VEGETATION OPINION

Proposed Powerline Loop In/Out from Reabetswe Substation
Farm: Rietkuil 491 JS, Mpumalanga

Date: December 2017

Amended October 2018

Report drafted on behalf of:

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Indemnity

This report is based on survey and assessment techniques which are limited by time and budgetary constraints relevant to the type and level of investigation undertaken. The findings, results, observations, conclusions and recommendations given in this report are based on the author's best scientific and professional knowledge as well as available information at the time of study. Therefore, the author reserves the right to modify aspects of the report including the recommendations if and when new information may become available from ongoing research or further work in this field, or pertaining to this investigation.

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The Environmental Impact Assessment Regulations (Government Notice No. R982 of 4 December 2014), requires that certain information is included in specialist reports. The terms of reference, purpose of the report, methodologies, assumptions and limitations, impact assessment and mitigation (where relevant to the scope of work) and summaries of consultations (where applicable) are included within the main report. Other relevant information is set out below:

Expertise of author:

- Working in the field of ecology, and in specific vegetation related assessments, since 2007;
- Is registered as a Professional Natural Scientist with the South African Council for Natural Scientific Professions in the field of ecology (Reg. No. 400019/11); and
- Has been working with plants indigenous to South Africa since 1997.

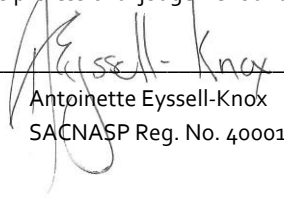
Declaration of independence:

Dimela Eco Consulting in an independent consultant 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 Dimela Eco Consulting is not subjected to or based on approval of the proposed project by the relevant authorities responsible for authorising this proposed project.

Disclosure:

Dimela Eco Consulting 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 Dimela Eco Consulting by the client, and in addition to information obtained during the course of this study, Dimela Eco Consulting present the results and conclusion within the associated document to the best of the authors professional judgement and in accordance with best practise.



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Date

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1. INTRODUCTION

Dimela Eco Consulting was tasked by Envirolution Consulting to investigate the vegetation that could be affected by a proposed Eskom powerline linking the authorised Reabetswe Substation and an existing powerline (loop in/out) in Mpumalanga.

An assessment was undertaken in 2017. However, the project locality changed in October 2018 and this report was amended accordingly.

1.1 Terms of reference

The terms of reference required an opinion of the vegetation that could be impacted on based on:

1. A short site visit;
2. Background information pertaining to the site (provincial conservation plans, vegetation types an listed ecosystems); and
3. An opinion whether the vegetation present poses a constraint to the proposed powerline loops.

1.2 Assumptions and Limitations

Vegetation studies should be conducted during the growing season of all plant species that may potentially occur. This may require more than one season's survey with two visits undertaken preferably during November and February.

A comprehensive vegetation assessment was not part of the terms of reference. Instead a number of small Eskom projects (of which this project was one) were visited on one day. The time spent on site aimed at identifying the dominant vegetation group and species present and to determine of any potential sensitive vegetation groupings could be impacted on by the proposed development. This site visit took place on the 30th of November 2017, after good summer rainfall.

Even though every care is taken to ensure the accuracy of this report, environmental assessment studies are limited in scope, time and budget. Discussions and proposed mitigations are to some extent made on reasonable and informed assumptions built on *bone fide* information sources, as well as deductive reasoning. Deriving a 100% factual report based on field collecting and observations can only be done over several years and seasons to account for fluctuating environmental conditions and migrations. Since environmental impact studies deal with dynamic natural systems additional information may come to light at a later stage. We can thus not accept responsibility for conclusions and mitigation measures made in good

1.3 Methodology

Literature of the area that the project is situated in was reviewed and the short site visit was undertaken on the 30th of November 2017. Google Earth aerial imagery was used to gain an understanding of past and current land uses and disturbances on and around the site that will determine the vegetation

response in terms of structure and species composition. A 100m buffer of surrounding land was also considered. Note that parts of the new project layout as received in October 2018, falls outside of the 100m buffer area surveyed around the original layout of 2017.

The description of the regional vegetation relied on literature from Mucina & Rutherford (2006). Plant names follow Van Wyk & Van Wyk (1997), Van Wyk & Malan (1997), Pooley (1998), Henderson (2001), Van Oudtshoorn (2002) and Bromilow (2010). Plant identification and vegetation description relied on species recorded in walked transects. Vegetation sensitivity was classified as set out in the assessment criteria in Appendix A.

2. BACKGROUND INFORMATION

2.1 Locality and land use

The site proposed Eskom Loop In/Out is situated on the farm Rietkuil 491JS in Mpumalanga. Currently two small substations are present, however, the authorised Reabetswe Substation will be constructed and the proposed loops will link this substation with the exiting powerline about 90 meters north thereof (Figure 1). A railway line is situated directly south of the substation. The closest town to the site is Rietkuil (Arnot Power Station), about 4km south-west of the site. The site falls within the quarter degree square 2529DD.

The amended layout of October 2018 includes two alternatives for the loops. The proposed route will connect the substation with the exiting powerline about 70m north of the substation. The proposed route is the shortest at between 70 and 80m. The alternative route will cross the railway line south of the substation and align parallel to the railway for about 300m before turning northwards to connect to the existing powerline.

