

FINAL BAR**Appendix D4 - Site Sensitivity Verification Report****PROPOSED DEVELOPMENT OF A RESIDENTIAL DWELLING ON ERF 1363, PARADYS STRAND, KOUGA LOCAL MUNICIPALITY, EASTERN CAPE**

Erf 1363 is an estimated 741.6 m² and situated on de Jager street in Paradys Strand (SG Code: C03400110000136300000) and falls within 100 meters of the high-water mark of the sea. The erf is located on a secondary dune approximately 60 m landward from the primary dune closest to the beach.

The owner of the property is proposing to develop a dwelling with an estimated development footprint of 296.9 m² which will include an estimated 43.8 m² decking area. A timber platform is also proposed which will be equipped with a walkway leading from the house to the lookout point and it will be set above the vegetation. The lookout area is proposed to be an estimated 33 m². The total area of the development will be 329.9 m². Approximate central coordinates: 34° 6'21.00"S; 24°53'16.07"E

The proposed development triggers activities in Listing Notice 1 and Listing Notice 3 of the Environmental Impact Assessment Regulations, 2014 (as amended, 2017) published in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA) and therefore requires an environmental authorisation to be issued by the competent authority before development can commence. The competent authority for the application is the Eastern Cape Department of Economic Development, Environmental Affairs and Tourism.

A screening tool has been developed by the Department of Forestry, Fisheries and Environmental Affairs (DFFE). The Screening Tool identifies related exclusions and/ or specific requirements including specialist studies applicable to the proposed site and/or development, based on the national sector classification and the environmental sensitivity of the site.

A Screening Report referred to in Regulation 16(1)(v) of the EIA Regulations 2014, must accompany any application for Environmental Authorisation. A screening report was generated for the proposed project and the following environmental sensitivities are identified:

- Agriculture Assessment: High sensitivity
- Animal species theme: Medium sensitivity
- Aquatic biodiversity theme: Low sensitivity
- Archaeological and Cultural Heritage theme: Low sensitivity
- Civil aviation theme: Low sensitivity
- Defence theme: Low sensitivity
- Palaeontology theme: Very high sensitivity
- Plant species theme: Medium sensitivity.
- Terrestrial biodiversity theme: Low Sensitivity

The following studies have been carried out:

- Geomorphological assessment to address the impact of development in a dynamic coastal area (Refer to Appendix D1 of the FBAR)
- Heritage report (heritage, archaeology and palaeontology) (Refer to Appendix D2 of the FBAR)
- Compliance Statement (Terrestrial biodiversity, plant species, animal species, aquatic biodiversity themes) (Refer to Appendix D3 of the FBAR)

The verification of sensitivities and the motivation for inclusion / exclusion of specialist studies are outlined in Table 1.

Table 1: Verification of environmental sensitivity identified in DFFE screening tool report

Specialist Study as per Screening Tool Report	Environmental sensitivity as per screening tool report	Verification of environmental sensitivity
Agriculture Assessment	High	Low Sensitivity
The sensitivity rating provided by the Screening Tool Report is disputed. The rating is based on the land capability rating and cropland use. There is no agriculture practiced within the Paradys Strand residential area. The 741.6 m ² site is underlain by windblown sand, designated as residential 1 and not suited to agriculture.		
Landscape / Visual Impact Assessment	NA	Low Sensitivity
The visual character of the study area consists of visually appealing natural coastal landscapes and modified landscapes including residential, tourism, roads and footpaths. The proposed dwelling design is considered to blend in with the natural environment and surrounding residential land uses and is not likely to deteriorate the visual quality of the area. No further assessment is deemed necessary based on the type of development and location of the dwelling. Mitigation measures to prevent visual impacts during the life cycle of the development are included in the EMP _r submitted with the BAR.		
Socio-Economic Assessment	NA	Low Sensitivity
No further assessment is deemed necessary; the proposed development will have a low positive impact on social and economic conditions and contribute towards rates and taxes in the area and employment of contractors and service providers and purchase of local goods. Mitigation measures are included in the EMP _r submitted with the BAR.		
Animal Species assessment	Medium Sensitivity	Low Sensitivity
The site is underlain by windblown sand and is designated as residential 1 with the surrounding area being the seafront and other houses; the entire footprint is situated within transformed and degraded habitat. <i>Stephanoaetus coronatus</i> (crowned eagle) is not commonly spotted in the coastal area of Jeffreys Bay as the natural habitat includes indigenous forest and mountain areas. The SCC included in the STR are not expected to be affected by the proposed development. <i>Aneuryphymus montanus</i> (Yellow-winged Agile Grasshopper) is associated with fynbos vegetation and rocky habitats, none of which occurs on the site. Due to the small site, limited footprint the animal species theme for the site is considered to be a low sensitivity.		
Aquatic Biodiversity Impact Assessment	Low Sensitivity	Low Sensitivity
No aquatic features were identified within close proximity (100 meters) to the site. Stormwater management and sewage management mitigation measures are included in the EMP _r to prevent polluted and / or excessive runoff from the site.		
Archaeological and Cultural Heritage Impact Assessment	Low Sensitivity	Low Sensitivity
A report has been compiled by Jenna Lavin which has accompanied the Notice of Intent submission to the ECPHRA. The area proposed for development is located within 100 m of the high-water mark and may therefore be at risk of impacting on shell-midden archaeological resources, especially in close proximity to rocky shores. However, no shell midden sites are known from this stretch of coastline. Based on the limited footprint of the proposed development as a small, single residential structure with limited associated excavations, it is unlikely that the proposed development will negatively impact on significant archaeological heritage.		

