistling, radios, sirens or hooters, motor revving, etc.</p> <ul style="list-style-type: none"> □ The contractor must ensure that noise levels remain within acceptable limits and that labourers have safety equipment such as ear plugs when undertaking of activities with high levels of noise 				
Impacts on heritage resources	<ul style="list-style-type: none"> • Workforce must be informed what heritage resources are and what must occur if such resources are found; <p>If any heritage resources are unearthed during construction, then:</p> <ul style="list-style-type: none"> • All work in immediate area of the historical findings must stop and a 5 m perimeter boundary must be placed around the find • A registered heritage specialist must be called to site to investigate the find • The Free State Provincial Heritage Resources Agency (PHRA) must also be informed • The heritage specialist will assess the significance of the resource and provide guidance on the way forward. • Permits must be obtained from the Free State PHRA if heritage 	<ul style="list-style-type: none"> • Protecting the country's heritage resources from damage or destruction 	<ul style="list-style-type: none"> • Workforce understanding of and compliance with process to DFFE with chance finds. • No damage to heritage resource 	Ongoing	ECO ESO Contractor

Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
	<p>resources are to be altered, removed or destroyed</p> <ul style="list-style-type: none"> • Work can only commence once go-ahead is given by the heritage specialist • Under no circumstances may any heritage material be destroyed or removed from site unless under direction of a heritage specialist. • If remains are found that could be human, then the SAPS must be informed immediately 				
Waste management	<ul style="list-style-type: none"> • The contractor must provide and maintain a method statement for "solid waste management". The method statement must provide information on the proposed licensed facility to be utilised and details of proposed record keeping for auditing purposes. • Waste must be taken to registered waste landfill sites as mentioned in the method statement. • Proof of legal disposal must be produced on request. • Any illegal dumping of waste must not be tolerated, no on-site burning, 	<ul style="list-style-type: none"> • Adherence to method statement and correct storage and disposal of waste • Promote waste separation at source for recycling purposes 	<ul style="list-style-type: none"> • No complaints from Rand water management and the school management regarding litter lying around the construction site and being blown across the School and Rand water • Regular disposal of waste • <input type="checkbox"/> No complaints from surrounding 	Ongoing throughout construction phase	ECO ESO Contractor

Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
	<p>burying or dumping of any waste materials, litter or refuse shall be permitted</p> <ul style="list-style-type: none"> • Separate bins must be clearly marked and used for recycling of waste such as glass, plastic and tins where possible. • All refuse bins must have lids that can be secured to prevent animals from gaining access. • Sufficient containers must be strategically located around the construction site to handle the amount of litter, wastes, rubbish, debris, etc., generated by the construction site • If skips are used, then they must be covered to prevent waste from wind blowing • Skips and other waste containers must be emptied regularly to registered waste landfill sites. • Chemical containers and packaging brought onto the site must be removed for disposal at a suitable hazardous licenced landfill site. 		<p>communities and landowners</p>		

Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
Use of cement and concrete	<ul style="list-style-type: none"> • The contractor must provide a method statement for cement and concrete batching. The method statement must provide information on proposed storage, washing and disposal of cement and concrete, packaging and tools. • The mixing of cement and concrete must only be done at specifically selected sites on mortar boards or similar structures to contain run-off. • Cleaning of cement and concrete mixing and handling equipment must be done using proper cleaning trays. • All Empty containers must be stored in a dedicated area and later removed from the site for disposal at a licensed facility. • All spillage that may occur must be investigated and immediate remedial action (removal of spillage and contaminated soil to registered landfill site) must be undertaken. • Cement batching areas must be located in consultation with the ESO or ECO to ensure spillages are contained and that the proposed location does not fall within sensitive areas 	<ul style="list-style-type: none"> • Minimise / avoid cement residue from entering into the environment • Minimise / avoid pollution of soil, surface and groundwater resources 	<ul style="list-style-type: none"> • No evidence of contaminated soil on the construction site • Method statement in place and enforced 	Daily monitoring	Contractor

Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
Hazardous substances	<ul style="list-style-type: none"> If hazardous substances are to be stored or used on site, the Contractor shall submit a method statement detailing the substances / materials to be used, together with the transport, storage, handling and disposal procedures for the substances The transportation and handling of hazardous substances must comply with the provisions of the Hazardous Substances Act (Act No.187 of 1993) and associated regulations. The Contractor shall also comply with all other applicable regional and local legislation and regulations with regard to the transport, use and disposal of hazardous substances. Hazardous chemical substances are defined in the Regulations for Hazardous Chemical Substances). The relevant Material Safety Data Sheets (MSDS) shall be available onsite. Procedures in the MSDSs shall be followed in the event of an emergency. The Contractor shall be responsible for the training and education of all 	<ul style="list-style-type: none"> Minimise harm / damage to workers and to the environment through hazardous substances Ensure safety of workers handling such substances Safe transport of substances 	<ul style="list-style-type: none"> No spillage of hazardous substances No harm to workers 	As and when required	ECO ESO Contractor

Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
	<p>personnel on site who will be handling hazardous materials about their proper use, handling and disposal.</p> <ul style="list-style-type: none"> Staff designated to handle hazardous waste must be supplied with the necessary safety items (gloves, dust masks, etc.) to ensure safety of workers. 				
Workshop and equipment maintenance	<ul style="list-style-type: none"> Where practical, all maintenance of equipment and vehicles on site shall be performed in a workshop. If it is necessary to do maintenance outside of the workshop area, the Contractor shall obtain the approval of the ECO prior to commencing such activities. The Contractor shall ensure that there is no contamination of the soil or vegetation. The workshop shall have a smooth impermeable (concrete or thick plastic covered with sand) floor. The floor shall be bunded and sloped towards an oil trap or sump to contain any spillages. When servicing equipment, drip trays shall be used to collect the waste oil 	<ul style="list-style-type: none"> Ensure that environment is not damaged by leaking oil and/or fuel from vehicles 	<ul style="list-style-type: none"> No damage to the environment No complaints from Rand water management and the school management 	Daily monitoring	ECO ESO Contractor ER

Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
	<p>and other lubricants. Drip trays shall also be provided in construction areas for stationary plant (such as compressors and vehicles).</p> <ul style="list-style-type: none"> All vehicles and equipment must be kept in good working order. Leaking equipment must be repaired immediately or removed from site. The washing of equipment must be undertaken in the workshop or maintenance area, and these areas must be equipped with an impermeable floor and sump/oil trap. As part of the site layouts, a plan must be submitted to the ECO detailing the design of the bunding of the workshop and how run-off from the workshop will be managed as well as how drip trays used under plant will be managed. 				
Eating areas for construction workers	<ul style="list-style-type: none"> The Contractor shall designate an eating area, subject to the approval of the ECO. No cooking is allowed outside this area The area shall be well demarcated and in a location approved by the ECO and shall not be within 20 m of any "no go" areas. 	<ul style="list-style-type: none"> Control potential influx of vermin and flies Neat work place Hygienic environment for workers 	<ul style="list-style-type: none"> No signs of vermin (e.g. rats) and flies No complaints from Rand water management and the school management and workforce 	Daily monitoring	ECO ESO Contractor

Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
	<ul style="list-style-type: none"> All workers must eat in designated eating areas. These areas shall have shade for the workers. The eating areas may be in existing structures or a temporary structure that shall be well constructed Sufficient bins shall be provided in the area. All disposable food packaging must be disposed of in the bins. The area must be cleaned after every meal. The feeding or leaving of food for animals must be strictly prohibited. 				
Ablution facilities for construction workers: contamination of soil, surface and groundwater and environment	<ul style="list-style-type: none"> The contractor is responsible for providing all ablution facilities for his/her workers and those of any sub- contractors. Workers must be strictly forbidden to use the veld as a toilet. A minimum of one chemical toilet must be provided per 12 workers. Sanitary arrangements must be to the satisfaction of the ECO and OHS official Toilets must be of the chemical type. All toilets will be located within the construction site. 	<ul style="list-style-type: none"> Ensure proper on-site sanitation. Minimise potential of diseases on-site Minimise potential pollution of soil, water resources and natural habitat 	<ul style="list-style-type: none"> Worker use toilets provided and not veld No complaints received Rand water management and the school management and from workforce No visible signs of pollution of the environment (soils, water, veld) 	Daily monitoring	Contractor ESO

Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
	<ul style="list-style-type: none"> The contractor must keep the toilets in a clean, neat and hygienic condition. The contractor must supply toilet paper at all times. A reputable toilet-servicing company must be used to clean, maintain and service the toilets. The contractor must ensure that all toilets are cleaned and Emptied before any long weekends, workers' holidays, etc. <input type="checkbox"/> Toilets must be secured to the ground and have a sufficient locking mechanism that are operational at all times. 	<ul style="list-style-type: none"> Frequent checks for leakages 			
Safety and security	<ul style="list-style-type: none"> The site and workforce must be managed in strict accordance with the OHS Act and the National Building Regulations as well as with Eskom's Safety, Health, Environment and Quality Policy (32- 727). The contractor must ensure that all emergency procedures are in place prior to commencing work. Emergency procedures must include: fire, spills contamination of the ground, accidents to Employees, use of hazardous substances and materials, etc. 	<ul style="list-style-type: none"> Reducing risk of incidents that could lead to fatalities or serious injury No complaints from inside and outside construction area 	<ul style="list-style-type: none"> No incidents reported during construction phase No complaints from the health and safety officer No complaints from surrounding communities and landowners regarding illegal squatting or dangerous driving by those driving construction vehicles 	Daily monitoring	Applicant/ CE/ PM ECO

Development phase	Construction				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
	<ul style="list-style-type: none"> • The contractor must ensure that lists of all emergency telephone numbers / contact persons are kept up to date and that all numbers and names are posted at relevant locations throughout the construction site. • The nearest emergency centre must be identified during all phases of the project. The contact details of this centre, as well as the police and ambulance services, must be available at prominent locations around the construction site. • A Health and Safety Officer as well as an independent firm must be appointed to audit the site's compliance with the OHS Act during construction. • Ensure a grievances procedure is in place for local people to log complaints regarding misbehaviour of construction workers • Monitor the surrounding area for illegal squatting and develop a strategy to DFFEI with illegal squatting that may occur as a result of people coming to the site looking for work 				

Development phase	Operational				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
Construction site decommissioning	<ul style="list-style-type: none"> All structures comprising the site office (if any) are to be removed from site. The area that previously housed the site office is to be checked for spills such as oil, concrete, etc., and these shall be cleaned up and removed. All surfaces hardened during construction are to be ripped and imported material thereon removed. All rubble is to be removed from the site to an approved disposal site. Fences, barriers and demarcations are to be removed unless otherwise stipulated by the Engineer or Contractor All residual stockpiles must be removed as directed by the Engineer. All residual building materials must be removed from the site 	<ul style="list-style-type: none"> Ensure site is restored to original condition Ensure that remains of construction activity are disposed of correctly 	<ul style="list-style-type: none"> No complaints from Randwater Board management for Ocheni construction activities No complaints from school management for the Ocheni substation construction activities 	<ul style="list-style-type: none"> Once off after construction is completed 	Contractor Engineer ECO
Rehabilitation of vegetation	<ul style="list-style-type: none"> Topsoil removed during the construction phase must be used where possible to rehabilitate disturbed areas; Topsoil must be analysed for its fertility and if reduced, appropriate 	<ul style="list-style-type: none"> Minimize exposed areas Appropriate plants are used for re-vegetating 	<ul style="list-style-type: none"> Exposed areas are rehabilitated quickly to reduce loss of soil 	Monthly until vegetation established; thereafter until has yearly	Contractor Applicant

Development phase	Operational				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
	<p>fertilisers must be used to increase the fertility of the soil prior to rehabilitation.</p> <ul style="list-style-type: none"> • Re-vegetate the area with plant species consistent surrounding environment and under guidance of a qualified ecologist. • Methods and timing of rehabilitation must be prescribed by an ecologist based on site conditions at the time • Badly damaged areas should be fenced off to allow the area to rehabilitate. • Remove invasive vegetation from damaged construction area and from rehabilitated areas • Manual labour to be used to remove alien plant species instead of chemical removal 	<ul style="list-style-type: none"> • Reduce risk of spread of invasive species 	<ul style="list-style-type: none"> • Area is rehabilitated to surrounding area standard • No signs of invasive species on rehabilitated areas 		
Erosion	<ul style="list-style-type: none"> • Reshape soil surface to flat as soon as possible and stabilise it. • Eroded areas to be re-vegetated immediately with appropriate fast growing vegetation • If necessary, erosion barriers (such as straw bales or fibre netting) should 	<ul style="list-style-type: none"> • Avoid permanent scarring of surrounding area • Ensure that rain water coming off existing buildings does not lead to 	<ul style="list-style-type: none"> • No visible signs of erosion around the substations 	Every month until eroded areas are stabilised; thereafter as and when required	Contractor Applicant

Development phase	Operational				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
	<p>be installed until eroded areas are rehabilitated</p>	<p>erosion of surrounding areas</p>			
Noise	<ul style="list-style-type: none"> Applicant must ensure that noise levels are kept as low as is possible 	<ul style="list-style-type: none"> Ensuring that substations and powerlines activities have limited impacts 	<ul style="list-style-type: none"> No complaints from surrounding communities and landowners 	Ongoing	Applicant
Use of hazardous substances	<ul style="list-style-type: none"> The transportation and handling of hazardous substances must comply with the provisions of the Hazardous Substances Act (Act No.187 of 1993) and associated regulations as well as SABS 0228 and SABS 0229. The applicant shall comply with all other applicable regional and local legislation and regulations with regard to the transport, use and disposal of hazardous substances. Hazardous chemical substances used during operation shall be stored in secondary containers and the relevant MSDS shall be available on site. Procedures detailed in the MSDSs shall be followed in the event of an emergency situation. 	<ul style="list-style-type: none"> Minimising risk to workers and environment through correct handling of such substances 	<ul style="list-style-type: none"> No accidents or spillages 	Daily	Applicant

Development phase	De-Commissioning				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
Loss of vegetation and seed banks due to oil and diesel spillages	<ul style="list-style-type: none"> Ensure that measures are in place to contain any oil and diesel leakages or spills. Proper handling and storage practices, as well as readily available oil-spill kits should minimise the risks associated with such spills. Spills should be cleaned up immediately by removing the spills together with the polluted soil and disposing thereof at a registered facility. Suitable covered containers should be provided and conveniently placed for waste disposal. All used oils, grease or hydraulic fluid should be placed therein and these containers should be removed from the site to a registered facility 	<ul style="list-style-type: none"> Minimise disturbance and pollution of the environment during dismantling of site facilities. 	<ul style="list-style-type: none"> No visible spills once substations and powerlines are dismantled □ 	Daily during dismantling	Applicant Contractor
Shaping, top soil infilling and seeding of disturbed area	<ul style="list-style-type: none"> Re-vegetate the area with plant species consistent with the post construction land use and with indigenous species 	<ul style="list-style-type: none"> Effective rehabilitation of footprint of construction areas 	<ul style="list-style-type: none"> Visible signs of footprint are reduced 	Immediately after dismantling has occurred; monthly checks thereafter to ensure that vegetation has taken	Applicant Contractor
Dust	<ul style="list-style-type: none"> Area to be watered regularly to reduce dust levels 	<ul style="list-style-type: none"> Minimise nuisance factor 	<ul style="list-style-type: none"> No complaints from surrounding 	Daily	Applicant Contractor

Development phase	De-Commissioning				
Impacts / Issues	Mitigation measures	Management objectives	Management targets	Frequency	Responsible party
	<ul style="list-style-type: none"> Fence off area with shade cloth to reduce spread of dust Working crews to wear dust masks when necessary 	<ul style="list-style-type: none"> during dismantling process 	<ul style="list-style-type: none"> communities and landowners 		
Noise	<ul style="list-style-type: none"> Dismantling to take place during weekdays between 7h00 and 17h00. Weekend work can only take place if surrounding landowners and communities have been informed timeously 	<ul style="list-style-type: none"> Reduce nuisance factor of dismantling process 	<ul style="list-style-type: none"> No complaints from surrounding communities and landowners 	Daily	Applicant Contractor

2.4. IMPLEMENTATION SCHEDULE

This section presents an implementation schedule of the EMPr as depicted in the table below.

Table 3: Implementation Schedule

Activity	Responsibility	Frequency	Deliverable
Legislation administration & Implementation	ECO, ESO Resident & Engineer/Site Manager	Throughout Project life cycle	Legal Register
Health & Safety Inspections	Contractor Health & Safety Officer, Resident Engineer/Site Manager	Daily Throughout Project life cycle	SOPs, Checklists, Method Statements, Incident Reports, Accident Reports, SHE statistics, NC Reports
Environmental Monitoring	Appointed ECO	Daily Throughout Project life cycle	Weekly and Monthly Reports, Incident Reports, Checklists, Method Statements
Environmental Auditing	Appointed ECO	Bi-Monthly for the duration of the Project	Audit Report, Corrective Action Plan, Checklists
Review of the EMPr	ESO, ECO, Contractor	When necessary	Reviewed EMPr

2.5. TRAINING, AWARENESS AND CAPACITY BUILDING

All new Employees and contractors will attend an induction session/s that will include health and safety, environmental and community awareness and emergency response procedures. The project proponent will use written (newsletter/posters/toolbox talks) and verbal (as part of routine briefings) communication methods to raise awareness on a range of health, safety and environmental issues. This will be done in relevant languages and English language (as appropriate) to ensure that all members of the workforce are made aware. Training for construction workers will include HIV/Aids counselling and awareness.

It is very important to take cognizance of the following if long term success has to be achieved:

- The EMPr will be implemented in a community that has extensive local knowledge that has to be integrated into the capacity building program. The capacity building plan should thus aim to develop skills, capitalize on the knowledge and values inherent within the community to develop skills, and promote behaviour that supports environmental sustainability.
- There are international, regional, national, provincial and local guiding principles and approaches, some of which are law that have to be adopted to formulate the program to ensure that it can hold its own.
- Environmental management capacity building regardless of the target audience should always take into consideration the interaction between the physical, social, economic and political dimensions of the environment, as all have an impact on the outcomes of the sustainability and equitability of environmental management choices.
- The interaction between the four major dimensions of the environment should be addressed in an equitable manner to ensure that all stakeholders understand and carry out their responsibilities.

2.6. DOCUMENTATION & RECORD KEEPING

All documents shall be kept on site and be available for monitoring and auditing purposes. Site inspections by an Environmental Audit Team may require access to this documentation for auditing purposes. The documentation shall be signed by all parties to ensure that such documents are legitimate. Regular monitoring of all site works by the Environmental Control Officer is imperative to ensure that all problems encountered are solved punctually and amicably. When the Environmental Control Officer is not available, the Contract Manager/Site Supervisor shall keep abreast of all works to ensure no problems arise.

2.7. PLAN MONITORING

The correct and successful implementation of impact mitigation measures in order to reduce adverse impacts on environmental conditions needs to be ensured by a proper monitoring programme. Monitoring of the general implementation of/adherence to the EMPr shall be the responsibility of the ECO. Reporting on adherence/compliance to stipulations as communicated to contractors, shall take place during scheduled site meetings.

During the construction phase of the Project, the Contractor's Environmental Officer must report all environmental impacts (e.g. large scale sedimentation and erosion, damage to and/or destruction of, natural vegetation and damage to wetland on site) as well as accidents and incidents to the Owner's Representative. These reported impacts and incidents will be captured on a database to ascertain trends and track progress in the implementation of preventative and corrective actions, and benchmarking against other, similar operations.

Depending on the level of severity, accidents and incidents during construction or maintenance will be investigated by the Contractor's Environmental officer division, with key input from the line management to ensure accountability.

2.8. RESPONDING TO NON COMPLIANCES

2.8.1. Notification of Non Compliance

- The contractors shall act immediately when notice of non-compliance is received and correct whatever is the cause for the issuing of the notice. Complaints received regarding activities on the construction site pertaining to the environment shall be recorded in a dedicated register and the response noted with the date and action taken. The ECO should be made aware of any complaints.
- Any non-compliance with the agreed procedures of the EMPr is a transgression of the various statutes and laws that define the manner by which the environment is managed. Failure to redress the cause shall be reported to the relevant authority for them to DFFE with the transgression, as it deems fit.
- The Contractor is deemed not to have complied with the EMPr if, inter alia:
 - There is evidence of contravention of the EMPr specifications within the boundaries of the construction site, site extensions and roads;
 - There is contravention of the EMPr specifications which relate to activities outside the boundaries of the construction site.
 - Environmental damage ensues due to negligence;
 - Construction activities take place outside the defined boundaries of the site; and/or
 - The Contractor fails to comply with corrective or other instructions issued by the Engineer within a specific time period.

2.8.2. Fines and penalties

Where environmental damage is caused or a pollution incident, and/or failure to comply with any of the environmental specifications contained in the EMPr, the developer and/or contractor shall be liable.

The following violations, and any others determined during the course of work, should be penalised:

- Hazardous chemical/oil spill and/or dumping in non-approved sites.
- Damage to sensitive environments on site (wetlands and protected species)
- Unauthorized removal/damage to indigenous trees and other vegetation, particularly in identified sensitive areas.
- Uncontrolled/unmanaged erosion.
- Unauthorised blasting activities (if applicable).
- Pollution of water sources.
- Unnecessary removal or damage to trees. (especially protected species)

2.9. ENVIRONMENTAL CONTACT PERSONS

This section is to be filled after appointment of various responsible officials to implement this EMPr

Table 4: Contact Officials & Details

Name	Organisation	Designation	Email Address	Cell Number	Tell
	Eskom				
		Contractor			
		ECO			
	DFFE	Competent Authority			
		OHS			

2.10. CONCLUSION

Although all foreseeable actions and potential mitigations or management actions are contained in this document, the EMPr should be seen as a day-to-day management document. The EMPr thus sets out the environmental standards that are required to minimise the negative impacts and maximise the positive benefits of the proposed substations and powerlines.

Further guidance should also be taken for any conditions contained in the Environmental Authorisation, if the project is granted approval, and that these DFFE conditions must be incorporated into the final EMPr. All contractors should be made to have this EMPr available, as part of any tender documentation, so that the engineers and contractors are made aware of the potential cost and timing implications needed to fulfil the implementation of the EMPr, thus adequately costing for these.



ANNEXURES 6


EMAIL COPIES

RE: (Background Information Document)Construction of a new 20MVA 132/22kV OCHENI Substation in Maphumulo within Maphumulo Local Municipality in the Kwazulu-N...

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RE: (Background Information Document)Construction of a new 20MVA 132/22kV OCHENI Substation in Maphumulo within Maphumulo Local Municipalit...

 musa@ourbiosphere.co.za
To [Sizwe Dladla](#); [Njabulo Ndlela](#); [info@ingonyamatrust.org.za](#); [khenisat@ingonyamatrust.org.za](#)


Thu 2023/06/29 19:58

Good day Sizwe

Thank you very much for your response and it is hereby noted.

Sincerely
Musa

Sincerely
Musa Netshivhambé (EAPASA:2019/1853, SACNASP: 200079/12)
Director: Capital Projects

 **POLOKWANE BRANCH OFFICE**
33 Railway Street • Annadale • Polokwane • 0699
Polokwane • 0699 • Tel: 086 001 8255 • Cell: 073 977 9414

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musa@ourbiosphere.co.za
To: 'Petronella.Sithebe@Kzntransport.gov.za'

Tue 2023/06/27 21:39

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You have been identified as either an Interested and/or Affected Party on the project. You have **30 days from date of this email** to submit your comments so that we can incorporate them on the Impact Assessment Report before submission to the National Department of Forestry, Fisheries and Environment (DFFE).

We hope that you will find the above in order.

Sincerely
Musa Netshivhambe (EAPASA, SAT. NAT. SCI)

Sincerely
Musa Netshivhambe (EAPASA:2019/1853, SACNASP: 200076/12)
Director: Capital Projects

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musa@ourbiosphere.co.za
To 'Sizwe.Dladla@kznedtea.gov.za'; 'Njabulo.Ndlela@kznedtea.gov.za'; 'info@ingonyamatrust.org.za'; 'khenisat@ingonyamatrust.org.za'

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Musa Netshivhambe (EAPASA, SAT. NAT. SCI)

Sincerely
Musa Netshivhambe (EAPASA:2019/1853, SACNASP: 200076/12)
Director: Capital Projects

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musa@ourbiosphere.co.za
To 'gerald.dlamini@kzndae.gov.za'; 'pinky.mkhize@kzncogta.gov.za'

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Director: Capital Projects

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musa@ourbiosphere.co.za
To info@amafainstitute.org.za; info@heritagekzn.co.za
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Sincerely
Musa Netshivhambe (EAPASA:2019/1853, SACNASP: 200076/12)
Director: Capital Projects

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Sincerely
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Director: Capital Projects

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Ocheni BID

musa@ourbiosphere.co.za
To 'Nandi Mbili'

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7 MB

Good day Nandi

Kindly receive the attached Ocheni BID,

I have withheld Gingindlovu-Mbongolwane BID, need to correct few passages and will send it shortly.

Adverts are with the newspapers, the publishing date is Thursday 01, June 2021.

We noted along the way the Mercury in fact does not cover the Maphumulo and uMlalazi areas, and they have advised that we consider utilising the Zululand observer. And that is what we are did. Both newspaper ads will go out on Thursday 01, June 2023

We will also be pasting the site notices on the same day.

Sincerely

Sincerely
Musa Netshivhambhe (EAPASA:2019/1853, SACNASP: 200076/12)
Director: Capital Projects

OURBIOSPHERE ENVIRONMENTAL POLOKWANE BRANCH OFFICE


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 Sizwe Dladla <Sizwe.Dladla@kznedtea.gov.za>
To: musa@ourbiosphere.co.za; [Njabulo Ndlela](mailto:Njabulo.Ndlela); info@ingonyamatrust.org.za; khenisat@ingonyamatrust.org.za

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Wed 2023/06/28 08:06

 You replied to this message on 2023/06/29 19:54.

Good morning Musa

Please note that your email has been forwarded to Malcom Moses, a colleague responsible for Environmental Authorizations in iLembe on behalf of EDTEA. He shall liaise with you.

Kind regards
Sizwe Dladla

From: musa@ourbiosphere.co.za <musa@ourbiosphere.co.za>
Sent: Tuesday, June 27, 2023 9:31:59 PM
To: Sizwe Dladla; Njabulo Ndlela; info@ingonyamatrust.org.za; khenisat@ingonyamatrust.org.za
Subject: FW: (Background Information Document)Construction of a new 20MVA 132/22kV OCHENI Substation in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province

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ANNEXURES 7

AGRICULTURAL COMPLIANCE STATEMENT

**THE AGRICULTURAL COMPLIANCE STATEMENT FOR OCHENI
SUBSTATION AND ASSOCIATED 21KM 132KV POWER LINE
POWERLINE DEVIATION**

DFFE REF: 2023-01-0006

**CONSTRUCTION OF A NEW 20MVA 132/22KV OCHENI
SUBSTATION AND ASSOCIATED 21KM 132KV POWER LINE IN
MAPHUMULO WITHIN MAPHUMULO LOCAL MUNICIPALITY IN
THE KWAZULU-NATAL PROVINCE.**

**CLIENT: ESKOM DISTRIBUTION
KZWAZULU-NATAL OPERATING UNIT**

**Prepared by:
OURBIOSPHERE ENVIRONMENTAL (PTY) LTD**

Cell: +27 73 977 9414

Fax : +27 86 5675523

MUSA@OURBIOSPHERE.CO.ZA

WWW.OURBIOSPHERE.CO.ZA

OCTOBER 2023

DECLARATION OF INDEPENDENCE

The Environmental Impact Assessment Regulations Regulation 13(1) of Government Notice No R982 of 2014), requires that the EAP must be Independent. And have expertise in conducting environmental impact assessments or undertaking specialist work as required, including knowledge of the Act.

EAP Expertise:

Musa Netshivhambe has experience that spans 3 decades working with Integrated Environmental Management Systems conducting almost 100 Environmental Impact Assessment, Environmental Management related project, assisting with many habitat suitability studies for Black Rhinos, conducting Botanical Assessment Studies, Development of Environmental Management Studies, Conducting Training on Tree and Grass Identification Trainings, compiling over 100 Environmental Management Programmes, Water use Licenses and many countless environmental management reports and advice to Private Individuals, Government SOCs and the Government Departments of South Africa. Musa is registered with Environmental Assessment Practitioners Association of South Africa (EAPASA: 2019/1853) and Certificated Natural Scientist with the South African Council for Natural Scientific Professions (Reg. No. 200076/12).

Declaration of independence:

Ourbiosphere Environmental (Pty) Ltd in an independent consultancy firm and hereby declare that it does not have any financial or other personal stake in the undertaking of the proposed activity, other than remuneration for the work performed in terms of the National Environmental Management Act, 1998 (Act 107 of 1998). In addition, remuneration for services provided by Ourbiosphere is not subjected to or based on approval of the proposed project by the relevant authorities responsible for authorizing this proposed project.

Disclosure:

Ourbiosphere undertake to disclose, to the competent authority, any material information that has or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) and will provide the competent authority with access to all information at its disposal regarding the application, whether such information is favourable to the applicant or not. Based on information provided to Ourbiosphere by the client, and in addition to information obtained during the course of this study, Ourbiosphere present the results and conclusion within the associated document to the best of the author's professional judgement and in accordance with best practice.

Musa Netshivhambe



Ourbiosphere Environmental (Pty) Ltd

October 2023

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1. INTRODUCTION

Ourbiosphere Environmental (Pty) Ltd was appointed by Eskom Distribution, Kwazulu-Natal Operating Unit KZN (LOU) to conduct the agricultural compliance assessment as part of the Impact Assessment Report process for the proposed Ocheni Substation and Associated 21km 132kV Powerline. The project applicant is Eskom Distribution KZN LOU. The project area falls within the Ocheni village of the Maphumulo Local Municipality area within the King Cetshwayo District Municipality in KwaZulu-Natal Province. Substation Location GPS coordinates: North-west Corner: S 29°08'46.64"; E 31°00' 49.98", North-east Corner S:29°08'48.38"; E:31°00'52.27", South-west Corner: S 29°08'48.35"; E 31°00' 48.37" and South-east Corner S:29°08'50.01"; E:31°00'50.68" see (Figure 1.1 below) and the substation is 100X100 metre in extent.

A buffered area of 50 meters along the substation site was chosen for the assessment. The "project assessment zone" will be used to refer to this area moving forward. Although it is known that the infrastructure may be placed differently within the assessment zone once the project starts, a preliminary infrastructure layout plan has been presented.

2. PURPOSE AND OBJECTIVES OF THE COMPLIANCE STATEMENT

The main goal of the Agricultural Compliance Statement, which will be included in the Impact Assessment Report, is to make sure that the site's sensitivity to the proposed construction of the Ocheni Substation and Associated 21km 132kV Powerline is sufficiently taken into account from the perspective of agricultural production. The location provided is not final, and the Ocheni Substation and Associated 21km 132kV Powerline may be sited anywhere within the 50m project assessment zone, as the information in this report enables the Competent Authority to reach a sound conclusion on the impact of the proposed project on the food production potential of the study area and development area..

Site sensitivity verification must be conducted with the following goals in mind for it to be successful:

- It must confirm or dispute the current land use and the environmental sensitivity as was indicated by the National Environmental Screening Tool. **Please refer to Section 9.3 for confirmation of the screening tool report.**
- It must contain proof in the form of photographs of the current land use and environmental sensitivity pertaining to the study field. **Please refer to Chapter 9 for detail and proof of current land use.**
- All data and conclusions are submitted together with the Impact Assessment Report (prepared in accordance with the NEMA regulations) for the proposed Ocheni Substation and Associated 21km 132kV Powerline. This report will be submitted as part of the Impact Assessment being conducted for environmental authorization by Ourbiosphere.

According to GN320, the agricultural compliance statement that is submitted must meet the following requirements:

- It must be applicable to the preferred site and the proposed development footprint.
- It has to confirm that the site is of "low" or "medium" sensitivity for agriculture.
- It has to indicate whether or not the proposed development will have an unacceptable impact on the agricultural production capability of the site.