2.2 Summary of biophysical information

Hydrology

A non-perennial drainage line originates about 180m west of the site (Figure 2). Mand-made dams are situated directly south of the railway line.

Historical Vegetation and Listed Ecosystems

The projects falls within the Eastern Highveld Grassland which grows on slightly or moderately undulating plains, including some low hills and pan depressions (Mucina & Rutherford, 2006). The vegetation is short dense grassland dominated by the typical highveld grass composition (including *Aristida, Digitaria, Eragrostis, Themeda, Tristachya* spcies) with small, scattered rocky outcrops with wiry, sour grasses and some woody species (e.g. *Senegalia caffra, Celtis africana, Diospyros lycioides* subsp *lycioides, Parinari capensis, Protea caffra, P. welwitschii* and *Rhus magalismontanum*) (Mucina &

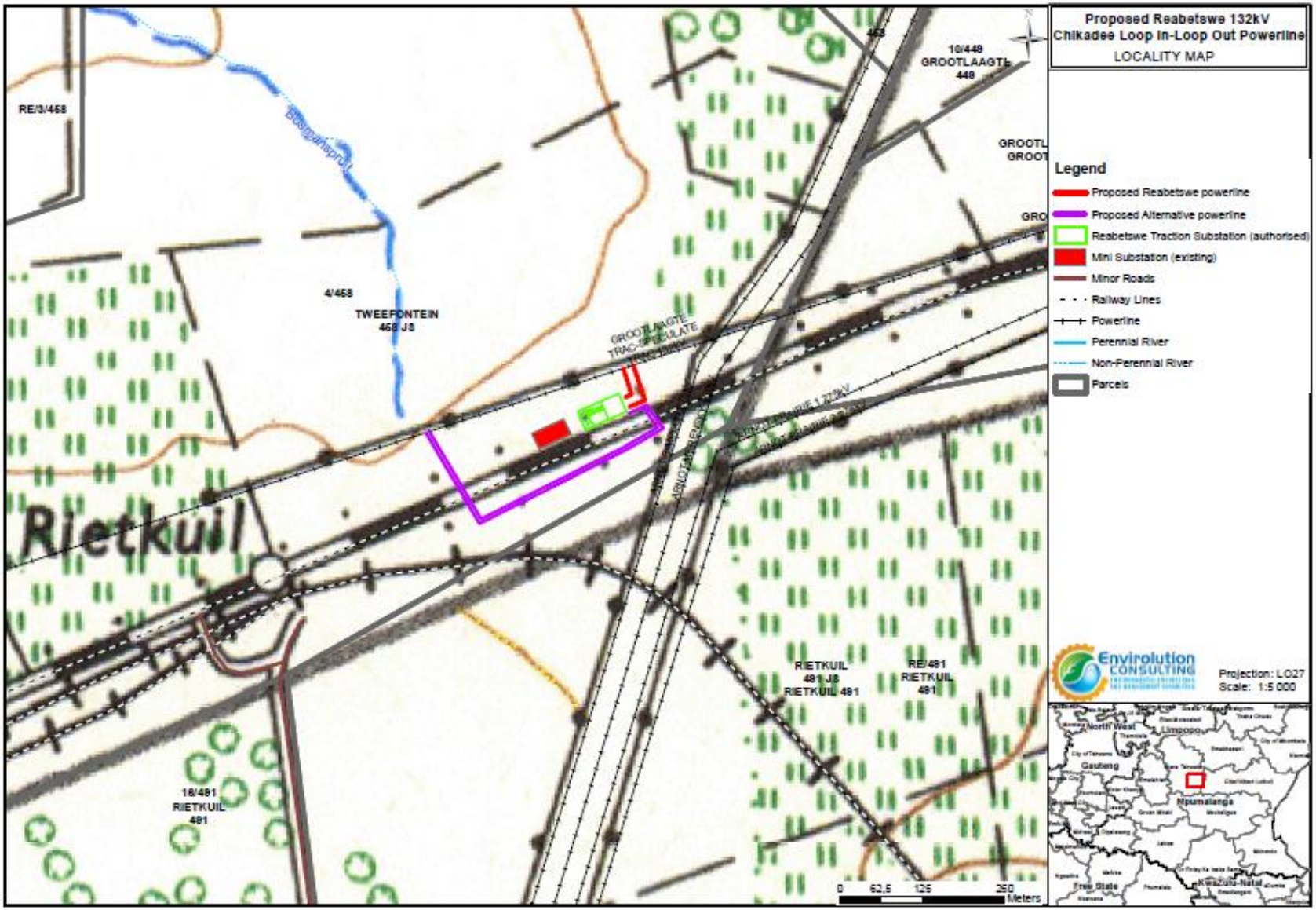

Figure 1: Locality map

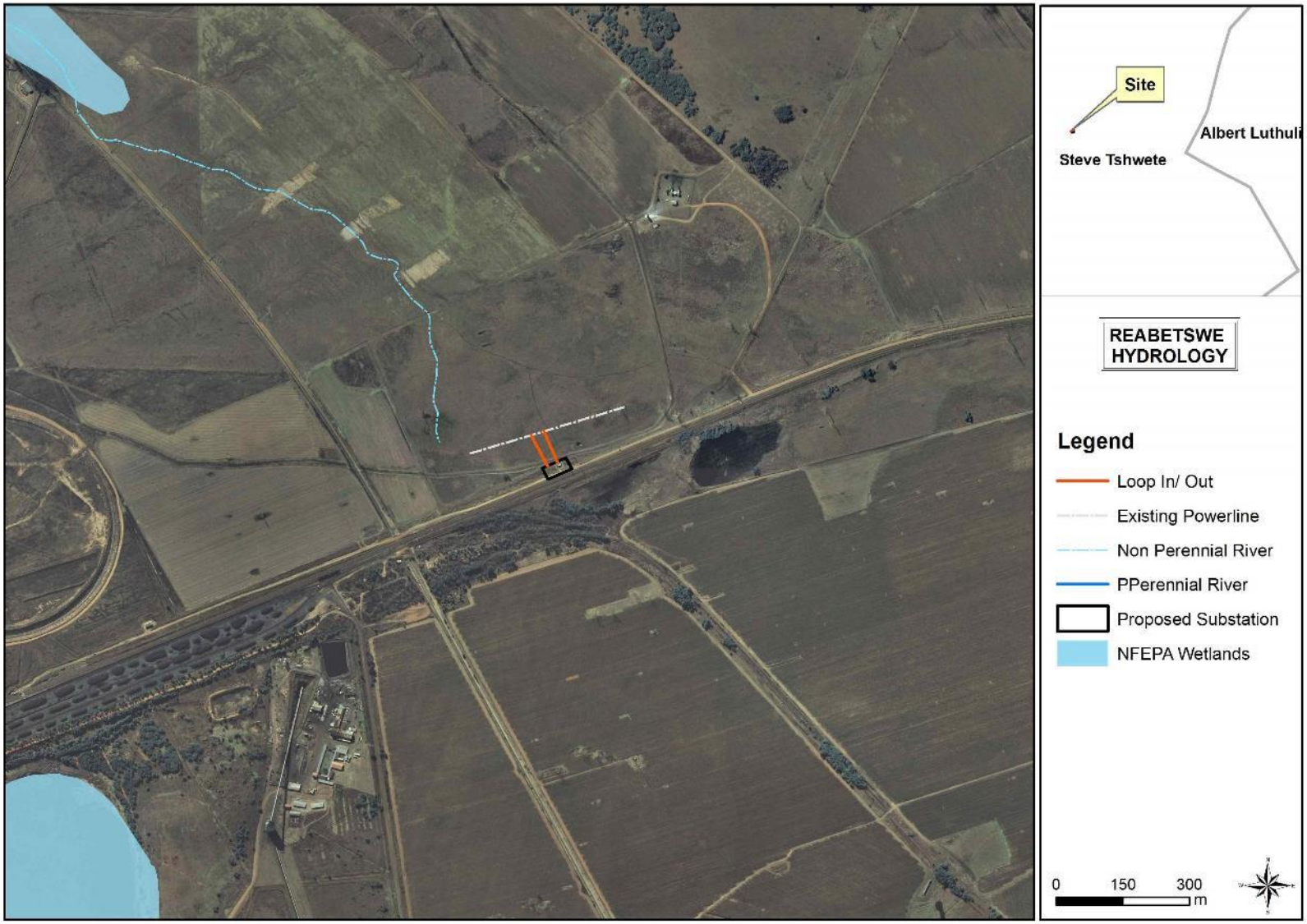

Figure 2: Hydrology of the area (note this map show the original layout as per November 2017)

Rutherford, 2006). This vegetation unit has been transformed by mining and cultivation and is considered to be endangered (Mucina & Rutherford, 2006).

The Eastern Highveld Grassland is listed as a Vulnerable ecosystem and natural to near-natural vegetation should thus be regarded as sensitive to development (Government Gazette 34809, Government Notice 1002, 9 December 2011).

2.3 Mpumalanga Biodiversity Sector Plan

According to the Mpumalanga Biodiversity Sector Plan (MBSP), the project site is situated in *Critical Biodiversity Areas: Optimal Area* (Figure 3). In Critical Biodiversity Areas (CBA's), any irreversible loss of habitat would be highly undesirable and these biodiversity features must be treated as 'red flags' or 'fatal flaws' (MTPA, 2014). The CBA Optimal Areas (previously called 'important and necessary' in the MBCP) are the areas optimally located to meet both the various biodiversity targets and other criteria defined in the analysis. Although these areas are not 'irreplaceable' they are the most efficient land configuration to meet all biodiversity targets and design criteria (MTPA, 2014).

Optimal areas should be maintained in a natural state with no further loss of natural habitat. If small-scale land-use change is unavoidable, it must be located and designed to be as biodiversity-sensitive as possible. The land use guidelines state that powerlines may compromise the biodiversity objective and are only permissible under certain conditions (MTPA, 2014).

