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Terrestrial Animal Site Sensitivity Verification Report and Compliance Statement

Proposed infrastructure upgrade and expansion of the tourist accommodation facilities on Rusty Gate Mountain Retreat, Farms 824, Rem. Farm 826 and Farm 887, in the Caledon District

Prepared for: LORNAY ENVIRONMENTAL CONSULTING

July 2024

Prepared by: Jan A Venter & Rudi Swart

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Photos by:

Declaration of independence

- We consider ourselves bound to the rules and ethics of the South African Council for Natural Scientific Professions (SACNASP);
- At the time of conducting the study and compiling this report, we did not have any interest, hidden or otherwise, in the proposed development that this study has reference to, except for financial compensation for work done in a professional capacity;
- Work performed for this study was done objectively. Even if this study results in views and findings that are not favourable to the client/applicant, I will not be affected in any manner by the outcome of any environmental process of which this report may form a part, other than being members of the general public;
- We declare that no circumstances may compromise my objectivity in performing this specialist investigation. We do not necessarily object to or endorse any proposed developments but aim to present facts, findings and recommendations based on relevant professional experience and scientific data;
- We do not have any influence over decisions made by the governing authorities;
- We undertake to disclose all material information in my possession that reasonably has or may have the potential of influencing any decision to be taken concerning the application by a competent authority to such a relevant authority and the applicant;
- We have the necessary qualifications and guidance from professional experts in conducting specialist reports relevant to this application, including knowledge of the applicable Act, regulations and any guidelines that have relevance to the proposed activity;
- This document and all information contained herein is and will remain our intellectual property. This document, in its entirety or any portion thereof, may not be altered in any manner or form for any purpose without the specific and written consent of the specialist investigators.
- All the particulars we furnished in this document are true and correct.

_____ 7 July 2024

Signature Date

_____ 13 July 2024

Signature Date

Contents

Introduction

The development of infrastructure and expansion of the tourist accommodation facilities on Rusty Gate Mountain Retreat, Farms 824, Rem. Farm 826 and Farm 887, in the Caledon District (Figure 1). The Department of Forestry, Fisheries and the Environment (DFFE) screening report (performed in April 2023) identified the site as having a 'High' Animal Species Theme sensitivity (Naylor 2023)(Figure 2). A high sensitivity requires the submission of a Site Sensitivity report and Terrestrial Animal Species Compliance Statement. This Compliance Statement, as per the protocol set out by the DFFE (2020) reports on a site visit to the area that will be impacted by the development (the study area), during which the presence or possible presence of the Species of Conservation Concern (SCC) identified by the screening tool was determined. Animal species of concern (*n=7*) that was identified by the screening tool are listed in Table 1. Cape Nature indicated the potential risk to two additional newly described frog species which were found in the region, specifically in the adjacent Riviersonderend Nature Reserve (Table 1).

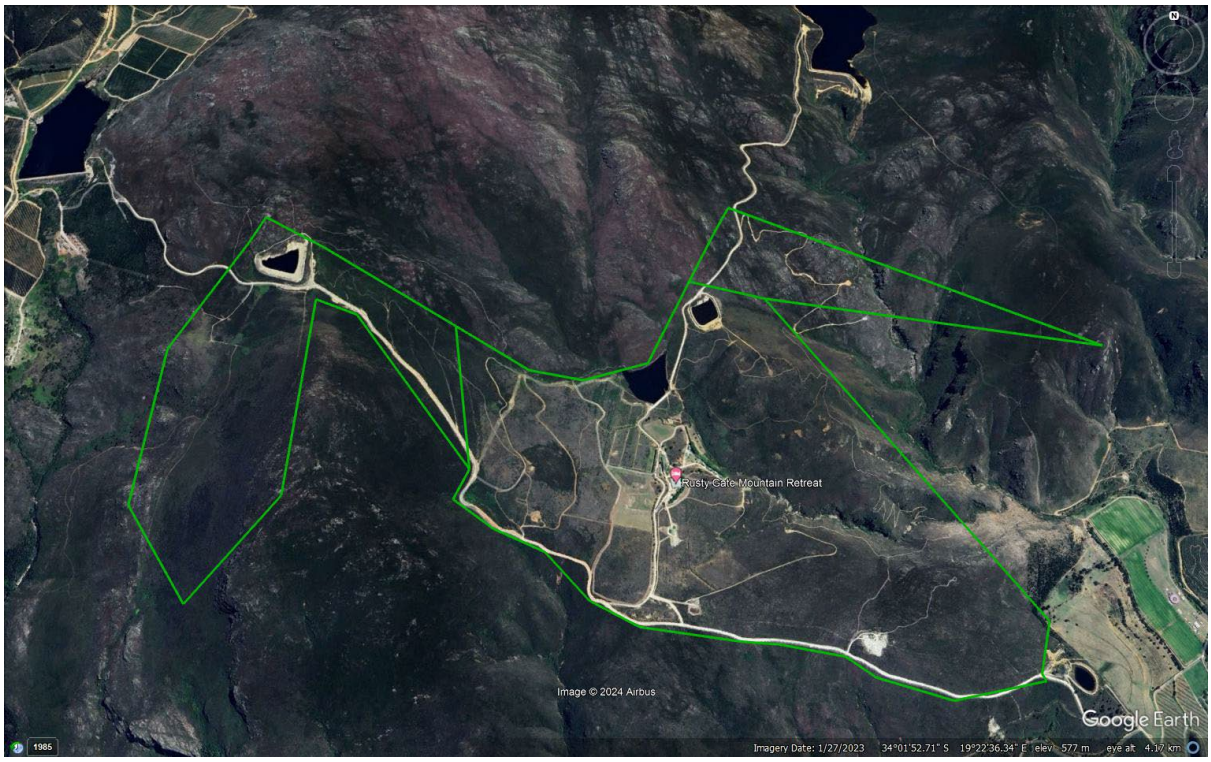

Figure 1: The cadastral boundary of the property (outlined in green) investigated during the site visit.

Table 1: Animal species of concern identified by the screening report (Naylor 2023). Two additional species were flagged by CapeNature for investigation.

Sensitivity	Species name	Common name	Order	Red List Status
High	*Sarothrura affinis*	Striped Flufftail	Avis	VU
Medium	*Circus maurus*	Black Harrier	Avis	EN
Medium	*Sagittarius serpentarius*	Secretary bird	Avis	EN
Medium	*Aquila verreauxii*	Verreaux's eagle	Avis	VU
Medium	*Conocephalus peringueyi*	Peringuey's Meadow Katydid	Invertebrate	VU
Medium	*Brinckiella aptera*	Mute Winter Katydid	Invertebrate	VU
Medium	*Aneuryphymus montanus*	Yellow winged agile grasshopper	Invertebrate	VU
*Unknown	*Capensibufo magistratus*	Landdroskop Mountain Toadlet	Amphibian	DD
*Unknown	*Arthroleptella atermina*	Riviersonderend moss frog	Amphibian	Unknown

* Two additional species were flagged by CapeNature for investigation.