Figure 1: Locality map of the proposed Ocheni Substation project assessment zone



The following checklist is supplied as per the requirements of GNR 320, detailing where in the report the various requirements have been addressed:

GNR 320 requirements of an Agricultural Compliance Statement (Low to Medium Sensitivity)	Reference in this report
3.1. The compliance statement must be prepared by a soil scientist or agricultural specialist registered with the SACNASP.	Page 2
The compliance statement must: be applicable to the preferred site and proposed development footprint;	Page 6
3.2.2. confirm that the site is of "low" or "medium" sensitivity for agriculture. and	Section 9.3
3.2.3. indicate whether or not the proposed development will have an unacceptable impact on the agricultural production capability of the site.	Section 12
The compliance statement must contain, as a minimum, the following information: contact details and relevant experience as well as the SACNASP registration number of the soil scientist or agricultural specialist preparing the assessment including a curriculum vitae;	Page 2
3.3.2. a signed statement of independence;	Page 2
3.3.3. a map showing the proposed development footprint (including supporting infrastructure) with a 50m buffered development envelope, overlaid on the agricultural sensitivity map generated by the screening tool;	Figure 2
3.3.4. confirmation from the specialist that all reasonable measures have been taken through micro- siting to avoid or minimise fragmentation and disturbance of agricultural activities;	Section 12
3.3.5. a substantiated statement from the soil scientist or agricultural specialist on the acceptability, or not, of the proposed development and a recommendation on the approval, or not, of the proposed development;	Section 12
3.3.6. any conditions to which the statement is subjected;	Section 10
3.3.7. in the case of a linear activity, confirmation from the agricultural specialist or soil scientist, that in their opinion, based on the mitigation and remedial measures proposed, the land can be returned to the current state. within two years of completion of the construction phase;	N/A – not a linear activity
3.3.8. where required, proposed impact management outcomes or any?	Section 10



monitoring requirements for inclusion in the EMP; and	
3.3.9. a description of the assumptions made as well as any uncertainties or gaps in knowledge or data.	Section 7
3.4. A signed copy of the compliance statement must be appended to the Impact Assessment Report or Environmental Impact Assessment Report.	This report forms part of the Impact Assessment Process reports for the authorisation

3. TERMS OF REFERENCE

In addition to the requirements specified in GN320, the following Terms of Reference, established by Ourbiosphere Environmental (Pty) Ltd, apply to the Agricultural Compliance Statement:

- Determine and evaluate any potential effects that the planned project may have on the soil's ability to support agriculture.
- Identify and describe potential cumulative soil, agricultural potential and land capability impacts resulting from the proposed development in relation to proposed and existing developments in the surrounding area.
- Make recommendations for management, monitoring, and mitigation strategies to reduce negative effects and/or maximize positive outcomes from the planned project.
- In order to achieve a full assessment, this comprises both a desktop analysis of databases and aerial imagery as well as on-site confirmation of the agricultural potential of the region that will be impacted by the Ocheni Substation and Associated 21km 132kV Powerline.

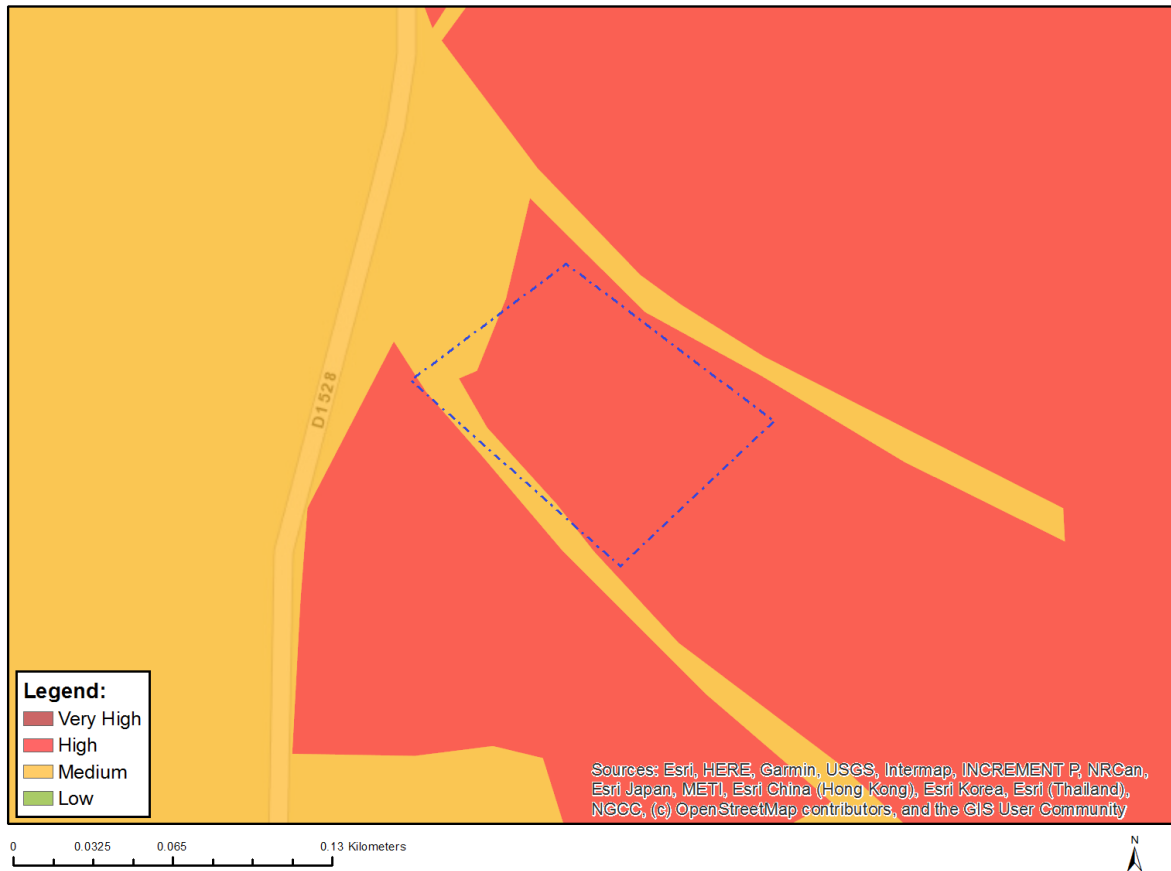
4. AGRICULTURAL SENSITIVITY

The total agricultural sensitivity of the Ocheni Substation and Associated 21km 132kV Powerline Project Assessment Zone was determined using the National Environmental Screening Tool (www.screening.environment.gov.za). The field crop boundaries from the Department of Agriculture, Forestry and Fisheries (DAFF) (DAFF 2017, DAFF 2019) are coupled with the national land capability raster data to determine the agricultural theme of the screening tool.

The screening report was created by Ourbiosphere Environmental (Pty) Ltd on March 4th, 2023. The screening tool needs to be used to assess a 500m buffered development envelope in accordance with GN320 criteria. Consequently, the 500 m project assessment zone that was used is more than sufficient and exceeds the requirement for a 500 m buffer zone surrounding the expected areas of effect.



The results provided by the screening tool indicated that the site has High to Medium sensitivity to the proposed development (Figure 2).



5. ENVIRONMENTAL LEGISLATION AND SOIL MANAGEMENT GUIDELINES APPLICABLE TO STUDY

The report complies with the agricultural evaluation requirements specified in Government Notice 320 of 2020 (GN320).

This Notice describes the reporting procedures and obligations in compliance with Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act (No. 107 of 1998), often known as NEMA. It replaces the previous requirements of Appendix 6 of the NEMA Environmental Impact Assessment Regulations.

- Although the results of the environmental screening report indicated that the area has High to Medium sensitivity with regards to the combined agricultural theme. The site visit was conducted in summer for 1 day on **23 February 2023** to determine the current use of the land and the environmental sensitivity of the Ocheni Substation and Associated 21km 132kV Powerline under consideration, this was done in order to confirm the sensitivity information as identified by the web based environmental screening tool.



- The screening tool has allocated a High to Medium Agricultural sensitivity theme on the Ocheni Substation site. After the site visit, it is hereby disputed that the rating given by the web based environmental assessment tool is high to Medium. This rating is disputed and a rating of Medium to Low seem to be rather relevant.
- The location of substation is situated in a former sugar cane plantation field that is no longer active. The area according to the current Chief Zubane was a family field which was used for sugar cane plantation in the past. The field is also surrounded by residential developments.

Government Notice No. 648, published in the Government Gazette 45421 on May 10, 2019, states that agriculture 1(a) outlines the procedure for evaluating and disclosing environmental effects on agricultural resources.

An applicant intending to undertake an activity identified in the Scope of this Protocol on a site identified by the national web based environmental screening tool as being of "very high" or "high" sensitivity for agricultural resources must submit an **Agricultural Agro-Ecosystems Assessment**, unless the:

- application is for a linear activity for which impacts to the agricultural resource are temporary and the land in the opinion of the soil scientist/agricultural specialist based on the mitigation and remedial measures, can be returned to the current land capability within two years of the completion of construction phase; or
- impact on agricultural resources is from an electricity pylon which is self-supporting; or
- information gathered from the Initial Site Sensitivity Verification contemplated in section 3 of this Protocol or the specialist assessment differs from the designation of "very high" or "high" agricultural sensitivity from the national web based environmental screening tool and it is found to be of a "medium" or "low" sensitivity.

Should either paragraph above apply, an Agricultural Compliance Statement is to be provided. In the case of paragraph 1.1.3, an environmental assessment practitioner or a registered soil scientist/agricultural specialist, as appropriate, must append to the Agricultural Compliance Statement a motivation and evidence (e.g., photographs) of the different agricultural resource sensitivity.

6. WHY AGRICULTURAL COMPLIANCE STATEMENT

- Ocheni Substation and Associated 21km 132kV Powerline is a 100m-by-100m location activity for which impacts to the agricultural resource will be permanent as the land will not be used for agriculture anymore. It is also anticipated that the surrounding land, based on the mitigation and remedial measures, can be returned to the current land capability within two years of the completion of the construction phase. This is in accordance with the protocol for specialist assessment and minimum report content requirements for environmental impact on agricultural resources.
- An Agricultural Compliance Statement is required as part of the Impact Assessment process. In addition to the specific requirements of GN320 for this study, the following South African legislation is also considered

applicable to the interpretation of the data and conclusions made with regards to environmental sensitivity and the conservation of soil resources of the project area:

- The Conservation of Agricultural Resources (Act 43 of 1983) states that the degradation of the agricultural potential of soil is illegal. This Act requires the protection of land against soil erosion and the prevention of water logging and salinisation of soils by means of suitable soil conservation works to be constructed and maintained. The utilisation of marshes, water sponges and watercourses are also addressed.
- Section 3(a) of the Subdivision of Agricultural Land Act 70 of 1970 states that agricultural land must not be subdivided. Although Ocheni Substation and Associated 21km 132kV Powerline Impact Assessment is not for the purpose of a subdivision of agricultural land, it will slightly change the current land use from sugarcane production to that of infrastructure associated with electricity distribution.
- In addition to this, the National Water Act (Act 36 of 1998) deals with the protection of water resources (i.e., wetlands and rivers).

7. METHODOLOGY

The following lists the various processes that were taken to collect the data needed to put this report together. The methodology complies with GN320's standards.

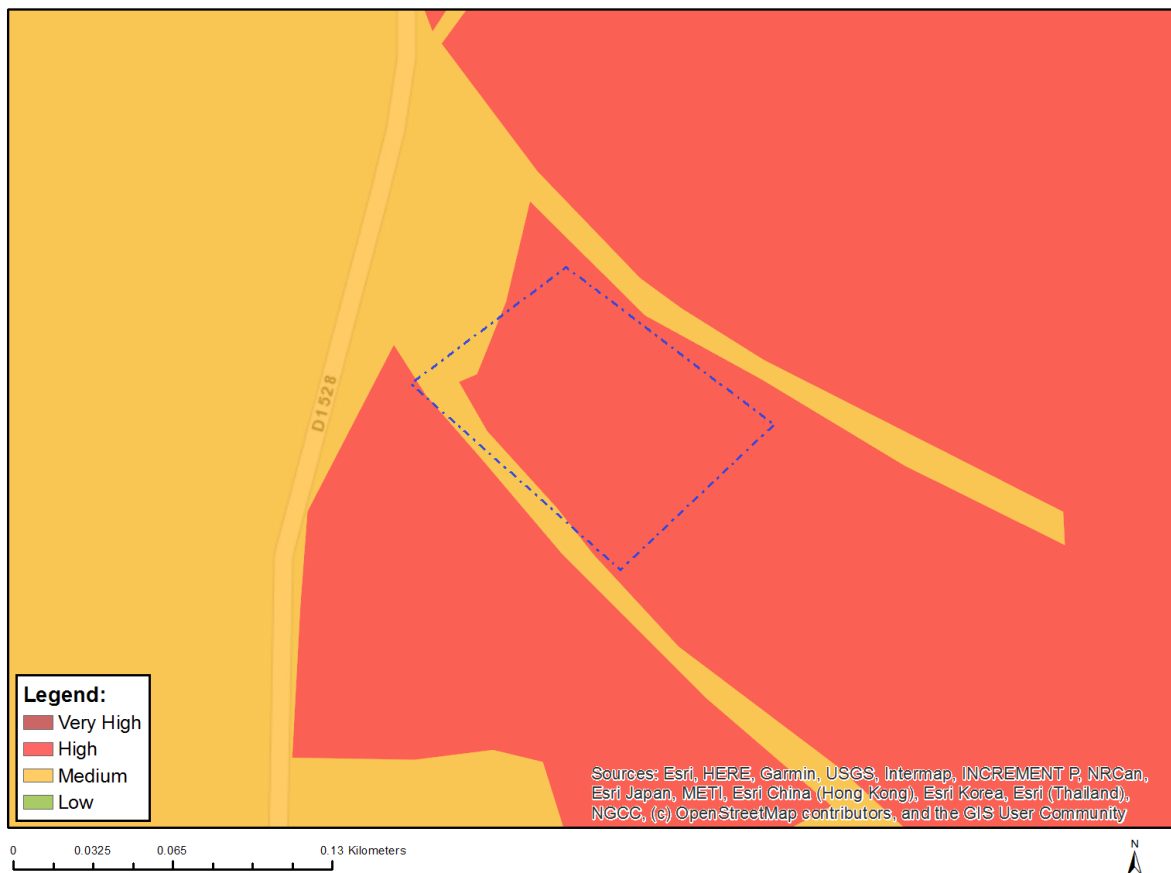


Figure 3 Agricultural Combined Sensitivity of the Ocheni Substation and Associated 21km 132kV Powerline project assessment zone (generated by Urbiosphere Environmental, 12 June 2020).



7.1 Desktop analysis of satellite imagery

We were able to obtain the most recent aerial photos of the area that Google Earth could offer. The satellite picture was analysed to determine areas of present influence, land uses inside the substation relocation grid connection path, and the overall landscape. Furthermore, every area that could have crop production and agricultural infrastructure was surveyed.

7.2. Site assessment

On February 23, 2023, Musa Netshivhambe visited the project assessment zone. While there, photographic documentation of the zone's typical soil characteristics was gathered. The images were utilized, together with other pertinent data on the area's land usage, to verify on-site the data sets and reports that were already in existence and used to characterize the baseline.

7.3 Analysis of all other relevant available information

To ensure a comprehensive analysis of the proposed development area, the following data was also analysed:

- To ascertain the land capacity classes of the project assessment zone in accordance with this approach, the DAFF provided the National Land capacity Evaluation Raster Data Layer. A geographical assessment modelling approach was used to produce the data (DAFF, 2017).
- The 2018 long-term grazing potential of South Africa was examined in the vicinity of the project evaluation zone. The Land Types of South Africa data set, the 2006 Vegetation Type of SA (as published by Mucina L. & Rutherford M.C.), the 1993 RSA grazing capacity map, and the KZN Bioresource classification data make up this data collection. The values for each location indicate the potential for long-term grazing if the veld is generally in decent shape.
- The Institute for Soil Climate and Water (ISCW) of the Agricultural Research Council (ARC) (Land Type Survey Staff, 1972-2006) provided the land type data for the project evaluation zone. The land type information is shown at a 1:250 000 scale and includes the classification of the earth's surface into several land types, representative topographic cross sections for each land type, and a representation of the predominant soil types for each of the terrain units that have been recognized.

7.4. Impact assessment methodology

The following criteria have been used to evaluate the project's direct, indirect, and cumulative impacts in accordance with the methodology established by Ourbiosphere Environmental (Pty) Ltd.:



- The nature, which shall include a description of what causes the effect, what will be affected and how it will be affected.
- The extent, wherein it will be indicated whether the impact will be local (limited to the immediate area or site of development) or regional, and a value between 1 and 5 will be assigned as appropriate (with 1 being low and 5 being high):
- The duration, wherein it will be indicated whether:
 - the lifetime of the impact will be of a noticeably short duration (0–1 years) – assigned a score of 1.
 - the lifetime of the impact will be of a short duration (2-5 years) - assigned a score of 2.
 - medium-term (5–15 years) – assigned a score of 3.
 - long term (> 15 years) - assigned a score of 4; or
 - permanent - assigned a score of 5.
- The **magnitude**, quantified on a scale from 0-10, where 0 is small and will have no effect on the environment, 2 is minor and will not result in an impact on processes, 4 is low and will cause a slight impact on processes, 6 is moderate and will result in processes continuing but in a modified way, 8 is high (processes are altered to the extent that they temporarily cease), and 10 is very high and results in complete destruction of patterns and permanent cessation of processes.
- The **probability** of occurrence, which shall describe the likelihood of the impact actually occurring. Probability will be estimated on a scale of 1–5, where 1 is very improbable (probably will not happen), 2 is improbable (some possibility, but low likelihood), 3 is probable (distinct possibility), 4 is highly probable (most likely) and 5 is definite (impact will occur regardless of any prevention measures).
- the degree to which the impact can be mitigated.
- the degree to which the impact can be reversed.
- the degree to which the impact may cause irreplaceable loss of resources.
- the significance, which shall be determined through a synthesis of the characteristics described above and can be assessed as low, medium, or high; and
- the status, which will be described as either positive, negative, or neutral.

The **significance** is calculated by combining the criteria in the following formula: $S=(E+D+M)P$

S = Significance weighting **E** = Extent

D = Duration **M** = Magnitude **P** = Probability

The **significance weightings** for each potential impact are as follows:

- < 30 points: Low (i.e., where this impact would not have a direct influence on the decision to develop in the area),
- 30-60 points: Medium (i.e., where the impact could influence the decision to develop in the area unless it is effectively mitigated),
- 60 points: High (i.e., where the impact must have an influence on the decision process to develop in



the area).

7.5 Study gaps, limitations, and assumptions

- Based on the photographic evidence provided by the EAP and the existing studies for the Ocheni Substation and associated 21km 132kV Powerline, it is assumed that the baseline soil and agricultural properties of the project assessment zone are satisfactorily demonstrated.
- It is assumed that the exact layout and location of the project infrastructure may change but that it will remain within the project assessment zone.
- Furthermore, it is believed that the infrastructure's individual components would remain in the same locations and that the activities involved in building and maintaining the infrastructure will be kept to those that are customary for a project of this kind.
- No other uncertainties and gaps have been identified that may affect the conclusions made in this report.

8. RESULTS OF DESKTOP ANALYSIS

8.1. Land capability

8.1.2 Literature Review

The conditions outlined in GN320 must be met by the submitted Agricultural Agro-Ecosystem Assessment. The scope of the proposed development's impact on agricultural resources, whether it will adversely affect the site's capacity to produce agricultural products, and whether any potential negative effects will be outweighed by any positive ones are among these requirements.

DAFF (2017) further modelled the land capabilities for the whole of South Africa on a rough scale. The results were categorized into 15 classes (see Table 1). Terrain, climate, and soil capabilities were utilized as the fundamental building blocks for this exercise to ensure a national land capability. A quick definition of land capability and agricultural potential will come from a mix of soil, topography, and climate factors. Land capacity is defined as the most intensive long-term sustainable use of land under rain-fed conditions. Simultaneously highlighted are the permanent constraints associated with the various land use types.

<p>Land Capability Class Increased Intensity of Use Land Capability Groups Land Capability Class Increased Intensity of Use Land Capability Groups</p>
--



I	W	F	LG	MG	IG	LC	MC	IC	VIC	Arable Land
II	W	F	LG	MG	IG	LC	MC	IC		
III	W	F	LG	MG	IG	LC	MC			
IV	W	F	LG	MG	IG	LC				
V	W	F	LG	MG						Grazing Land
VI	W	F	LG	MG						
VII	W	F	LG							
VIII	W									Wildlife
<p>W - Wildlife MG - Moderate Grazing MC - Moderate Cultivation</p> <p>F- Forestry IG - Intensive Grazing IC - Intensive Cultivation</p> <p>LG - Light Grazing LC - Light Cultivation VIC - Very Intensive Cultivation</p>										

As indicated in **Table 1**, the land potential classes are created by integrating the results of the land capability and the climate capability of a location. The overall results for land potential are then presented in Table 3-4.

Table 2 The combination table for land potential classification

Climate capability class

Land capability class	C1	C2	C3	C4	C5	C6	C7	C8
I	L1	L1	L2	L2	L3	L3	L4	L4
II	L1	L2	L2	L3	L3	L4	L4	L5
III	L2	L2	L3	L3	L4	L4	L5	L6
IV	L2	L3	L3	L4	L4	L5	L5	L6
V	Vlei	Vlei	Vlei	Vlei	Vlei	Vlei	Vlei	Vlei
VI	L4	L4	L5	L5	L5	L6	L6	L7
VII	L5	L5	L6	L6	L7	L7	L7	L8
VIII	L6	L6	L7	L7	L8	L8	L8	L8

Table 3 The Land Potential Classes.



Land potential	Description of land potential class
L1	Extremely high potential: No limitations. Appropriate contour protection must be implemented and inspected.
L2	High potential: Very infrequent and/or minor limitations due to soil, slope, temperatures, or rainfall. Appropriate contour protection must be implemented and inspected.
L3	Good potential: Infrequent and/or moderate limitations due to soil, slope, temperatures, or rainfall. Appropriate contour protection must be implemented and inspected.
L4	Moderate potential: Moderately regular and/or severe to moderate limitations due to soil, slope, temperatures, or rainfall. Appropriate permission is required before ploughing virgin land.
L5	Restricted potential: Regular and/or severe to moderate limitations due to soil, slope, temperatures, or rainfall.
L6	Very restricted potential: Regular and/or severe limitations due to soil, slope, temperatures, or rainfall. Non-arable
L7	Low potential: Severe limitations due to soil, slope, temperatures, or rainfall. Non-arable
L8	Very low potential: Very severe limitations due to soil, slope, temperatures, or rainfall. Non-arable

Table 4 Soils expected at the respective terrain units within the Dc 7 land type (Land Type Survey Staff, 1972 - 2006)

Terrain units	1 (20%)	3 (40%)	4 (35%)	5 (5%)			
Arcadia	26%	Valsrivier	55%	Valsrivier	58%	Rensburg	70%
Avalon	1%	Avalon	1%				
Bare Rock	5%	Bare Rock	2%	Sterkspruit	6%		
Glenrosa	5%	Glenrosa	2%	Estcourt	2%		
Hutton	4%	Shortlands	1%				
Mayo	10%	Swartland	5%	Katspruit	6%	Arcadia	8%
Shortlands	4%	Westleigh	2%				
Swartland	16%	Arcadia	14%	Arcadia	11%	Bonheim	10%
Valsrivier	25%	Bonheim	16%	Bonheim	17%	Katspruit	12%
Westleigh	4%	Mayo	2%				



Terrain

Figure 3: The computed slope percent for the project area. The remainder of the assessment area has a slope percentage between 0 and 15%, whereas smaller regions within the project area are characterized by slope percentages up to 25. This image shows a topography that is not homogeneous and contains both gentle and steep hills. According to the Digital Elevation Model (DEM) for the project region (Figure 5), the elevation there is between 1,420 and 1,490 meters above sea level (MASL).

9. METHODOLOGY

9.1 Desktop Assessment

SAGA software was used to calculate the elevation and slope % in order to assess the project region's suitability for agriculture.

9.2. Field Survey

Both cars and foot were used by locals and visitors to get around the location. The depth and soil form/family have been ascertained by means of a soil auger. The top layer of restriction, approximately 1.5 meters of earth, was manually augured. Using a portable GPS, the soil survey locations were marked as waypoints. According to "Soil Classification: A Taxonomic System for South Africa" (Soil Classification Working Group, 2018), soils were grouped all the way down to the soil family level. An existing landscape feature, such as open excavations, aided in identifying the diverse types and depths of soil.

"Soil Classification: A Taxonomic System for South Africa" (Soil Classification Working Group, 2018) classifies soil down to the family level. Further assistance in identifying the kinds and depths of soil can be obtained from open excavations and other existing landscape features. Based on the land capability data (DAFF, 2017), there are seven different land capability classes in the assessment zone of the Ocheni Substation and Associated 21km 132kV Powerline project, as well as in the surrounding area. In the project evaluation zone, there are around four of these land capacity classifications. Figure 3 displays the locations of the different land capacity classifications in relation to their surroundings.

The primary method for evaluating land capability was the National Land Capability Evaluation Raster Data Layer (DAFF, 2017) because of the compliance statement's structure and the screening tool's sensitivity matching the baseline findings. To compare the land potential and capability with the screening tool and determine the accuracy of the land capability sensitivity from (DAFF, 2017), a quick assessment of the land will also be conducted.



The land's potential for agriculture will be influenced by its topography, soil, and climate. The land's capacity is determined by its most intensive long-term sustainable use under rain-fed conditions. Simultaneously, it illustrates the ongoing constraints linked to the different land use classes. Three different capability groupings can be formed by combining eight different land capability categories. Table 7-1 lists the land classes and groupings based on diminishing capacity and use ranges. The risk of use increases from class I to class VIII (Smith, 2006).

10. CURRENT LANDUSE

Land use was identified using aerial imagery and then ground-truthed while out in the field.

The possible land use categories are:

- Agriculture crops.
- Bare areas.
- Built-up.
- Forest.
- Grazing lands.
- Natural veld.
- Plantation.

11. EROSION POTENTIAL

Erosion Possibility

Erosion has been computed using the (Smith, 2006) methodology. Table 5 displays the final erosion classes as well as the procedures for calculating the Fb1 ratings relevant to erosion potential.

Table 5 ratings relevant to the calculating of erosion potential (Smith, 2006)

Fine sand	Medium/coarse sand	Fine Sand	Medium/coarse sand	All sands
3.5	4.0	4.5	5.0	6.0
Step 2- Adjustment value (permeability of subsoil)				
Slightly restricted	Moderately restricted			Heavily restricted
-0.5	-1.0			-2.0



Step 3- Degree of leaching (excluding bottomlands)

Dystrophic soils, medium and heavy textures	Mesotrophic soils	Eutrophic or calcareous soils, medium and heavy textures
+0.5	0	-0.5
Organic topsoil	Step 4- Organic Matter	Humic Topsoil
+0.5		+0.5

Step 1- Initial value, texture of topsoil horizon		
Light (0-15% clay)	Medium (15-35% clay)	Heavy (>35% clay)

Step 5- Topsoil limitations

Surface crusting shrink/self-mulching	Excessive sand/high swell-
-0.5	-0.5

Step 6- Effective soil depth

Very shallow (<250 mm)	Shallow (250-500 mm)
-1.0	-0.5

Table 6 Final erosion potential class

Erodibility	Fb Rating (from calculation)
Very Low	>6.0
Low	5.0 - 5.5
Moderate	3.5 – 4.5
High	2.5 – 3.0
Very High	<3.0



12. IMPACT ASSESSMENT METHODOLOGY

The approach created by Ourbiosphere Environmental (Pty) Ltd was used to assess the importance of direct, indirect, and cumulative impacts. The following are considered while assessing the impact:

- A scale for the impact's severity and benefits that indicates whether it will be mild, have no effect, moderately severe or beneficial (a medium- to long-term impact that could be mitigated/a medium- to long-term benefit), very severe or beneficial (a permanent change that cannot be mitigated/a permanent and significant benefit with no real alternative to achieving this benefit);
- The risk that it may result in irreparable loss.
- The impact's reversibility.
- The impact's probability (improbable, probable, highly probable, or definite), which indicates the likelihood that the impact will actually occur.
- The impact's nature, which must describe what led to it, what will be affected by it, and how it will be affected.
- The impact's extent, which must specify whether it will be local or regional.
- The impact's duration (0–1 year), short-term (2–5 years), medium (5–15 years), long-term (> 15 years), or permanent.
- Status, which will be classified as either good, negative, or neutral.
- Significance, which will be calculated by combining the aforementioned traits and can be rated as low, medium, or high.
- Impact probability, which expresses the possibility that an impact will actually occur and is denoted as unlikely, likely, highly likely, or certain.

13. ASSUMPTIONS AND LIMITATIONS

- Before beginning the site evaluation and reporting,
- the applicable project area was confirmed.
- no soil samples were taken.
- The employed handheld GPS system may have errors of up to 5 meters. Therefore, any and all delineations could be wrong by up to 5 meters.



13.1 DESKTOP ASSESSMENT

13.1.1 Vegetation Type

The main vegetation type can be observed within the project is North Coast Grassland. However, where the Substation Location are occurring, in the main there is mostly residential dwellings around the site, the general area is covered by Ngongoni grassland or road or residential trees and fields that are fairly covered by *more* grass showing recovering from agricultural activities. At some areas, *Aristida junciformis* (Ngongoni grass) was also observed in the broader area. Some of the edge of cultivated areas around the site have been left fallow, where they have become infected with exotic weeds, native pioneer plants, or both.

The characteristic dry grasses and flat, previously extensively forested coastal lowlands comprise the CB 1 vegetation type. The latter mentioned grasslands include, under some circumstances, palm veld, thicket groups, and hygrophilous grasslands. This vegetation type presently comprises timber plantations, thickets, secondary grasslands, and sugar cane fields (in some situations), according to Mucina and Rutherford (2006).

13.1.2 Climate

With limited seasonality along the shore, summer rainfall occurs toward the interior areas of this vegetation type. Up to 1200 mm of rain may fall annually in coastal places, but as you approach inland, where it is much more humid, the amount of precipitation declines noticeably. The vegetation type is characterized by elevated temperatures and the atmosphere in CB 1. Mucina and Rutherford (2006) report that Lake St. Lucia typically experiences monthly low and elevated temperatures of 5.5°C and 35.3°C, respectively, with no frost.

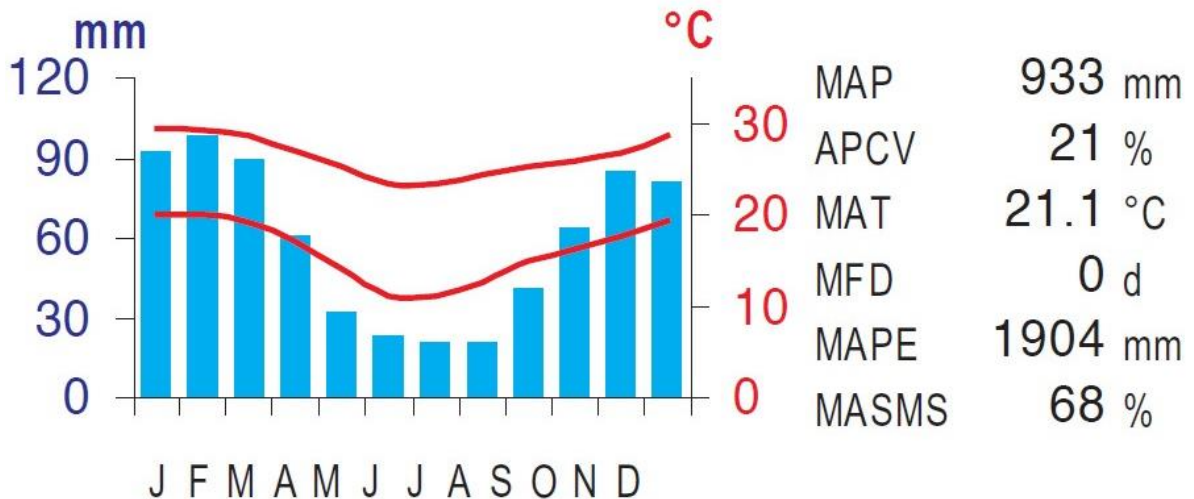


Figure 4: Climate for the Maputaland Coastal Belt (CB 1) (Mucina & Rutherford, 2006)

13.1.3 Soils and Geology

The land type database (Land Type Survey Staff, 1972–2006) indicates that the Ocheni Substation and Associated 21km 132kV Powerline deviation development belongs to the Hb 69 land type. Grey regic sands and other similar gray soils define the Hb land type. Figure 9-2 and Table 9-1 provide illustrations of the topography units and anticipated soil formations for the last described land type.