Figure 3: The project area falls within CBA: Optimal areas of the Mpumalanga Biodiversity Sector Plan(note this map show the original layout as per November 2017)

3. OPINION: VEGETATION

3.1 Land use

Past disturbances was considered to determine the vegetation response to such disturbances. However, other than trenches presumably to drain water, and the existing powerline north of the project area, no other soil disturbances were noted (Figure 4). A sign on the fence adjacent to the railway line warns against subsidence due to mining. Mining activities were noted around the site, particularly south and east thereof. The site is grazed. A dam is situated south of the site, bordering the railway line. Cultivated land is present south and west of the site.

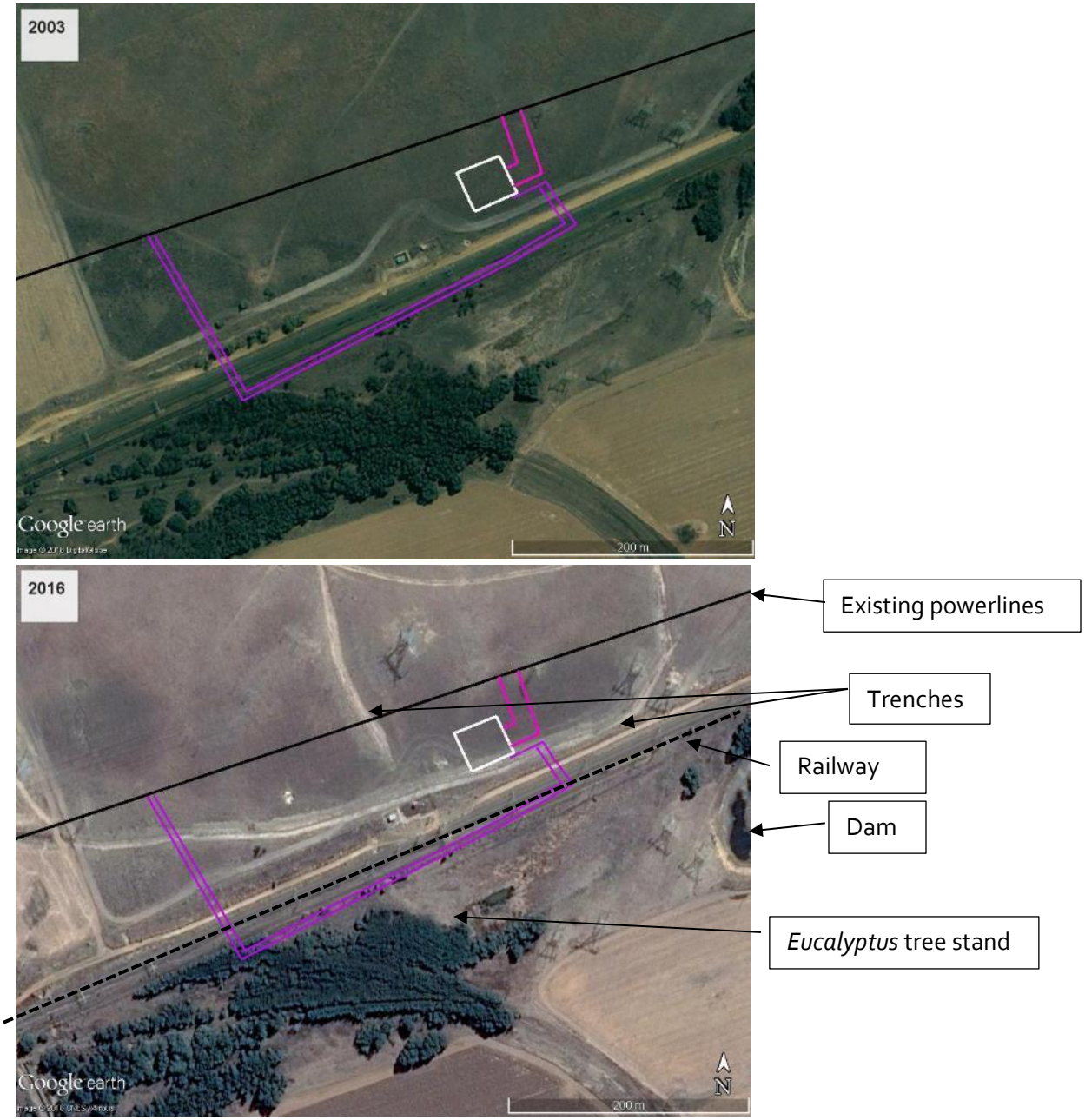

Figure 4: Google Earth imagery of the year 2003 and 2016 showing little change on the project site since 2003

Photograph 1: The existing substation and powerlines at the project area

3.2 Vegetation

3.2.1 Moist grassland

The substation locality and proposed route comprised sandy soils and the vegetation was classified as moist grassland based on the presence of sedges and numerous grass and forb species known to favour elevated soil moisture (Table 1) (Figure). Localised disturbances directly north of the substation lead to an increase in the invasive species *Solanum sisymbrifolium* (wild tomato). The area is likely grazed and the shrub *Stoebe plumosa* (bankrupt bush), that is known to proliferate under bad-land management such as overgrazing, was abundant.