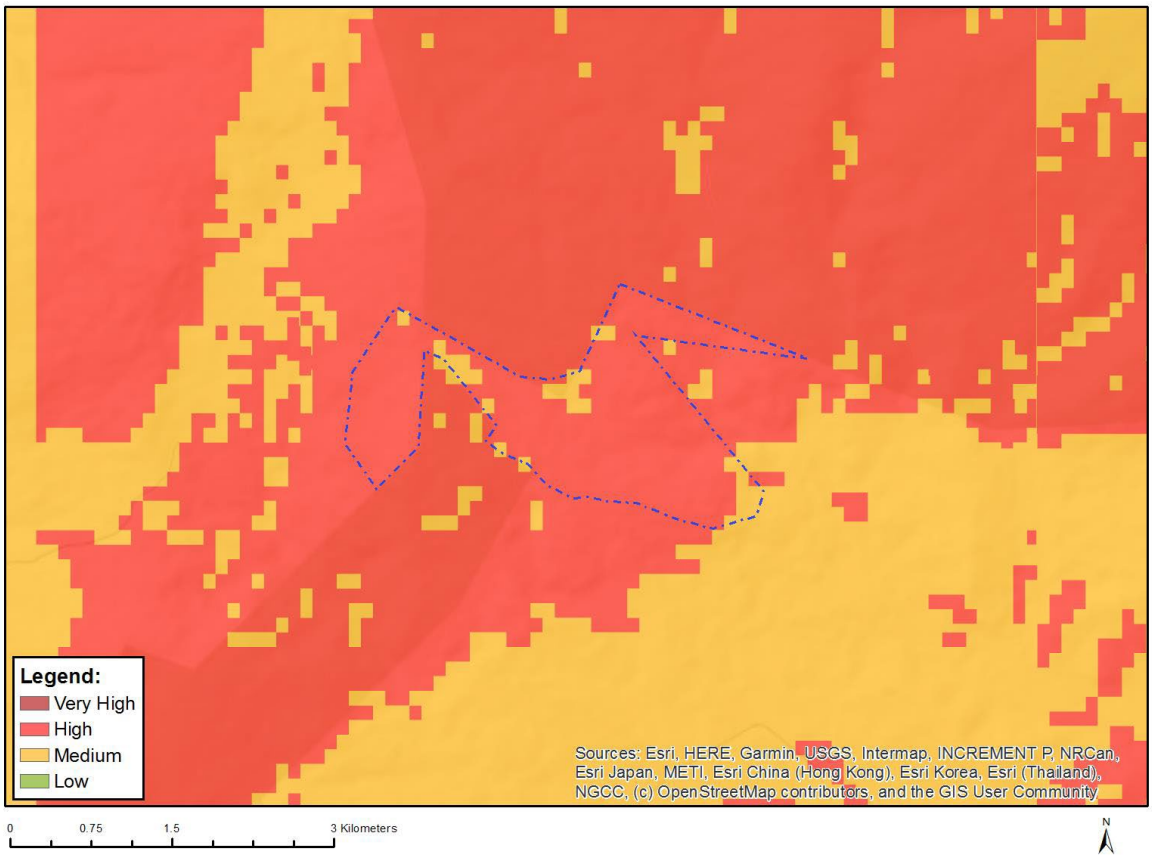

Figure 2: Map of the relative animal species theme sensitivity as per(Naylor 2023)

This report follows the legislative requirements set out by the National Environmental Management Act 107 of 1998 and specifically the regulations listed in the Government Gazette Notice No. 1150, Protocol for the specialist assessment and minimum report content requirements for environmental impacts on terrestrial animal species, October 2020.

Study Area

Rusty Gate Mountain Retreat, Farms 824, Rem. Farm 826 and Farm 887 is situated ±23 km northwest of the town Caledon, in the Western Cape Province (E 19°22'22"; S 34°00'37") (Figure 1). The majority ±60% of the property consist of natural mountainous Fynbos with the rest comprising of old fruit orchards and associated infrastructure (Figure 3). There are several man-made dams present fed by small natural streams and springs (Figure 4).

My overall impression during the site visit was that the property is in a moderately transformed state (due to past agricultural practises) with a considerable proportion that can be considered as 'natural' or 'pristine'.

The proposed development includes:

The proposed new development at Rusty Gate Mountain Retreat comprises the development of the following (Figure 5):

- Eco Cabins (2 per site at sites 7, 26 & 27 and 1 per site at sites 6, 24 & 25)
- Eco Pods (2 per site at sites 3B and 28 and 1 per site at site 30)
- A sundowner boma and fire pit at site 29
- A campsite at site 3A, and
- A new primary residence at site 2.
- Each site will be serviced in the following manner:
    - Power supply: Each accommodation unit and the facilities at the camp site will be supplied with an off-grid solar PVC power generating system;
    - Water supply: Some accommodation units and the ablutions at the campsite will be connected via HDPE pipelines to the farm's potable water supply while other higher elevated sites (Sites 28, 27, 25 and 31) need to be provided with a tanker supply;
    - Sewerage: All effluent from the accommodation units and ablutions for the campsite will be discharged via a buried HDPE pipe leading to a conservancy tank which will be located at an accessible location for emptying by the landowner.
- New dirt access roads only required for sites 27 (new road length 92 m), 3a (124 m), 3b (48 m)

Figure 3: A large proportion of the property consist of natural mountain Fynbos with some remnants of old fruit orchards and associated infrastructure.

Figure 4: There are several man-made dams present on the property.

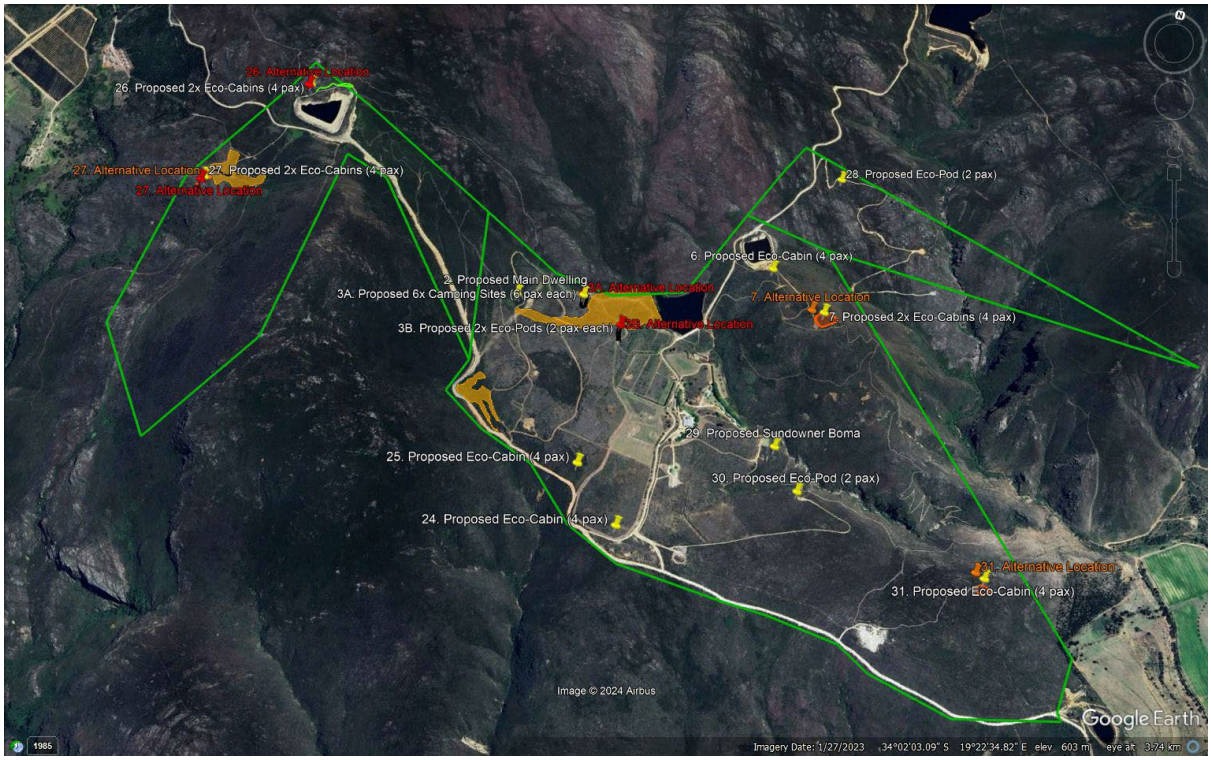

Figure 5: The development footprint for the development of infrastructure and expansion of the tourist accommodation facilities on Rusty Gate Mountain Retreat. Orange polygons indicate sensitive vegetation areas and yellow polygons indicates wetlands. Yellow markers are original development locations, orange markers alternatives considering sensitive vegetation and red markers alternatives considering wetland dynamics.

Methods

We followed the prescribed protocol for performing a Terrestrial Animal Site Sensitivity Verification Report according to the Government Gazette Notice 320 (Government Gazette 43110, 20 March 2020), and amended in Government Gazette Notice 3717 (Government Gazette 49028, 28 July 2023).