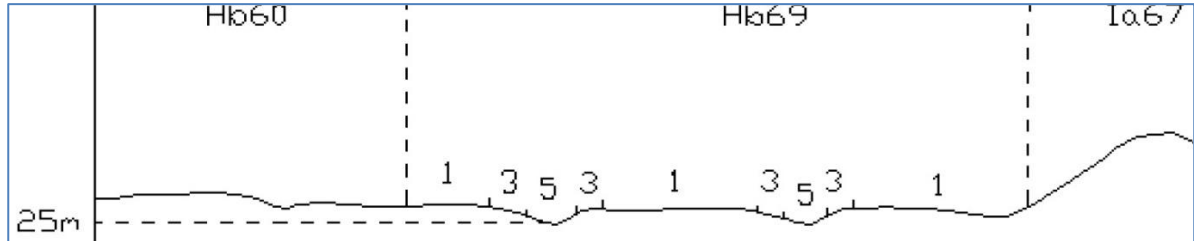


Figure 5 Illustration of land type Hb 69 terrain unit (Land Type Survey Staff, 1972 -2006)

Table 6 Soils expected at the respective terrain units within the Hb 69 land type (Land Type Survey Staff, 1972 - 2006)

Terrain Units

1 (70%)		3 (25%)		5 (5%)	
Fernwood	70%	Fernwood	65%	Champagne	50%
Vilafontes	10%	Champagne	10%	Fernwood	35%
Champagne	5%	Vilafontes	10%	Longlands	5%
Clovelly	5%	Hutton	5%	Kroonstad	5%
Hutton	5%	Clovelly	5%	Streambeds	5%
Shepstone	5%	Shepstone	5%		

13.1.4 Terrain

Figure 6 shows the slope % of the project area, which has been calculated. Smaller areas within the project area are distinguished by slope percentages up to 2.0%, with the majority of the project area having a slope percentage between 0.15% and 25.0%. The geography seen in this illustration is irregular, with alternating hillslopes. The project area's elevation (Figure 6) shows that it is between 41 and 54 meters above sea level (MASL).

The area is characterised by red-brownish subsoil that shows at more than 1m depth the influence of a seasonal fluctuating water table. The topsoil - which has a depth of about 50cm - is throughout the area studied of a melanic type. The B horizon which underlies the melanic A horizon is thin in the top part of the site. This makes that the soils in this part of the site are of Mayo type according to the South African soil taxonomy.

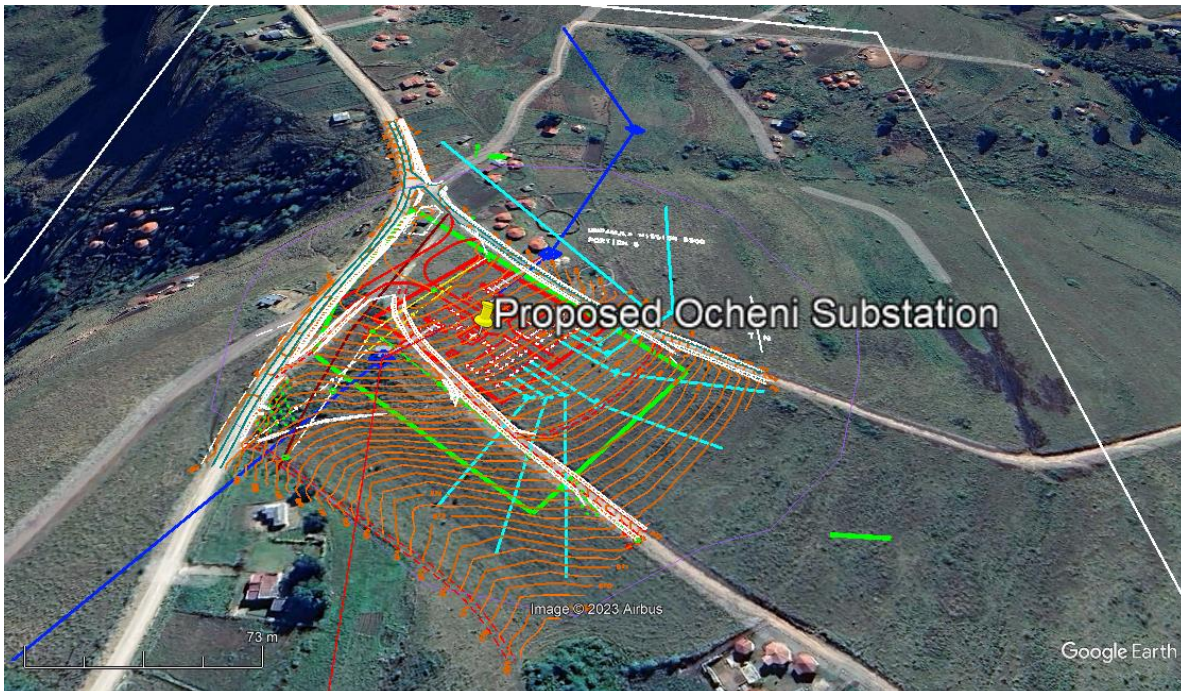


Figure 6: Slope of between 5 to 25 degrees (red lines) percentage map for the project area

The surrounding general area, it is cultivated land that in the main remain fallow and is also dependent on the topography. The steep slopes of the valley are characterised by extensive forest cultivation, whereas the gentler sloping land is characterised by sugar cane cultivation. The areas to the north-west, are sparsely settled. The land cover is predominantly indigenous bushveld, which exhibits limited disturbance. Erosion on the slopes is common due to poor subsistence farming practices.

13.2 Baseline Findings

13.2.1 Description of Soil Profiles and Diagnostic Horizons

Soil profiles were studied up to a depth of 1.0 m to identify specific diagnostic horizons which are vital in the soil classification process as well as determining the agricultural potential and land capability. The following diagnostic horizons were identified during the site assessment (**also see Figure 6**):

- Orthic topsoil.
- Organic topsoil; and
- Albic horizon.

13.2.1.1 Orthic Topsoil

Mineral horizons that have experienced varying degrees of biological activity and mineral weathering are known as orthotic topsoil. Different orthotic topsoils have different properties due to differences in parent material and climate. (For example, structure, colour, etc.) (WG for Soil Classification, 2018).

13.2.1.2 Organic Topsoil

The soil type's dark hue is due to the high content of organic carbon in the organic topsoil, as stated by SASA (1999). This type of soil forms after protracted saturation, which slows down the rate of decomposition and guarantees the formation of hemic or fibrous material.

13.2.1.3 Albic Horizon

The consistent white-greyish colours of albic horizons are often indicative of the presence of residual clay and quartz particles within the horizon's matrix. The main feature of this diagnostic horizon is bleached coloration, which is a result of several redox and ferrollysis pedological processes along with eluvial processes. According to the Soil Classification Working Group (2018), albic strata are regularly reached by lateral sub-surface flows resulting from hillslope processes.

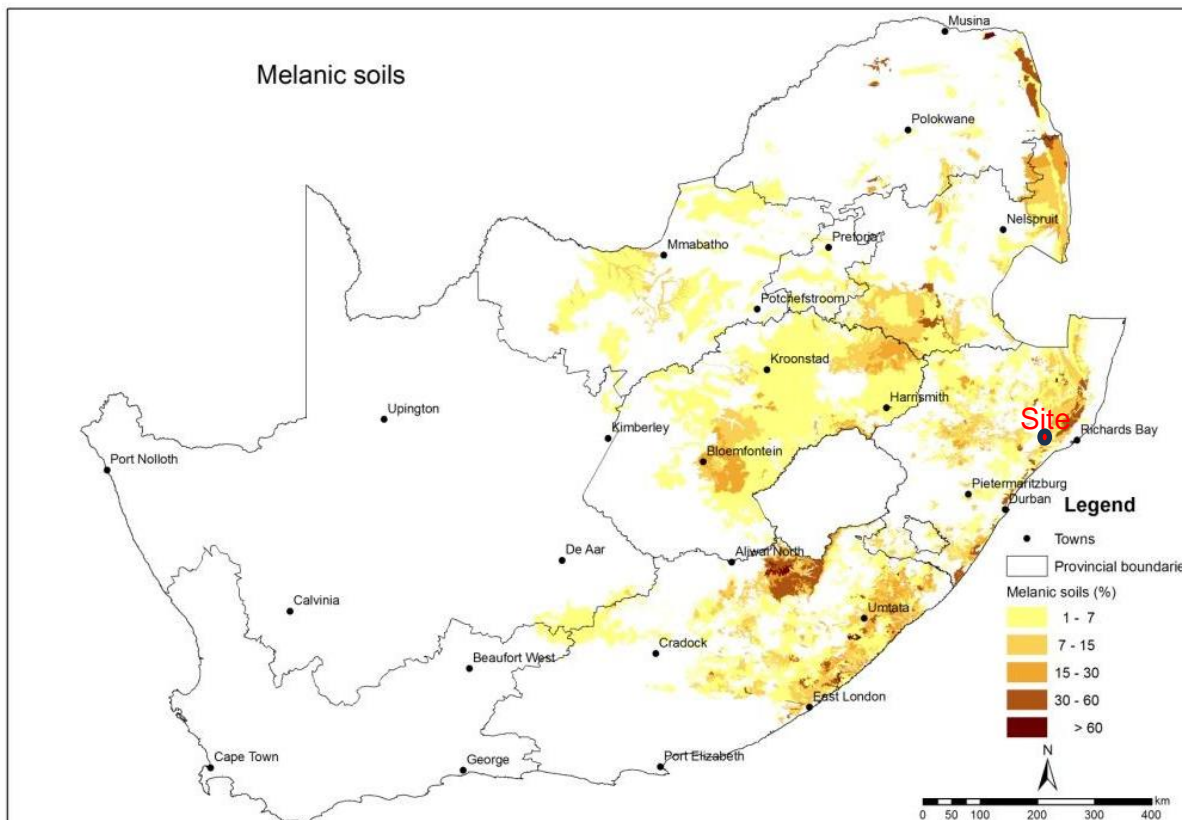


Figure 7a: Showing the Melanic type of soil covering the site.

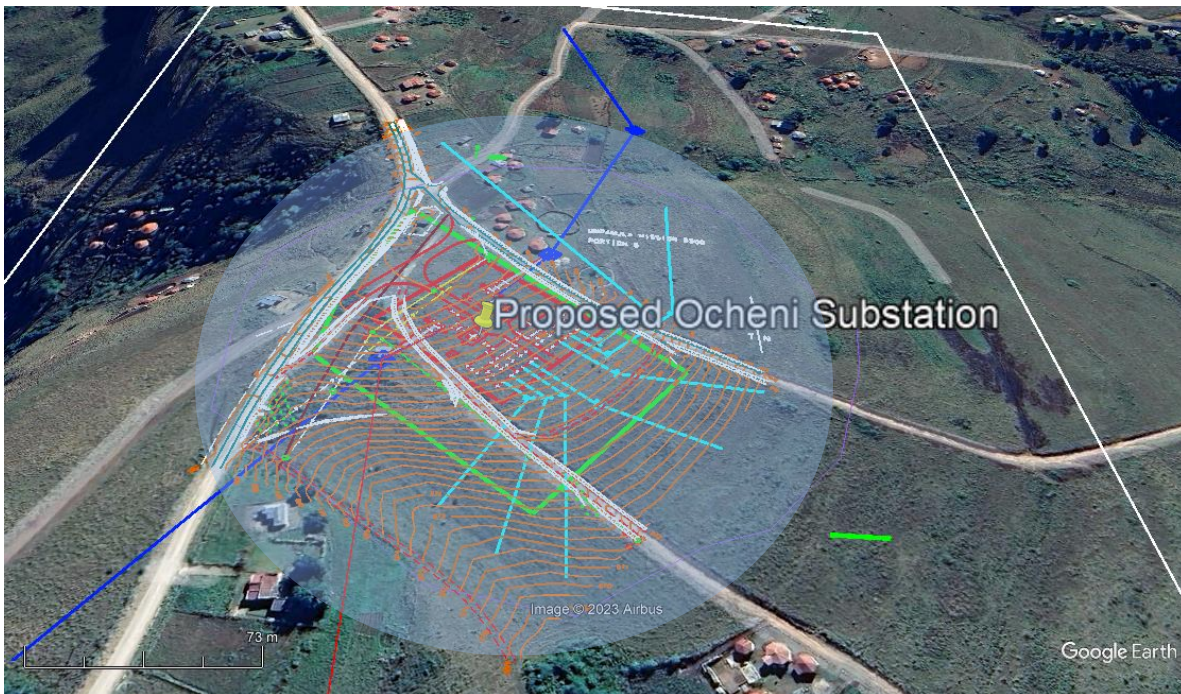


Figure 7b: Showing the Melanic type of soil covering the site.

13.2.2 Description of Soil Forms and Soil Families

During the site assessment various soil forms were identified. These soil forms have been delineated and are illustrated in Figure 7 and is described in **Table 6** according to depth, clay percentage, indications of surface crusting, signs of wetness and percentage rock. The soil forms are followed by the soil family and in brackets the maximum clay percentage of the topsoil. Soil family characteristics are described in **Table 6**.

Ap--0 to 8 inches; very deep brown (10YR 2/2) sandy loam; moderate medium granular structure; soft, very friable, nonsticky, nonplastic; common fine roots; very strongly acid; clear smooth boundary. (6 to 13 inches thick)

B--8 to 18 inches; dark brown (10YR 3/3) sandy loam; weak fine subangular blocky structure; soft, very friable, nonsticky, nonplastic; few fine roots; common fine quartz grains and black concretions; common fine weathered feldspar crystals; very strongly acid; clear smooth boundary. (8 to 13 inches thick)

C1--18 to 27 inches; brown (10YR 4/3) sandy loam: massive; soft, very friable, nonsticky, nonplastic; few fine roots; many fine quartz grains; common fine weathered feldspar crystals; few fine black concretions; very strongly acid; gradual smooth boundary. (8 to 13 inches thick)

13.2.2.1. Land types

The proposed Ocheni Substation and Associated 21km 132kV Powerline project assessment zone consist of three different land types. These land types are Fc254 (western part of the assessment zone), Fc256. The terrain units, slope and soil forms within each land type is described below.

13.2.2.1.1. Land Type Fc254

About 25440 acres of land in South Africa are this land type, according to the data sheet for Land Type Fc254. Only 0.12% of the land in this land type is thought to be suitable for arable farming, which means that this area has very little potential for agriculture. Toe-slope positions make up around 60% of the surface of the land type area, making them the most common terrain unit in this region. These areas are somewhat sloping (between 1 and 5%), and they are made up of a mix of black clay soils and shallow, rocky Mispah and Glenrosa soils. Deeper profiles of the Oakleaf shape (between 0.3m and deeper than 1.2m) make up about 15% of the toe-slopes and 65% of the minor depressions (Terrain unit 5). tiny portion of this land.

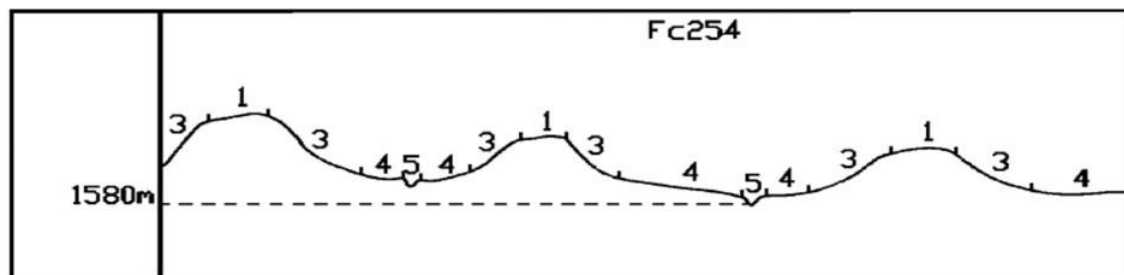


Figure 8: Terrain form sketch of Land Type Fc254

13.2.2.1.2. Land Type Fc259

Land Type Ib228 is composed of four different terrain units (Figure 9). Regarding the total land type area, foot-slopes (Terrain unit 4) with a modest slope (2 to 5%) account for almost 69%. The soil formations of this topographical unit are a combination of rock and shallow Mispah and Glenrosa profiles. The crest (Terrain unit 1) and mid-slopes (Terrain

unit 3) are composed of the same blend of shallow soils. The deeper soil profiles of the Oakleaf and Dundee types may be found in little depressions at this site (Terrain unit 5). It is believed that ib228 land types are unsuitable for arable farming. None of the estimated 3922 ha of this land type's total area in South Africa, according to the land type data sheet, are suitable for cultivating arable land.

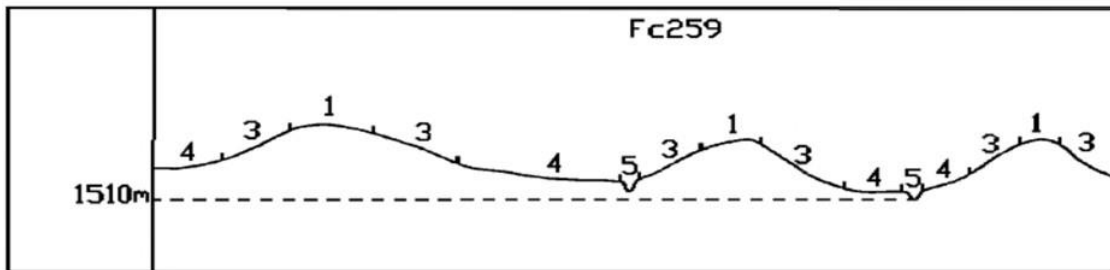


Figure 9: Terrain form sketch of Land Type Fc259

13.2.2.1.3. Land Type Db6

Only 25ha of the roughly 7215ha of Land Type Db6 in the nation are believed to be suitable for arable cultivation. There are only two terrain units that make up this type of land: terrain unit 4, which is flat to slightly inclined toe-slopes with a slope ranging from 0% to 2%, and terrain unit 5, which is modest depressions in the landscape (Figure 9). Both the toe-slopes and small depressions (Swartland form) are dominated by shallow soil profiles with moderate to strong soil structure. A small percentage of black clay soils and other soil types, such as Mispah, Glenrosa, and oakleaf soils, are also present in this type of area.

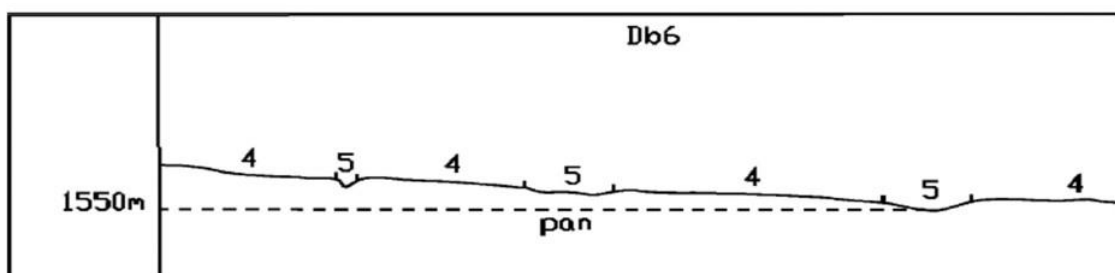


Figure 10: Terrain form sketch of Land Type Db6

13.3. Results of on-site inspection

13.3.1. Soil forms

Melanic Soils have black or dark grey topsoils that are well structured. The subsoil either contains lime or has a well-developed structure and is neutral or only slightly acid.

Occurrence

Melanic Soils occupy small areas scattered throughout the Kwazulu-Natal Coastal zone, in association with lime-rich rocks or dark (basic) volcanic rocks. They cover 10% of South Africa

Physical properties

Topsoil structure is usually stable. The soils shrink on drying and swell on wetting.

Chemical properties

Natural fertility is high. Base saturation is high with high exchangeable calcium or magnesium. The clay fraction is usually dominated by swelling (smectite) clays.

Biological properties

These soils are biologically highly active with high populations of soil organisms.

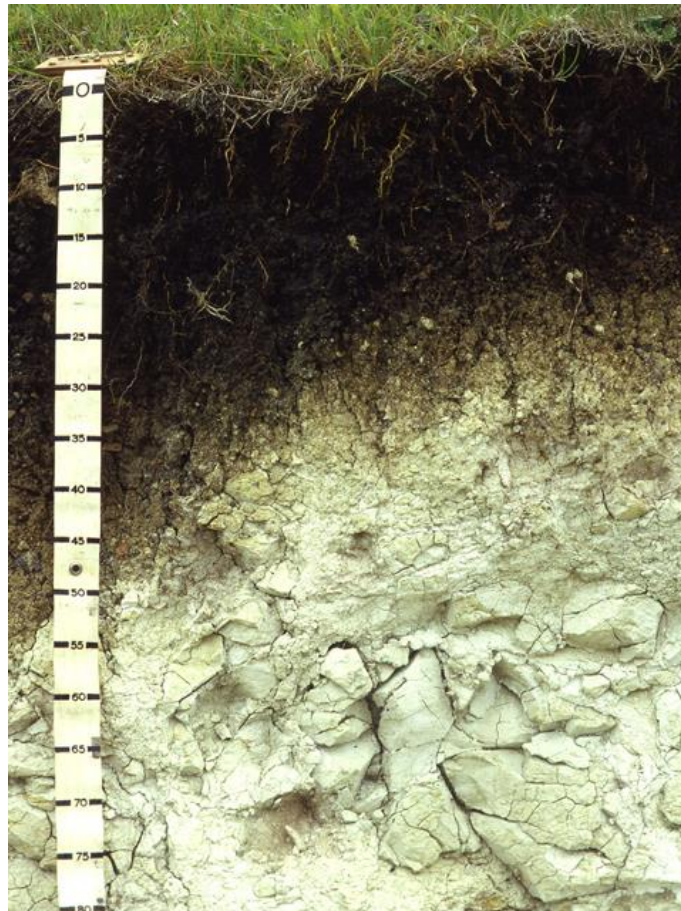


Figure 11: Photographic evidence of the Melanic soil profile present within the project assessment zone

13.4. Land use and agricultural activities

The current land use on all the land parcels assessed, is a combination of natural veld that support local biodiversity and small stock farming. The main vegetation type can be observed within the project is North Coast Grassland. However, where the Substation Location are occurring, in the main there is mostly dormant grassland cover around and surrounded by residential dwellings. The area is either covered by dormant subsistence fields that are fairly covered by *Themeda triandra* grass showing recovering from agricultural activities. *At some areas, Aristida junciformis* (Ngongoni grass) was also observed. Some of the edge of cultivated areas around the site have been left fallow, where they have become infected with exotic weeds, native pioneer plants, or both. (Figure 12).



Figure 12: Showing the vegetation of the area of the substation site.

In confirmation of the field crop data layer for the Kwazulu-Natal (DAFF, 2019), the project assessment zone is rainfed or irrigated crop fields. No special horticultural structures such as tunnels or greenhouses are present within this area.

13.5. Sensitivity analysis

The region is deemed to have Low Sensitivity to the proposed development after taking into account all of the desktop and baseline data that was previously collected. The land type analysis findings that show these regions are not suitable for producing arable crops were validated by the soil types found inside the project evaluation zone. Black clay and loamy clay soils have been identified as the predominant soil types in the evaluation zone of the Ocheni Substation and the associated 21-kilometer, 132kV Powerline project. In addition to the medium to high soil adaptability, the area experiences warm, dry winters devoid of frost and snow and a humid subtropical climate with



hot, humid summers. The yearly precipitation in Ocheni village is 1,009 millimetres (39.7 in). causes certain areas to occasionally become unsuitable for rainfed agriculture. Section 10 of this document discusses the project's expected effects on the productivity of the land and the characteristics of the soil.

14. IMPACT ASSESSMENT

14.1. Project description

Eskom have received an environmental authorization for the application of Environmental Authorisation in terms of the National Environmental Management Act, 1998: GN R543, R544 and R546: Construction of a new 20MVA 132/22kV Ocheni Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province, obtained on 29 August 2017 as amended.

Eskom have commenced with the construction of this project through Survey work on the ground, however Eskom noted that the approved location of Ocheni Substation as per the Environmental Authorization is not at the exact site location as Eskom knew the substation to be since the planning phase, rather the co-ordinate on the environmental authorization falls on a different property, and that site it is currently utilised by the local church. Eskom do not have authority to construct on that land and the civil work will be exorbitantly high and the church that is currently occupying the land has not given consent and also the land and rights issues will unnecessarily be expensive and delay the project.

Eskom therefore have approached the Department of Forestry, Fisheries and Environment (DFFE) to seek advice on how to include the original site on the authorization before the continuation of the substation construction. The consultation meeting with the following REF: 2023-01-0006 was held on January 27, 2023, with the officials from DFFE. Eskom requested to have the substation follow the Electricity Grid Infrastructure (Transmission Strategic Corridors) Process.

14.2. Impact significance rating

The impacts of the proposed Ocheni Substation and Associated 21km 132kV Powerline project on soil and agricultural productivity is envisaged to mainly occur during the construction phase of the project. Below follows a rating of the significance of each of the impacts.

14.2.1 Impact: Reduction of land with natural vegetation for livestock grazing



Tractor Loader Backhoe (TLB), Excavator and earthmoving plant will be used to excavate the substation site platform and on some occasion on the powerline structure foundations after bush clearing has been conducted Ocheni Substation and Associated 21km 132kV Powerline. In areas where obstacles such as rock outcrops are present, earth-moving equipment will be used to prepare the surface for the delivery of the construction materials.

Nature: The availability of grazing land for livestock farming will not be reduced during the construction phase. It is anticipated that the significance impact will remain the same as the Ocheni Substation and Associated 21 km 132kV Powerline area will not be likely be fenced-off for security purposes.

	Without mitigation	With mitigation
Extent	Local (1)	Local (1)
P0m m cn Duration	Short duration - 2-5 years (2)	Short duration - 2-5 years (2)
Magnitude	Low (4)	Low (4)
Probability	Definite (4)	Definite (4)
Significance	Low (28)	Low (28)
Status (positive or negative)	Negative	Negative
Reversibility	High	High
Irreplaceable loss of resources?	Yes	Yes
Can impacts be mitigated?	Yes	Yes

Mitigation:

- All left-over construction material must be removed from site once construction on a land portion is completed.
- No boundary fence must be opened without the landowners' permission.
- No open fires made by the construction teams are allowable during the construction phase.
- Prior arrangements must be made with the landowners to ensure that livestock and game animals are moved to areas where they cannot be injured by vehicles traversing the area.
- Removal of obstacles to allow for access of construction vehicles must be kept to only where essential.
- Vegetation clearance must be restricted to areas where infrastructure is constructed.

Residual Impacts:

The residual impact from the construction and operation of the Ocheni Substation and Associated 21km 132kV Powerline is considered low.



Cumulative Impacts:

Any additional infrastructure that will be constructed to strengthen and support the operation of the Ocheni Substation and Associated 21km 132kV Powerline will result in additional areas where grazing veld will be disturbed.

14.2.2 Impact: Soil erosion

All areas where vegetation is removed from the soil surface in preparation for the Ocheni Substation and Associated 21km 132kV Powerline construction, will result in exposed soil surfaces that will be prone to erosion. Both wind and water erosion are a risk and even though the project area is in the arid climate, the intensity of single rainstorm may result in soil particles being transported away. Once the soil particles are removed, vegetation will have difficulty establishing itself on the rock and lithic material in the area.

Nature: The clearing and levelling of a limited area of land of the total of (8 square meters) within the proposed project assessment zone will increase the risk of soil erosion in the area. It is anticipated that the risk will naturally reduce as grass and lower shrubs re-establishes in the areas around the new infrastructure once the construction has wrapped up and the operational phase continues.

	Without mitigation	With mitigation
Extent	Local (1)	Local (1)
Duration	Medium-term (3)	Medium-term (3)
Magnitude	Moderate (6)	Low (4)
Probability	Probable (3)	Improbable (2)
Significance	Medium (30)	Low (16)
Status (positive or negative)	Negative	Negative
Reversibility	Low	Low
Irreplaceable loss of resources?	Yes	No



Can impacts be mitigated?	Yes	N/A
Mitigation: <ul style="list-style-type: none">▪ Land clearance must only be undertaken immediately prior to construction activities and only within the development footprint.▪ Unnecessary land clearance must be avoided.▪ Level any remaining soil removed from excavation pits that remained on the surface instead of allowing small stockpiles of soil to remain on the surface.▪ Where possible, conduct the construction activities outside of the rainy season.		
Residual Impacts: <p>The residual impact from the construction and operation of the proposed Ocheni Substation and Associated 21km 132kV Powerline on the susceptibility to erosion is considered extremely low.</p>		
Cumulative Impacts: <p>Any additional infrastructure that will be constructed to strengthen and support the operation of the Ocheni Substation and Associated 21km 132kV Powerline will result in additional areas were exposed to soil erosion through wind and water movement.</p>		

14.2.3 Impact: Soil pollution

Construction workers will have access to the site during the construction phase to prepare the terrain and build the Ocheni Substation and Associated 21km 132kV Powerline infrastructure. Soil contamination may be caused by on-site rubbish creation as well as potential spills and leaks from construction trucks and equipment.

- Nature: The following construction activities can result in the chemical pollution of the soil:
- Petroleum hydrocarbon (present in oil and diesel) spills by machinery and vehicles during earthworks and the removal of vegetation as part of site preparation.
- Spills from vehicles transporting workers, equipment, and construction material to and from the construction site.
- The accidental spills from temporary chemical toilets used by construction workers.
- The generation of domestic waste by construction workers.



- Spills from fuel storage tanks during construction.
- Pollution from concrete mixing.
- Any construction material remaining within the construction area once construction is completed.
- During the operational phase of the power line, maintenance and repairs can result in waste generation within the servitude area.

	Without mitigation	With mitigation
Extent	Local (1)	Local (1)
Duration	Short-term (2)	Short-term (2)
Magnitude	Moderate (6)	Low (4)
Probability	Low (4)	Improbable (2)
Significance	Medium (36)	Low (14)
Status (positive or negative)	Negative	Negative
Reversibility	Low	Low
Irreplaceable loss of resources?	Yes	No
Can impacts be mitigated?	Yes	N/A

Mitigation:

- Maintenance must be undertaken regularly on all vehicles and construction/maintenance machinery to prevent hydrocarbon spills.
- Any waste generated during construction, must be stored into designated containers, and removed from the site by the construction teams.
- Any left-over construction materials must be removed from site.

Residual Impacts:

The residual impact from the construction and operation of the proposed project will be low to negligible.

Cumulative Impacts:

- Any additional infrastructure that will be constructed to strengthen and support the operation of the Ocheni Substation and Associated 21km 132kV Powerline and where waste is not removed to designated waste sites, will increase the cumulative impacts associated with soil pollution in the area.



15. ASSESSMENT OF CUMULATIVE IMPACTS

"Cumulative impact" describes the effects of an activity in the past, present, and reasonably near future, as well as any associated effects that, by themselves may not be significant, but may become so when added to other, already present, reasonably foreseeable effects resulting from related or different activities.

