

Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

06 May 2025

To whom it may concern.

Compiled by: Martinus Erasmus

Email: martinus@thebiodiversitycompany.com

Compiled for: Mrs Murchellin Saal

Email Murchellin Saal Murchellin.S@greenmined.co.za

M +27 (76) 792 6327

ADDENDUM: Terrestrial Biodiversity Impact Assessment – Mining Permit Application (Keet,2023)¹

EcoFloristix Specialist Environmental Consulting was commissioned by Greenmined Environmental (Pty) Ltd in 2023 for the undertaking of terrestrial ecology surveys, and compilation of a biodiversity baseline and impact assessment report (Keet,2023)¹. These studies were undertaken in support of a mining permit application planned on Farm Rhenosterkop nr 115, Beaufort West District, Western Cape Province.

This document acts as an addendum to the previously mentioned report, specifically to address animal species sensitivity, which was not comprehensively covered in Keet's 2023 study and is necessary for the new application. The site for the proposed sand mine is situated in an area that was extensively studied in 2023 (Figure -3 & Figure -2)¹. Therefore, the purpose of this letter is to provide insights on the sensitivity of animal species and to identify any additions to the 2023 report.

¹ Keet, J-H (2023) Flora and Vegetation Report. Mining Permit Application near Beaufort West, Western Cape. Report prepared for Greenmined Environmental (Pty) Ltd., GM.OM.2.0.



Cell: +27 81 319 1225

Fax: +27 86 527 1965

info@thebiodiversitycompany.com

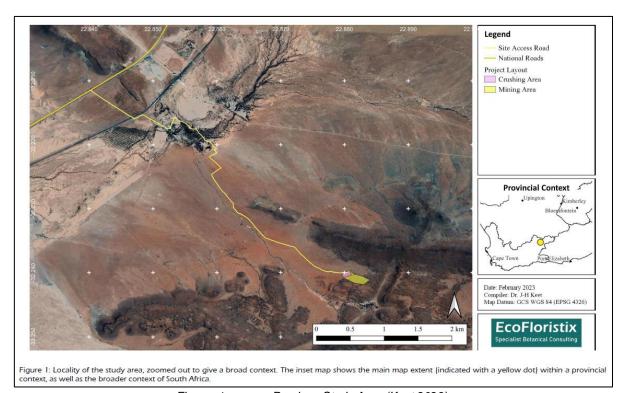


Figure -1 Previous Study Area (Keet,2023)

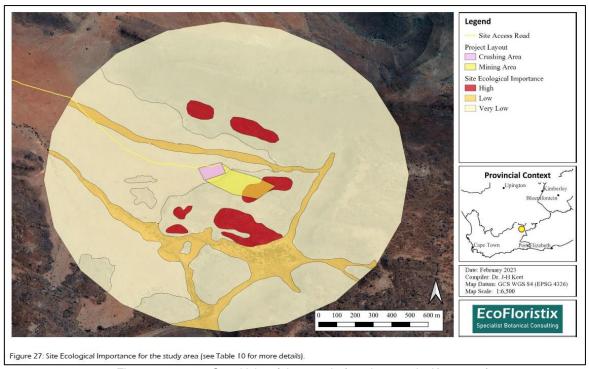


Figure -2 Sensitivity of the area in (previous study, Keet 2023)



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

1) Background

The Applicant, Sand Mine (Pty) Ltd, applied for environmental authorisation (EA) and a mining permit to mine sand on a portion of the remaining portion of the Farm Rhenosterkop no 155, Registration Division of Beaufort West, Western Cape Province (Figure -3). The proposed mining area is approximately 5 ha in extent and will be developed over an undisturbed and inactive area of the farm. The applicant intends to obtain material from the area for at least 2 years with a possible 3-year extension. The proposed sand mine will appoint ±6 employees, and due to the small scale of the operation no infrastructure, other than a chemical toilet, must be established within the mining footprint. The proposed mining area will be reached via an existing farm road that will be upgraded and maintained for the duration of the operational phase.