As per the Protocols, the site sensitivity report includes:

a) Confirmation of the current land use of the land and the environmental sensitivity as identified by the screening tool;
b) Contain a motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity;
c) Contain verifiable evidence from the specialist's site inspection, including:
   I. a map showing the specialist's GPS track in relation to the study area (Figure 6);
   II. 10 spatially representative sample site descriptions from across the study area that include:
      i. precise geographical coordinates of the sample site;
      ii. at least one in situ photograph of the sample site; and
      iii. a habitat description of the sample site; and
d) be submitted together with the relevant assessment report prepared in accordance with the requirements for the Environmental Impact Assessment Regulations.

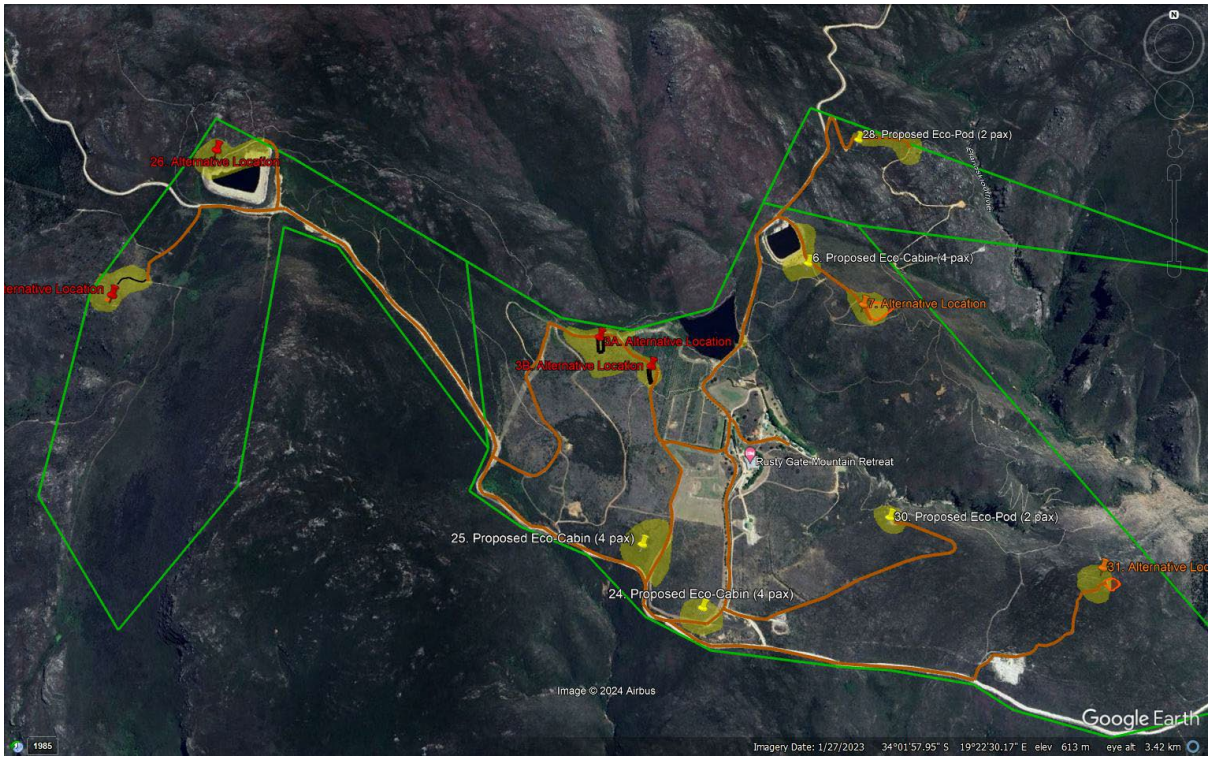

Figure 6: A map indicating the areas within the property visited during the site visit. Brown lines indicates routes travelled and yellow polygons areas where intensive searching was done on foot.

This report's findings are based on:

- A desktop study to determine the presence of animal species of concern (as listed in Table 2) and other species at the study area; and
- A field visit that took place on the 4th and 5th of July 2024.

The desktop study included the use of iNaturalist and Global Biodiversity Information Framework (GBIF) records. These records were used to determine the species recorded in the area and the presence of potential SCC, with particular emphasis on the SCC listed by the screening tool. I rechecked these records for any potential updates.

A site visit was performed on the 4th and 5th of July 2024, where both nocturnal (between 19:00 and 23:00) and diurnal (between 7h00 and 12h00) surveys were performed. During the site surveys, the species, and signs of presence (tracks, scats etc), observed were recorded. Surveys consisted of visual and acoustic surveys performed at and between the various proposed development sites. We used territorial call playback to determine the presence of striped flufftail. We also sweep netted each site for insect presence and scanned representative vegetation for resting insects. We searched during day and night times to attempt to record diurnal and nocturnal species. The main purposes of the site visit were to confirm whether:

- any SCC were present in the proposed development area;
- the proposed site for the development would act as a corridor for any of the SCC highlighted by the screening tool;

- ❖ whether the vegetation (indigenous and planted) at the proposed development site likely supports undetected individuals or populations of the SCC highlighted by the screening tool; and
- ❖ there are any SCC present at the site that were not highlighted by the initial screening.

To aid in record-keeping of the site and species observed, photographs were taken during the site visit. We physically visited and conducted intensive searches at all sites except site 2 (main dwelling) and 29 (sundowner boma) because the landowner on the day forgot to take us there. For these sites we used comparable sites in terms of topography, vegetation and soil type to estimate potential risk.

Results

Habitat descriptions.

After screening the development site using Google Earth images and on-site verification, we decided to do intensive searches at each proposed development site and additional sites of interest of specific representative or seemingly important locations (see Figure 6) within the development area. The specific site habitat descriptions will be dealt with as they are located from west to east.

Site 27

This location is on the western side of the property and one of the higher elevation sites (>780 masl) (S 31° 01’ 50”; E19° 21’ 39”) (Figure 6). The area is dominated by natural mountain Fynbos with occasional scattered exotic *Pinus* sp. (Figure 7 & 8). A seepage area is situated between the road and the development site is situated to the east (Figure 8). The development site is on a rocky outcrop (Figure 9). At the times (day & night) of visit it was fairly cold and a fresh wind was blowing but we did observe some birdlife and orthopteran fauna (Table 2).

Figure 7: Site 27 is dominated by natural Fynbos.

Figure 8: The seepage area to the east of site 27.

Figure 9: Site 27 is situated on a rocky outcrop on the western boundary of the property.

We observed (visually and acoustic) 2 different bird species at this location, and a species of Orthoptera (Table 2).

Table 2: Animal species observed at Site 27

Group	Species	Notes	Status
Birds:	Cape crow *Corvus capensis*	Flying to the south of location	Least Concern
	Cape grassbird *Sphenoeacus afer*	At location	Least Concern
Invertebrates:	*Thericlesiella meridionalis*	Netted at site	Unknown

Site 26

This location is situated in the west of the property and is the highest elevated site (>830 masl) (S 34° 01’ 37”; E 19° 21’ 48”) (Figure 6). The area is dominated by natural mountain Fynbos (Figure 10) with a man-made dam to the south (Figure 10). Stands of *Protea neriifolia* harbours several nectivorous bird species close to this site. We found a Little karoo dwarf chameleon, *Bradypodion gutturale* (Figure 11) at the dam and clicking stream frogs, *Strongylopus fasciatus* could be heard at the dam during the evening survey (Table 3). We also noted the presence of orthopteran fauna (Table 3).

Figure 10: A photo taken standing at the development site looking down on the man-made dam.

Figure 11: We found a Little karoo dwarf chameleon, Bradypodion gutturale at the dam during the nocturnal survey.

Table 3: Animal species observed at Site 26.