The objective of the cumulative assessment is to determine whether these effects are pertinent to the proposed project at the proposed site (i.e., whether the addition of the project will have a greater impact). If the proposed development is built, this section should discuss whether it will:

- Unacceptable risk
- Unacceptable loss
- Complete or whole-scale changes to the environment or sense of place
- Unacceptable increase in impact

Table 7: Assessment of cumulative impact of decrease in areas available for livestock farming

Nature:		
Decrease in areas with suitable land capability for livestock farming.		
	Overall impact of the proposed project considered in isolation	Cumulative impact of the project and other projects in the area
Extent	Local (1)	Regional (2)
Duration	Short duration - 2-5 years (2)	Long-term (4)
Magnitude	Low (4)	Low (4)
Probability	Highly likely (4)	Highly likely (4)
Significance	Low (28)	Medium (40)
Status (positive/negative)	Negative	Negative
Reversibility	High	Low
Loss of resources?	No	Yes
Can impacts be mitigated?	Yes	Yes
Confidence in findings:		



Low.
<p>Mitigation:</p> <p>The only mitigation measure for this impact is to keep the footprints of all Ocheni Substation and Associated 21km 132kV Powerline activities as small as possible to be within the 100-by-100m metres of the substation and to manage the soil quality by avoiding far-reaching soil degradation such as erosion.</p>

Table 2: Assessment of cumulative impact of areas susceptible to soil erosion

Nature:		
Increase in areas susceptible to soil erosion		
	Overall impact of the proposed project considered in isolation	Cumulative impact of the project and other projects in the area
Extent	Local (1)	Regional (2)
Duration	Medium-term (3)	Medium-term (3)
Magnitude	Moderate (6)	Moderate (6)
Probability	Probable (3)	Probable (3)
Significance	Low (30)	Medium (33)
Status (positive/negative)	Negative	Negative
Reversibility	Low	Low
Loss of resources?	No	Yes
Can impacts be mitigated?	Yes	yes
Confidence in findings:		
Low.		
Mitigation:		
<p>The contractor should adhere to the highest standards for soil erosion prevention and management as defined in Section 10.2.2 above.</p>		

**Table 8:** Assessment of cumulative impact of increased risk of soil pollution

Nature:		
Increase in areas susceptible to soil pollution		
	Overall impact of the proposed project considered in isolation	Cumulative impact of the project and other projects in the area
Extent	Local (1)	Regional (2)
Duration	Short-term (2)	Short-term (2)
Magnitude	Moderate (6)	Moderate (6)
Probability	Probable (3)	Probable (3)
Significance	Low (27)	Medium (30)
Status (positive/negative)	Negative	Negative
Reversibility	Low	Low
Loss of resources?	No	No
Can impacts be mitigated?	Yes	Yes
Confidence in findings:		
High.		
Mitigation:		
The contractor should adhere to the highest standards for soil pollution prevention and management as defined in Section 11.2.3 above.		

16. ACCEPTABILITY STATEMENT

The proposed Ocheni Substation and Associated 21km 132kV Powerline is regarded as a permissible development within the region of the project assessment zone that was evaluated for the purpose of producing the Agricultural Compliance Report based on the data analysis and impact assessment discussed above.

The soils are Melanic characterized by humic, clayey, rich, and between 50 and 80 cm deep in the study area. They are underlain by a metamorphic rock that has undergone significant weathering and is rich in amphibolite. At the foot slope (i.e., close to the geo-structural born hat borders the north of the site), a red-brownish subsoil that shows at more



than 1m depth the influence of a seasonal fluctuating water table overlies the clayey humic surface horizon of about 50 cm depth. The area under study has topsoil of the melanic type, with a depth of around 50 cm. The top portion of the site has a thin B horizon, which lies beneath the melanic A horizon.

It is anticipated that the construction phase will have exceptionally low impacts that range from low to exceptionally low and that through the consistent implementation of the recommendation mitigation measures, these impacts can all be reduced to very low since it is only Substation Location. Impacts during the operational phase are associated with maintenance of the infrastructure as well as possible repairs that may be required in the case of equipment failure.

Given that the Ocheni Substation and Associated 21km 132kV Powerline infrastructure will be Substation Location of about 100m-by-100m surrounded by residential dwellings both directions, We hereby certify that all practicable steps have been taken to prevent or minimize fragmentation and disturbance of agricultural activities, provided that the mitigation measures recommended in this report are carried out.

Our expert view is that this application should be approved if the mitigation measures are adopted to prevent soil erosion and soil pollution and to lessen effects on the veld quality of the affected farm sections. The project infrastructure should also stay within the 500-meter project assessment zone, but its placement anywhere within the assessment zone has already been evaluated for impacts, mitigations, and ratings; therefore, regardless of its exact location within the 500-meter project assessment zone, it is considered acceptable from the perspective of agricultural impact.

In the main, the area is no longer used for any agricultural purpose as per the landowner Chief Zubane, therefore, the project will not be taking away the agricultural potential since the field has been left to lay fallow for several years. Although, the substation site is located on the field that was used previously for plantation of sugarcane, for so many years, it was no longer used for the same purposes and this project will not be disrupting the agricultural Activities of the field.



17. REFERENCE LIST

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- The Soil Classification Working Group, 2018. *Soil Classification – Taxonomic System for South Africa*. Dept. of Agric., Pretoria.
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ANNEXURES 8

ANIMAL SPECIES COMPLIANCE STATEMENT

**THE TERESTRIAL ANIMAL SPECIES THEME COMPLIANCE
STATEMENT FOR OCHENI SUBSTATION AND ASSOCIATED 21KM
132KV POWER LINE**

DFFE REF: 2023-01-0006

**CONSTRUCTION OF A NEW 20MVA 132/22KV OCHENI
SUBSTATION AND ASSOCIATED 21KM 132KV POWER LINE IN
MAPHUMULO WITHIN MAPHUMULO LOCAL MUNICIPALITY IN
THE KWAZULU-NATAL PROVINCE.**

**CLIENT: ESKOM DISTRIBUTION
KZWAZULU-NATAL OPERATING UNIT**

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OCTOBER 2023

NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND ENVIRONMENTAL IMPACT REGULATIONS, 2014 (AS AMENDED) – REPORTING REQUIREMENTS FOR SPECIALIST THEMES

GN 1150 of 30 October 2020: Terrestrial Animal Species Compliance Statement (Areas where no natural habitat remains. Natural areas where there is no suspected occurrence of SCC)	Section of Report
5.1 The compliance statement must be prepared by a SACNASP registered specialist under one of the two fields of practice (Zoological Science or Ecological Science).	P5
5.2 The compliance statement must:	Section 1
5.2.1 be applicable to the study area;	Section 1
5.2.2 confirm that the study area, is of “low” sensitivity for terrestrial animal species; and	Section 1
5.2.3 indicate whether or not the proposed development will have any impact on SCC.	Section 5
5.3.1 contact details and relevant experience as well as the SACNASP registration number of the specialist preparing the compliance statement including a curriculum vitae;	P7
5.3.2 a signed statement of independence by the specialist;	Section 2
5.3.3 a statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment;	Section 2
5.3.4 a description of the methodology used to undertake the site survey and prepare the compliance statement, including equipment and modelling used where relevant;	Section 2
5.3.5 the mean density of observations/ number of samples sites per unit area.	Section 3
5.3.6 where required, proposed impact management actions and outcomes or any monitoring requirements for inclusion in the EMPr	Section 4
5.3.7 a description of the assumptions made and any uncertainties or gaps in knowledge or data; and	Section 2
5.3.8 any conditions to which the compliance statement is subjected.	Section 4,

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DECLARATION OF INDEPENDENCE

The Environmental Impact Assessment Regulations Regulation 13(1) of Government Notice No R982 of 2014), requires that the EAP must be Independent. And have expertise in conducting environmental impact assessments or undertaking specialist work as required, including knowledge of the Act,

EAP Expertise:

Musa Netshivhambe has experience that spans 3 decades working with Integrated Environmental Management Systems conducting almost 100 Environmental Impact Assessment, Environmental Management related project, assisting with many habitat suitability studies for Black Rhinos, conducting Botanical Assessment Studies, Development of Environmental Management Studies, Conducting Training on Tree and Grass Identification Trainings, compiling over 100 Environmental Management Programmes, Water use Licenses and many countless environmental management reports and advice to Private Individuals, Government SOCs and the Government Departments of South Africa. Musa is registered with Environmental Assessment Practitioners Association of South Africa (EAPASA: 2019/1853) and Certificated Natural Scientist with the South African Council for Natural Scientific Professions (Reg. No. 200076/12).

Declaration of independence:

Ourbiosphere Environmental (Pty) Ltd in an independent consultancy firm and hereby declare that it does not have any financial or other vested interest in the undertaking of the proposed activity, other than remuneration for the work performed in terms of the National Environmental Management Act, 1998 (Act 107 of 1998). In addition, remuneration for services provided by Ourbiosphere is not subjected to or based on approval of the proposed project by the relevant authorities responsible for authorising this proposed project.

Disclosure:

Ourbiosphere undertake to disclose, to the competent authority, any material information that has or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) and will provide the competent authority with access to all information at its disposal regarding the application, whether such information is favourable to the applicant or not. Based on information provided to Ourbiosphere by the client, and in addition to information obtained during the course of this study, Ourbiosphere present the results and conclusion within the associated document to the best of the author's professional judgement and in accordance with best practise.

Musa Netshivhambe

.....

21 August 2023



Ourbiosphere Environmental (Pty) Ltd

1. INTRODUCTION

Eskom have received an environmental authorization for the application of Environmental Authorisation in terms of the National Environmental Management Act, 1998: GN R543, R544 and R546: Construction of a new MVA 132/22kV Ocheni Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province, obtained on 29 August 2017 as amended.

Eskom have commenced with the construction of this project through Survey work and pegging of pole structure positions on the ground, however Eskom noted that the approved location of Ocheni Substation as per the Environmental Authorization is not at the exact site location as Eskom knew the substation to be since the planning phase, rather the co-ordinate on the environmental authorization falls on a different property adjacent to the north, and that site it is currently utilised by the local church. Eskom do not have authority to construct on that land and the civil work will be exorbitantly high and the church that is currently occupying the land has not given consent and also the land and rights issues will unnecessarily be very expensive and delay the project.

Eskom therefore have approached the Department of Forestry, Fisheries and Environment (DFFE) to seek advice on how to include the original site on the authorization before the continuation of the substation construction. The consultation meeting with the following REF: 2023-01-0006 was held on January 27, 2023, with the officials from DFFE. Eskom requested to have the substation follow the Impact Assessment for the Electricity Grid Infrastructure (Transmission Strategic Corridors) Process.

This have necessitated Eskom to seek Department of Forestry, Fisheries and Environment (DFFE) on whether to amend the Environmental Authorisation through an Impact Assessment Process for the Strategic Transmission Corridor (EGI) process. Eskom requested a meeting with Department of Forestry, Fisheries and Environment (DFFE) and the consultation meeting with the following REF: 2023-01-0006 was held on January 27, 2023, with the officials from DFFE.

From this meeting, Eskom requested to have the proposed substation follow the Transmission Strategic Corridors Process (EGI) for obtaining an Environmental Authorisation. That is, because the proposed Ocheni Substation Project falls within the Expanded Electricity Grid Infrastructure (EGI) [Expanded Eastern Corridor] that is, is it is located within the Eastern Strategic Transmission Corridor to be precise as per the National Environmental Management Act, 1998 (Act N0.107 of 1998) Standard No 383 of 29 April 2021 as gazetted. The Standard identification is in terms of sections 24(3), 24(5)(1) and 24(5)(b) of the National Environmental Management Act, 1998 of expanded geographical areas of strategic importance for the development of electricity transmission and distribution infrastructure.

If it is read in conjunction with the extension of the Strategic Transmission Corridors as outlined in the Schedule hereto, which was announced on February 16, 2018, under Government Notice No. 113. Via exclusions and/or certain requirements of the Impact Assessment Procedure, Eskom wants to be excluded. The EGI procedure is in accordance with the Notice of Identification in Terms of Sections 24(5)(a) and (b) of the National Environmental Management Act, 1998, of the procedure to be followed in applying for Environmental Authorization for Large-Scale Electricity Transmission and Distribution Development Activities identified in Terms of Section 24(2)(a) of the National Environmental Management Act, 1998, when occurring in Geographic Areas of Strategic Importance. In this instance, the proposed Construction of a new MVA 132/22kv Ocheni Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province. falls within the Transmission Strategic Corridors (EGI), Expanded Eastern Corridor.

2. DFFE SCREENING TOOL SITE VERIFICATION

The majority of the project assessment zone's shallow rocky soil has shallow land capacity classes and soil depths. There are two grades of land capability: Low-Very-Low (Class 04) and Low-Moderate (Class 07). The long-term grazing capacity of 32 ha/LSU shows that considerable land expanses are needed for long-term sustainable livestock production. The vegetation and temperature of the project assessment zone make it more suitable for small stock husbandry (sheep and goats) than cattle breeding. The results of the Site Verification are provided below and indicate that the site is considered low sensitivity. The location of the proposed Ocheni Substation is in a field that has been laying fallow and surrounded residential dwellings and is frequented by locals as there is a footpath that traverse the site from North-western direction towards south-eastern direction. Although the site has been left fallow for a while, there is no way it can be used by many animal species as their habitat due the human presence on site. The field is surrounded by the residential dwelling and access road. This on its own will not be an ideal habitat for animals, let alone abundance of animals that can warrant the site to be considered having a medium animal sensitivity. The general area maybe medium animal sensitivity, but the affected site as well as looking at the footprint of the substation and the forever presence of humans on site, the medium rating is hereby disputed in favour of low in as far as Animal sensitivity is concerned after site visit is concerned.

In the main, the close proximity of the site and the fact that the site is surrounded by residential dwelling almost on all direction is the contributing factor is the location of both structures within the residential areas, their location proximity of the residential dwellings can easily introduce unwanted poaching and can also generally threaten terrestrial animals away. The other major contributor is the agricultural activities that occasionally practiced on site. This on its will fend off the potential animals to inhabit the site.

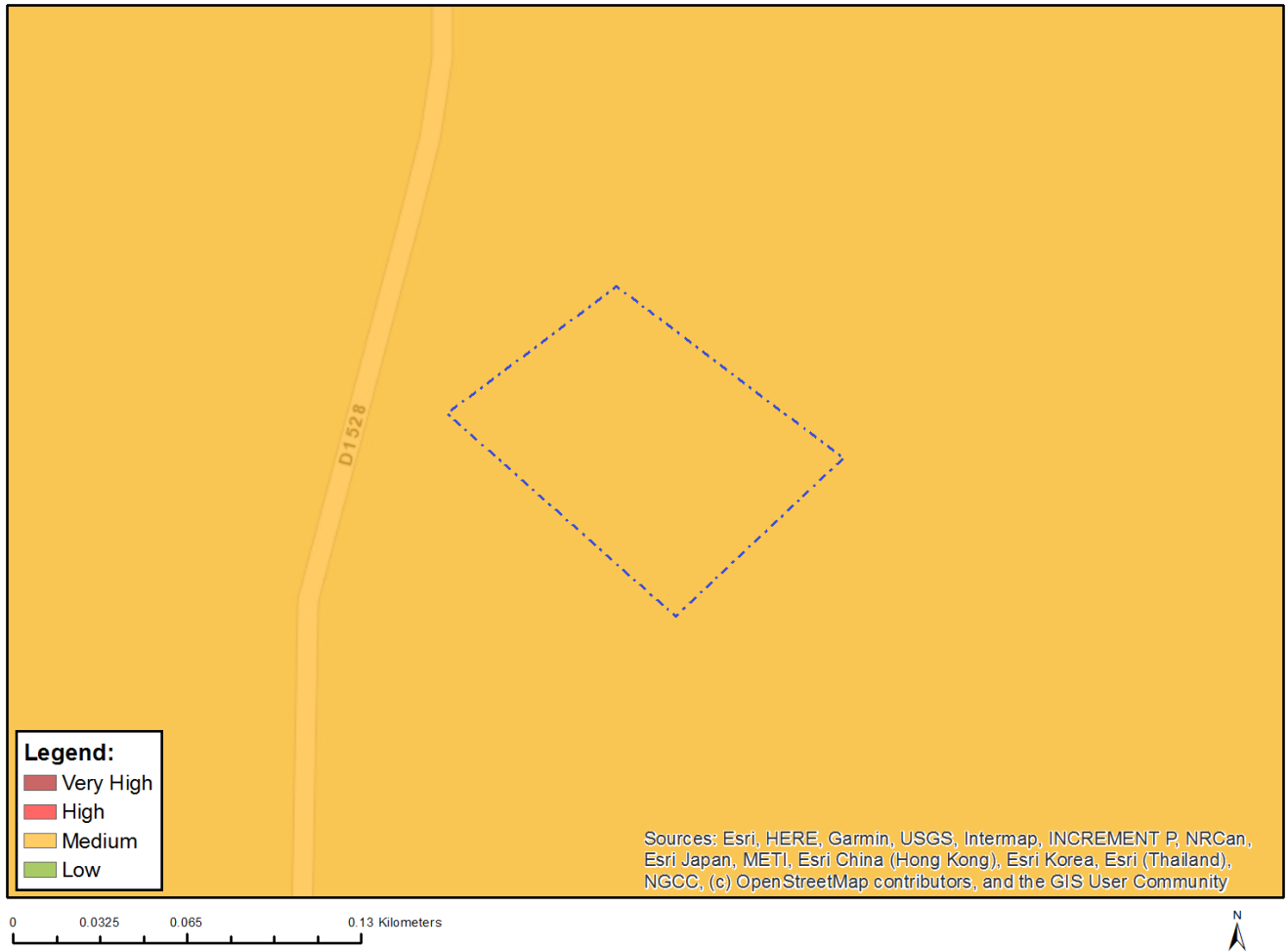


Figure 1. The Medium Animal Species Theme for the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation according to the DFFE Screening Tool.

Table 1. Sensitivity features for the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation and associated 21km 132kV power line in Maphumulo as defined by the DFFE Screening Tool for the site.

Sensitivity	Feature(s)
Medium	Mammalia- <i>Chrysospalax villosus</i>
Medium	Mammalia- <i>Ourebia ourebis s</i>
Medium	Sensitive species 8
Medium	Invertebrate- <i>Chrysospalax villosus</i>

3. RELEVANT ASPECTS OF THE DEVELOPMENT

Eskom noted at Ocheni Village where the substation is to be situated there are some residential dwellings that are situated in close proximity with the site almost in all directions. The proposed Ocheni substation coordinates were observed to falling not on the area Eskom preferred, rather in an area north of the proposed site where there is currently utilised by a local church.

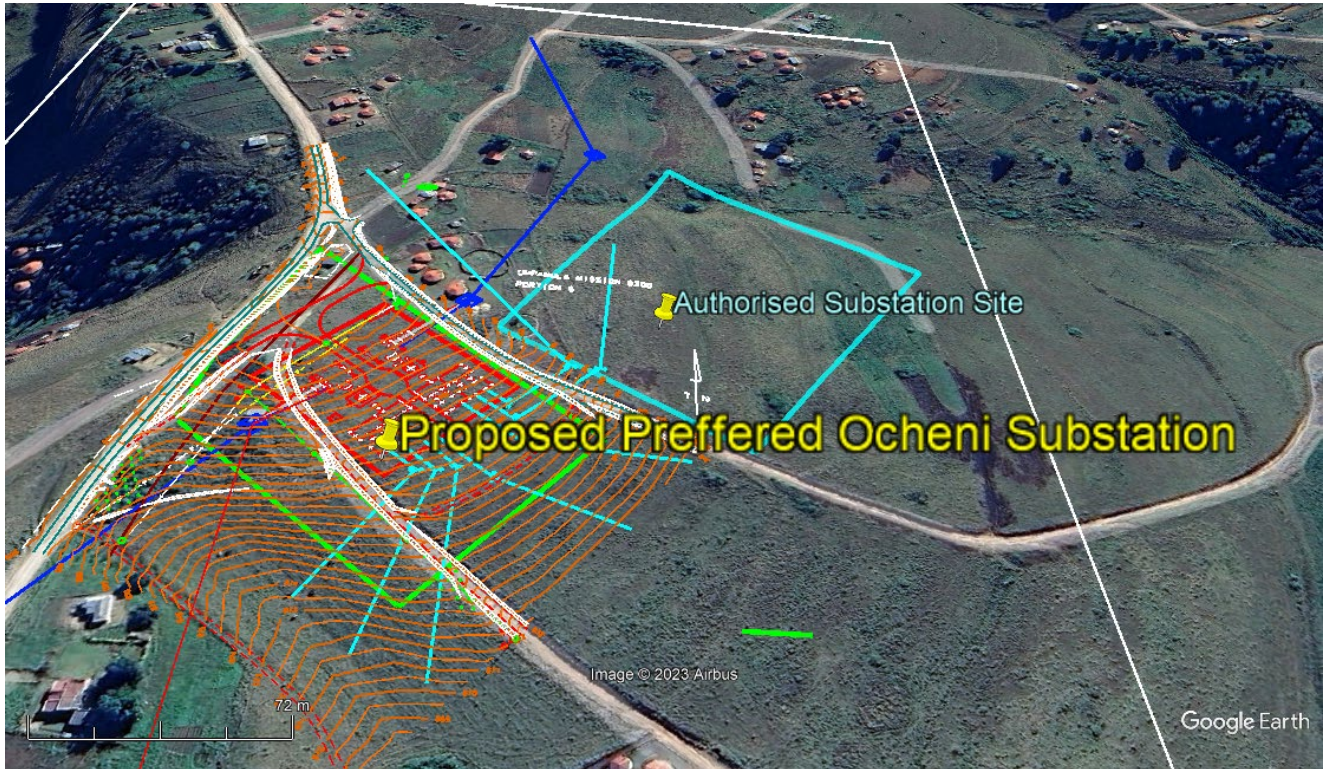


Figure 1. Satellite image showing the location of the proposed Construction of a new MVA 132/22kv Ocheni Substation versus what was authorised.

Table 2: Summary of the components, specifications, and approximate areas of impact of the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation and associated 21km 132kV power line in Maphumulo project

Project Components	Description	Structure 20	Structure 21
Location	Four Corner coordinates:	Northwest Corner S 29°08'46.64". E 31°00' 49.98"	Northeast Corner S:29°08'48.38"; E:31°00'52.27"
		Southwest Corner S 29°08'48.35". E 31°00' 48.37"	Southeast Corner S:29°08'50.01"; E:31°00'50.68"
Access	For commuter traffic and some small loads, access from North to South, or South to north on the local gravel road. The main highway is R74 travelling from southeast toward Northwestern direction from Maphumulo Municipality towards Hermannsburg.	Through R74 from Southeast to Northwest	
Extent	The total area of the site being considered for developing the proposed substation	100-by-100m	1 ha

5. METHODOLOGY

5.1. Habitat Delineation

Satellite imagery was utilized to identify and map regions of potential habitat in order to evaluate the availability, distribution, and breadth of potential *Chrysospalax villosus* and *Ourebia ourebi s* and *Arytropteris basalis* habitat within the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation and associated 21km 132kV power line in Maphumulo (Ocheni). Due to the specialized habitat requirements of the *Chrysospalax villosus* and *Ourebia ourebi s*, such places can be rather easily identified from satellite photography. The *Chrysospalax villosus* and *Ourebia ourebi s* as well as *Arytropteris basalis* lives in dense riparian growth along the seasonal rivers in the central Karoo (Nama-Karoo shrubland), according to the IUCN 2016 Mammal Red List Assessment. The riverine vegetation on alluvial soils next to seasonal rivers is where it specifically occurs. Such locations may be mapped with a fair amount of accuracy and dependability and are easily discernible on satellite imagery.

Chrysospalax villosus is found on sandy soils in grasslands, meadows and along edges of marshes in Savanna and Grassland biomes. *Arytropteris basalis* species occurs only within coastal forest and thicket mosaics of KwaZulu-Natal Province. *Ourebia ourebi s* the distribution of *Ourebia ourebi s* is patchy and discontinuous throughout the grasslands of central and southern Africa.

5.2. Camera Trapping

The Construction of a new MVA 132/22kv Ocheni Substation and associated 21km 132kV power line in Maphumulo was examined using camera traps to determine whether *Chrysospalax villosus*, *Arytropteris basalis* and other animals were present. The Endangered Wildlife Trust (EWT) established the *Chrysospalax villosus* and *Ourebia ourebi s* and *Arytropteris basalis* Camera Trapping Guidelines expressly for the assessment of *Chrysospalax villosus* and *Ourebia ourebi s* and *Arytropteris basalis* within the proposed Ocheni development area, which provided guidance for the camera trapping. The cameras were set up gradually across the site.

In other sites where it was thought vital to make sure that *Chrysospalax villosus* and *Arytropteris basalis* were not present, cameras were placed for periods of not less than 4 days. According to the EWT recommendations, six weeks at the very least is sufficient. The study used a total of 4 camera positions, which are shown in **Figure 3** below. The first set of cameras on the site were installed in June 2023. In case of *Ourebia ourebi s*, it was easy to determine that it did not exist on site due to the relative smaller substation site and by virtue of it been a grassland and the presence of residential dwellings. Otherwise, it would have been easily poached.

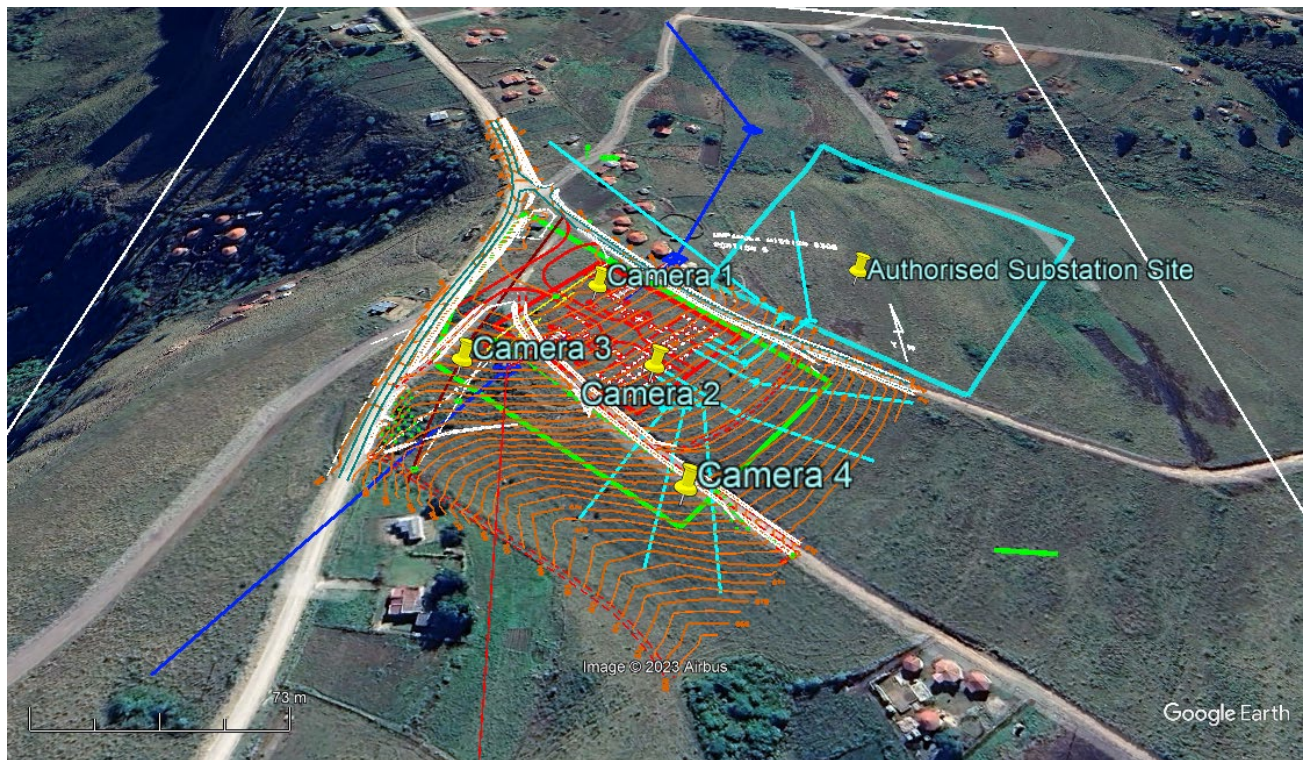


Figure 3. Map showing the location of camera traps used in the study as well as the mapping of potential habitat areas identified as potential *Chrysospalax villosus* and *Arytropteris basalis* habitat.

6. LIMITATIONS & ASSUMPTIONS

A number of limitations and assumptions are inherent in camera trapping studies generally and with the assessment of rare fauna. These include the following:

- It is impossible to prove the absence of a species with absolute certainty, such as *Chrysospalax villosus* and *Ourebia ourebis*. Therefore, it is believed that presence is more important than absence. However, when *Chrysospalax villosus* and *Arytropteris basalis* were spotted at a camera trapping site, they frequently got caught not long after the camera was deployed and were plentiful there in comparison to other wildlife. It is unlikely that they were present at locations where they were not picked up because this suggests that they are very numerous and active within areas of acceptable habitat.
- Since some of the species that could be present at the site is low density and only sometimes active, camera traps might not detect it very frequently. The use of numerous cameras dispersed throughout the location helps to partially address this.

7. BASELINE DESCRIPTION OF THE AFFECTED ENVIRONMENT

7.1. Camera Trapping Results

Despite several other species being found at 4 separate places within the substation study area, the *Chrysospalax villosus* and *Ourebia ourebis* s and *Arytropteris basalis* were not found within the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation and associated 21km 132kV power line in Maphumulo (Ocheni). Spatial limitations on all of the observations to the bigger habitat patches scattered along the Mountain to the east of the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation. The area has mainly been surrounded by residential dwellings and subsistence farming of crops and to a certain extent sugarcane plantation. The presence of the *Chrysospalax villosus* and *Ourebia ourebis* s and *Arytropteris basalis* within the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation and associated 21km 132kV power line in Maphumulo is highly unlikely due to the lack of habitat there and their fidelity to particular safer habitat plant communities; as a result, the site is therefore considered low sensitivity for this species.

7.2. Faunal Communities

7.2.1. Mammals

Up to 48 animals have been discovered for the larger study area in the Mammal Map database; however, many of them are introduced or dependent on conservation, and roughly 33 of these can be considered free-roaming and may be impacted by the development. This includes several species that are listed as being on the "red list," including *Chrysospalax villosus*, *Arytropteris basalis*, and *Ourebia ourebis*. Table 3 looks at the possible occurrence of these species and their possible impacts on development.

The Construction of a new MVA 132/22kv Ocheni Substation and associated 21km 132kV power line at Ocheni, Maphumulo location is therefore regarded as having low sensitivity for terrestrial mammals because no listed species were spotted there. This does not mean that the *Chrysospalax villosus*, *Ourebia ourebis* s and *Arytropteris basalis* may not be present in the general area. However, neither species was seen within the proposed substation site, which is considered low sensitivity for this species. Figures 5 and 6 below show pictures of the residential development, around the proposed substation location and show that there isn't much suitable habitat for this species there.

Yellow mongoose was among the species photographed by the camera traps inside the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation. The majority of the aforementioned species are not in grave danger and are all classified as Least Concern.

Table 3. Mammals on the Red List that are known to exist in the region and are probably present in the Construction of

the Proposed new 20MVA 132/22kv Ocheni Substation nearer to the substation site and its most likely repercussions.

Species	Status	Likely Presence & Consequence	
		Wider Construction of a new MVA 132/22kv Ocheni Substation	In close proximity to proposed substation site
<i>Chrysospalax villosus</i> and <i>Ourebia ourebiis s</i> and <i>Arytropteris basalis</i>	CR	Not Confirmed present within the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation.	There are no major drainage lines within the site that contain extensive tracts of riparian vegetation, and the camera trapping failed to confirm the presence of this species within the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation with the result that the site is considered low sensitivity. for this species.
Black-footed Cat	VU	There are historical records from the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation area and it is considered to be possibly present	This is a secretive species and while it may be present in the area, this species has not been detected by the cameras

Species	Status	Likely Presence & Consequence	
		Wider Construction of a new MVA 132/22kv Ocheni Substation	Within substation site
Grey Rhebok	NT	This species is confirmed present in the broader area and can commonly be seen in most areas of high-lying ground	This species was not detected by the camera traps on the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation. This species has a wide distribution in the country and the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation project is not likely to generate a significant impact on the local population of this species.