The sand extracted from the sand mine will be used for the construction industry in the surrounding area. The proposed sand mine will contribute to the upgrading / maintenance of road infrastructure, renewable energy projects and building contracts in and around the Beaufort West area.

The proposed operation is representative of the small-scale mining industry where the mineral (sand) is loaded with a Front-End-Loader (FEL) directly from the mining footprint area to the stockpile area, following standard practices in the small-scale mining sector. If necessary, the sand will be screened before being stockpiled. Once ready for distribution, a front-end loader will load the sand onto trucks for delivery to customers. No washing of sand will be required. All mining related activities will be contained within the limits of the authorized mining permit.

The proposed project triggers listed activities in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) and the Environmental Impact Assessment Regulations 2014 (as amended 2017) and therefore requires an environmental impact assessment (basic assessment process) that assess project specific environmental impacts and alternatives, consider public input, and propose mitigation measures, to ultimately culminate in an environmental management programme that informs the competent authority (Department of Mineral Resources and Energy) when considering the environmental authorisation.

Site Alternative 1 (Preferred and Only Site Alternative):

- Site Alternative 1 is considered the most practical and feasible option. The proposed area is adjacent to an existing quarry, allowing for the use of the same access route, which reduces additional infrastructure requirements. Furthermore, rehabilitation efforts are simplified due to the sites location and characteristics. Based on the preliminary assessments, the anticipated environmental impacts are deemed acceptable.
- The Applicant, applied for a 5 ha mining permit to mine sand on a portion of the remaining portion of the Farm Rhenosterkop no 155, Registration Division of Beaufort West in the Western Cape Province. The proposed mining area is over an undisturbed and inactive area of the farm.
- The proposed area was deemed as the preferred area due to the location of the sand reserve which is situated over an undisturbed and inactive area of the farm. The site



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

has a medium agricultural production potential. The mining area is situated between the koppies on a flat sandy area with low visual impact and is approximately 5 km from the N1, the site is situated to avoid interfering with nearby drainage lines.

• An alternative layout for the sand mine, has been assessed in the pre application phase – Site Alternative 2 but not found viable as explained below.

Site Alternative 2:

• Site alternative 1, was deemed the only viable site alternative as this is the only area that will be viable for the applicant due to the presence of the sand ridge. Although the position of Site Alternative 2 will still allow the development of the sand mine on the property, it is believed that the impact associated with this site alternative is of higher significance without the need or motivation justifying it.

Motivation where no alternative sites were considered;

- Site Alternative 2 (S2) was considered for the proposed mining activities but was found
 to be neither environmentally nor practically suitable. The earmarked area is situated
 between two drainage lines, and mining in this location would result in the complete
 destruction of these watercourses. In addition, this site would require the use of an
 alternative access route, increasing the need for additional infrastructure and
 associated impacts.
- Rehabilitation at this location would also be more complex due to the sites terrain and
 ecological sensitivity. Preliminary assessments indicate that, while Site Alternative 2
 could technically accommodate sand mining the associated environmental impacts
 are of significantly higher concern. It is believed that the impact associated with this
 site alternative is of higher significance without the need or motivation justifying it.

A 25 m buffer has been applied to the proposed access roads whereas a 100m buffer was placed on the proposed development area and is collectively referred to as the Project Area of Influence (PAOI) from hereon



