



Cape EA Prac

Cape Environmental Assessment Practitioners (Pty) Ltd

Reg. No. 2008/004627/07
VAT No 4720248386



Telephone: (044) 874 0365
Facsimile: (044) 874 0432

Web: www.cape-eaprac.co.za

17 Progress Street, George
PO Box 2070, George 6530

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DEA&DP Ref: 16/3/3/6/7/1/D1/6/0110/21

RE: SITE SENSITIVITY VERIFICATION REPORT FOR BASIC ASSESSMENT APPLICATION FOR ERF 390 & REMAINDER ERF 141 KEURBOOMSTRAND, BITOU MUNICIPALITY

On 20 March 2020 the Minister of Forestry, Fisheries and the Environmental published the general requirements for undertaking site sensitivity verification for environmental themes for activities requiring environmental authorisation (Government Gazette No. 43110). In terms of these requirements, prior to commencing with a specialist assessment, the current land use and environmental sensitivity of the site under consideration by the screening tool must be confirmed by undertaking a site sensitivity verification.

The report uses national datasets to identify site sensitivities and potential specialist studies that may be required for any particular development. Since the datasets are not necessarily ground truthed, there may be instances where the required specialist study is in actual fact not necessary.

Prior to commencing with a specialist assessment, the current use of the land and the environmental sensitivity of the site under consideration identified by the screening tool must be confirmed by the undertaking a **site sensitivity verification**. According to the Assessment Protocol for specialist involvement, If any part of the proposed development falls within an area of "high" or "very high" sensitivity, the requirements prescribed for such sensitivity must be followed.

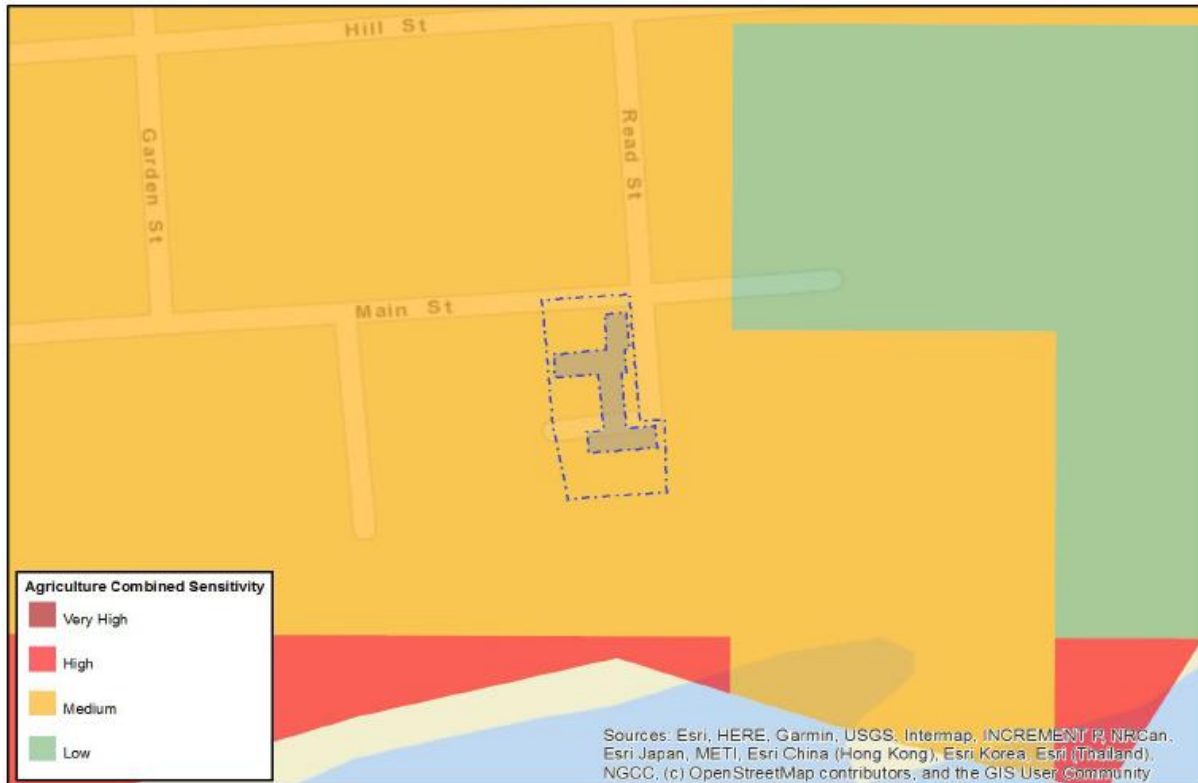
According to the Screening Tool Report that was run on **20 April 2021**, the following summary of the development footprint environmental sensitivities is identified. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme			X	
Animal Species Theme			X	
Aquatic Biodiversity Theme				X
Archaeological and Cultural Heritage Theme	X			
Civil Aviation Theme		X		
Defence Theme				X
Paleontology Theme			X	
Plant Species Theme			X	
Terrestrial Biodiversity Theme	X			

Below is confirmation of the studies required for the Amendment based on the sensitivity themes identified above.