Group	Species	Notes	Status
Birds:	Orange breasted sunbird *Anthobaphes violacea*	Observed on protea stand close to site	Least Concern
	Cape sugar bird *Promerops cafer*	Observed on protea stand close to site	Least Concern
	Cape crow *Corvus capensis*	Observed flying over site	Least Concern
Amphibians:	Striped stream frog *Strongylopus fasciatus*	Heard in dam	Least Concern
Reptiles:	Robertson dwarf chameleon *Bradypodion gutturale*	Found close to dam wall	Least Concern
Invertebrates:	*Thericlesiella meridionalis*	Netted at site	Unknown

Site 3A

This site (indicated as 'alternative location in figure 6) is situated towards the middle of the property but on the northern boundary (S 34° 01' 53"; E 19° 22' 29")(Figure 6). It is adjacent to a firebreak and below a rocky edge with a man-made dam about 200 m to the east (Figure 12 and 13). There are some stands of *Protea neriifolia* but the site is dominated by *Seriphium plumosum, Helichrysum cymosum* and *H. patulum* (Helme 2024). The site is located to the west of a hillslope seep (Steytler 2024). A couple of bird species was observed and Striped flufftail, *Sarothrura affinis* responded to the call-up at this site (Table 4).

Figure 11: Site 3A vegetation taken standing in the firebreak.

Figure 12: The view from site 3A down the firebreak towards the dam.

Table 4: Animal species observed at Site 3A

Group	Species	Notes	Status
Birds:	Orange breasted sunbird *Anthobaphes violacea*	Observed on protea stand close to site	Least Concern
	Cape sugar bird *Promerops cafer*	Observed on protea stand close to site	Least Concern
	Cape spurfowl *Pternistis capensis*	Observed in firebreak	Least Concern
	Striped flufftail *Sarothrura affinis*	Responded to callup, from the seep to the south	**Vulnerable, Decreasing**
Mammals:	Cape hare *Lepus capenis*	Observed in firebreak	Least Concern
	Cape Porcupine *Hystrix africaeaustralis*	Scat observed in firebreak	Least Concern

Site 3B

This location (indicated as 'alternative location in figure 6) is situated about 150 m south east of site 3A (S 34° 01' 57"; E 19° 22' 34")(Figure 6). There is a hillslope seep to the north and northwest of this site (Steytler 2024). This site is situated next to an old fruit orchard (Figure 13). Dominant plants in this site are *Seriphium plumosum*, *Helichrysum cymosum* and *H. patulum* (Helme 2024). A couple of bird, amhibian and mammal species was observed at this site including Verreaux's eagle, *Aquila verreauxii* and Striped flufftail, *Sarothrura affinis* (Table 5).

Figure 13: Site 3B is situated to the left of the road with the remnant fruit orchards which can be seen on the right.

Table 5: Animal species observed at Site 3B.

Group	Species	Notes	Status
Birds:	Greater double collared sunbird *Cinnyris afer*	Observed on site	Least Concern
	Cape sugarbird *Promerops cafer*	Observed on site	
	Cape grass bird *Sphenoeacus afer*	Observed in old orchard	Least Concern
	Cape spurfowl *Pternistis capensis*	Observed in road	Least Concern
	Striped flufftail *Sarothrura affinis*	Responded to callup, from the seep to the north	**Vulnerable, Decreasing**
	Southern boubou *Laniarius ferrugineus*	Observed in old orchard	Least Concern
	Egyptian goose *Alopochen aegyptiaca*	Fly by towards dam in the east	Least Concern
	Cape bulbul *Pycnonotus capensis*	Observed in old orchard	Least Concern
	Cape turtle dove *Streptopelia capicola*	Heard close to site	Least Concern
	Bokmakierie *Telophorus zeylonus*	Observed on site	Least Concern
	Verreaux's eagle *Aquila verreauxii*	Observed flying above site	**Vulnerable, Stable**
Mammals:	Cape hare *Lepus capenis*	Observed in firebreak	Least Concern
	Cape Porcupine *Hystrix africaeaustralis*	Scat observed in firebreak	Least Concern
Amphibians:	Clicking stream frog *Strongylopus grayii*	Vocal in pool on roadside	Least Concern
	Cape river frog *Amietia fuscigula*	At dam overflow 200 m to east of site	Least Concern
	Bronze caco *Cacostrenum nanum*	Vocal in pool on roadside	Least Concern

Site 25

This location is also situated in the central part of the property but closer to the southern border (S 34° 02' 13"; E 19° 22' 13")(Figure 6). The site is dominated by dense and very old, vegetation e.g. *Protea neriifolia, Passerina corymbosa, Psoralea spicata, Osteospermum moniliferum, Metalasia densa, Leucadendron tinctum, L. laureolum, Erica hispidula, E. plukenetii* and *E. vestita* (Helme 2024) (Figure 14). A couple of nectivorous bird species was observed at this site (Table 6).

Table 6: Animal species observed at Site 25.

Group	Species	Notes	Status
Birds:	Orange breasted sunbird *Anthobaphes violacea*	Observed on protea stand close to site	Least Concern
	Cape sugar bird *Promerops cafer*	Observed on protea stand close to site	Least Concern
	Cape grass bird *Sphenoeacus afer*	Observed on protea stand close to site	Least Concern

Figure 14: Site 25 are dominated by very old Fynbos vegetation.

Site 24

This location is also situated in the central part of the property but closer to the southern border (S 34° 02' 18"; E 19° 22' 40")(Figure 6). The site is similar to site 25 with very old, dense vegetation dominated by *Protea neriifolia, Passerina corymbosa, Psoralea spicata, Osteospermum moniliferum, Metalasia densa, Leucadendron tinctum, Erica hispidula, E. plukenetii* and *E. vestita* (Helme 2024)(Figure 15). There is a bonnox game fence present at this site. A couple of nectivorous bird species and one mammal species was observed at this site (Table 7).

Table 7: Animal species observed at Site 24

Group	Species	Notes	Status
Birds:	Orange breasted sunbird *Anthobaphes violacea*	Observed on protea stand close to site	Least Concern
	Cape sugar bird *Promerops cafer*	Observed on protea stand close to site	Least Concern
Mammal:	Cape hare *Lepus capenis*	Observed in firebreak	Least Concern

Figure 15: Site 24 are dominated by very old Fynbos vegetation and in a camp fenced by Bonnox. Site location indicated be yellow arrow.

Site 6

This site is situated in the north-eastern part of the property but close to a man-made dam (S 34° 01’ 45”; E 19° 22’ 53”)(Figure 6). Plant species found here are *Dicerothamus rhinocerotis, Helichrysum patulum, H. cymosum, Anthospermum aethiopicum, Erica cruenta, Searsia angustifolia, Osteospermum moniliferum, Tetraria sp.,* and *Athanasia trifurcate* (Helme 2024)(Figure 16). Below the dam-wall we observed Southern double-collared sunbird *Cinnyris chalybeus* in stands of *Protea neriifolia* (Table 8).

Table 8: Animal species observed at Site 6

Group	Species	Notes	Status
Birds:	Southern double-collared sunbird *Cinnyris chalybeus*	Observed on protea stand close to site	Least Concern

Figure 16: The view from site 6 indicating the vegetation and location of the man-made dam.

Site 7

This site is situated in the north-eastern part of the property a couple of hundred meters south-east of site 6 (S 34° 01' 50"; E 19° 22' 59")(Figure 6). Vegetation are dominated by *Protea neriifolia* and *Tenaxia stricta* (Helme 2024)(Figure 17) and indicated as the 'alternative location' in Figure 6. No fauna was observed at this site.

Figure 17: Vegetation are dominated by Protea neriifolia and Tenaxia stricta at site 7.

Site 28

This site is situated in the north-eastern part of the property (S 34° 01’ 32”; E 19° 23’ 01”)(Figure 6). Vegetation are dominated by *Protea neriifolia, Hypodiscus aristatus, Elegia hookeriana, Penaea mucronata, Cliffortia obovata, Erica corifolia, E. vestita, Mimetes cucullatus, Protea repens, Dilatris pillansii, Leucadendron salignum* and *Wachendorfia paniculata* (Helme 2024) (Figure 18). A steep road vulnerable to erosion leads to this site. At the time of the visit the road was washed away. A couple of bird species and orthopteran fauna was observed at this site (Table 9).