Table 1: Species recorded within walked transects in the moist grassland

Grass	Forbs/ shrubs	Sedge
Dominant taxa		
Eragrostis plana	*Centella asiatica* (marsh pennyworth)	*Cyperus* cf *denudatus*
Stiburus cf conrathii	*Stoebe plumosa* (bankrupt bush)	
	Helichrysum aureonites	
Other common species recorded		
Eragrostis curvula	*Chironia palustris*	*Cyperus longus* var. *tenuiflorus*
Setaria spachelata	*Lobelia flaccida*	*Fimbristylis complanata*
Andropogon appendiculatus	*Gomphocarpus fructicosa (milkweed)*	
Aristida adscesionis	*Ranunculus multifidus (buttercups)*	
	Hypoxis filiformis	
Alien or invasive species		
	Solanum sisymbifolium (category 1b)	

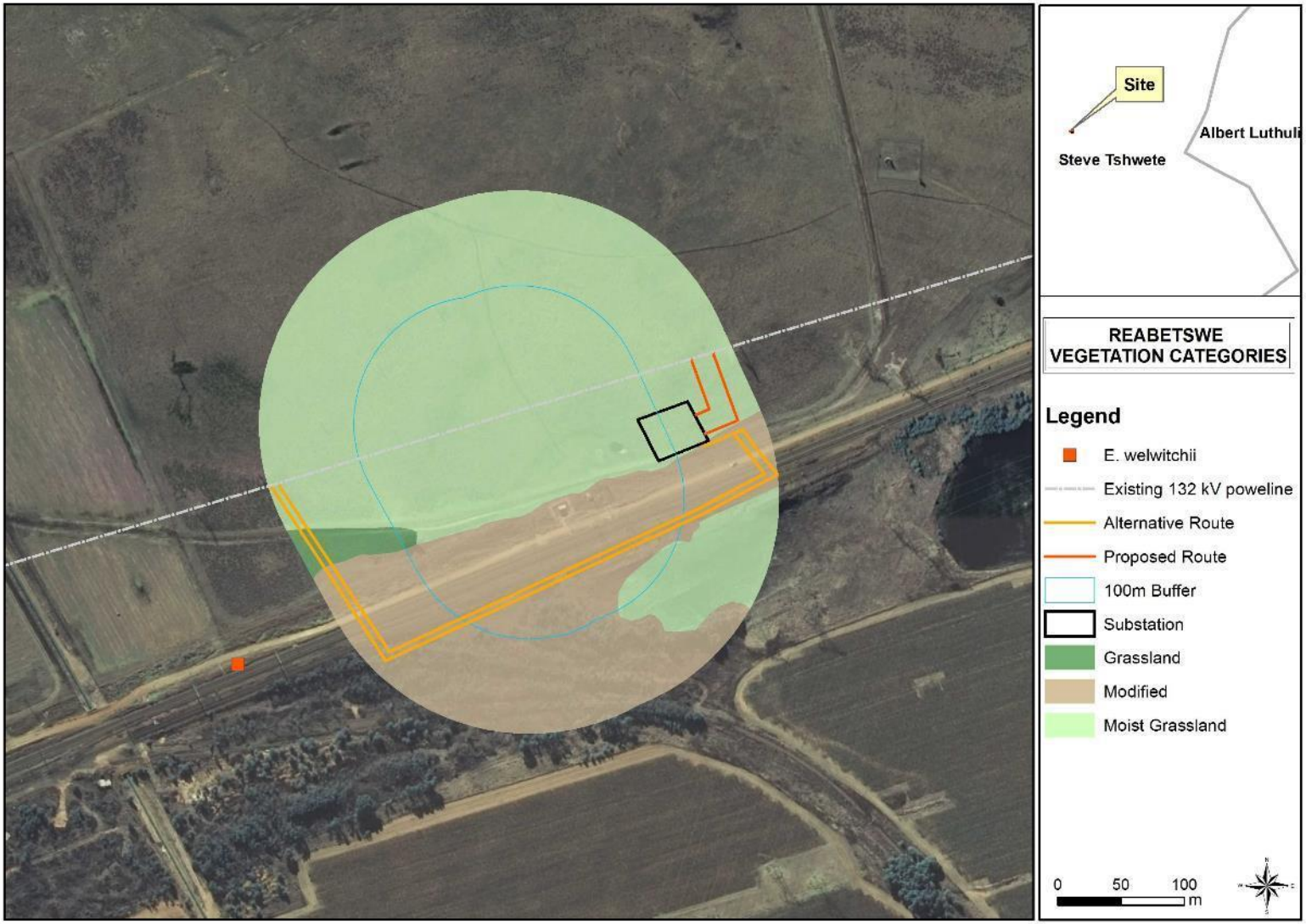

Figure 5: Broad vegetation categories around the proposed and alternative routes. Note that vegetation was extrapolated from the original 100m buffer mapped. Vegetation beyond the 100m buffer was thus not groundturthed.

Photograph 2: View from the existing powerline southwards to the existing substation

Photograph 3: Standing water within trenches or drains directly north of the substation as well as linear disturbances

3.2.2 Modified vegetation

South of the proposed loops, along the railway embankment and the proposed substation locality, the vegetation was dominated by pioneer grasses such as *Hyparrhenia hirta*, with the invasive *Eucalyptus* and Wattle trees present south of the railway line (Figure 5). These areas were classified as modified from the reference state of Eastern Highveld Grassland with limited forbs present. Forbs such as *Justicia*

anagaloides and the invasive Category 1a *Rumex acetosella* (sheep's sorrel) were recorded. The invasive *Eucalyptus* species (blue gum) is present along the western portion of the alternative route.