Agriculture (Medium Sensitivity)

The Screening Tool identifies the agricultural sensitivity theme as “medium” due to a portion of the proposal falling within the estimated land capability of the site. The properties are zoned as Open Space II and Single Residential respectively (although the Bitou GIS Portal clearly still identifies Erf 390 as Residential) and have not been utilised identified for agricultural purposes since the area was established as a township. There is also no intention on the part of the applicant to use the property for agricultural purposes. The properties are located inside the urban edge of Keurboomstrand.



The land capability layer as used in the Screening Tool does not take into account any urban delineation and has to take into account **high value agricultural land** that can be preserved for **continued agricultural production** thus ensuring long term national food security. These properties do not quality in this respect.

Layer Information

Title

Land Capability (DAFF 2016)

Description

The Land Capability (2016) represents the distribution of the land capability evaluation values in the country, used as one of the input data layers to determine and demarcate all high value agricultural land for ensuring that these areas, pending availability, are preserved for continued agricultural production, thereby ensuring long-term national food security. The data layer is a seamless data layer and does not exclude permanently transformed areas (built up; waterbodies; mining etc.)

Land capability is defined as the most intensive long-term use of land for purposes of rainfed farming determined by the interaction of climate, soil and terrain. Land capability should not be seen as a substitute for the interpretation designed to show land suitability or agricultural potential.

The approach to the refinement of the 2016 Land capability data layer was based on a spatial modelling exercise and verified through actual in-field verification processes and local level soil assessment data.

The Land capability evaluation 2016 data layer is a refined and updated spatial modelled data layer depicting the land capability evaluation values for the country. The main contributing factors towards land capability in a "natural or unimproved "rainfed (dryland) scenario, were the soil, climate and terrain capabilities with a weighted reference of:

Soil capability = 30%; Climate capability = (40%) and Terrain capability = (30%).

Source

Department of Agriculture, Forestry and Fisheries (DAFF)

Type

Raster Layer

No Agriculture studies are being considered.

Animal Species (Medium Sensitivity)

The screening tool identified the sensitivity for animal species (fauna) as "medium" for the following species:

Sensitivity	Feature(s)
Medium	Insecta-Aloeides thyra orientis
Medium	Invertebrate-Aneuryphymus montanus
Medium	Mammalia-Chlorotalpa duthieae
Medium	Reptilia-Tetradactylus fitzsimonsi
Medium	Sensitive species 5
Medium	Amphibia-Afrixalus knysnae

It must be noted that the properties have been extensively gardened for decades and there is very little remaining indigenous vegetation to support the habitats for the species indicated. The proposed development replaces the current residential use for further residential use and as such there is no change to the garden environment. It is recommended that only indigenous vegetation is planted in the garden which will encourage faunal use of the habitat.

The photographs below show the level of gardening and lack of diverse habitat as is associated with many residential properties.