Table 9: Animal species observed at Site 28

Group	Species	Notes	Status
Birds:	Orange breasted sunbird *Anthobaphes violacea*	Observed on protea stand close to site	Least Concern
	Cape sugar bird *Promerops cafer*	Observed on protea stand close to site	Least Concern
	Cape grass bird *Sphenoeacus afer*	Observed on protea stand close to site	Least Concern
	Cape crow *Corvus capensis*	Observed flying over site	Least Concern
Invertebrates:	*Thericlesiella meridionalis*	Netted at site	Unknown

Figure 18: The vegetation and prominent rocky feature at site 28.

Site 30

This site is situated in the south-eastern part of the property (S 34° 02’ 09”; E 19° 23’ 01”)(Figure 6). Vegetation are dominated by *Leucadendron salignum, Searsia rosmarinifolia,*

Protea repens, Berkheya herbacea, Erica sp., Phaenocoma prolifera, Hypodiscus aristatus, H. striatus, Asparagus rubicundus, Serruria phylicoides and *Penaea mucronate* (Helme 2024)(Figure 19). There is a non-perennial drainage line and associated riparian habitat approximately 50 m downslope to the north-west of this this site (Steytler 2024)(Figure 19). A couple of bird species was observed at this site and Striped flufftail, *Sarothrura affinis* responded to the call-up from the adjacent drainage line (Table 10). Cape mountain rainfrog *Breviceps montanus* vocalized in the area of the development site. An orthopteran species was sampled from the site (Table 10).

Table 10: Animal species observed at Site 30

Group	Species	Notes	Status
Birds:	Orange breasted sunbird *Anthobaphes violacea*	Observed on protea stand close to site	Least Concern
	Cape sugar bird *Promerops cafer*	Observed on protea stand close to site	Least Concern
	Cape grass bird *Sphenoeacus afer*	Observed on protea stand close to site	Least Concern
	Cape crow *Corvus capensis*	Observed flying over site	Least Concern
	Striped flufftail *Sarothrura affinis*	Responded to callup, from the drainage line to the north	**Vulnerable, Decreasing**
Amphibians:	*Cape mountain rainfrog Breviceps montanus*	Vocalized in and around site	Least Concern
Invertebrates:	*Thericlesiella meridionalis*	Netted at site	Unknown

Figure 19: The dominant vegetation at site 30 with a drainage line in the background.

Site 31

This location is at the south-eastern edge of the property on a north-facing (S 34° 02’ 14”; E 19° 23’ 24”)(Figure 6). The vegetation at this site is diverse and dominated by *Protea repens, P. neriifolia, Erica sp., Hypodiscus aristatus, Anthospermum aethiopicum, Tetraria sp., Otholobium spissum, Berkheya herbacea, Thamnochortus lucens, Lobelia chamaepitys* and *Senecio pinifolius* (Figure 20). A couple of bird species was observed here and Cape mountain rainfrog *Breviceps montanus* also vocalized at this site (Table 11). Two orthopteran species were sampled during sweep netting, identified and released.

Table 11: Animal species observed at Site 31

Group	Species	Notes	Status
Birds:	Orange breasted sunbird *Anthobaphes violacea*	Observed on protea stand close to site	Least Concern
	Cape sugar bird *Promerops cafer*	Observed on protea stand close to site	Least Concern
	Cape grass bird *Sphenoeacus afer*	Observed on protea stand close to site	Least Concern
	Little swift *Apus affinis*	Observed flying over site	Least Concern
Amphibians:	*Cape mountain rainfrog Breviceps montanus*	Vocalized in and around site	Least Concern
Invertebrates:	*Thericlesiella meridionalis*	Netted at site	Unknown
	Megalotheca sp.	Netted at site	Unknown

Figure 20: The dominant vegetation at site 31 which is situated at the edge of small cliffs looking down into a kloof.

Site 2

This location is also situated in the central part of the property but closer to the southern border (S 34° 01' 36"; E 19° 22' 20")(Figure 6). This site is east facing and then vegetation on site is old, and dominated by dense *Protea neriifolia* (Helme 2024). This site was not visited (see comment on page 10) but we did drive past it on the way to site 3A and 3B. The dense protea veld is similar to that of Site 25. There is no high concern on potential impact on any of the listed SCC's.

Site 29

This location is situated in the central-eastern edge of the property (S 34° 02' 06"; E 19° 22' 57")(Figure 6). This site is east facing and about 150 m north of site 30. It is a flat area of disturbed clays and low plant diversity, dominated by *Passerina corymbosa, Seriphium plumosum* and *Osteospermum moniliferum* (Helme 2024). This site was not visited (see comment on page 10) but we did see it from site 30. **Striped flufftail *Sarothrura affinis*** did respond to call-ups in the drainage line between site 29 and 30.

Animal species of concern

A total of nine animal species of concern was identified by the screening tool (Naylor 2023)(Table 2). The following section deals with the site's potential importance for these species and the probability of them being present in habitats in the development area.

Connectivity for animal species

The conservation planning map of the Western Cape Biodiversity Plan (Pool-Stanvliet et al. 2017) indicates that a very small proportion of the development area falls within Critical biodiversity or Ecological support areas. The CapeNature Spatial Biodiversity Plan indicates that that there is a mix of planning categories in the area. Only site 30 and 31 are located within mapped areas of CBA1 terrestrial vegetation (Helme 2024). Most units are located in unmapped areas mainly because these areas being South Sonderend Sandstone Fynbos is a Least Concern habitat which are well conserved and with low level of loss or because the units being in previously disturbed areas that were not deemed conservation priorities (Helme 2024).

From a faunal connectivity perspective. The scattered nature and small footprints of the proposed development sites allows for great connectivity and low disturbance for non-sedentary species (e.g. species who are not dependant on very specific localized habitat conditions). It is therefore reasonable to assume that the development will not influence connectivity for animal species in a significant way. **From a faunal connectivity perspective we consider the proposed development risk as 'low'.** During my site visit I was able to confirm this assumption with the exception of Striped flufftail *Sarothrura affinis* in Site 3A (see section on this species below).

Stiped flufftail *Sarothrura affinis*

The South African population of Striped Flufftail *Sarothrura affinis* is suspected to be undergoing a decline as a result of habitat loss (Peacock et al. 2015). More than 10% of the regional population may have been lost because throughout its fragmented range, suitable grassland habitat is under severe threat from unsuitable burning regimes, heavy grazing,

agriculture and afforestation (Peacock et al. 2015). In the Western Cape this species is often found in dense *Psoralea-Osmitopsis* Fynbos next to streams or near moist depressions (Graham and Ryan 1984, Kakebeeke 1993). There are a couple of records for this species on both the iNaturalist and GBIF databases however most of these are towards Grabouw area about 40 km away. One GBIF record is very close to the property (within a 5 km radius).