Figure 5. Showing the overview of the Proposed Ocheni Substation location, which cannot be deemed ideal for *Chrysopalax villosus*, *Ourebia ourebis s* and *Arytropteris basalis* as it is heavily transformed and fragmented the residential dwelling and previous agricultural activities.



Figure 6. Showing the 22kV powerline traversing the site surrounded by residential dwellings.

7.2.2. Reptiles

The range of habitats present, particularly along the south of the site, can be attributed to the unusually high reptile diversity in the surrounding area. There are about 49 species of reptiles that are known from the area in general and could possibly exist inside the research area, with 12 having confirmed occurrences, 44 having likely occurrences, and 6 having possible occurrences.

Most of its dispersion is discovered along a section of the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation maybe up the mountain range. Nevertheless, as of right now, none of the species of concern are on the Red List and have not been discovered within the proposed new MVA 132/22 kv Ocheni Substation. This species spends only short periods of the day inactive since they are more often specifically targeted; yet, given unfavourable environmental conditions, they may potentially aestivate for extended periods of time.

The Construction of a new MVA 132/22kv Ocheni Substation as a result, the primary area of possible impact from the development of the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation is most likely to be habitat loss for these species. The sensitivity mapping specifically considered the possibility of habitat loss for this species, and all locations that provide extremely favourable habitat for this species have been marked as off-limits. S



Figure 7a. The most common species observed within the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation was the *Diplacodes pumila* which above which is not red listed,

7.2.3. Amphibians

Only 1 species of amphibians have been identified in the research region, indicating a relatively low variety of amphibians there. *Sclerophrys gutturalis* the only species that have been spotted close to the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation site. Although this species is not frequently observed in the research area and its existence at the site is regarded as doubtful, it is associated with Grassland and water environment. There are not many various drainage systems on the generalised Substation area that have transient pools that toads and frogs can use for seasonal breeding. *Chrysospalax villosus*, *Arytropteris basalis* and other ecological factors make these areas important, so there are no specific areas that should be avoided in order to protect amphibians. Instead, these areas are captured by other ecological factors. A significant long-term influence on amphibians is unlikely given the localized nature of key amphibian habitats at the site, as well as the generally arid nature of the location and the low overall population of amphibians.



Figure 7a. *Sclerophrys gutturalis* – Guttural Toad

Guttural toads are terrestrial, but they occur in or around water bodies such as ponds. They forage at night and seek shelter under rocks, logs and in between gutters during the day. The guttural toad moves fast from one area to another, on paved surfaces and in dense vegetation.

8. PROPOSED IMPACT MITIGATION ACTIONS

To lessen and minimize impacts on terrestrial species, the EMPr for the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation should incorporate the following avoidance and mitigation measures.

- All laydown areas, construction sites, etc. should have lockable trash cans that are resistant to tampering by

baboons, monkeys, and other wildlife.

- A log should be kept detailing all fauna-related incidences or mortalities that occur on site, including roadkill, electrocutions etc. during construction and operation. These should be reviewed annually and used to inform operational management and mitigation measures.
- During construction, limiting access to the site and ensuring that workers and equipment stay inside the clearly marked construction zones. Environmental orientation for all on-site employees and contractors.
- Electrical fencing around substation (and related battery facilities) and other features shouldn't be placed within 30 cm of the ground, as tortoises can become tangled in such fences and be zapped to death. Or, to prevent larger tortoises from approaching the fence, a guard wire set at 20 cm can be utilized.
- No ditches or holes that have been dug should be left open for a long time since animals could fall in and become trapped.
- Reptile and other vulnerable species search and rescue during construction before intact vegetation is removed. Such a search and rescue operation should be carried out by subject-matter experts with prior knowledge of the relevant faunal groupings.
- There should be a low-speed limit in place for all cars. Light cars should be allowed to travel at 40 km/h and heavy vehicles at 30 km/h.

9. CONCLUSION & RECOMMENDATIONS

Ourebia ourebis s and *Arytropteris basalis* and *Chrysospalax villosus* although present in the general area surrounding Ocheni substation site, they were not found in the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation site itself. This is despite being present in the broader area around the proposed Ocheni substation site. None of these were located in the research region for the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation study area. All of the sightings are in the traditional floodplain habitat for this species, demonstrating its remarkable fidelity to certain safer habitats away from people dwelling in that community. The Construction of the Proposed new 20MVA 132/22kv Ocheni Substation area did not contain any such places; thus the location is regarded as having poor sensitivity for this species.

As a result, the DFFE Screening Tool results indicating that the site has medium sensitivity for the *Chrysospalaxthus, losus* and *Ourebia ourebis s* and *Arytropteris basalis* is hereby refuted, and the site verification supports the finding that the site has low sensitivity for the *Chrysospalax villosus* and *Ourebia ourebis s* and *Arytropteris basalis* and for terrestrial mammals more generally. Thus, in terms of the *Chrysospalax villosus* and *Ourebia ourebis s* and *Arytropteris basalis* and

other mammals of potential concern. The presence of residential dwelling all around the proposed substation site is the major determinant factor on the low sensitivity of animal species.

There are no reasons that the Construction of the Proposed new 20MVA 132/22kv Ocheni Substation and associated 21km 132kV powerline in Maphumulo Project site should not proceed into the development phase. In the main, the substation is occurring within a residential developed area and have also been completely transformed into subsistence farming fields, although many of them are laying fallow.

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ANNEXURES 9

AQUATIC BIODIVERSITY SPECIES SENSITIVITY THEME COMPLIANCE STATEMENT

**THE AQUATIC BIODIVERSITY SPECIES SENSITIVITY THEME
COMPLIANCE STATEMENT FOR OCHENI SUBSTATION AND
ASSOCIATED 21KM 132KV POWER LINE POWERLINE DEVIATION**

DFFE REF: 2023-01-0006

**CONSTRUCTION OF A NEW 20MVA 132/22KV OCHENI
SUBSTATION AND ASSOCIATED 21KM 132KV POWER LINE IN
MAPHUMULO WITHIN MAPHUMULO LOCAL MUNICIPALITY IN
THE KWAZULU-NATAL PROVINCE.**

**CLIENT: ESKOM DISTRIBUTION
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1. INTRODUCTION

Eskom have received an environmental authorization for the application of Environmental Authorisation in terms of the National Environmental Management Act, 1998: GN R543, R544 and R546: Construction of a new 20MVA 132/22kV Ocheni Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province, obtained on 29 August 2017 as amended.

Eskom have commenced with the construction of this project through Survey work on the ground, however Eskom noted that the approved location of Ocheni Substation as per the Environmental Authorization is not at the exact site location as Eskom knew the substation to be since the planning phase, rather the co-ordinate on the environmental authorization falls on a different property, and that site it is currently utilised by the local church. Eskom do not have authority to construct on that land and the civil work will be exorbitantly high and the church that is currently occupying the land has not given consent and also the land and rights issues will unnecessarily be very expensive and delay the project.

Eskom therefore have approached the Department of Forestry, Fisheries and Environment (DFFE) to seek advice on how to include the original site on the authorization before the continuation of the substation construction. The consultation meeting with the following REF: 2023-01-0006 was held on January 27, 2023 with the officials from DFFE. Eskom requested to have the substation follow the Electricity Grid Infrastructure (Transmission Strategic Corridors) Process.

The proposed Ocheni Substation Project falls within the Expanded Electricity Grid Infrastructure (EGI) [Expanded Eastern Corridor] that is, is it is located within the Eastern Strategic Transmission Corridor to be precise as per the National Environmental Management Act, 1998 (Act N0.107 of 1998) Standard No 383 of 29 April 2021 as gazetted. The Standard identification is in terms of sections 24(3), 24(5)(1) and 24(5)(b) of the National Environmental Management Act, 1998 of expanded geographical areas of strategic importance for the development of electricity transmission and distribution infrastructure.

When read in conjunction with as expansion of the Strategic Transmission Corridors published in Government Notice No. 113 under Government Gazette No. 41445 on 16 February 2018, as set out In the Schedule hereto. Eskom intends to be excluded through exclusions and/ or specific requirements of Basic Assessment Process. The EGI process is in accordance to Notice of identification in terms of Section 24(5)(a) and (b) of the National Environmental Management Act, 1998, of the

procedure to be followed in applying for Environmental Authorisation for large scale Electricity Transmission and Distribution Development activities identified in terms of Section 24(2)(a) of the National Environmental Management Act, 1998 when occurring in geographical areas of strategic importance.

In this instance, the proposed Construction of a new 20MVA 132/22kV Ocheni Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province falls within the Transmission Strategic Corridors (EGI), Expanded Eastern Corridor.

To this effect, The Department requested the following, that: for the Department to consider Eskom's request to follow the EGI process, Eskom must:

- Utilise the Web Based Environmental Screening Tool to determine the sensitivity of the substation site.
- Eskom's Environmental Assessment Practitioner to conduct a ground truthing to confirm or contrast the sensitivity as shown by the National web based Environmental Screening tool.
- A feedback report be prepared and be subjected to a public participation period of 30 days and all comments be included and then be submitted to the DFFE for decision.

This report contains the site's various sensitivities as per National Web based Environmental Screening Tool and The ground truthing feedback and other measures as suggested by the Environmental Assessment Practitioner (EAP).

1.1. Web Based Environmental Screening Tool

The site's environmental sensitivities were identified using the web-based environmental screening program. Prior to the site inspection, the initial environmental screening was completed on February 15, 2023. After the site visit, the final environmental screening report was created on March 4th, 2023, simply to make sure the environmental sensitivity had not altered.

2. PURPOSE OF THE REPORT

In line with gazetted requirements for an Aquatic Biodiversity Compliance statement, this report provides baseline data on the aquatic biodiversity of the study area and evaluates the potential environmental sensitivity of the site under consideration for a proposed development. This report will be attached to the Impact Assessment in the application for environmental authorization, as required by the Environmental Impact Assessment Regulations.

3. PROJECT DISCRPTION

The project area falls within the Ocheni village of the Maphumulo Local Municipality area within the iLembe District Municipality in KwaZulu-Natal Province GPS coordinates:

Northwest Corner S 29°08'46.64". E 31°00' 49.98";	Northeast Corner S: 29°08'48.38"; E:31°00'52.27",
Southwest Corner S 29°08'48.35". E 31°00' 48.37"	Southeast Corner S: 29°08'50.01"; E: 31°00'50.68"

Figure 1.1 below) and is approximately 100m-by-100m (1ha) in extent. This area falls within the Quarter Degree Grid Square (QDS) 2931AA.

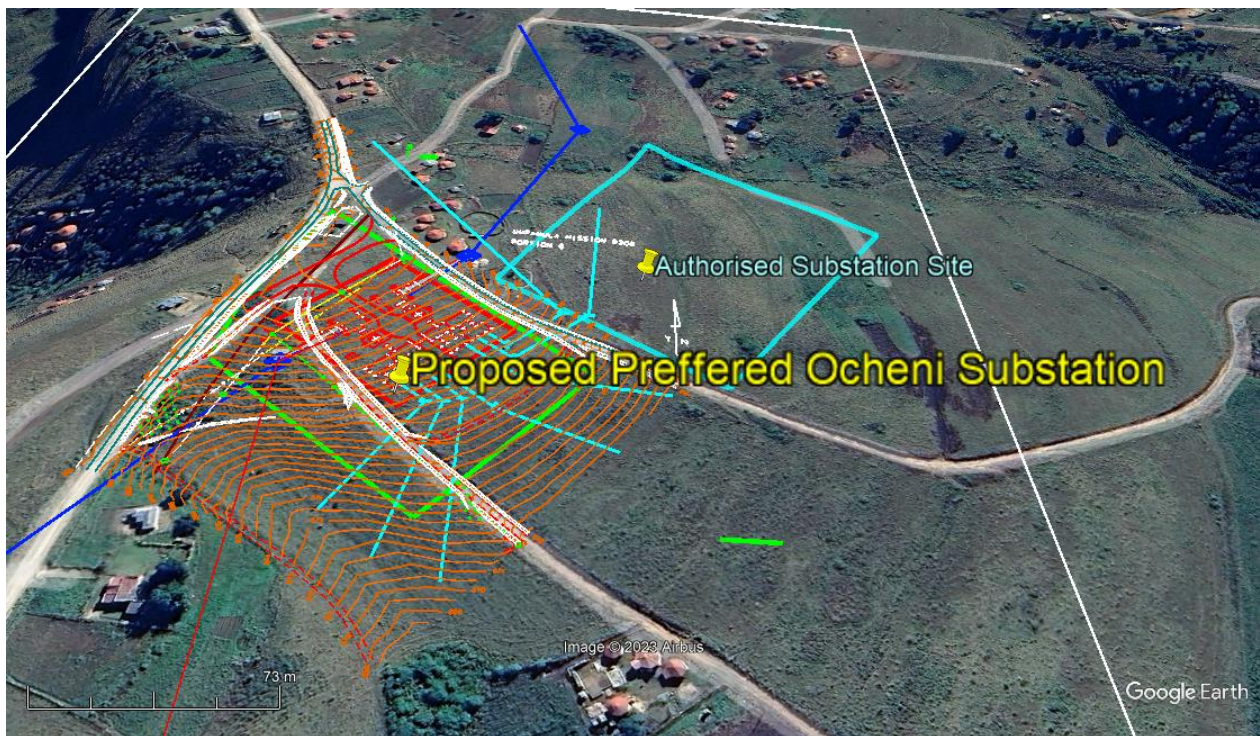


Figure 1.1: Showing the location of the proposed new 20MVA 132/22kV Ocheni Substation.

4. METHODOLOGY

The National Environmental Management Act (1998)'s " According to the Biodiversity 3(b) - protocol for the assessment and reporting of environmental impacts on aquatic biodiversity published in Government Notice No. 648 Government Gazette 45421 10 MAY 2019. . Following the site sensitivity verification procedure and in accordance with the evaluation and

reporting requirements outlined in the protocol, a aquatic biodiversity compliance statement was evaluated against the minimal reporting standards outlined in the protocol.

4.1. Study Area

The web based Environmental screening Tool has assigned a Very High sensitivity rating for the aquatic biodiversity sensitivity theme in the area where Proposed new 20MVA 132/22kV Ocheni Substation Project site. On the same note, the protocol for the assessment and reporting of environmental impacts on aquatic biodiversity indicated that if a Very High sensitivity rating is allocated for aquatic biodiversity features, An applicant, intending to undertake an activity identified in the Scope of this Protocol, on a site identified as being of "Very High sensitivity" for aquatic biodiversity on the national web based environmental screening tool must submit an Aquatic Biodiversity Compliance Statement to the competent authority.

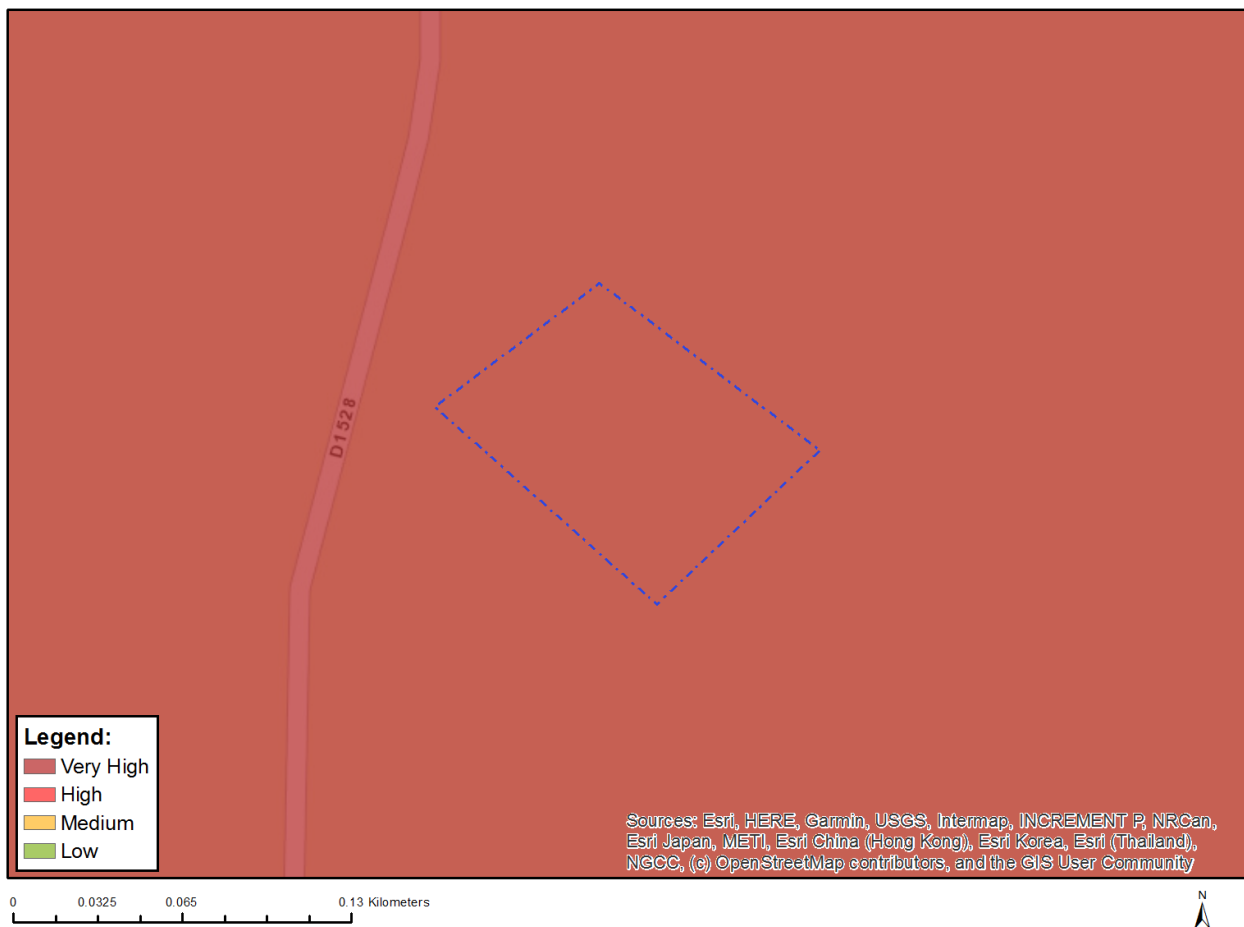


Figure 5: A very High Aquatic biodiversity Sensitivity rating as per online environmental screening tool

The indicated sensitivity of the site under consideration (i.e., the proposed development footprint) was confirmed through a desktop review of previous aquatic biodiversity studies that had been carried out at the Proposed new 20MVA 132/22kV

Ocheni Substation site in recent years. This was done to determine whether a full aquatic biodiversity specialist assessment or an aquatic biodiversity compliance statement was necessary.

- To establish how vulnerable the aquatic biodiversity in the research area is, the following in-depth professional articles were analysed and compiled:
- The site's ecology, vegetation, and species of conservation concern are described in depth in the powerline current Impact Assessment documentation and more recently.
- Other nationally accessible datasets that were used to support the site sensitivity verification include the National Freshwater Ecosystem Priority Area database and the South African National Wetland Map version 5 (NWM5) (Van Deventer et al., 2019).

5. STUDY ASSUMPTIONS AND LIMITATIONS

5.1. Data used for Specialist Assessments

The site sensitivity verification procedure carried out in response to the national web-based screening report served as the foundation for the Aquatic Biodiversity Species Compliance declaration. The Proposed new 20MVA 132/22kV Ocheni Substation Site's extensive baseline knowledge of the local flora, as described in Ground Truth (2013), was used to complete the site sensitivity verification, which was then cross-referenced to the most recent species conservation assessments. Surveys conducted in support of the aquatic ecosystems assessments documented in Ground Truth (2013) were conducted in April 2023, and observations of aquatic ecosystem flows and existing pressures/drivers of change were made during May 2023 (Desmet, 2022). These survey periods coincide with the wet season and as such maximise the opportunity for accurate description of the ephemeral aquatic ecosystem in this otherwise dry and arid region.

It is therefore considered that there are no sampling or information limitations pertaining to this Aquatic Biodiversity Species Compliance Statement and the recommendations contained in this report.

5.2. Findings

There are no water courses surrounding the site intended for the proposed Ocheni Substation. No rivers or wetland or any form of watercourse identified within 100 metres of the proposed site. In the main, although the area is covered by hillslopes, it is also surrounded by many residential dwellings almost in all directions with the exception of the open fields on the eastern direction towards the escarpment.

The very high sensitivity rating suggested for the aquatic biodiversity theme is hereby disputed. The reason for this is that the study area does not have any form of perennial or non-perennial river or wetland on site or nearby within 100 metres. And it is in no way that the aquatic biodiversity theme can be very high in a place where there is no stream nor an intermittent stream nearby or a wetland. The only rating that can suite the site is a Low Rating. The site have natural stormwater as it is on a hillside, but those are not in anyway water courses.

5.1. Regional Context

The study area falls within the quaternary catchment (W1 Catchment) covers a total surface area of 5 661 km². The secondary catchment includes 14 quaternary catchments with a total average natural runoff of 816.3 million m³/annum. Average rainfall throughout the catchment ranges from 799 mm to 1324 mm, with an overall average of 1079 mm. The South African National Wetland Map version 5 (NWM5) portrays the most up-to-date spatial data for the extent and varieties of South African inland freshwater and estuarine environments (Van Deventer et al., 2019). The NWM5 database showed that the ephemeral drainage line to the north of the proposed West dump is a river, that a potential area of "channelled valley bottom wetland" habitat occurs outside of the 500 m buffer of the proposed infrastructure, and that the Present Ecological Status of that system is considered largely to severely/critically modified (Figure 7).



Figure 7: Proposed development in relation to NWM5 dataset

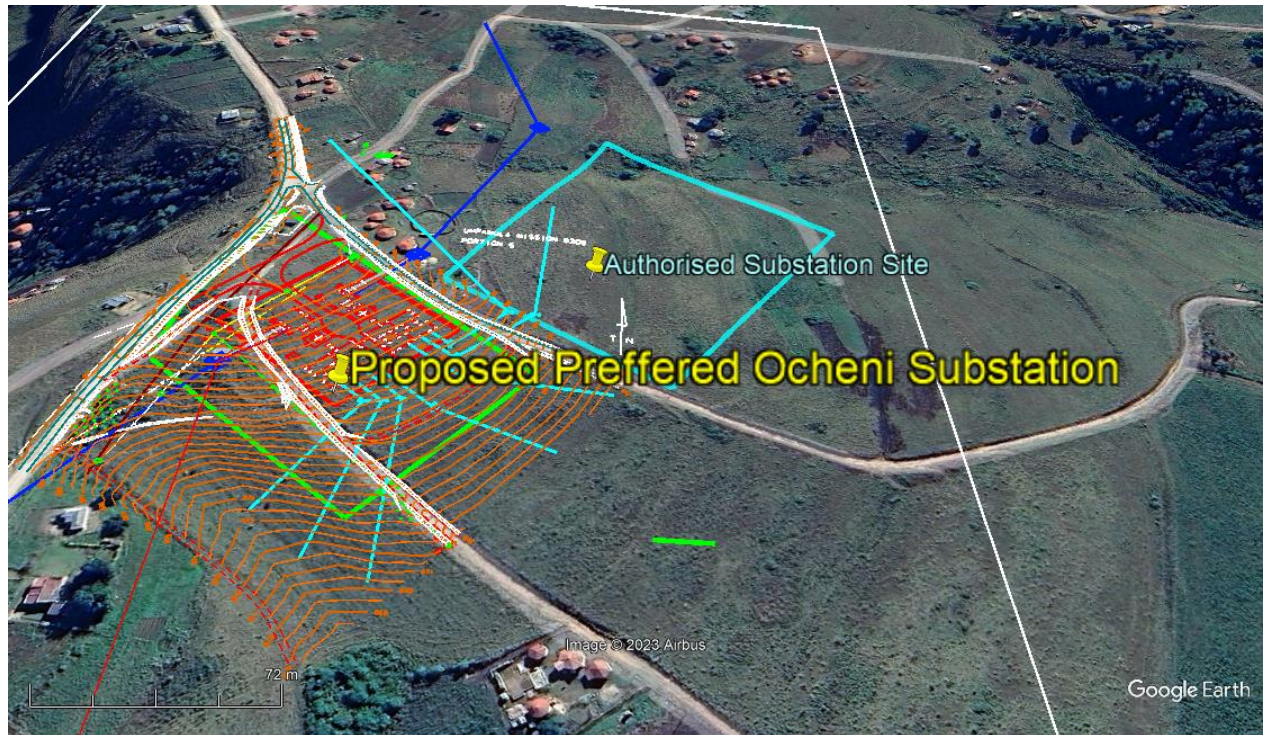


Figure 8: No National Freshwater Ecosystem Priority Area (NFEPA) systems are present within the study area (Figure 8).

5.2. Field Survey Findings

As part of a baseline evaluation carried out by Ourbiosphere Environmental (Pty) Ltd (2023) in support of the Impact Assessment for the environmental authorisation of the Proposed new 20MVA 132/22kV Ocheni Substation Site (Eskom Project), the aquatic biodiversity of the Proposed new 20MVA 132/22kV Ocheni Substation Site was thoroughly studied. Depending on the availability of aquatic habitats at each of the individual sampling locations, the aquatic ecosystems of the Proposed new 20MVA 132/22kV Ocheni Substation Site were evaluated using aquatic biomonitoring techniques, including benthic diatoms and aquatic macroinvertebrates. Fish surveys were attempted but because there was no fish-friendly habitat there, it was assumed that there were no fish in this system.

The is no watercourse to the south of the proposed Ocheni substation—is highly ephemeral and typically dry, making it unlikely to support species adapted for aquatic life (such as hydrophytic plants, fish, aquatic macroinvertebrates, and diatoms). As a result, no assessment of the aquatic biodiversity in this system was done. The NWM5 database's map of the area designated as "channelled valley bottom wetland habitat" did not contain any wetlands.



Figure 9:No stream or watercourse observed February 2023

6. MOTIVATION FOR SUBMISSION OF A COMPLIANCE STATEMENT

It is clear that there are no watercourses within the research area or within a 100-meter radius. Because of this, the National Web-based Environmental Screening Tool has assigned the proposed new 20MVA 132/22kV Ocheni Substation site an aquatic biodiversity theme sensitivity rating of low, as opposed to extremely high. Because the study region is so ephemeral, it cannot sustain soil saturation hydroperiods, surface water flows, or wetland conditions long enough to sustain aquatic life. Therefore, it is believed that the system cannot support riparian or wetland habitat. Therefore, in accordance with the procedure, a "low sensitivity rating" for aquatic biodiversity in the study region is motivated.

7. PROPOSED IMPACT MANAGEMENT ACTIONS

The following impact mitigation and management measures are advised to avoid/minimize potential impacts on the watercourse arising from the current (and proposed) substation operation, despite the study area being considered to be of low sensitivity for aquatic biodiversity and no significant impacts on aquatic biodiversity as a result of the proposed development being predicted: Stormwater runoff from the proposed Substation area was observed to be entering the conservation area in the crater via the management track during the April 2022 survey, which has the potential to alter the quality and quantity of water flow in the landscape.

- Restricting activities and infrastructure to designated water catchments and managing contaminated runoff from work sites can minimize potential effects on the quality and quantity of water reported to the receiving

environment. The ecological effects of this development will be lessened if drainage systems are kept in good working order and the natural flow of water in the landscape is respected.

- Proposed Ocheni substation may not be built beyond any area that have characteristics of a watercourse's 100-year flood line.
- Contractor must avoid significant drainage/flood zones and areas with high biodiversity sensitivity at all costs when working.

8. MONITORING REQUIREMENTS

The following monitoring requirements are proposed:

In order to ensure that potential impacts on the receiving environment are avoided or minimized, it is recommended that the implementation of the recommended mitigation measures be monitored at least Bi-Monthly to assess their effectiveness in addressing potential impacts.



Figure 10: Natural Stormwater south of the project area

9. CONCLUSION AND RECOMMENDATIONS

The very high sensitivity rating suggested for the aquatic biodiversity theme is hereby disputed. The reason for this is that the study area does not have any form of perennial or non-perennial river or wetland on site or nearby within 100 metres. And it is in no way that the aquatic biodiversity theme can be very high in a place where there is no stream nor an intermittent stream nearby or a wetland. The only rating that can suite the site is a Low Rating. The application of the relocation of the authorised Ocheni Substation site to the new site which we are hereby applying is not envisaged that it will create more environmental impacts than the authorised site. In anything, granting the preferred site authorisation will alleviate stress and anxiety to the local church people that are occupying the site that was previously authorised.

It is therefore recommended that the Department approve the site relocation as almost the natural environment is more homogenous to that of the already approved site, although the already authorised site it may have more impact due to the fact that is more steeper than the preferred site.

9. REFERENCES

Ollis, D.J., Snaddon, C.D., Job, N.M. & Mbona, N. (2013). Classification System for Wetlands and other Aquatic Ecosystems in South Africa. User Manual: Inland Systems. SANBI Biodiversity Series 22. South African National Biodiversity Institute, Pretoria.

van Deventer, H., van Niekerk, L., Adams, J., Dinala, M. K., Gangat, R., Lamberth, S.J., Lotter, M., Mbona, N., MacKay, F., Nel, J.L., Ramjukadh, C-L., Skowno, A. and Weerts, S. P. (2019). National Wetland Map 5 – An improved spatial extent and representation of inland aquatic and estuarine ecosystems in South Africa. bioRxiv preprint first posted online May. 17, 2019; doi: <http://dx.doi.org/10.1101/6404>. Accessed 21 March 2022.



ANNEXURES 10

CIVIL AVIATION SENSITIVITY THEME COMPLIANCE STATEMENT

**THE CIVIL AVIATION COMPLIANCE SENSITIVITY STATEMENT FOR
OCHENI SUBSTATION AND ASSOCIATED 21KM 132KV POWER
LINE POWERLINE**

DFFE REF: 2023-01-0006

**CONSTRUCTION OF A NEW 20MVA 132/22KV OCHENI
SUBSTATION AND ASSOCIATED 21KM 132KV POWER LINE IN
MAPHUMULO WITHIN MAPHUMULO LOCAL MUNICIPALITY IN
THE KWAZULU-NATAL PROVINCE.**

**CLIENT: ESKOM DISTRIBUTION
KZWAZULU-NATAL OPERATING UNIT**

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OCTOBER 2023

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1. INTRODUCTION

Eskom have received an environmental authorization for the application of Environmental Authorization in terms of the National Environmental Management Act, 1998: GN R543, R544 and R546: Construction of a new 20MVA 132/22kV Ocheni Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province, obtained on 29 August 2017 as amended.

Eskom have commenced with the construction of this project through Survey work on the ground, however Eskom noted that the approved location of Ocheni Substation as per the Environmental Authorization is not at the exact site location as Eskom knew the substation to be since the planning phase, rather the co-ordinate on the environmental authorization falls on a different property, and that site it is currently utilized by the local church. Eskom do not have authority to construct on that land and the civil work will be exorbitantly high and the church that is currently occupying the land has not given consent and also the land and rights issues will unnecessarily be very expensive and delay the project.

Eskom therefore have approached the Department of Forestry, Fisheries and Environment (DFFE) to seek advice on how to include the original site on the authorization before the continuation of the substation construction. The consultation meeting with the following REF: 2023-01-0006 was held on January 27, 2023, with the officials from DFFE. Eskom requested to have the substation follow the Electricity Grid Infrastructure (Transmission Strategic Corridors) Process.

The proposed Ocheni Substation Project falls within the Expanded Electricity Grid Infrastructure (EGI) [Expanded Eastern Corridor] that is, is it is located within the Eastern Strategic Transmission Corridor to be precise as per the National Environmental Management Act, 1998 (Act N0.107 of 1998) Standard No 383 of 29 April 2021 as gazette. The Standard identification is in terms of sections 24(3), 24(5)(1) and 24(5)(b) of the National Environmental Management Act, 1998 of expanded geographical areas of strategic importance for the development of electricity transmission and distribution infrastructure.