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

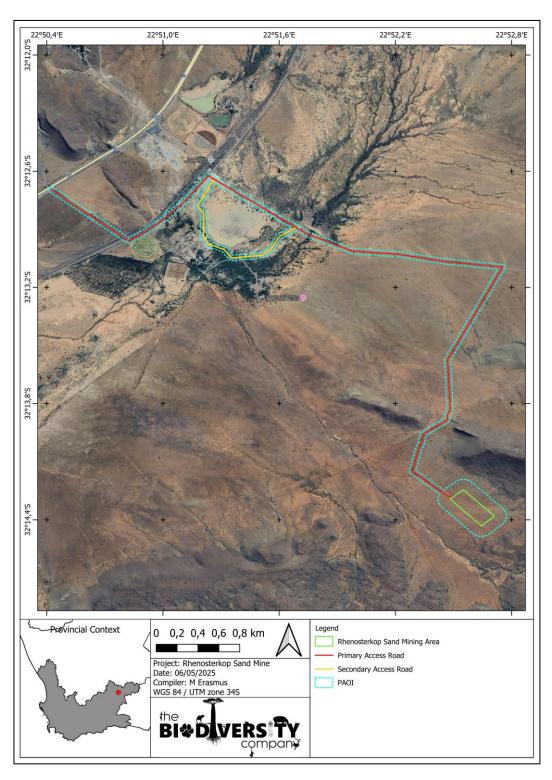


Figure -3 The new proposed infrastructure



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

2) Fauna Component

2.1) Fauna Species of Conservation Concern

The Screening Tool indicates that one (1) reptile SCC and five (5) avifauna SCC are predicted to occur within the PAOI (Figure -4). Most species have an overall moderate likelihood of occurring1 within the area due to the presence of suitable habitat, however unlikely use of the PAOI as a resident area. (Table 1).

Please note that the Screening Tool report includes lists of bird, mammal, reptile, amphibian, butterfly, and plant species of conservation concern known or expected to occur on the proposed development footprint. Some of these SCC are sensitive to illegal harvesting. Such species have had their names obscured and are listed as sensitive plant unique number / sensitive animal unique number. As per the best practise guideline that accompanies the protocol and screening tool, please, the name of the sensitive species may not appear in the final EIA report nor any of the specialist reports released into the public domain. It should be referred to as sensitive plant or sensitive animal and its threat status may be included, e.g. critically endangered sensitive plant or endangered sensitive animal.

Table 1 List of mammal SCC that are expected within the PAOI EN = Endangered, LC = Least Concern, NT = Near Threatened and VU = Vulnerable.

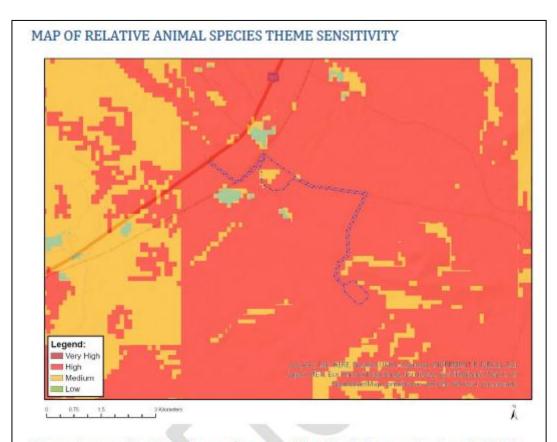
Group	Scientific	Common	Screening	Red L	.ist	Likelihood	Reason	
Group	Name	Name	Tool	Regional	Global	Likelihood of Occurrence Moderate Moderate Moderate Moderate Moderate Moderate	Neason	
Avifauna	Neotis Iudwigii	Ludwig's bustard	High	EN	EN	Moderate	Foraging/Movement Area	
Avifauna	Falco biarmicus	Lanner falcon	High	VU	LC	Moderate	Foraging/Movement Area	
Avifauna	Polemaetus bellicosus	Martial Eagle	High	EN	EN	Moderate	Foraging/Movement Area	
Avifauna	Aquila verreauxii	Verreaux's Eagle	High	VU	LC	Moderate	Foraging/Movement Area	
Avifauna	Afrotis afra	Southern Black Korhaan	Medium	VU	VU	Moderate	Foraging/Movement Area	
Reptile	Chersobius boulengeri	Karoo Dwarf Tortoise	Medium	EN	EN	Moderate	Foraging/Movement Area	

¹ Based on the report from Keet in 2023 and desktop information.