Stripe flufftails responded to our play-backs in the vicinity of sites 3A, 3B, 29 and 30 (see site descriptions above). At site 29 and 30 the flufftail responded from within the drainage line between the two sites (Figure 21). **Disturbance construction phase and increased human presence due to tourism activities will have a negative effect on striped flufftails. Sites 29 and 30 is however not within the potential flufftail habitat but adjacent to it with site 30 being closer than site 29 (Figure 21). We therefore consider the potential impact as 'moderate'.**

The striped flufftails was heard close to site 3A (Figure 22). We played the territorial call at two observation points (OP 1 and OP 2) and an individual responded both times from the response locations indicated (Figure 22). **The proposed footprint of the camping area (site 3A) infringes into potential striped flufftail habitat and at the current proposed location we consider the impact to be 'high'. We propose moving site 3A to the west and parallel-align it to the firebreak to avoid the infringement (see Figure 23). This will lower impact to disturbance during construction phase and increased human presence due to tourism activities with the habitat destruction component removed. If this is done the impact could be considered 'medium' and a full impact assessment would not be required..**

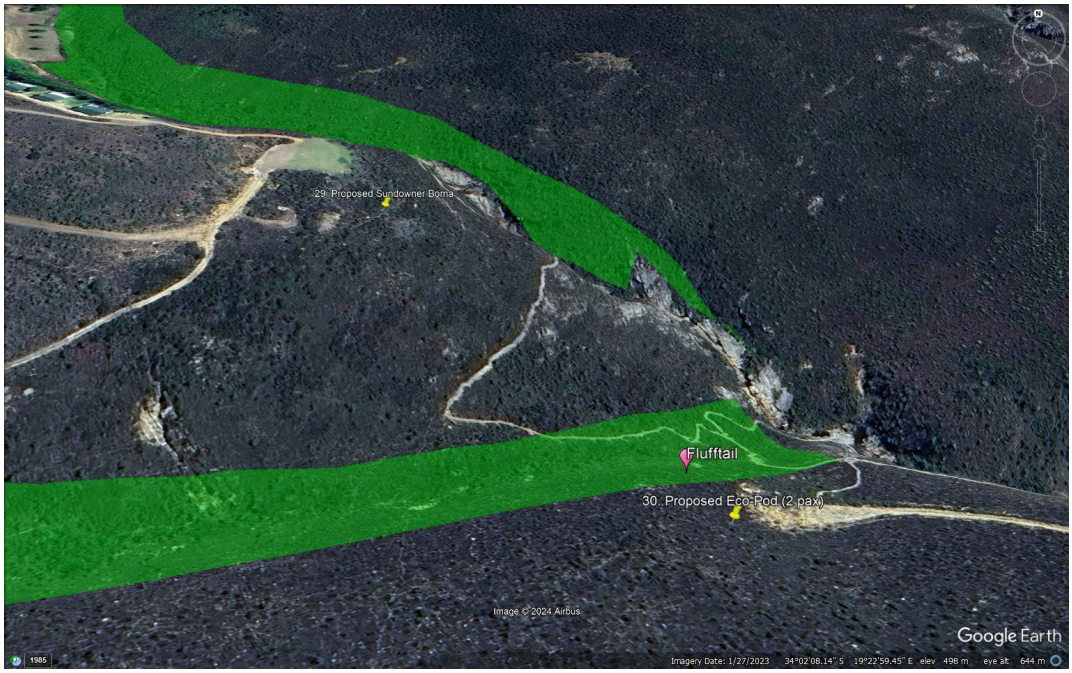

Figure 21: Site 29 and 30 in relation to where the flufftail responded to the playback (Pink marker). Potential flufftail habitat is the drainage line with associated vegetation (shaded in green).

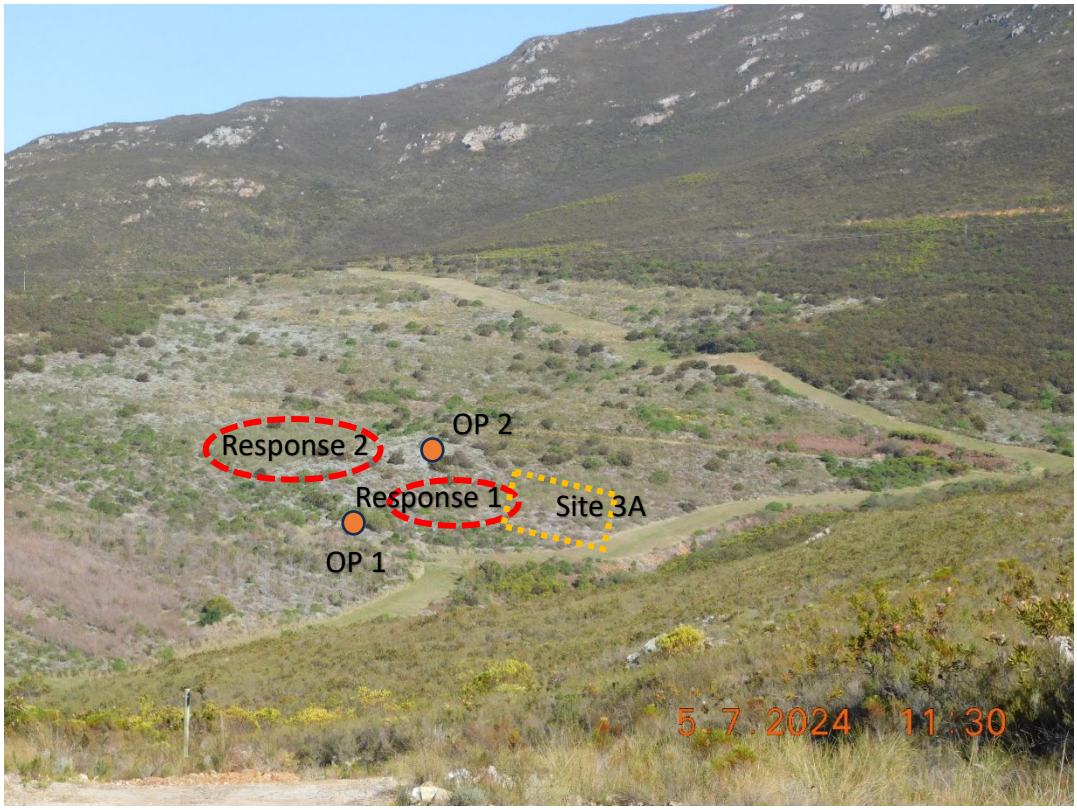

Figure 22: At site 3A individual striped flufftails responded to playbacks that was done at two observation points (OP 1 and OP 2) and an individuals responded both times (Response 1 and response 2) at the response locations indicated.

Figure 23: Site 3A and 3B locations in relation to potential striped flufftail habitat (shaded in green) which is basically in and around seepage areas (shaded in yellow, identified by (Steytler 2024). To avoid the infringement, we recommend moving the camping sites to the west and parallel-align it with the firebreak (alternative locations in pink markers).

Black harrier *Circus maurus*

Black Harrier *Circus maurus* is a rare endangered, southern African endemic that may have lost more than 50% of its breeding habitat as a result of extensive land transformation by agriculture, invasive alien vegetation and urbanization in the Fynbos biome (Curtis et al. 2004, Taylor 2015). The species' typical breeding habitat is Fynbos, particularly Strandveld and Mountain Fynbos. In fragmented Renosterveld habitat it is only found in high-quality, larger sized patches (Curtis et al. 2004). Foraging habitat includes montane areas, lower altitude Karoo scrub, semi-desert, floodplains and croplands (Curtis et al. 2004). Small mammals and birds (especially quail) are their main diet preference (Curtis et al. 2004). Both GBIF and iNaturalist data sets sufficient records of this species close to and in the general region of the property. There is therefore a reasonable likelihood that the species would frequent the property. We did not observe the species during our field visit. **The scattered nature and small footprints of the proposed development sites allows for great connectivity and low disturbance for non-sedentary species (e.g. species who are not dependant on very specific localized habitat conditions). The development sites also do not significantly influence potential breeding sites or their prey species. The Black harrier *Circus maurus,* will therefore not likely be impacted by the proposed development and potential impact are classified as 'low'**.