When read in conjunction with as expansion of the Strategic Transmission Corridors published in Government Notice No. 113 under Government Gazette No. 41445 on 16 February 2018, as set out In the Schedule hereto. Eskom intends to be excluded through exclusions and/ or specific requirements of Basic Assessment Process. The EGI process is in accordance to Notice of identification in terms of Section 24(5)(a) and (b) of the National Environmental Management Act, 1998, of the procedure to be followed in applying for Environmental Authorization for large scale Electricity Transmission and Distribution Development activities identified in terms of Section 24(2)(a) of the National Environmental Management Act, 1998 when occurring in geographical areas of strategic importance.

In this instance, the proposed Construction of a new 20MVA 132/22kV Ocheni Substation and associated 21km 132kV power line in Maphumulo within Maphumulo Local Municipality in the Kwazulu-Natal Province falls within the Transmission Strategic Corridors (EGI), Expanded Eastern Corridor.

To this effect, The Department requested the following, that: for the Department to consider Eskom's request to follow the EGI process, Eskom must:

- Utilize the Web Based Environmental Screening Tool to determine the sensitivity of the substation site.
- Eskom's Environmental Assessment Practitioner to conduct a ground truthing to confirm or contrast the sensitivity as shown by the National web based Environmental Screening tool.
- A feedback report be prepared and be subjected to a public participation period of 30 days and all comments be included and then be submitted to the DFFE for decision.

This report contains the site's various sensitivities as per National Web based Environmental Screening Tool and the ground truthing feedback and other measures as suggested by the Environmental Assessment Practitioner (EAP).

1.1. Web Based Environmental Screening Tool

The web-based environmental screening application was used to determine the environmental sensitivities of the location. The first environmental screening was finished on February 15, 2023, before the site inspection. To ensure that the environmental sensitivity had not changed, the final environmental screening report was generated on March 4, 2023, following the site inspection.

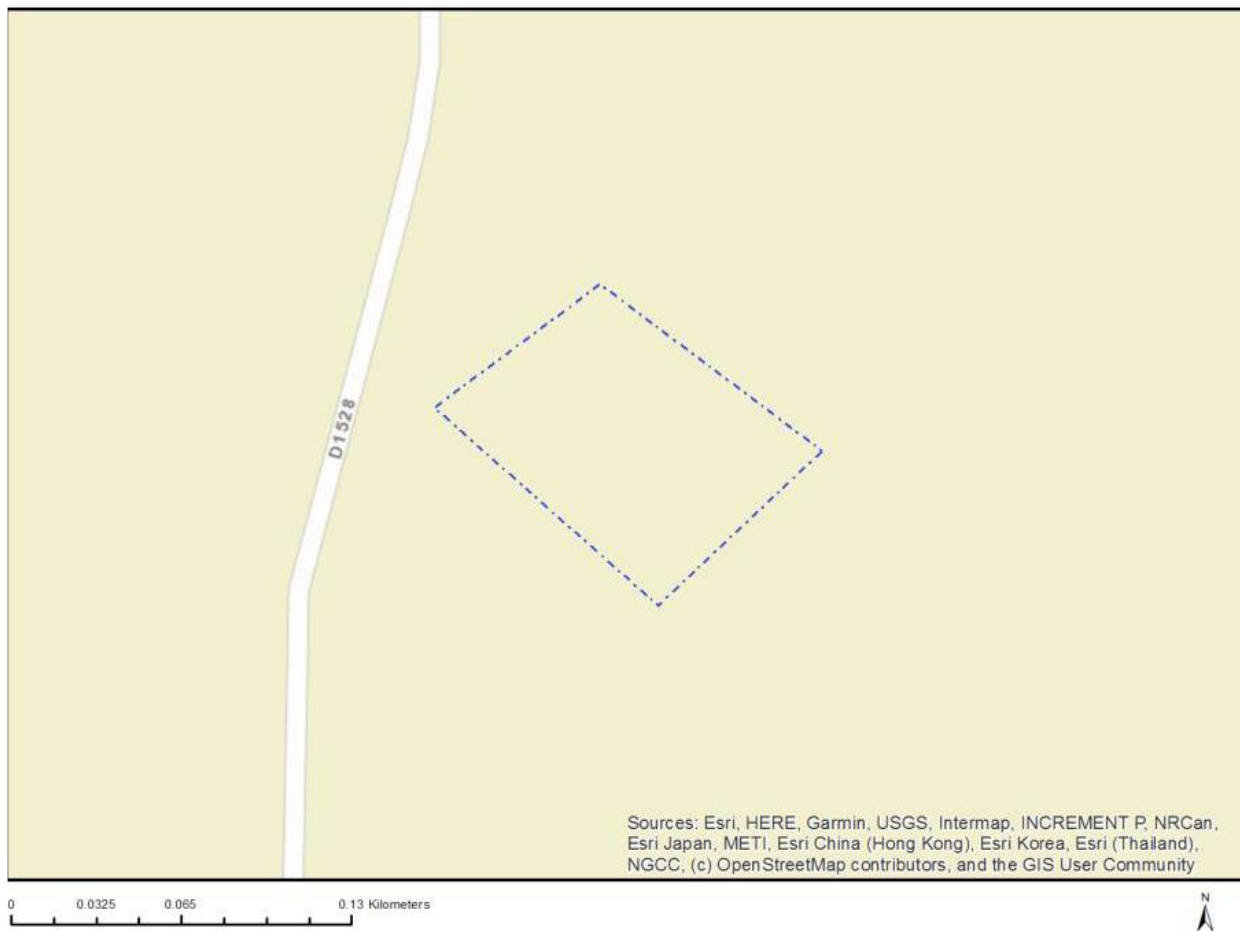


Figure 1: Showing the locality map of the Proposed new 20MVA 132/22kV Ocheni Substation Project as the screening tool

The project site is rated as having a "medium" sensitivity with respect to civil aviation installations in the Screening Report created using the Department of Forestry, Fisheries, and the Environment's (DFFE) national web-based environmental screening tool, this may be because it is not located within 8 km to 15km of any civil aviation aerodrome.

A Civil aviation Compliance Statement must be prepared and submitted for consideration by the Competent Authority when a site is identified as having a very high, high, or medium sensitivity for the civil aviation theme, in accordance with the protocol for the specialist assessment and minimum report content requirements for environmental impacts on civil aviation installations (Government Notice No. R 320 of 20 March 2020). As a result, the proposed new 20MVA 132/22kV Ocheni Substation Project has been given the attention it deserves in this Civil Aviation Compliance Statement. In accordance with the protocol a map showing the proposed development footprint overlaid on the civil aviation sensitivity map generated by the screening tool is provided in Figure 2 below.

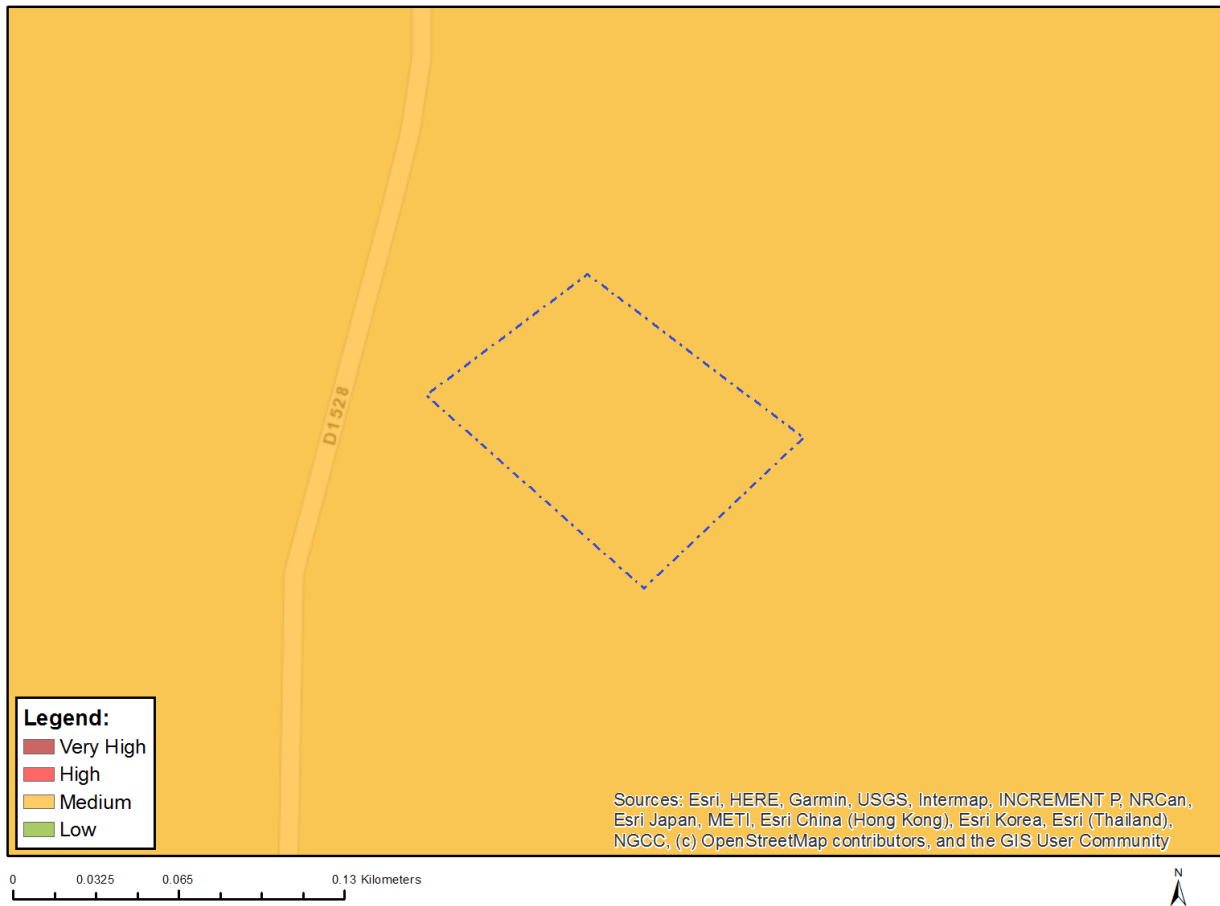


Figure 2: The proposed project relates to the medium sensitivity map for civil aviation produced by the DFFE national screening tool.

2. SENSITIVITY VERIFICATION

The installation of new buildings and equipment, such power lines, and masts, close to airports may have an effect on flight safety, according to ATNS. Therefore, evaluations are required to determine whether these facilities and constructions go against the designated obstacle limiting surfaces surrounding each airport. Additionally, the screening method makes advantage of the proposed new 20MVA 132/22kV Ocheni Substation sensitivity as well as related infrastructure, like the real power line structures, which will only be 30 m high. Consequently, it is expected that the proposed new 20MVA 132/22kV Ocheni Substation will have far less sensitivity and impact.

It was discovered that the proposed new 20MVA 132/22kV Ocheni Substation project has low sensitivity (the medium sensitivity is therefore questioned as it relates to civil aviation). It validates the RSA Airspaces in 3D sensitivity assigned on the Screening Tool, Air Traffic and Navigation Services SOC Ltd (ATNS), which was determined through a site visit and based on current databases. In light of the aforementioned, GN 320 does not require any further duties, i.e., a Compliance Statement.

This is justified by the fact that the closest facility is a civil aviation airfield is located at about 25 km away at Kranskop, therefore the project won't significantly affect it. Additionally, according to Air Traffic and Navigation Services SOC Limited (ATNS), RSA Airspaces in 3D, the location is not in any airport's flight route. Instead, because of the massive mountain ranges surrounding it, it is located in what is known as restricted air space, with a restricted flying altitude of 5500 feet above sea level. In kilometers, this equals 1.6764 above sea level. It follows that the proposed new 20MVA 132/22kV Ocheni Substation and its supporting infrastructure will not obstruct aviation in any manner. The highest structure will be the Mast, which will stand 35 meters above the ground. Any powerline structures that are attached to it will be significantly lower, at 30 meters above the ground.

It was discovered that the proposed new 20MVA 132/22kV Ocheni Substation project has low sensitivity (the medium sensitivity is therefore questioned as it relates to civil aviation). It validates the RSA Airspaces in 3D sensitivity assigned on the Screening Tool, Air Traffic and Navigation Services SOC Ltd (ATNS), which was determined through a site visit and based on current databases. In light of the aforementioned, GN 320 does not require any further duties, i.e., a Compliance Statement.

Other airfields located less than 50km from the site are as follows:

- Eshowe Airport at 16km away and.
- Isithebe Airport located 17 kilometres away according to ATNS.

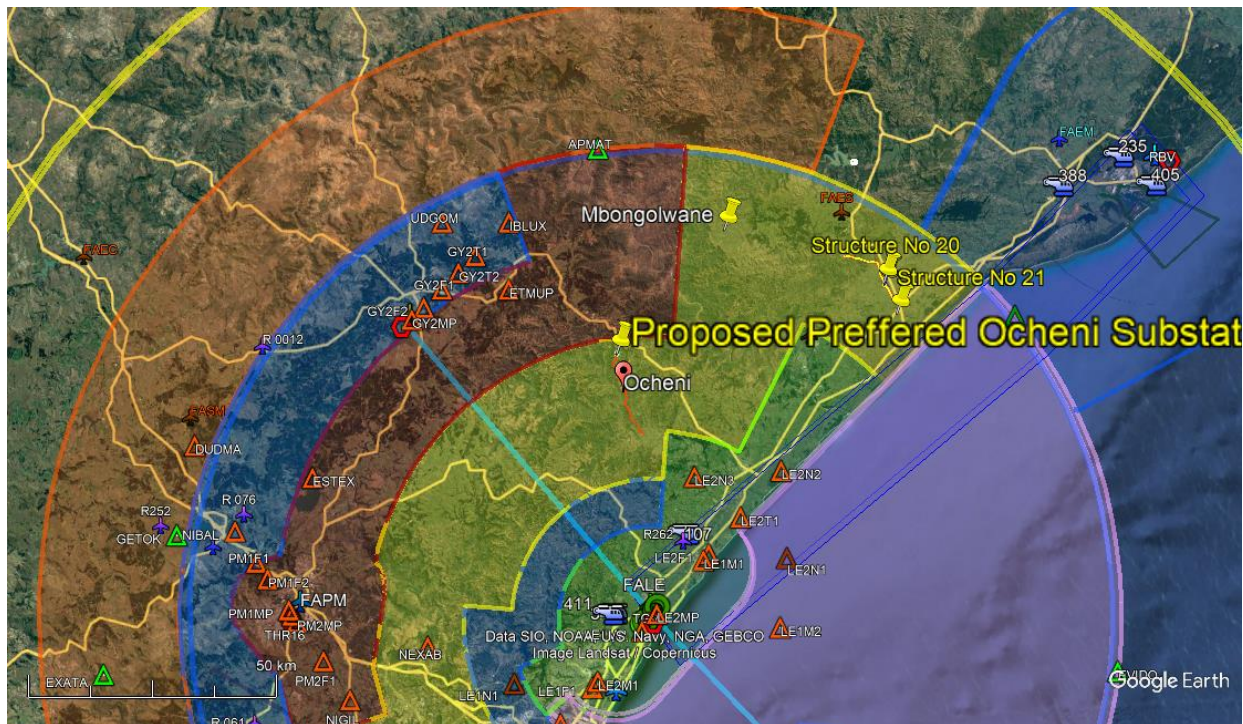


Figure 3: Any airport facilities that are up to 50 km away from the project site are listed here. Within 8 miles of the site, two private landing strips (marked in red) must be discussed further with the proprietor.

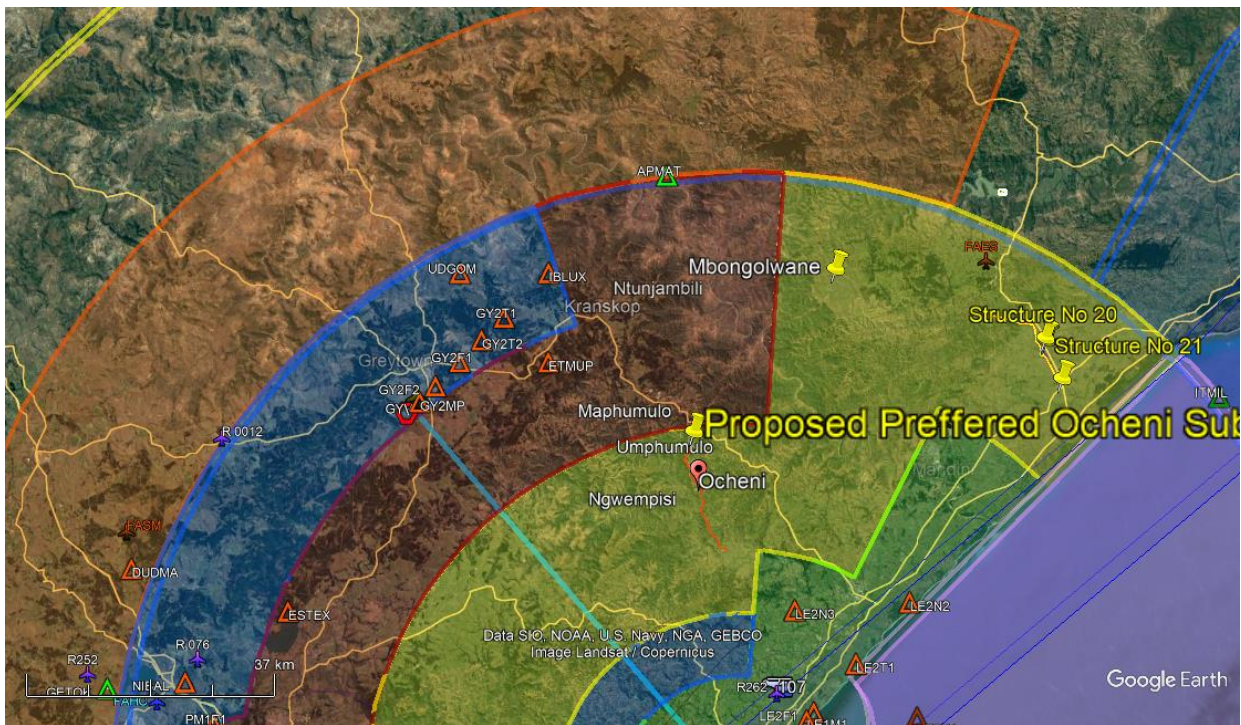


Figure 3: The proposed project in relation to known civil aviation installations.

The South African Civil Aviation Authority (SACAA) has been identified as a key stakeholder on the project database and will be afforded an opportunity to provide comments of the Impact Assessment Report during the 30-day review and comment period. Should additional requirements be requested, these will be addressed in the Impact Assessment phase of the project.

The development will not have an unacceptable negative impact on civil aviation installations. The CAA will continue to be notified of the application process and afforded the opportunity to raise comment which can further confirm / dispute the findings of the screening tool.

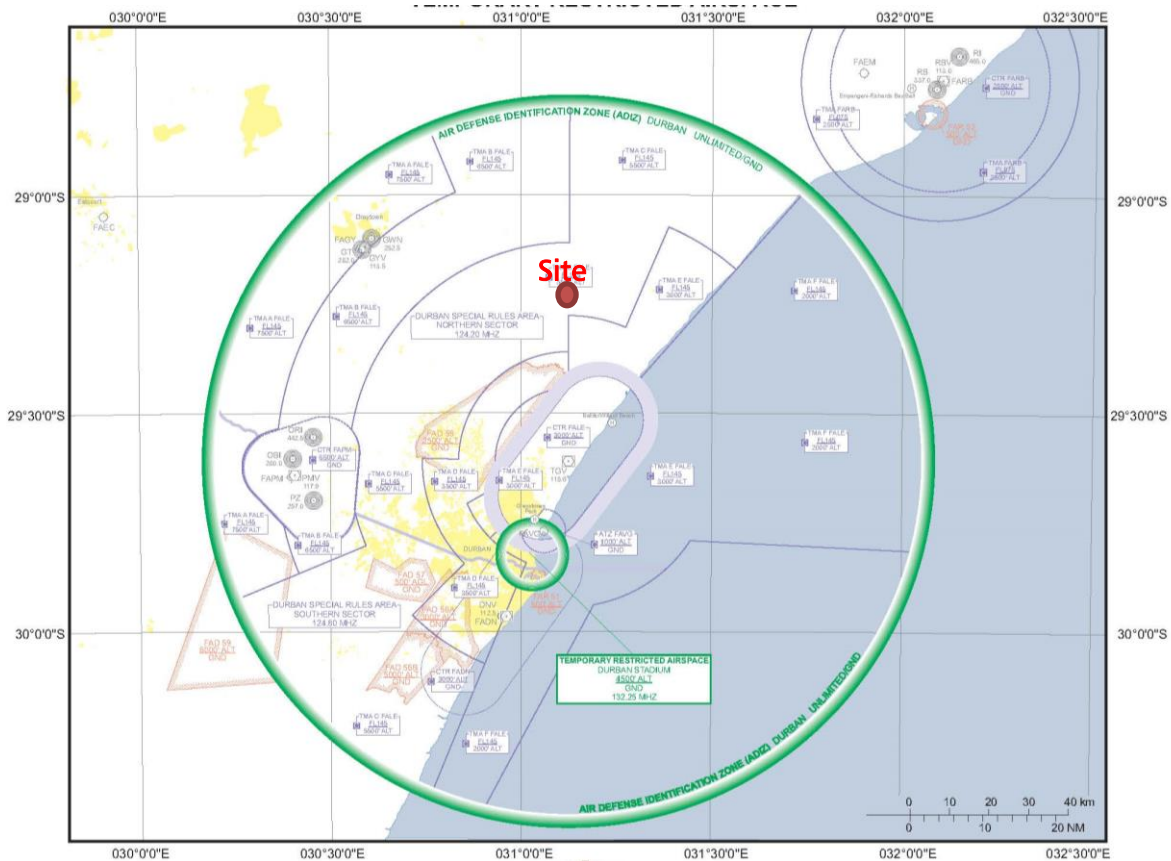


Figure 4: Showing the flying restriction zone of 5500 feet altitude due to mountain ranges around the site, TMAFALE FL. 145 5500'ALT.

3. CONCLUSION AND RECOMMENDATIONS

The factor is that the proposed Ocheni Substation site according to Air Traffic and Navigation Services SOC Limited (ATNS), RSA Airspaces in 3D is not located on the flight route of any airport, in fact the site is located within what is classified as Restricted Air Space with a Restricted Flying Altitude of 5500 feet altitude above ground level due to vast mountain ranges occurring in around the site. This is equivalent to 1.6764km above ground level. By inference, the Ocheni Substation and its related infrastructure will in no way infringe on any form of aviation. The longest structure will be the Mast at 35 meters above ground, and any related Powerline Structure will be at 30 meters above ground which is way to lower than the required 1.6764km altitude.

Concluding Statement:

The Ocheni Substation project site was determined and verified to be of low sensitivity (as it relates to civil aviation, the medium sensitivity is therefore disputed). This was determined through a site visit and based on existing databases, and confirms the sensitivity allocated on the Screening Tool, Air Traffic and Navigation Services SOC Limited (ATNS), RSA Airspaces in 3D. Based on the above, in terms of GN 320, no further requirements are applicable i.e., a Compliance Statement is not required.



ANNEXURES 11

TERRESTRIAL BIODIVERSITY THEME SENSITIVITY COMPLIANCE STATEMENT

**THE TERESTRIAL BIODIVERSITY SENSITIVITY THEME COMPLIANCE
STATEMENT FOR OCHENI SUBSTATION AND ASSOCIATED 21KM
132KV POWER LINE POWERLINE**

DFFE REF: 2023-01-0006

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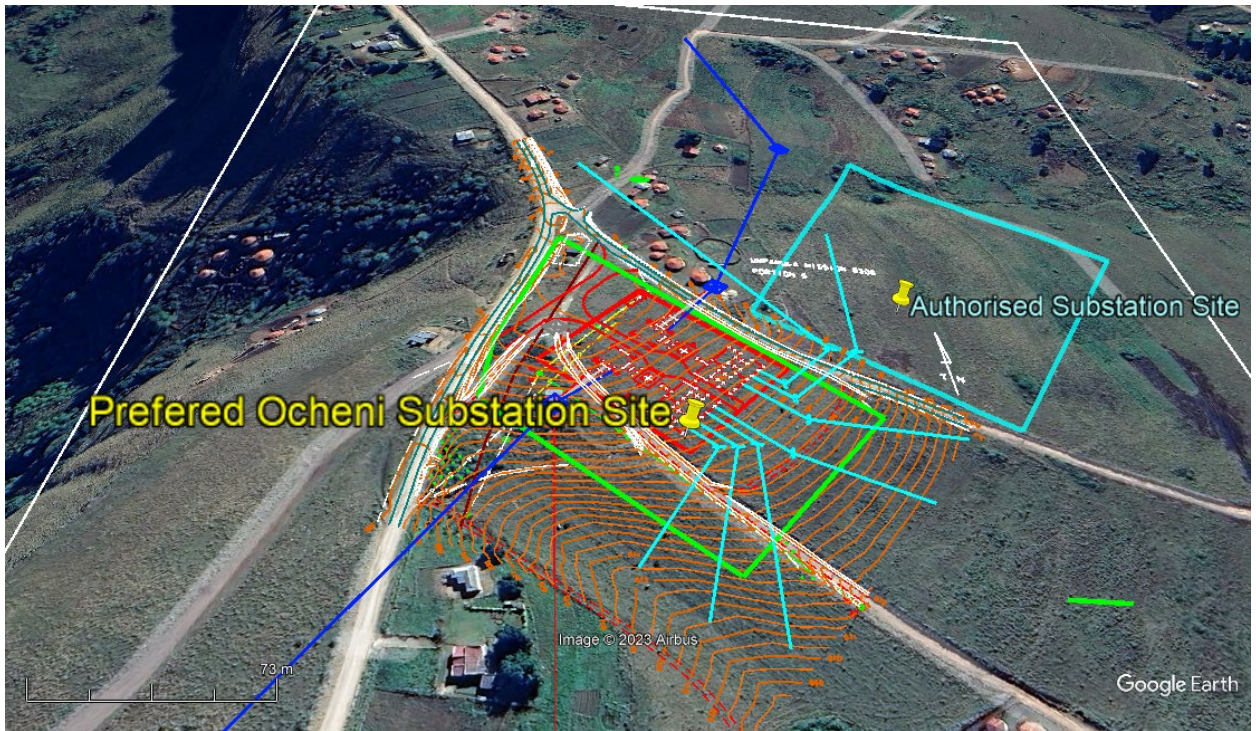


Figure 1: The project Locality area

2. ENVIRONMENTAL ASSESSMENT PRACTITIONER DETAILS

The Environmental Impact Assessment Regulations Regulation 13(1) of Government Notice No R982 of 2014), requires that the EAP must be Independent. And have expertise in conducting environmental impact assessments or undertaking specialist work as required, including knowledge of the Act,

EAP Expertise:

Musa Netshivhambe has experience that spans 3 decades working with Integrated Environmental Management Systems conducting almost 100 Environmental Impact Assessment, Environmental Management related project, assisting with many habitat suitability studies for Black Rhinos, conducting Botanical Assessment Studies, Development of Environmental Management Studies, Conducting Training on Tree and Grass Identification Trainings, compiling over 100 Environmental Management Programmes, Water use Licenses and many countless environmental management reports and advice to Private Individuals, Government SOCs and the Government Departments of South Africa. Musa is registered with Environmental Assessment Practitioners Association of South Africa (EAPASA: 2019/1853) and Certificated Natural Scientist with the South African Council for Natural Scientific Professions (Reg. No. 200076/12).

Declaration of independence:

Ourbiosphere Environmental (Pty) Ltd in an independent consultancy firm and hereby declare that it does not have any financial or other vested interest in the undertaking of the proposed activity, other than remuneration for the work



performed in terms of the National Environmental Management Act, 1998 (Act 107 of 1998). In addition, remuneration for services provided by Ourbiosphere is not subjected to or based on approval of the proposed project by the relevant authorities responsible for authorising this proposed project.

Disclosure:

Ourbiosphere undertake to disclose, to the competent authority, any material information that has or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) and will provide the competent authority with access to all information at its disposal regarding the application, whether such information is favourable to the applicant or not. Based on information provided to Ourbiosphere by the client, and in addition to information obtained during the course of this study, Ourbiosphere present the results and conclusion within the associated document to the best of the author's professional judgement and in accordance with best practise.

Musa Netshivhambe

24 September 2023

Ourbiosphere Environmental (Pty) Ltd



3. KEY LEGISLATIVE REQUIREMENTS

Regarding biodiversity and ecological support systems, the current project is subject to the laws, regulations, and recommendations specified below. Despite being lengthy, the list below is not all-inclusive, and more laws, rules, and regulations might be applicable.

Region	Legislation	
International	Convention on Biological Diversity (CBD, 1993)	
	The Convention on Wetlands (RAMSAR Convention, 1971)	
	The United Nations Framework Convention on Climate Change (UNFCCC, 1994)	
	The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES 1973)	
	The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention, 1979)	
National	Constitution of the Republic of South Africa (Act No. 108 of 2006)	
	The National Environmental Management Act (NEMA) (Act No. 107 of 1998)	
	The National Environmental Management Act (NEMA) (Act No. 107 of 1998) Section 24, No 42946 (January 2020)	
	The National Environmental Management Act (NEMA) (Act No. 107 of 1998) Section 24, No 43110 (March 2020)	
	The National Environmental Management Protected Areas Act (Act No. 57 of 2003)	
	The National Environmental Management Biodiversity Act (Act No. 10 of 2004)	
	The National Environmental Management: Waste Act, 2008 (Act 59 of 2008);	
	The Environment Conservation Act (Act No. 73 of 1989) and associated EIA Regulations	
	National Environmental Management Air Quality Act (No. 39 of 2004)	
	National Protected Areas Expansion Strategy (NPAES)	
	Environmental Conservation Act (Act No. 73 of 1983)	
	Natural Scientific Professions Act (Act No. 27 of 2003)	
	National Biodiversity Framework (NBF, 2009)	
	National Forest Act (Act No. 84 of 1998)	
	National Veld and Forest Fire Act (101 of 1998)	
	National Spatial Biodiversity Assessment (NSBA)	
	World Heritage Convention Act (Act No. 49 of 1999)	
	National Heritage Resources Act, 1999 (Act 25 of 1999)	
Municipal Systems Act (Act No. 32 of 2000)		



Alien and Invasive Species Regulations, 2014
South Africa's National Biodiversity Strategy and Action Plan (NBSAP)
Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983)
Sustainable utilisation of Agricultural Resources (Draft Legislation).
White Paper on Biodiversity
National Water Act (NWA, 1998)

Table 1: A list of key legislative requirements relevant to these studies in KZN

4. METHODS

4.1. Desktop Assessment

The desktop evaluation was mostly carried out using a Geographic Information System (GIS), which allowed access to the most recent spatial datasets and allowed the development of digital cartographs and species lists. Below is a list of these datasets along with the date they were published.

4.2. Ecologically Important Landscape Features

To determine how the proposed development could interact with any environmentally significant entities, existing ecologically relevant data layers were added to a GIS. The following geographic datasets were given special attention:

(Skowno et al., 2019) National Biodiversity Assessment 2018. - In order to understand changes through time and guide policy and decision-making across a variety of sectors, the National Biodiversity Assessment (NBA) aims to assess the state of South Africa's biodiversity based on the best available knowledge. Genes, species, and ecosystems are all addressed by the NBA, which also evaluates biodiversity and ecosystems in terrestrial, freshwater, estuarine, and marine habitats. The NBA evaluates these two key variables:

- Ecosystem Threat Status: A measure of an ecosystem's health based on how much its structure, function, or composition has changed. Based on the percentage of each ecosystem type's original extent that is still in good ecological health, ecosystem types are categorized as Critically Endangered (CR), Endangered (EN), Vulnerable (VU), Near Threatened (NT), or Least Concern (LC).
- Ecosystem Protection Level: A measure of how well or poorly ecosystems are protected. Based on the percentage of the biodiversity objective for each ecosystem type that is present within one or more protected areas, ecosystem types are categorized as Well Protected (WP), Moderately Protected (MP),



Poorly Protected (PP), or Not Protected (NP). Under-protected ecosystems are a collective term for ecosystem types that are not protected, poorly protected, or moderately protected.