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com



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)		
High	Aves-Neotis ludwigii		
High	Aves-Falco biarmicus		
High	Aves-Polemaetus bellicosus		
High	Aves-Aquila verreauxii		
Medium	Aves-Afrotis afra		
Medium	Reptilia-Chersobius boulengeri		

Figure -4 Sensitivity of the area in relation to the proposed development in relation to previous sensitivity)



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

2.2) Screening Tool Comparison

Using the report information by Keet from 2023, the identified habitats and their suitability for the expected fauna species were determined and the SEI calculated. Based on the SEI criteria provided in Appendix A of this letter, all habitats within the PAOI were assigned a sensitivity category, i.e., a SEI category. Habitats within the PAOI was classified a sensitivity of Medium SEI (Table -2 and Figure -5). The findings of this assessment in relation to the proposed development therefore contradict the findings set forth by the Screening Tool with regards to the Animal Theme Sensitivity (Table -3). A summative explanation for each result is provided as relevant.

Table -2 Summary of habitat types and associated SEIs delineated within the PAOI.

Habitat Type	Conservation Functional Biodiversity Receptor Resilience Importance		Receptor Resilience	Site Ecological Importance Guidelines	
	Medium	Medium		Medium	Medium
Shrubland Drainage Area	> 50% of receptor contains natural habitat with potential to support SCC.	Mostly minor current negative ecological impacts. Moderate rehabilitation potential.	Medium	Species that have a moderate likelihood of: (i) remaining at a site even when a disturbance or impact is occurring, or (ii) returning to a site once the disturbance or impact has been removed.	Minimisation and restoration mitigation — development activities of medium impact acceptable followed by appropriate restoration activities.

Table -3 Summary of the screening tool vs specialist assigned sensitivities within the PAOI.

Screening Tool Theme	Screening Tool	Habitat (Keet, 2023)	Fauna Specialist	Tool Validated or Disputed by Specialist - Reasoning
		N/A	Modified Access Roads Very Low SEI	Disputed – No SCC were observed, moreover, some fauna SCC may potentially move through the area sporadically.
Animal Theme	Aristida congesta- High Asparagus burchelli	Shrubland Medium SEI	Disputed – No SCC expected resident, moreover, some fauna SCC may potentially move through the area sporadically, but it is unlikely that they will remain within the area. It still serves as a corridor for fauna dispersion.	
		Stipagrostis namaquensis -Vachellia karroo	Drainage area Medium SEI	Disputed – No SCC expected resident, moreover, some fauna SCC may potentially move through the area sporadically, but it is unlikely that they will remain within the area. It still serves as a corridor for fauna dispersion.



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

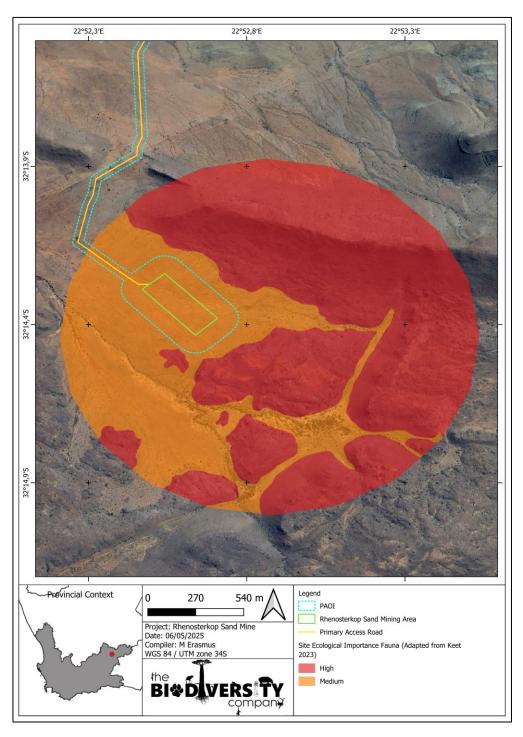


Figure -5 Sensitivity of the area in relation to the proposed development² (adapted from previous study for fauna)

² High SEI areas are considered suitable habitat for *Chersobius boulengeri*. However outside PAOI.