Secretary bird *Sagittarius serpentarius*

The Secretary bird *Sagittarius serpentarius* is classified as Vulnerable and is widely distributed throughout South Africa. The species prefers open grassland and scrubland, with the ground cover shorter than 50 cm (Boshoff and Allan 1997). The species is absent from Mountain Fynbos, forest, dense woodland and very rocky, hilly or mountainous woodland (Boshoff and Allan 1997). **Because the species is not found in mountainous Fynbos areas there is a very low likelihood that the species would be present the property. The Secretary bird *Sagittarius serpentarius,* will therefore not likely be impacted by the proposed development and potential impact are classified as 'low'.**

Verreaux's eagle *Aquila verreauxii*

The Verreaux's eagle *Aquila verreauxii* is classified as Vulnerable and is widely distributed throughout South Africa. This eagle prefers rock hyrax but is an opportunistic predator that will also take medium-sized mammals, large birds and carrion (Murgatroyd et al. 2016). Sightings of the species in the general area are common in both the iNaturalist and GBIF. We did observe the species during our site visit at site 3A only but they likely to use the whole property as hunting area. **The scattered nature and small footprints of the proposed development sites allows for great connectivity and low disturbance for non-sedentary species (e.g. species who are not dependant on very specific localized habitat conditions). The development sites also do not significantly influence potential breeding sites or their prey species or their prey species. The Verreaux's eagle *Aquila verreauxii,* will therefore not likely be impacted by the proposed development and potential impact are classified as 'low'.**

Landdroskop Mountain Toadlet *Capensibufo magistratus*

This species is listed as data deficient and only known to occur from a few locations Landdroskop (on the Hottentots-Holland Mountains), Groenlandberg Mountain, and

Limietberg (part of the Hawekwas Mountains), and Jonaskop (on the Riviersonderend Mountains) (Channing et al 2017). The species are typically found in shallow temporary pools with emergent sedge-like plants in Mountain Fynbos or Grassy Fynbos vegetation types (Channing et al 2017). INaturalist indicate 8 records of the species 40 km to the east of the property and GBIF also indicate the same site plus a site 35 km to the north of the property. We did not observe this species or suitable habitat during our site visit. **The species is not easily detectable so its potential presence can't be ruled out. However, the scattered nature and small footprints of the proposed development sites allows for good connectivity and low disturbance. The Landdroskop Mountain Toadlet *Capensibufo magistratus*, will therefore not likely be impacted by the proposed development and potential impact are classified as 'low'.**

Riviersonderend moss frog *Arthroleptella atermina*

This species with 'unknown' conservation status distribution is limited to the Riviersonderend mountains from Die Galg, eastwards, with the most western population at Jonaskop. Occurs mostly on the lower slopes of the summits (Turner and Channing 2017). The species is known to occur in thickly vegetated seeps dominated by restioid vegetation, on gentle mountain slopes within montane fynbos. This habitat is present within the Rusty Gate Mountain Retreat property (Steytler 2024). There are a number of iNaturlist and GBIF records for this species with the closest being 6 km to the east of the property. We did not observe the species during our site visit. **The species is not easily detectable so its potential presence can't be ruled out. However, the scattered nature and small footprints of the proposed development sites allows for good connectivity and low disturbance. The Riviersonderend moss frog *Arthroleptella atermina*, will therefore not likely be impacted by the proposed development and potential impact are classified as 'low'.**

Peringueyi's Meadow Katydid *Conocephalus peringueyi*

This endemic katydid species occurs at high elevations (not defined) and is found in the southwestern Cape mountains. It is listed as vulnerable (B1, B2) on the IUCN Red List Category (Bazelet & Naskrecki 2014). It has been found at six locations only, which include Table Mountain National Park, Hawequa Mountains and the Kogelberg Mountains. It can expectantly be found across the Western Cape province at various high-elevation fynbos types, although declining due to habitat loss (Bazelet & Naskrecki 2014). Its host plant data is absent. The estimated area the species occupy is ca. 32 square kilometres, and its extent of occurrence is ca. 5065 square kilometres (Bazelet & Naskrecki 2014). They are a nocturnal species, and thus sensitive to light disturbance, such as artificial lights associated with development (See Appendix 1). No specimens were heard or seen during a field visit. **One site (31) is classified as 'low-moderate' impact on *C. peringueyi*, solely due to the sampling of a closely related species, subgenus *Megalotheca* sp. (recently moved to genus *Conocephalus*), close to the proposed area of development. With an absence of information on *C. peringueyi*'s host plants, and specific elevational data, this related species (*Megalotheca* sp.) could indicate suitable habitat for *C. peringueyi.* Site 31 had two prominent restio species (*Hypodiscus aristatus* and *Thamnochortus lucens*), and restios in general could be host plants for *Megalotheca* spp., and this could hold true for *C. peringueyi* as well. With a lack of more info, site 31 is listed as 'low-moderate' impact. All other sites proposed for**

development are listed as 'low' impact on *C. peringueyi*, due to factors including either 1) low intactness of natural vegetation, 2) the relatively small size of proposed developments allowing for species movement (all sites) and / or 3) the intactness of large areas of the type of vegetation that will remain unaffected by the developments.

Mute Winter Katydid *Brinckiella aptera*

This endemic, flightless katydid species occurs in the succulent Karoo and fynbos biomes of the Western Cape. It is listed as vulnerable (B1) on the IUCN Red List Category (Naskrecki & Bazelet 2009). It has been found at four locations only, including Bredasdorp, Pearly Beach and Tulbagh. It can expectantly be found across the Western Cape province in succulent Karoo (re: into southern Namaqualand) and fynbos habitats, although declining due to habitat loss (Naskrecki & Bazelet 2009). Its host plant data is absent, but predictably feeds on flowers and leaves of a narrow range of host plants, occurring on low-growing, herbaceous shrubs (Naskrecki & Bazelet 2009). The estimated extent of occurrence is ca. 12 500 square kilometres (Naskrecki & Bazelet 2009). They are a nocturnal species, and thus sensitive to light disturbance, such as artificial lights associated with development (See Appendix 1). During the daytime, they can be found basking in the sun. Their peak emergence time is from August to October. No specimens were seen during a field visit. **The proposed developments are classified as 'low' impact on *B. aptera*, due to 1) an absence of species data from this area, 2) no host plant records being available to link present vegetation to possible insect species occurrence, 3) no direct evidence of occurrence, 4) the limited size of the development relative to the surrounding vegetation and the species' regional occurrence and 5) the intactness of large areas of the type of vegetation that will remain unaffected by the developments (i.e., permitting movement through the landscape).**

Yellow-winged Agile Grasshopper *Aneuryphymus montanus*

This endemic grasshopper species occurs on Western and Eastern Cape mountains. It is listed as vulnerable (B2) on the IUCN Red List Category. It has been recorded from near Clanwilliam eastwards towards East London, associated with different fynbos types occurring on south-facing, cool slopes (Kinvig 2005; Brown 1960). Brown (1960) mentions the species being collected "amongst partly burnt stands of evergreen sclerophyll in rocky foothills". Sites where the species have been documented include Graafwater, close to Lambert's Bay, De Rust, Suurbraak, Bot River, Kogelberg and Joubertinia. The species seems to show preference for rocky, mountainous areas. Its estimated extent of occurrence is ca. 170 000 square kilometres, the largest of the three insect SCC. No specimens were seen during a field visit. **The proposed developments are classified as 'low' impact on *A. montanus*, due to 1) an absence of species data from this area, 2) no host plant records being available to link present vegetation to possible insect species occurrence, 3) no direct evidence of occurrence, 4) the limited size of the development relative to the surrounding vegetation and the species' regional occurrence, 5) the intactness of large areas of the type of vegetation that will be unaffected by the developments permitting movement through the landscape and 6) the wide extent of occupancy of *A. montanus*.**

Terrestrial animal compliance statement

The DFFE screening tool identified the study area as having a '**High'** sensitivity for the animal species theme, due to the potential presence of nine species of conservation concern. Based on my desktop assessment and evidence from the site visit the site sensitivity should be considered '**Medium'** because:

i. From a faunal connectivity perspective. The scattered nature and small footprints of the proposed development sites allows for great connectivity and low disturbance for non-sedentary species (e.g. species who are not dependant on very specific localized habitat conditions). It is therefore reasonable to assume that the development will not influence connectivity for animal species in a significant way. From a faunal connectivity perspective we consider the proposed development risk as **'low'.**

ii. Disturbance construction phase and increased human presence due to tourism activities will have a negative effect on striped flufftails. Sites 29 and 30 is however not within the potential flufftail habitat but adjacent to it with site 30 being closer than site 29. The proposed footprint of the camping area (site 3A) infringes into potential striped flufftail habitat and at the current proposed location we consider the impact to be **'high'**. We propose moving site 3A to the west and parallel-allign it to the firebreak to avoid the infringement. This will lower impact to disturbance during construction phase and increased human presence due to tourism activities with the habitat destruction component removed. If this is done the impact could be considered **'medium'** and a full impact assessment would not be required.