Photograph 4: Typical modified vegetation on the embankment and proposed substation locality

3.3.3 Grassland

The most north-western extent of the alternative route traverses a patch of grassland where it connects to the existing line (Figure 5). This grassland area was not assessed at the time of the site visit in November 2017, as it fell outside of the 100m buffer area around the original project layout that was assessed. Google Earth imagery was examined and it seems that this portion of grassland was not historically cultivated and are likely drier than the moist grassland. However, the moist grassland showed signs of poor land management evident by the dominance of the shrub *Stoebe plumosa* (bankruptbush). It is thus highly likely that this patch of grassland could also be dominated by this encroacher.

3.3 Plants of Conservation Importance

A list of plants of conservation concern that may occur on or around the project site was compiled using information from the Plants of Southern Africa (POSA) website, as well as historic information received from the Mpumalanga Tourism and Parks Agency (MTPA) (Table 2). None of these species were recorded at the time of the site visit, while suitable habitat is thought to be present for *Eucomis autumnalis* that was recently reclassified from Declining to Least Concern. However, numbers of these species are still declining and as best practise the plants should be relocated if found to be present.

Table 2: Plant species of conservation concern that occur in the area

Specie	Conservation status	Likelihood of occurrence	Flowering time
Boophone disticha	Declining (reclassified as Least Concern nationally)	Rocky grasslands, but particularly in proximity or on rocky outcrops– potential habitat in the grassland patch on the north-western extent of the alternative route	Oct-Jan
Eucomis autumnalis	Declining (reclassified as Least Concern nationally)	Damp, open grassland and sheltered places between rocks. Potential to occur, however, not recorded on the project site at the time of the site visit.	Nov-April
Eulophia cooperi	LC, but Rare in Mpumalanga	Open grassland and quartzite ridges– no suitable habitat on the project site	Spring
Khadia carolinensis	Vulnerable	Well-drained sandy loam soils among rocky outcrops – no suitable habitat on the project site	-
Miraglossum davyi	Vulnerable	Grassland. Site likely too moist for this species to occur. However the patch of grassland in the north-western extent of the alternative route was not assessed and therefore the possibility of occurring can not be ruled out.	Nov-Jan

3.4 Provincially Protected Plants

A number of plants are provincially protected by the Mpumalanga Nature Conservation Act, 1998 (Act No. 10 of 1998). These species may not be removed, pruned or damaged without a permit from the Mpumalanga Tourism and Parks Agency (MTPA). Of these species, the protected *Eulophia welwitshii* was recorded against the embankment of the railway line (Figure 5). The alternative route comes within 90m of this locality. Note that this alternative route was not known at the time of the assessment and therefore the exact route where the alternative crosses this embankment was not surveyed. Therefore, there is a likelihood that the alternative route may impact on other individuals of this species.

Photograph 5: A grass orchid recorded about 80m west of where the alternative route crosses the railway embankment

4. VEGETATION SENSITIVTY

It has been clearly demonstrated that vegetation not only forms the basis of the trophic pyramid in an ecosystem, but also plays a crucial role in providing the physical habitat within which organisms complete their life cycles (Kent & Coker 1992). Therefore, the vegetation of an area will largely determine the ecological sensitivity thereof.

In order to determine the vegetation condition and importance along the proposed route alternatives, weighting scores as listed below (Table 3) were applied. Vegetation of conservation importance were classified based on the findings of the study and the criteria as listed in Appendix A. The sensitivity analysis results were classified as per Table 4 and geographically presented in Figure 6.

Table 3: Weighting scores

Scoring	13-18	7-12	0-6
Sensitivity	High	Medium	Low

Table 4: Scoring of vegetation that occur on and within 100m of the site

Broad vegetation community	Conservation Status of regional Vegetation	Predominant state	Level of protection	Plants of conservation concern	Ecological Function	Conservation Importance / unique habitat	Total Score out of max of 18	Importance and vulnerability
Moist grassland	2	2	3	1	2	2	**12**	**medium**
Modified	2	1	0	0	1	1	**5**	**low**
Grassland patch	2	2	1	1	2	2		**medium**

Moist grasslands are usually indicative of wetland conditions which are protected by national legislation. The hydrological processes associated with the wetlands are closely associated with the intactness of the vegetation within and surrounding these areas. The vegetation plays an important role in flood attenuation, prevent soil erosion and sedimentation of wetlands and pans and promote the uptake of toxins from the water. Although the vegetation of the moist grassland was likely overgrazed and in a sub-climax state, the moist grasslands are regarded as important, natural open space in an area fragmented by cultivation and mining. The patch of grassland present in the north-western extent of the alternative route was not assessed at the time of the site visit as it fell outside of the 100m buffer area surveyed around the original project layout. Therefore the precautionary principle applies and it is considered as being in the same ecological state as the moist grasslands. As per the Mpumalanga Biodiversity Sector Plan, the site falls within and *CBA: Optimal* area and the land use guidelines state that powerlines may compromise the biodiversity objective and are only permissible under certain conditions which should be clarified with the department (MTPA, 2014).