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

3) Impact Management and Mitigation Plan

3.1) Anticipated Impacts

Anthropogenic activities drive habitat destruction causing displacement of fauna and flora, and possibly direct mortality. Land clearing destroys local wildlife habitat and can lead to the loss of local breeding grounds, nesting sites and wildlife movement corridors, such as rivers, streams and drainage lines, or other locally important features. The removal of natural vegetation may reduce the habitat available for fauna species and may reduce animal populations and species compositions within the area. Potential impacts were evaluated against the data captured during the desktop and field assessment to identify relevance to the PAOI by Keet in 2023. Even though the report focused on Terrestrial Biodiversity and Plants, fauna was considered in the impact assessment.

Construction

Increased noise, pollution, and disturbance levels, and an on-site human presence will be detrimental to fauna. Sensitive and shy fauna will be displaced due to the human activities, while slow-moving species might not be able to avoid the construction activities and might be killed. Some impact on fauna is highly likely to occur during construction.

- A human presence on, and potential uncontrolled access to, the site may result in negative impacts on fauna and flora through poaching of fauna and/or uncontrolled collection of plants, or other reckless activities that might impact upon them.
- The presence and operation of mining vehicles and machinery in the study area will create a physical impact, and will generate noise, potential pollution, and other forms of disturbances.
- Displacement of faunal communities due to vegetation and habitat loss, and direct mortalities and disturbance (e.g., road collisions, noise, dust, vibration).

Operation

An on-site human presence will continue to contribute to the displacement of, and direct mortalities of, faunal communities due to disturbances (road collisions, noise, pollution, and disturbance).

- Continued fragmentation, and subsequent degradation, of habitats and ecosystems. This will result in a continued loss of plant communities, with a consequent impact on the potential occurrence of SCC and protected plant species.
- Maintenance and mining vehicles that are continually moving causes sensory disturbances to fauna and affects their lifecycles and movement. This might cause ongoing displacement and direct mortalities of faunal communities (similar to construction phase impacts).

The impact ratings provided by Keet in 2023, based on the aforementioned impacts, are **deemed sufficient** for assessing the expected significance of the impact on the animal species theme pre and post mitigation. Nonetheless, additional impact mitigation measures will be outlined below and should be reviewed alongside the previous study.



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

3.2) Mitigation Measures

The aim of the management outcomes is to present the mitigations in such a way that the can be incorporated into the Environmental Management Programme (EMPr), allowing for more successful implementation and auditing of the mitigations and monitoring guidelines (Table 4) presents the recommended mitigation measures and the respective timeframes, targets and performance indicators for the terrestrial study.

The focus of mitigation measures is to reduce the significance of potential impacts associated with the development and thereby to:

- As far as possible, reduce the negative fragmentation effects of the linear development (access roads) and enable safe movement of faunal species; and
- Prevent the direct and indirect loss and disturbance of faunal species and community.

Table 4 Mitigation measures including requirements for the fauna study.

Anticipated Impact	Displacement of faunal community due to habitat loss, direct mortalities and disturbance (road collisions, noise, dust, vibration and poaching)				
Activity/risk source	Land clearing, Fire and human presence as well as roads.				
Mitigation Objective	Avoidance / minimisation of the disturbance and mortality of fauna				
Mitigation, Action/control					