▪ **Protected areas:**

SAPAD (DEA, 2020): South Africa Protected Areas Database The South African Protected Areas Database (SAPAD) has spatial information for South Africa's conservation. It contains location and attribute data for both areas with formal protection and those with less formal protection. According to the National Environmental Management: Protected Areas Act, Act 57 of 2003, SAPAD is continuously updated and serves as the foundation for the Register of Protected Areas.

NPAES (SANBI, 2010): National Protected Areas Expansion Strategy Spatial data on places that are eligible for protecting terrestrial ecosystems is provided by the National Protected Area Expansion Strategy (NPAES).

These focal areas are very significant for biodiversity, climatic resilience, and freshwater preservation since they are big, intact, and unbroken.

The landscape's terrestrial and aquatic Critical Biodiversity Areas (CBAs) must be preserved in a natural or nearly natural state to guarantee the survival and functionality of species and ecosystems as well as the provision of ecosystem services. Thus, biodiversity goals cannot be achieved if these regions are not kept in a natural or almost natural state.

BirdLife South Africa's 2015 list of Important Bird and Biodiversity Areas. Over 13 500 sites make up the global network of Important Bird and Biodiversity Areas (IBAs), of which 112 sites are located in South Africa. IBAs are locations with significant worldwide conservation value for birds that have been determined through multi-stakeholder processes utilizing internationally standardized, quantifiable, and scientifically accepted criteria;

The South African Inventory of Inland Aquatic Ecosystems (SAIIAE) was published in 2018 by Van Deventer et al. The 2018 National Biodiversity Assessment led to the creation of the South African Inventory of Inland Aquatic Ecosystems (SAIIAE). It consists of a number of data layers that show the size of various river and inland wetland habitat types as well as the pressures that are placed on them.



i. Desktop Flora Assessment

The Vegetation of South Africa, Lesotho, and Swaziland (Mucina & Rutherford, 2006) was used to determine the kind of vegetation that would have existed in a naturally occurring environment or one that had not yet been anthropogenically altered. In order to produce a list of anticipated plant species in the projected development area and its surroundings, the Plants of Southern Africa (POSA) database was used. The most recent national conservation status of flora species was provided using the Red List of South African Plants (Raimondo et al., 2009; SANBI, 2020).

ii. Botanical Assessment

As part of the botanical study, the project area's habitat types and every type of vegetation unit within them were evaluated. The two primary objectives were to find any Red Data species within the known distribution of the research region and to conduct an ecological assessment of the various habitat types. The Botanical Database of Southern Africa (BODATSA), a digital database system provided by the South African National Biodiversity Institute (SANBI), allows users to obtain distribution data on species found in southern Africa.

This new database has taken the place of the old one, Plants of Southern Africa (POSA). The POSA database supplied information on the distribution of flora at the quarter degree square (QDS) resolution. The most recent information on the status of the country's flora was obtained from the Red List of South African Plants website (SANBI, 2017).

Relevant field guides and texts consulted for identification purposes in the field during the surveys included the following:

- Orchids of South Africa (Johnson & Bytebier, 2015);
- Mesembs of the World (Smith et al., 1998);
- Medicinal Plants of South Africa (Van Wyk et al., 2013);
- Identification guide to southern African grasses. An identification manual with keys, descriptions and distributions (Fish et al., 2015).
- Guide to the Aloes of South Africa (Van Wyk & Smith, 2014);
- Guide to Grasses of Southern Africa (Van Oudtshoorn, 1999);
- Freshwater Life: A field guide to the plants and animals of southern Africa (Griffiths & Day, 2016); and
- Field Guide to the Wild Flowers of the Highveld (Van Wyk & Malan, 1997);
- A field guide to Wildflowers (Pooley, 1998);

Additional information regarding ecosystems, vegetation types, and Species of Conservation Concern (SCC) included the following sources:



- The Vegetation of South Africa, Lesotho, and Swaziland (Mucina & Rutherford, 2012); and
- Red List of South African Plants (Raimondo et al., 2009; SANBI, 2016). The field work methodology included the following survey techniques:
 - Timed meanders.
 - Sensitivity analysis based on structural and species diversity; and
 - Identification of floral red-data species.

4.3 Floristic Analysis

Based on the preliminary interpretation of satellite imagery (Google Corporation) and GIS analysis (which included the most recent applicable biodiversity datasets available prior to the fieldwork), sample sites were located within targeted areas (i.e., target sites) that were considered to be ecologically sensitive. This field assessment during the wet season was completed in a single day. In order to swiftly assess the flora and ecology at each sample location, the fieldwork's objective was to maximize coverage while traveling to each target site. Sensitive habitats received a lot of attention, particularly those that surrounded the project's intended area.

To define homogenous vegetation units, current land cover maps and satellite images were used. Timed wandering was used inside sample habitat units found during scoping fieldwork to measure floristic diversity and search for plant SCC. The majority of attention was directed at fragile ecosystems that shared boundaries with the project's intended areas.

The timed random meander approach is especially useful for maximizing floristic coverage and identifying plant SCC while performing floristic analysis. The technique, which is also cost-effective and time-efficient, offers a rapid indicator of flora diversity and is ideal for compiling lists of flora species. The timed meander search was conducted using the first approach described by Goff et al. (1982). Appropriate SCC habitats were located and incorporated into the timed meandering, per Raimondo et al. (2009).

The primary plant species, any sensitive features (wetlands, outcrops, etc.), and current impacts (such as mining, erosion, etc.) at each sample site were recorded. Additionally, opportunistic observations were obtained while traversing the project area.

4.4. Limitations

The following limitations should be noted for the assessment:

- Only a single season one day survey was conducted for the respective studies, this would constitute an early wet season survey; and



- This assessment has not assessed any temporal trends for the project.

5. RESULTS

5.1. Desktop Spatial Assessment

The following features describe the general area and habitat, this assessment is based on spatial data that are provided by various sources such as the provincial environmental authority and the SANBI. The desktop analysis and their relevance to this project are listed in **Table 1**

Table 2: Desktop spatial features examined.

Desktop Considered	Information	Relevant/Not relevant
Conservation Plan		Proposed new 20MVA 132/22kV Ocheni Substation area overlaps with an Ecological Support Area (ESA) area, whereas both alternative 2 and alternative 3 area overlap with Critical Biodiversity Area (CBA): Important and an ESA area
Terrestrial Ecosystem Threat Status		The project area falls within an ecosystem which is listed as Vulnerable (VU) ecosystem.
Terrestrial Ecosystem Protection Level		The project area falls in a "Not Protected" area.
Wetland Ecosystem Threat Status		A Critically Endangered (CR) wetland was found within the 500 m regulated area of the project area
Wetland Ecosystem Protection Level		The wetland protection level as per the National Biodiversity Assessment (NBA) shows that the wetland within the 500 m regulated area is classed as "Not Protected"
Endemic species		High numbers of endemic species are expected in the project area
Protected area		Irrelevant: No protected areas can be found in close proximity to the project area.
National Protected Areas		Irrelevant: The project area does not traverse any NPAES area



Expansion Strategy (NPAES)	
Biome	Located in the Grassland Biome
Vegetation Type	The project area occurs in the Maputaland Coastal Belt vegetation which is Endangered
Strategic Water Source Areas (SWSA)	Irrelevant: The project area does not traverse any SWSA and there is no SWSA in close proximity to the project area
National Freshwater Ecosystem Priority Areas (NFEPA)	The 500 m regulated area does overlap with a Mesic Highveld Grassland Group 3 Depression
Important Bird Area (IBA) (2015)	The project area is not located within or near an IBA (within 5 km)

5.2. Vegetation Assessment

Maputaland Coastal Belt vegetation

The vegetation of this ecoregion is complex and diverse. In forests on top of the Lebombo Range, canopy species such as *Chrysophyllum viridifolium*, *Homalium dentatum*, *Combretum kraussii*, and various *Ficus*, *Celtis*, and *Strychnos* spp. are most common. In dry sand forests, *Cleistanthus schlechteri* and *Newtonia hildebrandtii* consistently dominate the canopy. *Mimuspos caffra*, *Euclea natalensis*, and *Diospyros rotundifolia* form short forest or thickets on the seaward side of the coastal dune forests.

Important Plant Taxa

The following are important taxa in the Maputaland Coastal Belt vegetation type:

Trees: *Syzygium cordatum*, *Acacia natalitia*, *Annona senegalensis*, *Apodytes dimidiata*, *Bridelia cathartica*, *Canthium inerme*, *Chrysanthemoides monilifera*, *Euclea natalensis*, *Ficus burtt-davyi*, *Hyphaene coriacea*, *Kraussia floribunda*, *Ozoroa obovata*, *Phoenix reclinata* and *Rhus natalensis*, *Strychnos spinosa* and *Synaptolepis kirkii*.

Shrubs: *Agathisanthemum bojeri*, *Helichrysum kraussii*, *Helichrysum adenocarpum*, *Diospyros galpinii*, *Indigofera williamsonii*, *Rhus kwazuluana* and *Tephrosia longipes*.

Grasses: *Diheteropogon amplexans*, *Eragrostis sclerantha*, *Ischaemum fasciculatum*, *Themeda triandra*, *Urelytrum agropyroides*, *Aristida stipitata*, *Cymbopogon pospischilii*, *Elionurus muticus*, *Eragrostis inamoena*, *Sporobolus subulatus*, *Trachypogon spicatus*, *Trichoneura grandiglumis* and *Tristachya leucothrix*.



Herbs: *Achyranthes aspera*, *Centella asiatica*, *Chamaecrista plumosa*, *Hermbstaedtia odorata*, *Nidorella tongensis*, *Senecio ngoyanus*, *Vernonia centaureoides* and *Vernonia oligocephala*.

Maputaland Wooded Grassland

Areas of Maputaland Wooded Grassland occur from the Mozambique border southward toward Richards Bay in South Africa.

5.3. Vegetation and Landscape features

Maputaland Wooded Grassland areas are generally flat and comprise coastal sandy grasslands, with a rich herbaceous assemblage of geoxylic suffrutices, dwarf shrubs and small trees (Mucina & Rutherford, 2006).

Important Plant Taxa

The following are important taxa in the Maputaland Wooded Grassland vegetation type:

Trees: *Parinari curatellifolia*, *Salacia kraussii*, *Ancylobotrys petersiana*, *Diospyros galpinii*, *Eugenia capensis*, *Dichrostachys cinerea*, *Diospyros lycioides*, *Hyphaene coriacea*, *Terminalia sericea* and *Syzygium cordatum*.

Shrubs: *Agathisanthemum bojeri*, *crotalaria monteiroi* and *Helichrysum kraussii*.

6. FIELD ASSESSMENT

The project area was found to have three primary faunal habitat units namely.

- Transformed areas;
- Degraded Grassland; and
- Freshwater habitats (Wetlands and Drainage features).

Places with significant anthropogenic disturbances (such as places with recent and ongoing disturbance (Sugar cane plantation) and infrastructure development (residential?) were included in the modified habitat unit. The area is heavily transformed into a sugarcane plantation. Even non both sides of the nearby Nyezane river, the riparian vegetation on the river banks have been heavily transformed into a sugarcane plantation fields. On the northern direction of Ocheni Village, the rea is heavily transformed by the residential dwellings of the locals.

Acacia mearnsii was found to be the dominant alien invasive plant (AIP) species identified in the habitat subunit. Within the proposed site including within residential households yards. Natural vegetation was sparse throughout the entire habitat unit or natural, and weed invasion is currently at its maximum degree.



The area around the Proposed new 20MVA 132/22kV Ocheni Substation is a built up residential dwelling and households that are occupied. This make up almost all the directions of the proposed substation.

In terms of geomorphology, the grassland habitat unit is very flat and comprises grassland in varying states of degradation. Grass covers around 70–80% of the region, with forbs, largely invasive foreign species, making up the remaining 5–10%. This habitat unit supports a range of species due to its well-developed forb and herb cover, irregular woody thickenings, and moderate to moderately high species richness. The research region's grassland was dry during the site visit, suggesting an early rainy season and an early development and flowering phase for the grasses. During the field examination of the proposed new 20MVA 132/22kV Ocheni Substation project by Gingindlovu-Mbongolwane, no threatened plant species were discovered.

Habitat unit was extensively proliferated by previous sugarcane plantation, cultivated subsistence fields and residential dwellings and currently covered by grass. The proposed New 20MVA 132/22kV Ocheni Substation will in the main be running through the transformed streets of the Ocheni Village Dwellings.



Figure 2a: Showing the situation of the site

7. HABITAT SUMMARY AND SENSITIVITY

The majority of the project area was previously transformed/disturbed (by Sugarcane plantations rural residential) due to human influence and presence and has been assigned a low sensitivity due to the disturbed areas, whereas the disturbed grassland was assigned a low sensitivity due to it being transformed, although slightly disturbed.

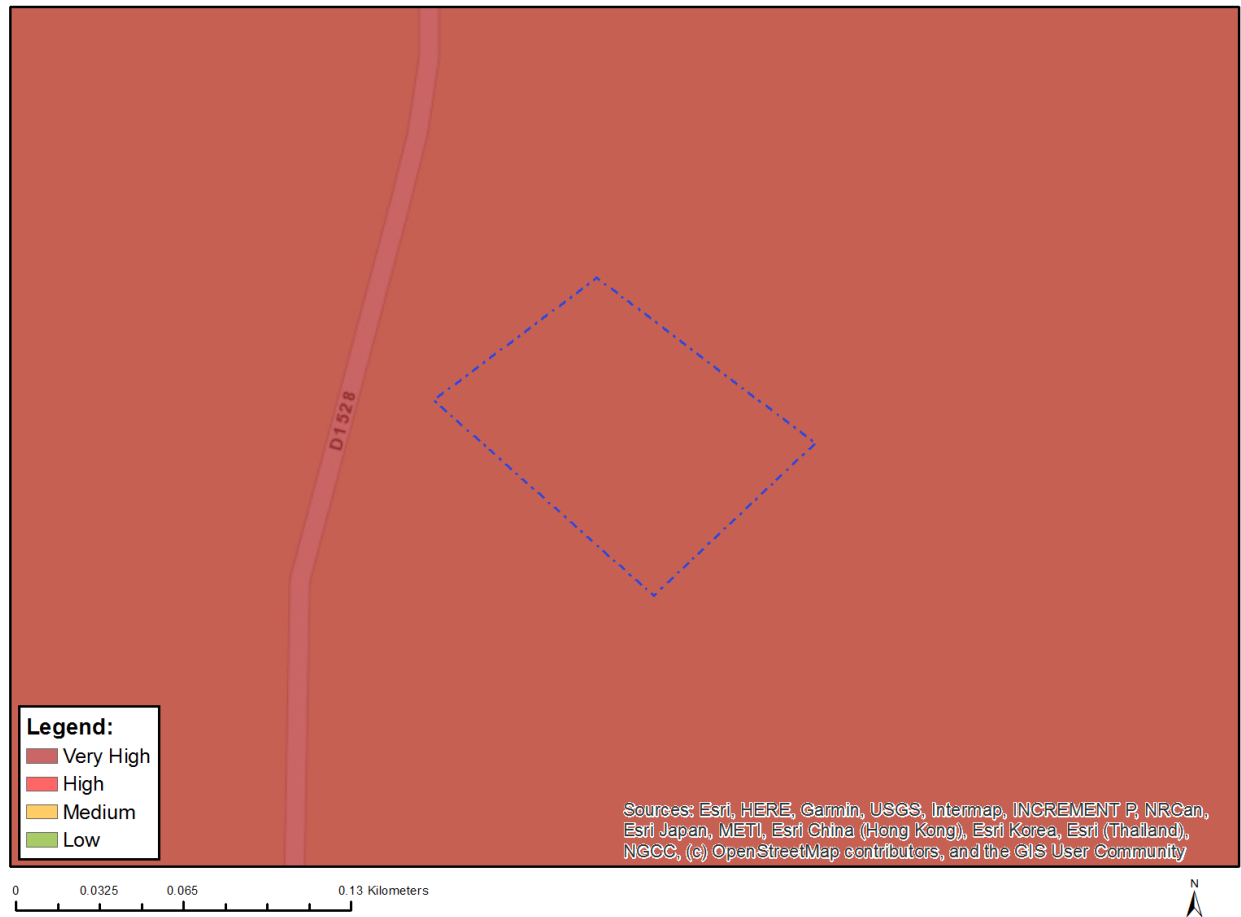


Figure 2b. Showing the very high terrestrial biodiversity sensitivity as per Web Based Environmental Screening Tool.

The site for the proposed New 20MVA 132/22kV Ocheni Substation project is identified in the screening tool report as having a very High Terrestrial Biodiversity Theme sensitivity.

Site visit have found out that, the area vegetation and ecology within Proposed new 20MVA 132/22kV Ocheni Substation area for the proposed project have been heavily disturbed for a long time, both currently and historically. No significant patches of intact natural vegetation remain and terrestrial botanical diversity within both sites is very low.

The site for the proposed New 20MVA 132/22kV Ocheni Substation project identified in the screening tool report as having a very High Terrestrial Biodiversity Theme sensitivity. The very high terrestrial biodiversity Theme sensitivity according to the screening tool is that the site is characterised by an Endangered Ecosystem.

7.1. Site findings

7.1.1. Endangered Ecosystem

Endangered ecosystems in as far as the terms of the National Environmental Management: Biodiversity Act (Act 10 of 2004) section 52 (2): endangered ecosystems, being ecosystems that have undergone degradation of ecological



structure, function, or composition as a result of human intervention, although they are not critically endangered ecosystems.

Vegetation: The study area falls within the Savanna Biome, and Mucina and Rutherford (2006) classify the vegetation group as Ngongoni Veld (SVs 4). Common features of this vegetation class is dense tall grassland that is overwhelmingly dominated by unpalatable, wiry Ngongoni grass and a low species diversity. The general area around the study area presented indications of a forb rich grassland and scattered trees, with some scattered alien invasive trees such as *Acacia mearnsii* (Black wattle). **Conservation Value:** The Ngongoni Veld is classified as vulnerable with an associated target value of 25%.

7.1.2. Other species

During the site visit, no evidence of wild animal species was observed on site. The presence of the cattle dropping has been observed on site. The site is generally covered by Ngongoni and is recovering from past sugarcane plantation activities, and it also has evidence of an alien species *Lantana camara*. As a result of the above, the very high sensitivity theme rating is hereby disputed, and a Low Terrestrial Biodiversity Theme sensitivity is deemed appropriate.

Although sensitive bird and animal species were not discovered in the project area, it is highly unlikely that they could access or graze there. This is because of the human presence in the form of rural residential dwelling that are surrounding the site in almost all the directions, as well as the footpath that traverse the site. In case there maybe any wild animals that hast been observed and to in order to reduce any potential effects of the development, it is crucial that the management outcomes be followed.

Table 3. of habitat types delineated within field assessment area of the project area

Habitat	Conservation	Functional	Biodiversity	Receptor	Site Ecological
(Area)	Importance	Integrity	Importance	Resilience	Importance
Transformed	Low	Low	Low	Medium	Low
Degraded Grassland	Medium	High	Medium	Medium	Medium
Wetlands and Drainage	Low	Low	Low	Medium	Low



features					
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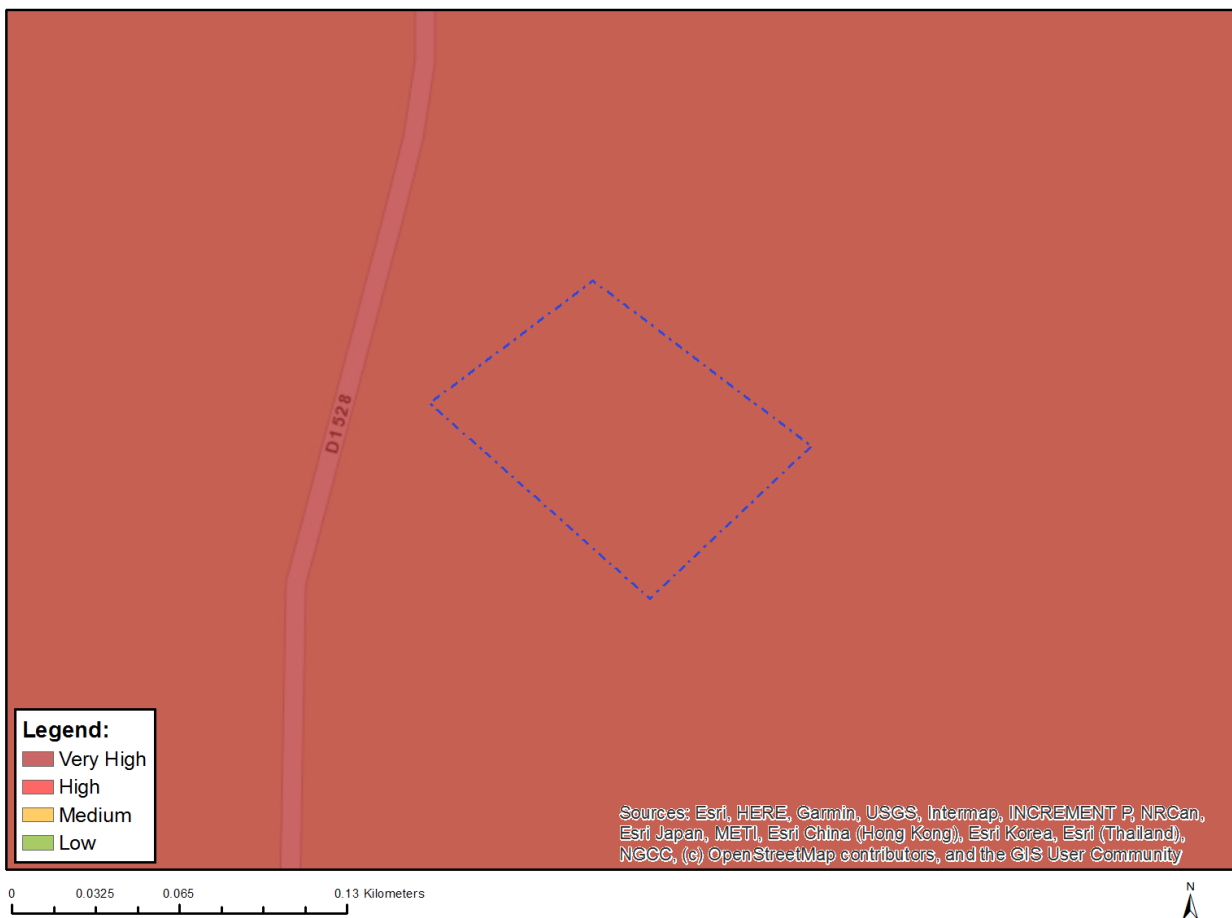


Figure 3 Map depicting relative Terrestrial Biodiversity Theme Sensitivity of the proposed New 20MVA 132/22kV Ocheni Substation new 20MVA 132/22kV Ocheni Substation project plant sites (National Environmental Screening Tool, 2023).

7.2. Proposed Impact Management Outcomes

The entire region where the proposed new 20MVA 132/22kV Ocheni Substation will be located has undergone significant alteration from its original state; nevertheless, chemical spills, erosion, dust, fire, the introduction and growth of alien vegetation, poor waste management that increases the number of pests, and fire can still have an effect on nearby species. As a result, it was recommended that the environmental management plan include the following general management outcomes.

Table 3: Impact Management Outcomes

Impact Management Actions	Implementation Phase	Responsible Party	Aspect	Frequency
	Management outcome:	Vegetation and Habitats		
Watercourses, drainage lines, streams, and wetlands outside of the project area must be avoided.	Lifetime	Project manager, Environmental Officer	Development footprint	Ongoing
Areas of indigenous vegetation, even secondary communities outside of the direct project footprint, should under no circumstances be fragmented or disturbed further. Clearing of vegetation should be minimized and avoided where possible.	Lifetime	Project manager, Environmental Officer	Areas of indigenous vegetation	Ongoing
Where possible, existing access routes and walking paths must be made use of.	Construction/Operational Phase	Environmental Officer & Design Engineer	Roads and paths used	Ongoing
All laydown, chemical toilets etc. should be restricted to low sensitivity areas. Any materials may not be stored for extended periods of time and must be removed from the project area once the construction/closure phase has been concluded. No storage of vehicles or equipment will be allowed outside of the designated project areas.	Construction/Operational Phase	Environmental Officer & Design Engineer	Laydown areas	Ongoing
Areas that are denuded during construction need to be re-vegetated with indigenous vegetation to prevent erosion during flood and wind events. This will also reduce the likelihood of encroachment by alien invasive plant species.	Operational phase	Environmental Officer & Contractor	Assess the state of rehabilitation and encroachment of alien vegetation	Quarterly for up to two years after the closure
Any woody material removed can be shredded and used in conjunction with the topsoil to augment soil moisture and prevent further erosion.	Operational and Decommissioning phase	Environmental Officer & Contractor	Woody material around footprint	During Phase

<p>indigenous or exotic should be brought into/taken from the project area, to prevent the spread of exotic or invasive species or the illegal collection of plants.</p>			
<p>A fire management plan needs to be complied with and implemented to restrict the impact fire might have on the surrounding areas.</p>	<p>Life of operation</p>	<p>Environmental Officer & Contractor</p>	<p>Fire Management During Phase</p>
<p>Rocks removed in the construction phase may not be dumped, but can be used in areas where erosion control needs to be performed</p>	<p>Operational phase</p>	<p>Environmental Officer & Contractor</p>	<p>Rock piles During Phase</p>
<p>Any individual of the protected plants that were observed needs a relocation or destruction permit for any individual that may be removed or destroyed due to the development. Preferably, the trees/plants can be relocated within the property without a permit or otherwise left unharmed. Hi-visibility flags must be placed near any protected plants to avoid any damage or destruction of the species. If left undisturbed the sensitivity and importance of these species need to be part of the environmental awareness program.</p>	<p>Life of operation</p>	<p>Project manager, Environmental Officer Lodge Manager</p>	<p>Protected Tree/Plant species Ongoing</p>
<p>The Electrical conductors panel surfaces may not have</p>	<p>Operational</p>	<p>Environmental Officer</p>	<p>Fire During Phase</p>

reflective surfaces which can lead to veld fires	phase	& Contractor	Management	
Management outcome: Fauna				
	Implementation		Monitoring	
Impact Management Actions	Phase	Responsible Party	Aspect	Frequency
The areas to be developed must be specifically demarcated to prevent movement of staff or any individual into the surrounding environments, Signs must be put up to enforce this	Construction/O perational Phase	Project manager, Environmental Officer	Infringement into these areas	Ongoing
Noise must be kept to an absolute minimum during the evenings and at night to minimize all possible disturbances to amphibian species and nocturnal mammals	Construction/O perational Phase	Environmental Officer	Noise levels	Ongoing
No trapping, killing, or poisoning of any wildlife is to be allowed Signs must be put up to enforce this;	Life of operation	Environmental Officer	Evidence of trapping etc	Ongoing
Try incorporating motion detection lights as much as possible to reduce the duration of illumination. Heights of light columns to be minimised to reduce light spill. Baffles, hoods, or louvres to also be used to reduce light spill	Construction Phase	Environmental Officer & Design Engineer	Light pollution	Ongoing

lighting during construction & operation should be kept to a minimum and should make use of the latest technology to ensure that light disturbance is minimised. This will also reduce the attraction of insects (and in turn insectivorous birds) to the	Construction/O perational Phase	Project manager, Environmental Officer & Design Engineer	Light pollution and period of light.	Ongoing
Outside lighting should be designed and limited to minimize impacts on fauna. All outside lighting should be directed away from highly sensitive areas. Fluorescent and mercury vapour lighting should be avoided, and sodium vapour (green/red) lights should be used wherever possible.	Construction/O perational Phase	Project manager, Environmental Officer & Design Engineer	Light pollution and period of light.	Ongoing
All construction and maintenance motor vehicle operators should undergo an environmental induction that includes instruction on the need to comply	Life of operation	Health and Safety Officer	Compliance with the training.	Ongoing
with speed limits, to respect all forms of wildlife. Speed limits must still be enforced to ensure that road killings and erosion is limited.				
Schedule activities and operations during least sensitive periods, to avoid migration, nesting and breeding seasons.	Life of operation	Project manager, Environmental Officer & Design Engineer	Activities should take place during the day in this	Ongoing

			case.	
All areas to be developed must be walked through before any activity to ensure no nests or fauna species are found in the area. Should any SCC not move out of the area, or their nest be found in the area a suitably qualified specialist must be consulted to advise on the correct actions to be taken.	Construction and Operational phase	Project manager, Environmental Officer	Presence of Nests and faunal species	Planning, Construction and Rehabilitation
Any holes/deep excavations must be dug and planted progressively. Should the holes overnight they must be covered temporarily to ensure no small fauna species fall in.	Planning and construction	Environmental Officer & Contractor, Engineer	Presence of trapped animals and open holes	Ongoing
Ensure that cables and connections are insulated successfully to reduce electrocution risk.	Planning and construction	Environmental Officer & Contractor, Engineer	Presence of electrocuted fauna	Ongoing
Wildlife-permeable fencing with holes large enough for mongooses and other smaller mammals should be installed, the holes must not be placed in the fence where it is next to a major road as this will increase road killings in the area	Planning and construction	Environmental Officer & Contractor, Engineer	Fauna movement corridor	Ongoing
Use environmentally friendly cleaning and dust suppressant	Construction and operation	Environmental Officer &	Presence of chemicals in	Ongoing

products		Contractor, Engineer	and around the project area	
Fencing mitigations: The top 2 strands must be smooth wire Routinely retention loose wires Minimum 30cm between wires Place markers on fences	Planning, construction, and operation	Environmental Officer & Contractor, Engineer	Monitor fences for slack wires	Ongoing
Any exposed parts must be covered (insulated) to reduce electrocution risk.	Planning and construction	Environmental Officer & Contractor, Engineer	Presence of electrocuted fauna	Ongoing
Management outcome: Alien species				
	Implementation		Monitoring	
Impact Management Actions	Phase	Responsible Party	Aspect	Frequency
The footprint area of the construction should be kept to a minimum. The footprint area must be demarcated to avoid unnecessary disturbances to adjacent areas. The footprint of the roads must be kept to prescribed widths.	Construction/O perational Phase	Project manager, Environmental Officer & Contractor	Footprint Area	Life of operation

An alien management plan must be implemented quarterly for 2 years after phase	Construction phase and Decommissioning phase	Project manager, Environmental Officer & Contractor	Assess presence and encroachment of alien vegetation	Quarterly for 2 years after phase
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Management outcome: Dust

Impact Management Actions	Impl ementation		Monitoring	
	Phase	Responsible Party	Aspect	Frequency
Dust-reducing mitigation measures must be put in place and must be strictly adhered to. This includes wetting of exposed soft soil surfaces.	Life of operation	Contractor	Dustfall	Dust monitoring program.
No non environmentally friendly suppressants may be used as this could result in pollution of water sources				

Management outcome: Waste management

Impact Management Actions	Implementation			Monitoring	
	Phase	Responsible Party	Aspect	Frequency	
Waste management must be a priority and all waste must be collected and stored effectively.	Life of operation	Environmental Officer & Contractor	Waste Removal	Weekly	
Litter, spills, fuels, chemicals, and human waste in and around the project area.	Construction/Closure Phase	Environmental Officer & Health and Safety Officer	Presence of Waste	Daily	
A minimum of one toilet must be provided per 10 persons. Portable toilets must be pumped dry to ensure the system does not degrade over time and spill into the surrounding area.	Life of operation	Environmental Officer & Health and Safety Officer	The number of toilets per staff member. Waste levels	Daily	
The Contractor should supply sealable and properly marked domestic waste collection bins and all solid waste collected shall be disposed of at a licensed disposal facility	Life of operation	Environmental Officer & Health and Safety Officer	Availability of bins and the collection of the waste.	Ongoing	
Where a registered disposal facility is not available close to the project area, the Contractor shall provide a method statement concerning waste management. Under no circumstances may domestic waste be burned on site	Life of operation	Environmental Officer, Contractor & Health and Safety Officer	Collection/handling of the waste.	Ongoing	

Contractors and employees must all undergo the induction and be made aware of the “no-go” to be avoided.

