

DBAR - Appendix D - Site Sensitivity Verification Report

Proposed expansion of development footprint on Residential Erf 631 located within EFZ, St Francis Bay, Kouga Local Municipality

A residential house is in place on Erf 631 located at 9 Shore Road within the Marine Glades residential area of St Francis Bay. Erf 631 is approximately 1549.9 m² in extent and falls within the Kromme Estuarine Functional Zone. An existing house is in place on the Erf with a total existing floor area of 386m²; a pool and paving area and fireplace are in place on the canal side with an estimated combined footprint of 100m²; the owner is proposing to expand the development footprint on the Erf by approximately 267m². An estimated 141m² will be developed on the second floor; the estimated ground floor expansion footprint is estimated at 114m².

The proposed development triggers Activities in Listing Notice 1 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.

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:

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

The following specialist studies are deemed necessary:

- Terrestrial biodiversity including flora and fauna SCC and relevant aquatic features

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



Eco Route

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Table 1: Verification of environmental sensitivity identified in DFFE screening tool report Table 2: Verification of environmental sensitivity identified in DFFE screening tool report

| Theme | Environmental sensitivity as per screening tool report | Verification of environmental sensitivity | Description |
|--------------------------------------|--|---|---|
| Agricultural theme | High Sensitivity | Low sensitivity | Site is a residential erf located adjacent to a road (north) and canal (south). The site is not considered to have any agricultural potential. No further studies are deemed necessary |
| Animal Species | High Sensitivity | Low sensitivity | Sensitive fauna species included in the screening to <i>Aneuryphymus montanus</i> (Yellow-winged Agile Grasshopper), <i>Circus ranivorus</i> (African Marsh Harrier), <i>Hydroprogne caspia</i> (Caspian tern) and SS8. Erf 631 is entirely transformed with no suitable habitat; the erf is directly adjacent to shore road (north) and canals (south). No Endangered or Critically fauna species were found to be present on the site or are likely to be directly affected by the proposed activity. Sensitivity of fauna on the development site is verified as low. Impacts on fauna have been addressed in the assessment; no specific specialist study was deemed to be required. |
| Aquatic Biodiversity | Very High | Low | <p>The DFFE screening tool reports indicates very high sensitivities for terrestrial and aquatic systems.</p> <p>The site is situated within the marine glades residential area of St Francis bay. The site falls within the Mzimvubu-Tsitsikamma water management area within the K90E quaternary catchment. The Kromme Estuary is located 60 meters north of the site. Mean annual precipitation is between 600 and 800 mm/year; Rainfall occurs all year round, with peaks during the summer months. The site is adjacent to the canal in the south.</p> <p>The site falls within the Kromme estuary mapped in terms of the National Biodiversity Assessment (NBA, 2018), National Wetlands Map (NWM5) the NFEPA, the National Vegetation Map (2018) and the National Estuary Map. The site is situated within an aquatic and terrestrial critical biodiversity area (CBA)1 as mapped in terms of the Eastern cape biodiversity conservation Plan (ECBCP,2022). The 5-meter contour line has been used to delineate the Estuary functional Zone (EFZ) in the National Biodiversity Assessment: Estuary Technical Report (2012). The site (as well as the majority of residential erven within the Marine Glades area) falls within the mapped EFZ.</p> <p>Residential erf 631 is located between 2 – 4 MASL. The lowest area is in the south, adjacent to the canal. Retaining walls are in place in northern and southern sections of the property between the 2 m and 3 m contour levels.</p> <p>The proposed development is not deemed to create any additional impacts on the estuary. Risk of flooding of the property is considered high due to location of the erf; however the proposed renovation will not increase the risk.</p> <p>Sensitivity of aquatic features on the development site is verified as low. Aspects related to aquatic systems have been addressed in the basic assessment, no specific specialist study was deemed to be required for the proposed renovation on an existing residential erf.</p> |
| Archaeological and Cultural Heritage | Low sensitivity | Low sensitivity | The SBDM coastal zone is rich in archaeological, heritage and historical resources. The coastal zone between Klasies River in the west and Krom River in the east is one of the richest and most significant archaeological cultural landscapes in South Africa. The headland bypass dunefields between Oyster Bay and the Kromme River mouth are underlain by ferricretes, calcretes and fossilized |



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| Paleontological | Medium sensitivity | Low sensitivity | dune sands which are situated on top of Table Mountain Sandstones. Due to the continuous movement of the dunes, many archaeological and paleontological sites are exposed while simultaneously others are covered (Binneman and Reichert, 2017; Draft SBDM CMP, 2019). Relatively large piles of marine shells (referred to as 'strandloper middens') dating back 600 years are found in the Kouga LM coastal zone, mostly within 300 m of the high water mark of the sea but can occur up to 5 km inland. A Notice of intention to develop has been submitted to the Eastern Cape Provincial Heritage Resources Authority; recommendations from the ECPHRA will be included in the EMP: No specific specialist study was deemed to be required. |
| Plant Species Assessment | High sensitivity | Low sensitivity | Erf 631 is entirely transformed. No flora species protected under the NEMBA – Amendment of Critically Endangered, Endangered, Vulnerable and Protected Species List (14 December 2007), occur on site. There are several red listed flora species in the surrounding area and vegetation units that are known to have limited distributions. No endemic and range restricted flora species were recorded to be present; several species are known from the surrounding area but were not recorded on the Erf. One protected tree listed under the National Forests Act, 1998 (Act No. 84 of 1998) (updated 8 September 2017), occurs on site. PNCO (Provincial Nature Conservation Ordinance) permits are unlikely to be required, however NFA (National Forests Act) permits would be required should any of the Milkwood trees (<i>Sideroxylon inerme</i>) require removal at any stage. Sensitivity of flora on the development site is verified as low. Aspects related to flora have been addressed in the basic assessment, however no specific specialist study was deemed necessary. |
| Terrestrial Biodiversity Impact | Very High Sensitivity | Low sensitivity | The DFFE screening tool reports indicates very high sensitivities for terrestrial systems. The site is situated within the marine glades residential area of St Francis bay. The site falls within the Kromme estuary mapped in terms of the National Biodiversity Assessment (NBA, 2018), National Wetlands Map (NWM5) the NFEPA, the National Vegetation Map (2018) and the National Estuary Map. The site is situated within a terrestrial critical biodiversity area (CBA)1 as mapped in terms of the Eastern cape biodiversity conservation Plan (ECBCP,2022). The 5-meter contour line has been used to delineate the Estuary functional Zone (EFZ) in the National Biodiversity Assessment: Estuary Technical Report (2012). The site (as well as the majority of residential erven within the Marine Glades area) falls within the mapped EFZ. Residential erf 631 is located between 2 – 4 MASL. The lowest area is in the south, adjacent to the canal. Retaining walls are in place in northern and southern sections of the property between the 2 m and 3 m contour levels. The proposed development is not deemed to create any additional impacts on the estuary. Sensitivity of terrestrial biodiversity features on the development site is verified as low. Aspects related to terrestrial biodiversity will be addressed in the basic assessment, however no specific specialist study was deemed to be required. |
| Socio-Economic | NA | NA | Aspects related to socio-economic impacts will be addressed in the basic assessment, however no specific specialist study was deemed to be required. |
| Civil Aviation Assessment | Medium sensitivity | Low sensitivity | A civil aviation assessment / compliance statement is excluded as the proposed development will not have an impact on civil aviation aerodrome. |



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|---------------|--|---|---|
| Defence theme | Low sensitivity | Low sensitivity | A defence them compliance statement is excluded as the proposed development will not have an impact on the defense theme. |