Mitigation: Action/control

- Clearly mark construction/mining zones to prevent impact on surrounding areas, using physical barriers like safety tape and signs instead of painted lines. This is especially true for the expected *Chersobius boulengeri* habitat in the surrounding dolerite ridges.
- Prior to vegetation clearing activities, the area to be cleared should be walked on foot by 1-2 individuals to create a
 disturbance in order for fauna to move off. Disturbance must occur as soon before vegetation clearing as possible and no
 unnecessary disturbance to the area is permitted
 - Any tortoises present should be removed from the affected areas before the start of site clearing/ construction and relocated them to safe areas with the PAOI.
 - Any fauna threatened by the construction activities should be removed safely by an appropriately qualified environmental officer or removal specialist.
- Schedule activities and operations during least sensitive periods;
 - Construction should take place during the dry season (May -July) as much is feasible, especially considering the fauna and their movement.
 - The known nesting time for Afrotis afra is August-November and Neotis Iudwigii is September-February.
 - Driving on access roads at night should be restricted to maximum 20 km/h to reduce or prevent wildlife road mortalities which occur more frequently during this period.
- Roads and road edges should be designed to allow any fauna, especially tortoises to easily move from one side of the road
 to the other.
- Safely relocate any wildlife at risk from construction activities with the help of a qualified environmental officer or specialist.
- Limit construction vehicle speeds to 40 km/h to prevent accidents, and install appropriate speed control measures and signage.
- Wildlife-permeable fencing with holes large enough for mongoose 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.
- · Minimize the time between clearing an area and starting development to prevent wildlife from returning to disturbed sites.



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

- Focus work on one area at a time to reduce the extent of on-site activities, allowing wildlife to relocate as the project progresses. This helps smaller animals find refuge in nearby undisturbed areas.
- Implement noise and light mitigation measures for any nighttime construction activities to minimise disturbances to nocturnal species expected in the area.
- All project activities must be undertaken with appropriate noise mitigation measures to avoid disturbance to avifauna population in the region;
- Provide all personnel and contractors to undergo Environmental Awareness Training to all personnel and contractors. A
 signed register of attendance must be kept for proof. Discussions The training must include.
 - All personnel should undergo environmental induction with regards to avifauna and in particular awareness about not harming, collecting, or hunting terrestrial species, and owls, which are often persecuted out of superstition.
 Signs must be put up to enforce this.
- As far as possible power cables within the PAOI should be insulated and preferably buried. All trenching areas must be rehabilitated
- All infrastructure must be removed if the facility is decommissioned.
- Where possible, instead of clearing the entire area at once, work on specific sections as needed. This approach involves
 focusing on one area at a time and following a systematic process. By doing so, the amount and scope of on-site activities
 are minimized, which allows wildlife to gradually relocate as the project advances. This method provides smaller birds,
 mammals, and reptiles the opportunity to cope with the disturbance by staying in nearby undisturbed areas that are close to
 their natural habitats.

4) Conclusion

The proposed development involves the construction of access roads and a sand mining area covering approximately 5 hectares. The access roads will utilize existing, already disturbed routes, resulting in minimal anticipated impact. The sand mining area overlaps with Medium SEI zones concerning the PAOI, due to the potential presence of SCC, although it is unlikely to serve as a significant habitat for these species. The impacts have been evaluated and mitigated.

The main anticipated impacts of the project include habitat loss and the migration of fauna. Based on the information provided, there are no apparent critical issues with the proposed project. The specialist believes the project can be approved, if all recommended mitigation measures are implemented, no significant negative impacts on the Faunal component are expected.

Regards,

-

Martinus Erasmus Ecologist Andrew Husted Project Manager

HAX



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

Appendix A – Terrestrial Site Ecological Importance

The different habitat types within the PAOI were delineated and identified based on observations made during the field survey, and information from available satellite imagery. These habitat types were assigned Ecological Importance (EI) categories based on their ecological integrity, conservation value, the presence of SCC and their ecosystem processes. Site Ecological Importance (SEI) is a function of the Biodiversity Importance (BI) of the receptor (e.g., SCC, the vegetation/fauna community or habitat type present in the Project Area) and Receptor Resilience (RR) (its resilience to impacts).

BI is a function of Conservation Importance (CI) and the Functional Integrity (FI) of the receptor. The criteria for the CI and FI ratings are provided in Table Error! No text of specified style in document.-5 and Table Error! No text of specified style in document.-6 respectively.