Management outcome: Erosion

Impact Management Actions	Implement		Monitor	
	Phase	Responsible Party	Aspect	Frequency
<p>Speed limits must be put in place to reduce erosion.</p> <ul style="list-style-type: none"> Reducing the dust generated by the listed activities above, especially the earthmoving machinery, through wetting the soil surface and putting up signs to enforce speed limit as well as speed bumps built to force slow speeds. Signs must be put up to enforce this. 	Life of operation	Project manager, Environmental Officer	Water Runoff from road surfaces	Ongoing
Where possible, existing access routes and walking paths must be made use of.	Life of operation	Project manager, Environmental Officer	Routes used within the area	Ongoing
Areas that are denuded during construction need to be re-vegetated with indigenous vegetation to	Life of	Project	Re-	Progressively

prevent erosion during flood events and strong winds.	operation	manager, Environmental Officer	establishment of indigenous vegetation	
A stormwater management plan must be compiled and implemented.	Life of operation	Project manager, EO	Management plan	Before construction phase: Ongoing

8. CONCLUSION

The very high terrestrial / biodiversity theme species sensitivity is disputed. Although the development will impact on areas classified as Ngongoni Veld, the value of the site is not considered exceptional and the location and context of the site, suggest that these impacts are likely to be acceptable and would not significantly restrict future conservation expansion in the Ocheni Village area.

Although the site may be located in areas that may overlap with CBA: Important, the field assessment suggests that these areas are not likely to be of high significance for broad-scale ecological processes and as the site is relatively small and already occurring within sugarcane plantation and surrounded by residential dwellings, and therefore not likely to be viewed as a current priority for formal conservation expansion or any other form of conservation.

It is the opinion of the EAP that the size of the project, the presence of the sugarcane plantation as well as the residential dwellings at Ocheni Village present a very much transformed and degraded location. Hence the Proposed new 20MVA 132/22kV Ocheni Substation is not envisaged that it may cause any significant impact on terrestrial biodiversity.

The proposed New 20MVA 132/22kV Ocheni Substation new 20MVA 132/22kV Ocheni Substation project will not create any significant environmental impact, this is due to the fact that the area is already heavily transformed by sugarcane plantation and residential dwellings.

Considering the fact that the proposed powerline is going to be traversing the sugarcane plantation and residential dwelling completely, it is therefore recommended that the project be approved for development as it will not cause any significant impact on the environment.

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APPENDIX 3:

LIST AND CONTACT DETAILS OF LAND OWNERS

LIST OF LANDOWNERS

1	Name of the landowner:	Inkosi Philuswa Costa Zubane		
	Name of contact person for landowner (if other):	Inkosi Philuswa Costa Zubane		
	Postal address:	P.O.Box 419, Maphumulo,		
	Postal code:	4470	Cell:	081 830 0635
	Telephone:		Fax:	
	E-mail:	nkosiecosta@gmail.com		

APPENDIX 4:

**LIST AND CONTACT DETAILS OF PROVINCIAL ENVIRONMENTAL AUTHORITY
AND LOCAL MUNICIPALITY**

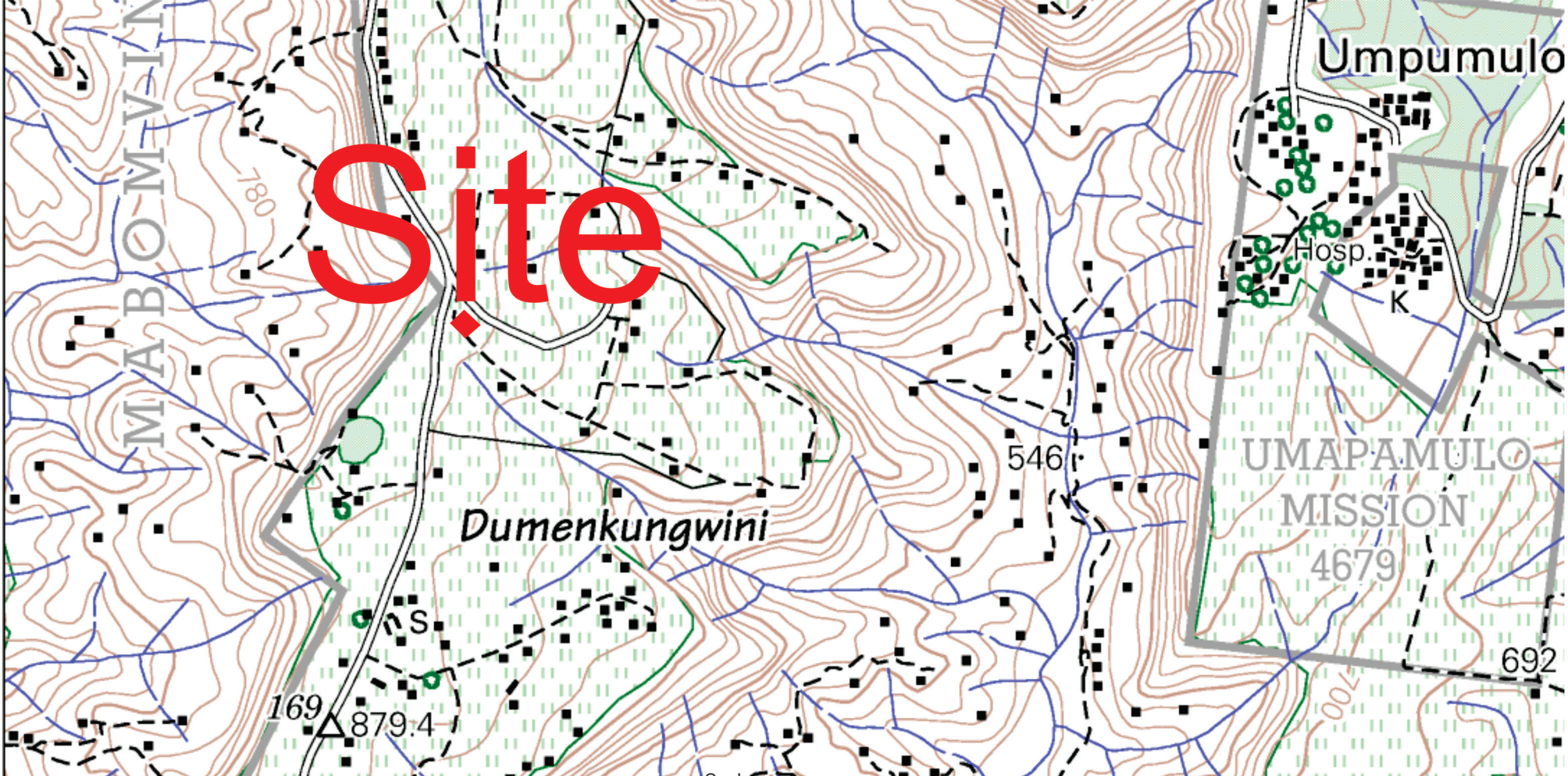
LIST AND CONTACT DETAILS OF PROVINCIAL ENVIRONMENTAL AUTHORITY
AND LOCAL MUNICIPALITY

1	Provincial Environmental Authority:	Kwazulu-Natal Department of Economic Development, Tourism and Environmental Affairs		
	Name of contact person:	Mr. Muziwandile Mdamba		
	Postal address:	Next to sports complex in Veld en Vlei, corner Aloe & Loop Street, Richards Bay		
	Postal code:		Cell:	082 822 2582
	Telephone:	(035) 780 0313	Fax:	(035) 780 0315
	E-mail:	muziwandile.mdamba@kznedtea.gov.za		
2	Local Municipality:	Maphumulo Local Municipality		
	Name of contact person in (Environmental Section)	Mr C.S Mhlongo		
	Postal address:	Private Bag X9205, Maphumulo, 4470		
	Postal code:		Cell:	
	Telephone:	032 481 4500	Fax:	
	E-mail:	sikhululekile.mhlongo@maphumulo.gov.za		

APPENDIX 5:

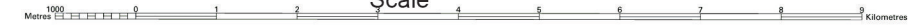
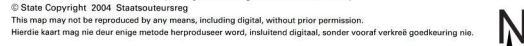
LIST OF SGIDS / COORDINATES OF THE BOUNDARY OF THE PROPERTY OR PROPERTIES

APPENDIX 6:
LOCALITY MAP



Published by the Chief Directorate: Surveys and Mapping, Private Bag X10, Mowbray
 Gepubliseer deur die Hoofdirektoraat: Opmetings en Kartering, Private Bag X10, Mowbray
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 Gedruk deur die Staatsdrukker, Private Bag X85, Pretoria



REFERENCE

Proposed Ocheni Substation Site

National Freeway; National Route	
Arterial Route	
Main Road	
Secondary Road; Bench Mark	
Other Road; Bridge	
Track and Hiking Trail	
Railway; Station or Siding	
Other Railway; Tunnel	
Embankment; Cutting	
Power Line	
Built-up Area (High, Low Density)	
Buildings; Ruin	
Post Office; Police Station; Store	
Place of Worship; School; Hotel	
Fence; Wall	
Windmill; Monument	
Communication Tower	
Mine Dump; Excavation	
Trigonometrical Station; Marine Beacon	
Lighthouse and Marine Light	
Cemetery; Grave	

Heights are in metres above mean sea level
 Hoogtes is in meter bo gemiddelde seepeel

Mean magnetic declination 22°24' West of True North (July 2002).
 Mean annual change 12' Westward (2000-2005).
 Supplied by Hermanus Magnetic Observatory.

Gemiddelde magnetiese deklinasie 22°24' Wes van Ware Noord (Julie 2002).
 Gemiddelde jaarlikse verandering 12' Westwaarts (2000-2005).
 Voorsien deur die Hermanus Magnetiese Observatorium.

CONTOUR INTERVAL 20 METRES KONTOERTUSSENRUIMTE 20 METER

Gauss Conform Projection. Central Meridian 31° East.
 Harebeesthoek 94 Datum (WGS84 Ellipsoid).

INDEX TO SHEETS **INDEKS VAN VELLE**

45°	31°	15'	30'	45°
2830D	2831CC	2831CD		
KWAZULU-NATAL				
2930BB	2931AA	2931AB		
15'				
2930BD	2931AC	2931AD		
30'	31°	15'	30'	INDIAN OCEAN

Whilst every effort is made to ensure the accuracy of this map, users noting errors and omissions are requested to notify the Chief Directorate: Surveys and Mapping.

The grid lines of the South African Co-ordinate System are indicated in the margin by short black ticks at 10 000 metre intervals, with co-ordinate values in units of 10 000 metres in blue.

Die ruitlyn van die Suid-Afrikaanse Koördinaatselsel word in die kantruitjie aangetoon deur kort swart strepies 10 000 meter van mekaar, met koördinaatwaardes in eenhede van 10 000 meter in blou.

Alle pogings moontlik word aangewend om die akkuraatheid van hierdie kaart te verseker. Gebruikers word versoek om die Hoofdirektoraat: Opmetings en Kartering, te verwittig van enige foute of weglatings.

REFERENCE

International Boundary and Beacon	
Provincial Boundary	
Protected Area	
Perennial River	
Perennial Water	
Non-perennial River	
Non-Perennial Water	
Dry Water Course	
Dry Pan	
Marsh and Vlei	
Pipeline (above ground)	
Water Tower; Reservoir; Water Point	
Coastal Rocks	
Prominent Rock Outcrop	
Erosion; Sand	
Woodland	
Cultivated Land	
Orchard or Vineyard	
Recreation Ground	
Row of Trees	

Kadastrale inligting verskaf deur die Landmeter-Generaal
 Oorspronklike Plaas

Geographical names, shown in this type face, have not been officially approved.
 Geografiese name, in hierdie letterbeeld, is nie officieel goedgekeur nie.



OURBIOSPHERE
 ENVIRONMENTAL

2931AA MAPUMULO FOURTH EDITION 2000
 VIERDE UITGAWE

APPENDIX 7:

**FINAL PRE-NEGOTIATED ROUTE PLAN OF THE ELECTRICITY GRID INFRASTRUCTURE
AND/OR LOCATION OF ANY RELEVANT SUBSTATIONS**



Proposed Ocheni Substation Site

DFFE Approved Substation

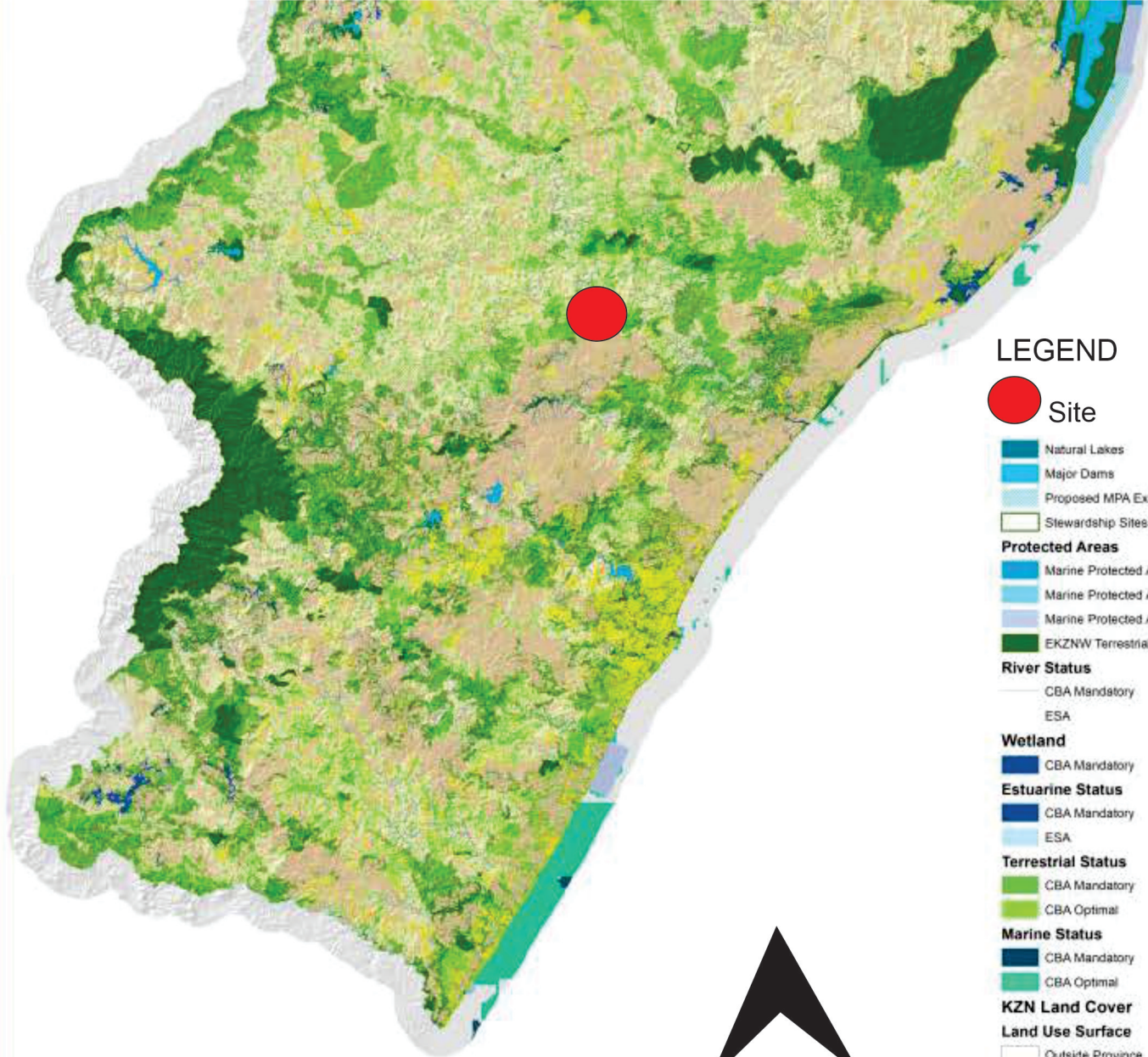
88 m

Image © 2024 Airbus

Google Earth

APPENDIX 8:
SENSITIVITY MAP

SENSITIVITY MAP



LEGEND

- Site
- Natural Lakes
- Major Dams
- Proposed MPA Extension
- Stewardship Sites - Nature Rese
- Protected Areas**
 - Marine Protected Area: A Zone
 - Marine Protected Area: B Zone
 - Marine Protected Area: C Zone
 - EKZNW Terrestrial Protected Area
- River Status**
 - CBA Mandatory
 - ESA
- Wetland**
 - CBA Mandatory
- Estuarine Status**
 - CBA Mandatory
 - ESA
- Terrestrial Status**
 - CBA Mandatory
 - CBA Optimal
- Marine Status**
 - CBA Mandatory
 - CBA Optimal
- KZN Land Cover**
 - Land Use Surface
 - Outside Province
 - Natural Vegetation
 - Transformed
 - Built-up Settlement

30 15 0 30 Kilometers

NOTE: All rivers not highlighted should be considered to be EGSA features



OURBIOSPHERE
— ENVIRONMENTAL —

APPENDIX 9:

DECLARATION OF THE PROPONENT COMMITMENT TO IMPLEMENT THE STANDARD³⁰


I, T.Nekhalale_Eskom Representative, hereby declare that:

- I am the proponent in this registration;
- I have appointed an Environmental Assessment Practitioner (EAP) to act as the independent EAP for this registration;
- I have taken all reasonable steps to verify whether the EAP and specialist/s appointed are independent and have relevant expertise, including knowledge of the Act, the EIA Regulations and any guidelines that have relevance to the proposed activity;
- I have provided the EAP and specialists with access to all information at my disposal that is relevant to the registration;
- I am responsible for the costs incurred in complying with the Standard, including but not limited to –
 - costs incurred in connection with the appointment of the EAP or any person contracted by the EAP; and
 - costs incurred in respect of the undertaking of any process required in terms of the Standard;
- I hereby indemnify the Government of the Republic of South Africa, the competent authority and all its officers, agents and employees, from any liability arising out of the content of any registration, any procedure or any action which I as the proponent or the EAP is responsible for in terms of the Standard;
- I will not hold the competent authority responsible for any costs that may be incurred in proceeding with an activity prior to obtaining confirmation of registration or prior to an appeal being decided in terms of the National Appeal Regulations;
- I have performed all obligations as expected from a proponent in terms of the Standard;
- I have read the completed registration form and supporting documents and hereby confirm that the information provided is, to the best of my knowledge, true and correct;
- All the particulars furnished by me in this form are true and correct;
- I have not commenced with the project as described in paragraph 1.3 of Chapter 1 of this Standard and will not commence until a registration number has been received as contemplated in the *Standard for the Development of Power Lines and Substations within Identified Geographical Areas Revision 1*; and
- I am fully aware of my responsibilities in terms of the *Standard for the development of Power Lines and Substations within Identified Geographical Areas Revision 1* in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and failure to comply with these requirements may constitute an offence. I am aware of what constitutes an offence in terms of the Standard and that a person convicted of an offence is liable to the penalties as contemplated in section 49B of the Act.

Proponent (Name and Surname) Tshililo Nekhalale

Name of Company (If Applicable) Eskom Holdings Soc Limited_CentralEast Cluster (KZN)

Designation Land Development Environmental Manager

Signature³¹ 

Date 02 Feb 2024 Place 02 Feb 2024 New Germany

³⁰ This registration form must be signed by the proponent.

³¹ Only original signatures will be accepted. No scanned, copied or faxed signatures will be accepted. An EAP may not sign on behalf of the proponent.

Commissioner of Oaths Mfanafuthi Bethuel Ndwandwe

Designation Senior Survey Technician

Signature 

Date 02/02/2024 Place New Germany

MFANAFUTHI BETHUEL NDWANDWE
COMMISSIONER OF OATHS
SURVEY TECHNICIAN
REPUBLIC OF SOUTH AFRICA
ESKOM, VALLEY VIEW ROAD, NEW GERMANY



Commissioner of Oaths Stamp

This document is certified a
true copy of the original

APPENDIX 10:

DECLARATION OF THE PROPONENT COMMITMENT TO IMPLEMENT THE GENERIC AND WHERE RELEVANT THE SITE SPECIFIC ENVIRONMENTAL MANAGEMENT PROGRAMME

I, T.Nekhalale_Eskom Representative, the proponent, affirm that I will abide by and comply with the prescribed impact management outcomes and impact management actions as stipulated in Part B: Section 1 / Part C [delete what is not applicable] of the Generic Environmental Management Programmes for the Development and Expansion of Overhead Electricity Transmission and Distribution Infrastructure and for the Development and Expansion of Substation (as published under Government Notice No. 435 in Government Gazette No. 42323 of 22 March 2019.).


I declare that I have the understanding that the impact management outcomes and impact management actions are legally binding.

I affirm that I will provide written notice of commencement of construction to the competent authority 14 days prior to the date on which the activity will commence in order to facilitate compliance inspections.

Proponent (Name and Surname) Tshililo Nekhalale

Name of Company (If Applicable) Eskom Holdings Soc Limited_CentralEast Cluster (KZN)

Designation Land Development Environmental Manager_CentralEast Cluster (KZN)

Signature³² 

Date 02 Feb 2024 Place New Germany

³² An EAP may not sign on behalf of the proponent.

APPENDIX 11:

DECLARATION OF EAP AND UNDERTAKING UNDER OATH OR AFFIRMATION

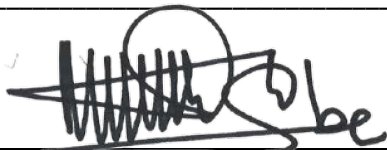
Declaration of EAP

I, Musa Netshivhambe, declare that -

- I act as the independent environmental assessment practitioner in the Standard registration process;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, the *Standard for the Development of Power Lines and Substations within Identified Geographical Areas Revision 1*, the Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the National Environmental Management Act, 1998 (Act No.107 of 1998) the *Standard for the Development of Electricity Power Lines and Substations within Identified Geographical Areas Revision 1*, the Regulations and all other applicable legislation;
- I have performed the work relating to the Standard registration process in an objective manner;
- I have taken into account, to the extent possible; the requirements of the *Standard for the Development of Power Lines and Substations within Identified Geographical Areas Revision 1*, matters listed in Regulation 13 of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended) when preparing the Standard registration process; and the reports relating to the Standard registration process;
- I have disclosed to the Proponent all material information in my possession that reasonably has or may have the potential of influencing the Standard registration process; and the objectivity of any report, plan or document to be prepared by myself to support the registration process, unless access to that information is protected by law, in which case, I have indicated that such information exists and will be provided to the competent authority as part of the registration process; and
- I have performed all obligations as expected from an environmental assessment practitioner in terms of the *Standard for the Development of Power Lines and Substations within Identified Geographical Areas Revision 1* and the EIA Regulations, 2014 (as amended).

Disclosure of vested Interest (delete whichever is not applicable)

- I do not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Standard;
- ~~I have a vested interest in the proposed activity proceeding, such vested interest being:~~



Signature of the Environmental Assessment Practitioner


Ourbiosphere Environmental (Pty) Ltd

Name of Company

Date

Undertaking under Oath or Affirmation

I, Musa Netshivhambe, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this registration is true and correct.



Signature of the Environmental Assessment Practitioner

Ourbiosphere Environmental (Pty) Ltd

Name of Company

12/01/2024

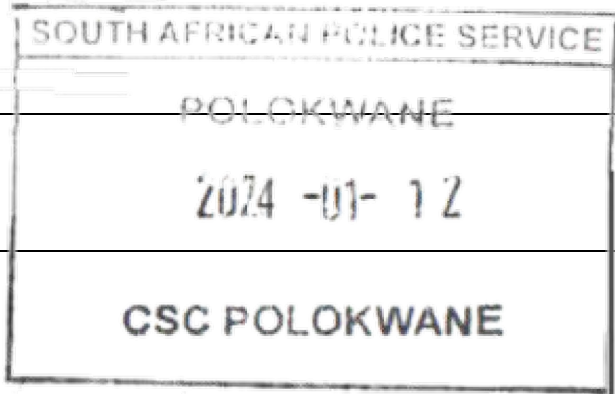
Date



Signature of the Commissioner of Oaths

12-01-2024

Date



APPENDIX 12:

CURRICULUM VITAE OF THE EAP AND SPECIALISTS

CURRICULUM VITAE OF MUSATONDWA JUSTICE NETSHIVHAMBE

First Names : Musatondwa Justice
Surname : Netshivhambe
SACNASP Reg: : 200076/12
Gender : Male
Date of birth : 1979-03-31
Identity number : 7903315306082
Nationality : South African
Health : Good
Criminal offence : None
Marital Status : Married
Driver's license : Code 08 and 10
Address : ERF4911
Bendor Park Ext 92
Polokwane
Cell phone : 0739779414
Fax : 086 567 5523
Email : musa@ourbiosphere.co.za

KEY COMPETENCES

- Environmental Management Systems (ISO 14001) Development, Implementation, Compliance, Auditing and Review
- Integrated Environmental Management (IEM) tools including EIA and SEA (Including the compilation of Scoping reports, Basic assessment reports, Environmental Management Plans, Strategic Environmental Impacts Assessments, and Application for Exceptions);
- Occupational Health and Safety
- Social Facilitation
- Land and Rights Negotiator
- Remote Sensing application to natural resource studies
- National Forest Management Act, Act 84 of 1998

EDUCATION		
MEnvSc (Master of Environmental Sciences)	University of Venda	2007
BEnvM (Bachelor of Environmental Management)	University of Venda	2003
Grade 12 (Matriculation)	Tondalushaka Secondary School	1998
MASTERS' RESEARCH TOPIC:		
An investigation into potential plants that can hyperaccumulate toxic heavy metals in contaminated areas.		
OTHER COURSES AND WORKSHOPS ATTENDED		
Geographical Information Systems	2005	
Participatory Rural Appraisal	2004	
Natural Resource and Environmental Economics	2003	
AWARDS		
Vice Chancellor Best Student Award	2002	
EMPLOYMENT AND EXPERIENCE RECORD		
PERIOD	POSITION & COMPANY	RESPONSIBILITIES
July 2014- Present	Environmental Consulting Manager Ourbiosphere Environmental (Pty) Ltd	<ul style="list-style-type: none"> ▪ Compliance Management Plans ▪ Construction monitoring (Environmental Control Officer) ▪ Land and Rights Negotiations ▪ Tree identification ▪ Social Facilitation ▪ Corporate Sustainability Strategy Services ▪ Environmental and Sustainability Training ▪ Environmental compliance training ▪ Environmental damage assessments ▪ Environmental Due Diligence Services ▪ Environmental Impact Assessments (EIAs) ▪ Environmental Management Systems (ISO14001:2004) ▪ Environmental Planning ▪ Environmental, Health and Safety Legal Compliance ▪ Environmental, Social and Health Management and Action Plans

		<ul style="list-style-type: none"> ▪ Impact Assessment and Planning Services ▪ Gap analysis ▪ Permitting Requirements Analyses and Support ▪ Product Life Cycle Assessment and Management ▪ Public Consultation and Stakeholder Engagement ▪ Site and Route Selection Studies ▪ Solid and Hazardous Waste Management ▪ Strategic Environmental Assessments (SEAs) ▪ Sustainability and Strategic Consulting ▪ Tree identification and Training ▪ Vegetation Management ▪ Vegetation mapping and assessments ▪ Water and Waste Licensing and Management Plans ▪ Wetland mitigation planning ▪ Wetlands Management and Delineations
<i>November 2011 - August 2014</i>	<i>Senior Environmental Supervisor, Eskom, Limpopo Operating Unit</i>	<p><i>Supervision and team leadership for the sub -section</i></p> <ul style="list-style-type: none"> ▪ Financial management and Staff Development ▪ Safety & Risk Management and emergency preparedness Stakeholder management Ensure Environmental Management compliance ▪ Provide Environmental Management Service to the Business ▪ Environmental Impact Assessments ▪ Environmental Management Systems (ISO14001:2004) ▪ Strategic Environmental Assessments
December 2008- October 2011	Environmental Management Officer, Eskom Distribution Division	<p><i>Environmental Management Systems</i></p> <ul style="list-style-type: none"> ▪ Assist in developing, implementing and monitoring compliance ▪ Responsible for Managing Environmental Consultant carrying-out environmental Authorizations for projects; ▪ Monitoring compliance of projects buy contractors; developing <p><i>Environmental Management Programmes (EMPs);</i></p>

		<ul style="list-style-type: none"> ▪ Provide environmental training and awareness to employees ▪ Investigating environmental incidences; ▪ Preparing reports and liaising with various statutory bodies <p><i>Conducts Environmental Impact studies:</i></p> <ul style="list-style-type: none"> ▪ Collating data and identifying sensitive areas ▪ Consulting with Statutory Authorities, landowners, pressure groups and interested and affected parties ▪ Researching and evaluating all Environmental data ▪ Integrating ESKOM proposals and its consequence with environmental findings and compiling recommendations ▪ Manipulating Environmental and Technical Data ▪ Assisting in final selection of routes or sites which will result in minimum Environmental impact <p><i>Develops Environmental Management Plans:</i></p> <ul style="list-style-type: none"> ▪ Developing guidelines for construction, operational and maintenance methods <p><i>Communicating all records of decision</i></p> <ul style="list-style-type: none"> ▪ Auditing and monitoring the implementation action on the environment as recommended in the management plan
<p>September 2007- December 2008</p>	<p>Head: Mabesa Environmental Impact Management Services</p>	<p><i>Responsible for conducting for:</i></p> <ul style="list-style-type: none"> ▪ ISO 14001 (Environmental Management Systems) ▪ Environmental Impacts Assessments (EIA) for specific development activities, meeting environmental obligations at the inception of the appropriate projects ▪ Public Participation Process ▪ Project Management involving the co-ordination of multidisciplinary processes and reports ▪ Ecological Assessments and Surveys ▪ Impact Evaluation and Significance Rating ▪ Environmental Management System (ISO 14001)

		<ul style="list-style-type: none"> ▪ Safety, Health, Environment and Quality (SHE) ▪ Environmental Mitigation and Control ▪ Identification and mapping of rural land use ▪ Fauna and Flora Investigations (Biodiversity) ▪ Environmental Risk and Liabilities Assessments ▪ Environmental Policy Formulation and Implementation ▪ Environmental Management Plans for development projects during construction, rehabilitation and operational phases ▪ Advice on Invasive Alien Plant Eradication ▪ Environmental Awareness and Capacity Building/Training
December 2006 – August 2007	Associate Environmental Consultant: Marsh Environmental Services (A Division of Marsh and McLennan Companies)	Environmental Impact Assessments (EIAs), including scoping reports, basic assessment reports, application for exemptions, public participation process, Stakeholders engagement, environmental planning, and landscape rehabilitation
September 2006 – November 2006	Associate Environmental Scientist Intern: Council for Scientific and Industrial Research (CSIR)	<p>Responsible for assisting the Senior Consultant with the:</p> <ul style="list-style-type: none"> ▪ Assessment of the feasibility, and potential environmental impacts of new rural land use systems; ▪ Development of indicators of environmental sustainability for rural land use systems ▪ Assessment and monitoring sustainability of rural land use systems using relevant indicators; ▪ Identification of sustainability challenges and obstacles related to rural land use; and searching for their solutions; ▪ Development and implementation of practical and affordable strategies for achieving environmental sustainability in rural land use systems;

		<ul style="list-style-type: none"> ▪ Development of rural land use models that integrate high economic productivity and environmental sustainability
January 2003 – July 2006	Junior Lecturer: University of Venda (School of Environmental Sciences)	<p>Responsibilities included:</p> <ul style="list-style-type: none"> ▪ Teaching and supervising undergraduate students on Environmental/Ecology and Resource Management modules in Environmental Sciences ▪ Developing curriculum for programmes for undergraduate degrees and diplomas in environmental management ▪ Providing leadership in Community Based Conservation Activities related to environmental management ▪ Undertaking research on Waste Management and Pollution and consultancy work in Environmental Impact Assessments for both Private and government departments ▪ Providing leadership to undergraduate student in field classes in Environmental Management ▪ Assisting the HOD in providing strategic direction to the department (staff and students)
INVOLVEMENT IN INTERNATIONAL INITIATIVES		
2003 – 2004		Part of the team and student leader for the Virginia (USA) and Venda (South Africa) weekly academic seminar series conducted <i>via</i> video conferencing facilities:
2005		Attended the summer classes offered by the University of Virginia (United States)