Specialist Study as per Screening Tool Report	Environmental sensitivity as per screening tool report	Verification of environmental sensitivity
Should any fossil material or archaeological heritage be uncovered during the course of construction activities, work must cease and ECPHRA must be contacted regarding an appropriate way forward. Mitigation measures to prevent unnecessary impact on heritage resources are recommended and are included in the EMPr submitted with the BAR.		
Paleontological Impact Assessment	Very High Sensitivity	Medium Sensitivity
A report has been compiled by Jenna Lavin which has accompanied the Notice of Intent submission to the ECPHRA. The area proposed for development is underlain by sediments of the Nanaga Formation of the Algoa Group which notes that this formation mostly devoid of significant fossils, however, minute fragments of marine macro-organisms, foraminifera and occasional extant land gastropods are present. Based on the limited nature and scale of the proposed development, the likelihood that significant fossil heritage will be negatively impacted by the proposed development is low and as such, no further paleontological assessment is recommended. Should any fossil material or archaeological heritage be uncovered during the course of construction activities, work must cease and ECPHRA must be contacted regarding an appropriate way forward. Measures to prevent impact on paleontological resources are recommended and are included in the EMPr submitted with the BAR		
Plant Species Assessment	Medium sensitivity	Low Sensitivity
The historical vegetation mapped on site is St Francis Dune Thicket (least concern) (NatVEG map, 2019) and verified to be representative of typical St Francis Dune thicket and not Southeastern Strandveld of the fynbos biome as mapped in the NATVEG map, 2024. There are no fynbos species on the erf. The owner of the property is proposing to develop a dwelling with an estimated development footprint of 296 m² which will include an estimated 43.8 m² decking area. A raised timber platform is also proposed which will be an estimated 33 m² and equipped with a walkway extending between the house and platform. The total area of the development will be 329.9 m². The erf is an estimated 741.6 m² in extent, which means approximately 45% of the erf will be developed and the remaining area will remain intact. No endemic and range restricted species were recorded as being present. Several species are known from the surrounding area, but unlikely to be affected by the proposed activity. No Endangered or Critically Endangered flora species were confirmed to be present nor known to be present in the affected area. Indigenous plant species protected in terms of the Eastern Cape Provincial Nature Conservation Ordinance occur within the site (i.e., <i>Carpobrotus</i> spp., <i>Bulbine</i> spp. and <i>Agathosma</i> spp) however, these species are common within the surrounding coastal dune system and are recommended for rehabilitation efforts. Milkwood trees are present on the erf, but these will not be affected by the development and will be retained. A 5-meter green corridor (KLM land) is also situated between erf 1363 and neighbouring northern erf. The limited development footprint minimises vegetation loss. Measures to prevent impact on flora are recommended and are included in the EMPr submitted with the BAR. The proposed development design and footprint avoids protected trees and allows for a significant amount of indigenous vegetation to be retained on the site. Removal and disposal of alien species and the replanting of indigenous vegetation removed during construction during rehabilitation efforts is encouraged. Based on the baseline data, location and site conditions and the nature and scale of the site and development the verified sensitivity of plant species is considered to be low.		
Terrestrial Biodiversity Impact Assessment	Low Sensitivity	Low
The historical vegetation mapped on site is St Francis Dune Thicket (least concern) (NatVEG map, 2019) and verified to be representative of typical St Francis Dune thicket and not Southeastern Strandveld of the fynbos biome as mapped in the NATVEG map, 2024. There are no fynbos species occurring on the erf. The erf is an estimated 741.6 m² in extent and approximately 45% of the erf will be developed and the remaining area will remain intact which includes the secondary dunes situated on the eastern (coastal) side of the erf. Based on the baseline data, location and site conditions and the nature and scale of the site and development, the verified terrestrial biodiversity sensitivity is Low. Measures are included in the EMPr submitted with the BAR to minimise impacts on terrestrial biodiversity.		

Specialist Study as per Screening Tool Report	Environmental sensitivity as per screening tool report	Verification of environmental sensitivity
Geotechnical Assessment	NA	Medium Sensitivity
Marine Impact Assessment	NA	Medium Sensitivity
A geomorphological assessment was carried out to address the impact of development in a dynamic coastal area. The specialist recommendations have been considered and incorporated in the design process. Mitigation measure recommended include, <i>inter alia</i>, a raised dwelling, appropriate foundation design, reuse of excavated material on site, revegetation of disturbed areas on the site, and minimal disturbance to the vegetation. to mitigate impacts on the coastal environment and to mitigate impacts of the coastal environment on the dwelling. The proposed development is deemed compatible with the site's geomorphic processes and acceptable from a geomorphological perspective.		
Visual Assessment	NA	NA
The visual character of the study area consists of visually appealing natural coastal landscapes and modified landscapes including residential, tourism, roads and footpaths. The proposed dwelling design is considered to blend in with the natural environment and surrounding residential land uses and is not likely to deteriorate the visual quality of the area. No further assessment is deemed necessary based on the type of development and location of the dwelling. Mitigation measures to prevent visual impacts during the life cycle of the development are included in the EMPr submitted with the BAR.		
Civil Aviation Assessment	High sensitivity	Low sensitivity
A civil aviation assessment / compliance statement is excluded as the nature of the proposed development will not impact on civil aviation.		
Defence theme	Low sensitivity	Low sensitivity
A defence theme compliance statement is excluded as the proposed development will not have an impact on the defense theme.		