Table Error! No text of specified style in document.-5

Summary of Conservation Importance (CI) criteria

Conservation Importance	Fulfilling Criteria
	Confirmed or highly likely occurrence of Critically Endangered (CR), Endangered (EN), Vulnerable (VU) or Extremely Rare or CR species that have a global extent of occurrence (EOO) of < 10 km ² .
Very High	Any area of natural habitat of a CR ecosystem type or large area (> 0.1% of the total ecosystem type extent) of natural habitat of an EN ecosystem type.
	Globally significant populations of congregatory species (> 10% of global population).
	Confirmed or highly likely occurrence of CR, EN, VU species that have a global EOO of > 10 km ² . IUCN threatened species (CR, EN, VU) must be listed under any criterion other than A.
	If listed as threatened only under Criterion A, include if there are less than 10 locations or < 10 000 mature individuals remaining.
High	Small area (> 0.01% but < 0.1% of the total ecosystem type extent) of natural habitat of EN ecosystem type large area (> 0.1%) of natural habitat of VU ecosystem type.
	Presence of Rare species.
	Globally significant populations of congregatory species (> 1% but < 10% of global population).
	Confirmed or highly likely occurrence of populations of Near Threatened (NT) species, threatened species (CR, EN, VU) listed under Criterion A only and which have more than 10 locations or more than 10 000 mature individuals.
Medium	Any area of natural habitat of threatened ecosystem type with status of VU.
	Presence of range-restricted species.
	> 50% of receptor contains natural habitat with potential to support SCC.
Low	No confirmed or highly likely populations of SCC.



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

	No confirmed or highly likely populations of range-restricted species.
	< 50% of receptor contains natural habitat with limited potential to support SCC.
	No confirmed and highly unlikely populations of SCC.
Very Low	No confirmed and highly unlikely populations of range-restricted species.
	No natural habitat remaining.

Table Error! No text of specified style in document.-6

Summary of Functional Integrity (FI) criteria

Functional Integrity	Fulfilling Criteria				
	Very large (> 100 ha) intact area for any conservation status of ecosystem type or > 5 ha for CR ecosystem types.				
Very High	High habitat connectivity serving as functional ecological corridors, limited road network between intact hab patches.				
	No or minimal current negative ecological impacts, with no signs of major past disturbance.				
	Large (> 20 ha but < 100 ha) intact area for any conservation status of ecosystem type or > 10 ha for EN ecosystem types.				
High	Good habitat connectivity, with potentially functional ecological corridors and a regularly used road network between intact habitat patches.				
	Only minor current negative ecological impacts, with no signs of major past disturbance and good rehabilitation potential.				
	Medium (> 5 ha but < 20 ha) semi-intact area for any conservation status of ecosystem type or > 20 ha for ecosystem types.				
Medium	Only narrow corridors of good habitat connectivity or larger areas of poor habitat connectivity and a busy us road network between intact habitat patches.				
	Mostly minor current negative ecological impacts, with some major impacts and a few signs of minor past disturbance. Moderate rehabilitation potential.				
	Small (> 1 ha but < 5 ha) area.				
Low	Almost no habitat connectivity but migrations still possible across some modified or degraded natural habita and a very busy used road network surrounds the area.				
	Low rehabilitation potential.				
	Several minor and major current negative ecological impacts.				
	Very small (< 1 ha) area.				
Very Low	No habitat connectivity except for flying species or flora with wind-dispersed seeds.				



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

Several major current negative ecological impacts.

BI can be derived from a simple matrix of CI and FI as provided in Table Error! **No text of specified style in document.-7**.

Table **Error! No text of specified style in document.-**7 Matrix used to derive Biodiversity Importance (BI) from Functional Integrity (FI) and Conservation Importance (CI)

Biodiversity Importance			Conservation Importance					
		Very High	High	Medium	Low	Very Low		
	Very High	Very High	Very High	High	Medium	Low		
egrity	High	Very High	High	Medium	Medium	Low		
Functional Integrity	Medium	High	Medium	Medium	Low	Very Low		
Functik	Low	Medium	Medium	Low	Low	Very Low		
	Very Low	Medium	Low	Very Low	Very Low	Very Low		

The fulfilling criteria to evaluate RR are based on the estimated recovery time required to restore an appreciable portion of functionality to the receptor, as summarised in Table Error! **No text of specified style in document.-8**.