The poor ecological condition of the modified vegetation limits it's conservation importance. The *Hyparrhenia hirta* grassland on the railway embankment provides habitat to one provincially protected orchid species. However, it is unlikely that the pylon footprint will be placed on the embankment and stringing is thought to have minimum impact on the embankment. The presence of this species should be verified if the alternative route is approved. This report is of the opinion that the powerline loops are limited in size and that strict mitigation measures could limit the negative impact, provided that all relevant legislation pertaining to wetlands are adhered to.

Figure 6: Sensitivity map. Note that vegetation was extrapolated from the original 100m buffer mapped. Vegetation beyond the 100m buffer was thus not groundturthed

5. IMPACT STATEMENT AND CONCLUSION

This report recommends the shortest route, the proposed route, be implemented. This route will have the least impact on vegetation and would be quickest to complete, limiting the time that the vegetation and bare soils are exposed to impacts. However, this report does not object to the alternative route, provided that locality of the orchid is protected from construction related impacts and that the alternative route in this area be scanned for the presence of this species. In addition, the patch of grassland present in the north-western extent of the alternative route should also be scanned for the presence of protected or threatened plant species.

The moist grassland on site is regarded as sensitive, however, the wetland report undertaken concurrently to this report (Limosella Consulting, 2017) must be consulted for details about wetland properties and extent on the project site. While the excavation of soil for the base of pylons would remove vegetation, the vegetation could be replanted after the construction and its re-establishment monitored to ensure that the soil and vegetation rehabilitate over time. This could only be done with suitable mitigation measures in place to protect the wetland hydrology and soils as recommended by the wetland report (Limosella Consulting, 2017). In addition, the

The greatest threat to the rehabilitation of the land disturbed by construction, is the potential of invasive plant species rapidly establishing on the disturbed soil and spreading into adjacent natural areas. The category 1b invasive *Solanum sisymbriofolium* was recorded on site and Wattle (*Acacia* species) and *Eucalyptus* trees south of the railway line. If remedial measures and monitoring are properly implemented, the vegetation that will be disturbed during construction could rehabilitate well over time, and long term impacts on vegetation could thus be minimal. Once in use, the powerlines have relatively contained impacts on the vegetation and can successfully be mitigated to limit or even negate the negative impacts. Furthermore, the presence of proximate access roads and dirt roads will greatly reduce the impacts of the proposed development.

<u>Recommended mitigation measures:</u>

- The wetland boundaries and recommend protective buffer zone as reported on by the wetland assessment should be adhered to and if development proceed within a wetland area, the relevant legislation and mitigation as suggested by the wetland report must be adhered to.
- If the alternative route is implemented, then the final route over the railway embankment must be scanned for the presence of *Eulophia welwitshii* within its flowering period (November-December). If this species is present, construction activities must avoid the localities or a permit for the removal / relocation of the species must be applied for. In addition, the patch of grassland present in the north-western extent of the alternative route should also be scanned for the presence of protected or threatened plant species.
- Camps and storage of equipment should be located outside of the moist grasslands.

- The use of heavy vehicles and machinery must be limited to prevent soil compaction. Due to the short distance of the loops equipment etc. could be carried or make use of lightweight alternatives.
- No activities should take place during rainy events and at least 2 days afterwards.
- Retain vegetation and soil in position for as long as possible, removing it immediately ahead of construction / earthworks in that area (DWAF, 2005).
- Remove only the vegetation where essential for construction and do not allow any disturbance to the adjoining natural vegetation cover.
- During construction, grassland can be removed as sods and replanted during rehabilitation of the areas affected by construction.
- Trucks and equipment should only be washed in dedicated areas and the dirty water is not allowed to discharge into the moist grasslands.
- After construction, the land must be cleared of rubbish, surplus materials, and equipment, and all parts of the land must be left in a condition as close as possible to that prior to construction.
- All construction vehicles and equipment, as well as construction material should be free of plant material. Therefore, all equipment and vehicles should be thoroughly cleaned prior to access on to the construction areas. This should be verified by the ECO.
- All alien seedlings and saplings must be removed as they become evident for the duration of construction.
- Colonisation of the disturbed areas by plants species from the surrounding natural vegetation must be monitored to ensure that vegetation cover is sufficient within one growing season. If not, then the areas need to be rehabilitated with a grass seed mix containing species that naturally occur within the study area. It is recommended that grasslands in the way of construction, be removed as sods that can be replanted as part of rehabilitation.