iii. The scattered nature and small footprints of the proposed development sites allows for great connectivity and low disturbance for non-sedentary species (e.g. species who are not dependant on very specific localized habitat conditions). The development sites also do not significantly influence potential breeding sites or their prey species. The Black harrier *Circus maurus*, will therefore not likely be impacted by the proposed development and potential impact are classified as **'low'.**

iv. Because the species is not found in mountainous Fynbos areas there is a very low likelihood that the species would be present the property. The Secretary bird *Sagittarius serpentarius*, will therefore not likely be impacted by the proposed development and potential impact are classified as **'low'.**

v. The scattered nature and small footprints of the proposed development sites allows for great connectivity and low disturbance for non-sedentary species (e.g. species who are not dependant on very specific localized habitat conditions). The development sites also do not significantly influence potential breeding sites or their prey species or their prey species. The Verreaux's eagle *Aquila verreauxii*, will therefore not likely be impacted by the proposed development and potential impact are classified as **'low'**.

vi. The Landdroskop Mountain Toadlet is not easily detectable so its potential presence can't be ruled out. However, the scattered nature and small footprints of the proposed development sites allows for good connectivity and low disturbance. The Landdroskop Mountain Toadlet *Capensibufo magistratus*, will therefore not likely be impacted by the proposed development and potential impact are classified as **'low'**.

vii. The Riviersonderend moss frog Arthroleptella atermina is not easily detectable so its potential presence can't be ruled out. However, the scattered nature and small footprints of the proposed development sites allows for good connectivity and low disturbance. The Riviersonderend moss frog Arthroleptella atermina, will therefore not likely be impacted by the proposed development and potential impact are classified as **'low'**.

viii. Due to the developments being relatively small and localized, not occupying large tracts of land and thus not impeding landscape level movement of *C. peringueyi*, the impact of the proposed developments is classified as '**low**', with the possible exception of site 31, which we list as '**low-moderate'** solely based on a lack of information and the sampling of a closely related species. Extreme caution should be made not to destroy or trample any indigenous fynbos vegetation and restio veld around the development at site 31 specifically, and all sites in general. As a nocturnal species, precautions to be taken in terms of a lighting plan (see Appendix 1).

ix. The proposed developments are relatively small and localized, do not occupy large tracts of land and do not intend to disturb large parts of natural fynbos vegetation, thus we list the potential impact on *B. aptera* as **low**. Extreme caution should be made to not destroy or trample any fynbos vegetation around development sites. As a nocturnal species, precautions to be taken in terms of a lighting plan (see Appendix 1).

x. The Yellow-winged Agile Grasshopper has a large extent of occupancy, but a lack of reliable occurrence data and continued habitat loss renders it vulnerable to future extinction. As with above orthopteran species, the proposed developments are localized and will not take up large tracts of the indigenous landscape, thus permitting movement of *A. montanus* through the landscape / property. Subsequently we classify the impacts of the proposed developments as '**low**'. Extreme caution should be made to not destroy or trample any fynbos vegetation around development sites (see Appendix 1).

Reference list

Bazelet, C.S., & Naskrecki, P. (2014). *Conocephalus peringueyi.* The IUCN Red List of Threatened Species.

Boshoff, A. F., and D. G. Allan. 1997. Secretarybird *Sagittarius serpentarius*. Pages 152-153 in J. A. Harrison, D. G. Allan, L. G. Underhill, M. Herremans, A. J. Tree, V. Parker, and C. J. Brown, editors. Birds of Southern Africa. Birdlife South Africa, Johannesburg.

Brown, H. D. (1960). New Grasshoppers (Acridoidea) from the Great Karroo and the South Eastern Cape Province. Journal of the Entomological Society of South Africa, 23, 126–143.

Channing, A., Measey, G., De Villiers, A.L., Turner, A.A., Tolley, K.A. 2017. *Capensibufo magistratus.* Red List of South African Species. South African Biodiversity Instit https://speciesstatus.sanbi.org/assessment/last-assessment/1567/ Downloaded on 14/07/2024

Curtis, O., R. E. Simmons, and A. R. Jenkins. 2004. Black Harrier Circus maurus of the Fynbos biome, South Africa: a threatened specialist or an adaptable survivor? Bird Conservation International 14:233-245.

Graham, J., and P. G. Ryan. 1984. Striped Flufftail. Promerops 162.

Helme, N. A. 2024. Botanical assessment of proposed upgrade of Rusty Gate Mountain Retreat tourist infrastructure, Farm 824, Rem. Farm 826 & Farm 887, Caledon, Western Cape., Nick Helme Botanical Surveys, Hermanus.

Kakebeeke, B. 1993. Striped Flufftail found breeding in Somerset West. Birding in Southern Africa 45:9-11.

Kinvig, R. G. (2005). Biotic indicators of grassland condition in Kwazulu-Natal, with management recommendations. University of KwaZulu-Natal. Doctoral dissertation.

Murgatroyd, M., L. G. Underhill, L. Rodrigues, and A. Amar. 2016. The influence of agricultural transformation on the breeding performance of a top predator: Verreaux's Eagles in contrasting land use areas. The Condor: Ornithological Applications 118:238-252.

Naskrecki, P., & Bazelet, C. S. (2009). A species radiation among South African flightless spring katydids (Orthoptera: Tettigoniidae: Phaneropterinae: Brinckiella Chopard). Zootaxa, 2056, 46–62. https://doi.org/10.5281/zenodo.186707

Naylor, M. 2023. Screening report for an environmental authorization as required by the 2014 EIA Regulations – Proposed site environmental sensitivity: Rusty Gate. Lornay Environmental Consulting, Hermanus.

Peacock, F., M. R. Taylor, and B. P. Taylor. 2015. Sarothrura affinis Smith A, 1828.in M. Taylor, F. Peacock, and R. Wanless, editors. The Eskom Red Data Book of Birds of South Africa, Lesotho and Swaziland. Birdlife South Africa, Johannesburg.

Pool-Stanvliet, R., A. Duffell-Canham, G. Pence, and R. Smart. 2017. The Western Cape Biodiversity Spatial Plan Handbook. CapeNature, Stellenbosch.

Turner, A., & Channing, A. (2017). Three new species of Arthroleptella Hewitt, 1926 (Anura: Pyxicephalidae) from the Cape Fold Mountains, South Africa. African Journal of Herpetology, 66(1), 53-78.

Steytler, N. 2024. Freshwater Ecological Assessment: Proposed development of tourism accommodation facilities at Rusty Gate Mountain Retreat comprising Farm No. 824, Remainder Farm No. 826 and Farm No. 887, Caledon, Theewaterskloof Municipality. Enviroswift, Hermanus.

Taylor, M. R. 2015. Circus maurus Temminck, 1828.in M. R. Taylor, F. Peacock, and R. W. Wanless, editors. The Eskom Red Data Book of Birds of South Africa, Lesotho and Swaziland. BirdLife South Africa, Johannesburg.

Appendix 1

Mitigation suggestions for nocturnal insect SCC (1-10) and diurnal insect SCC (8-10):

1. Switch lights off when not needed
2. Add timers / sensors to lights
3. Make lights activated by movement
4. Add shields to lights
5. Make lights shine downward, or direct only to where needed
6. Use long wavelength red or amber lights / filtered amber LED, with no blue / minimal green light for outdoor lighted areas
7. A lighting plan should be developed to ensure that the impact of night lights is kept to an absolute minimum
8. Clearing of indigenous fynbos vegetation should be kept to an absolute minimum
9. Avoid the establishment of invasive species
10. Avoid trampling of natural fynbos vegetation surrounding developments

Appendix 2

CV and SACNASP Certificate of Prof JA Venter

CV and SACNASP Certificate of Dr Rudi Swart