Table Error! No text of specified style in document.-8 Summary of Receptor Resilience (RR) criteria

Resilience	Fulfilling Criteria
Very High	Habitat that can recover rapidly (~ less than 5 years) to restore > 75% of the original species composition and functionality of the receptor functionality, or species that have a very high likelihood of: (i) remaining at a site even when a disturbance or impact is occurring, or (ii) returning to a site once the disturbance or impact has been removed.
High	Habitat that can recover relatively quickly (~ 5–10 years) to restore > 75% of the original species composition and functionality of the receptor functionality, or species that have a high likelihood of: (i) remaining at a site even when a disturbance or impact is occurring, or (ii) returning to a site once the disturbance or impact has been removed.
Medium	Will recover slowly (~ more than 10 years) to restore > 75% of the original species composition and functionality of the receptor functionality, or species that have a moderate likelihood of: (i) remaining at a site even when a disturbance or impact is occurring, or (ii) returning to a site once the disturbance or impact has been removed.
Low	Habitat that is unlikely to be able to recover fully after a relatively long period: > 15 years required to restore less than 50% of the original species composition and functionality of the receptor functionality, or species the



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

have a low likelihood of: (i) remaining at a site even when a disturbance or impact is occurring, or (ii) returning to a site once the disturbance or impact has been removed.

Habitat that is unable to recover from major impacts, or species that are unlikely to: (i) remain at a site even when a disturbance or impact is occurring, or (ii) return to a site once the disturbance or impact has been removed.

After the determination of BI and RR, the SEI can be ascertained using the matrix as provided in Table Error! No text of specified style in document.-9.

Table Error! No text of specified style in document.-9 Matrix used to derive Site Ecological Importance from Receptor Resilience (RR) and Biodiversity Importance (BI)

Site Ecological Importance -			Biodiversity Importance					
		Very High	High	Medium	Low	Very Low		
Very Low		Very High	Very High	High	Medium	Low		
lience	Low	Very High	Very High	High	Medium	Very Low		
Receptor Resilience	Medium	Very High	High	Medium	Low	Very Low		
Recept	High	High	Medium	Low	Very Low	Very Low		
	Very High	Medium	Low	Very Low	Very Low	Very Low		

Interpretation of the SEI in the context of the proposed project is provided in Table Error! **No text of specified style in document.-10**.

Table Error! No text of specified style in document.-10 Guideline for interpreting Site Ecological Importance in the context of proposed activities

Site Ecological Importance	Interpretation in relation to proposed development activities
Very High	Avoidance mitigation – no destructive development activities should be considered. Offset mitigation not acceptable/not possible (i.e., last remaining populations of species, last remaining good condition patches of ecosystems/unique species assemblages). Destructive impacts for species/ecosystems where persistence target remains.
High	Avoidance mitigation wherever possible. Minimisation mitigation – changes to project infrastructure design to limit the amount of habitat impacted, limited development activities of low impact acceptable. Offset mitigation may be required for high impact activities.
Medium	Minimisation and restoration mitigation – development activities of medium impact acceptable followed by appropriate restoration activities.



Cell: +27 81 319 1225 Fax: +27 86 527 1965

info@thebiodiversitycompany.com

Low	Minimisation and restoration mitigation – development activities of medium to high impact acceptable followed by appropriate restoration activities.
Very Low	Minimisation mitigation – development activities of medium to high impact acceptable and restoration activities may not be required.

The SEI evaluated for each taxon can be combined into a single multi-taxon evaluation of SEI for the assessment area. Either a combination of the maximum SEI for each receptor should be applied, or the SEI may be evaluated only once per receptor but for all necessary taxa simultaneously. For the latter, justification of the SEI for each receptor is based on the criteria that conforms to the highest CI and FI, and the lowest RR across all taxa.