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7. GLOSSARY

Biome	A major biotic unit consisting of plant and animal communities having similarities in form and environmental conditions, but not including the abiotic portion of the environment.
Buffer zone	A collar of land that filters edge effects.
Conservation	The management of the biosphere so that it may yield the greatest sustainable benefit to present generation while maintaining its potential to meet the needs and aspirations of future generations. The wise use of natural resources to prevent loss of ecosystems function and integrity.
Conservation concern (Plants of..)	Plants of conservation concern are those plants that are important for South Africa's conservation decision making processes and include all plants that are Threatened (see **Threatened**), Extinct in the wild, Data deficient, **Near threatened**, Critically rare, Rare and **Declining**. These plants are nationally protected by the National Environmental Management: Biodiversity Act. Within the context of these reports, plants that are provincially protected are also discussed under this heading.
Conservation status	An indicator of the likelihood that species remaining extant either in the present day or the near future. Many factors are taken into account when assessing the conservation status of a species: not simply the number remaining, but the overall increase or decrease in the population over time, breeding success rates, known threats, and so on.
Edge effect	Inappropriate influences from surrounding activities, which physically degrade habitat, endanger resident biota and reduce the functional size of remnant fragments including, for example, the effects of invasive plant and animal species, physical damage and soil compaction caused through trampling and harvesting, abiotic habitat alterations and pollution
Indigenous	Any species of plant, shrub or tree that occurs naturally in South Africa
Mitigation	The implementation of practical measures to reduce adverse impacts
Protected Plant	According to Provincial Nature Conservation Ordinances or Acts, no one is allowed to sell, buy, transport, or remove this plant without a permit from the responsible authority. These plants are protected by provincial legislation.
Red Data	A list of species, fauna and flora that require environmental protection - based on the IUCN definitions. *Now termed Plants of Conservation Concern*
Species diversity	A measure of the number and relative abundance of species
Species richness	The number of species in an area or habitat
Threatened	Threatened Species are those that are facing a high risk of extinction, indicated by placing in the categories Critically Endangered (CR), Endangered (E) and Vulnerable (VU) (Raimondo *et al,* 2009)
Transformation	The removal or radical disturbance of natural vegetation, for example by crop agriculture, plantation forestry, mining or urban development. Transformation mostly results in a serious and permanent loss of biodiversity and fragmentation of ecosystems, which in turn lead to the failure of ecological processes. Remnants of biodiversity may survive in transformed landscapes

APPENDIX A: METHODOLOGY-vegetation

The study was undertaken on the 30th of November 2017. The assessment entailed a literature review which included short listing plants of conservation concern that could potentially occur, a site visit and reporting.

Literature Review:

The description of the regional vegetation relied on literature from Mucina & Rutherford (2006). Plant names follow Van Wyk & Van Wyk (1997), Van Wyk & Malan (1997), Pooley (1998), Henderson (2001), Van Oudtshoorn (2002) and Bromilow (2010).

Field survey:

The field survey focussed on walking transects and identifying natural and untransformed vegetation, unique features that could indicate local sensitivities such as threatened and protected plants, as well as sensitive ecological features such as wetlands, ridges and rivers that are essential for the maintenance of ecosystems and ecological processes.

Vegetation Sensitivity

The following criteria and weighting was used to determine the vegetation sensitivity, function and conservation importance:

1. The status of the regional vegetation that is expected to occur on the study site, only where natural vegetation is still remaining.

Conservation status*	Scoring
Critically Endangered	3
Endangered	2
Vulnerable	1
Least threatened	0

*This scoring is not applicable (N/A) for areas devoid of natural vegetation.

2. State of the vegetation

Listed Ecosystem*	Scoring
Primary state	3
Sub-climax state	2
Secondary state	1
No natural vegetation remaining	0

3. Whether the vegetation or ecological feature is protected by legislation:

Listed Ecosystem*	Scoring
National legislation	3
Provincial policies and guidelines	2
Municipal or other protection	1
No legislated protection	0

4. The presence of suitable habitat for plants of conservation concern as well as the actual occurrence thereof.

Suitable habitat / presence	Scoring
Confirmed presence	3
Confirmed presence of Declining species and Suitable habitat and some likelihood of occurrence of Threatened species	2
Suitable habitat but unlikely to occur	1
No suitable habitat	0

5. Ecological Function: areas important to ecological processes such as ecological corridors, hydrological processes and important topographical features such as ridges.

Ecological function	Scoring
High: Sensitive vegetation communities with low inherent resistance or resilience towards disturbance factors; vegetation that are considered important for the maintenance of ecosystem integrity. Most of these vegetation communities represent late succession ecosystems with high connectivity with other important ecological systems.	3
Medium to high: Vegetation communities that occur at disturbances of low-medium intensity and representative of secondary succession stages with a high degree of connectivity with other ecological systems OR disturbed vegetation connected to an ecological and protected system e.g. ridge, wetland or river	2
Medium: Vegetation communities that occur at disturbances of low-medium intensity and representative of secondary succession stages with some degree or limited connectivity with other ecological systems	1
Low: Degraded and highly disturbed vegetation with little ecological function	0

6. Conservation Importance: indication of the necessity to conserve areas based on factors such as the importance of the site on a national and/or provincial scale and on the ecological state of the area (degraded or pristine). This is determined by the presence of a high diversity, rare or endemic species and areas that are protected by legislation.

Ecological importance	Scoring
High: Ecosystems with high species diversity and usually provide suitable habitat for a number of threatened species. OR protected ecosystems e.g. wetlands, riparian vegetation etc These areas should be protected	3
Medium to high: Ecosystems with intermediate levels of species with the possible occurrence of threatened species	2
Medium: Ecosystems with intermediate levels of species diversity without any threatened species.	1
Low: Areas with little or no conservation potential and usually species poor (most species are usually exotic).	0