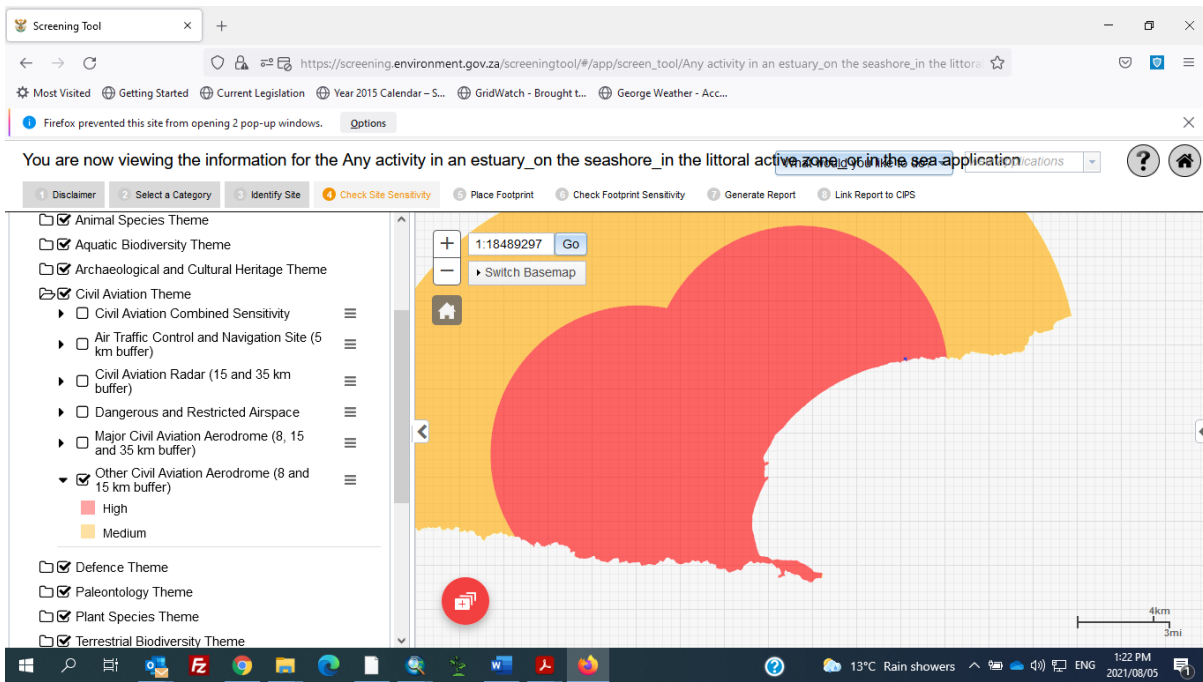


Photo 1: Garden beds that have been developed to be low maintenance

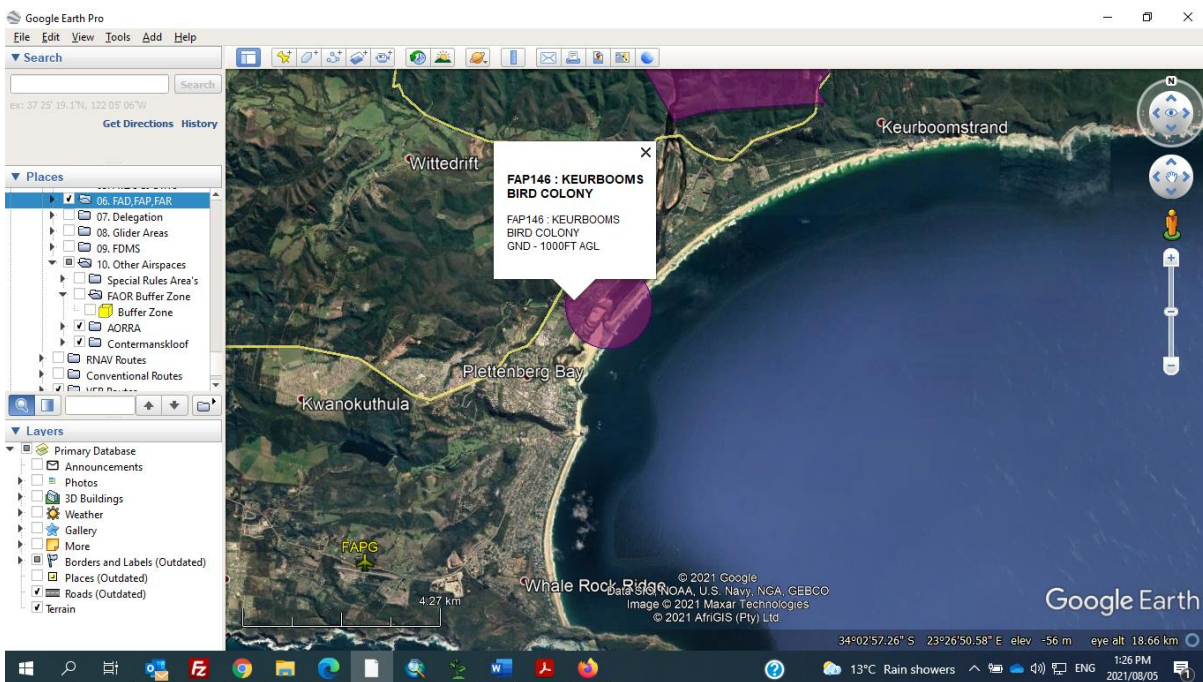


Photo 2: Expanses of grassed lawn and garden beds that have been developed to be low maintenance

No faunal impact study however is being considered for this application.



According to the South African Integrated Aeronautical Information Publication (IAIP) dated June 2021, the more likely reason for this sensitivity is the location of the location of FAP146 airspace providing for the Keurbooms bird colony approximately 7.8kms southwest on a bearing of 61.81degrees.



The development does not trigger the obstacle collision / potential hazard requirements as set out by the CAA, i.e.

- Buildings or other objects which will constitute an obstruction or potential hazard to aircraft moving in the navigable air space in the vicinity of an aerodrome, or navigation aid, or which will adversely affect the performance of the radio navigation or instrument landing systems,
- There are no buildings or objects higher than 45 metres above the mean level of the landing area;

- No building, structure or object which projects above a slope of 1 in 20 and which is within 3000 metres measured from the nearest point on the boundary of an aerodrome;
- No building, structure or other object which will project above the approach, transitional or horizontal surfaces of an aerodrome.

As such it is not necessary to request approval in terms of the Civil Aviation Act for obstacles, however comment will be requested from the Civil Aviation Authority.

Defence (Low Sensitivity)

The screening tool identified this theme as being “low”. No further studies will be undertaken as the development constitutes an activity inside an urban edge for the purpose of a residential dwelling.

Palaeontology (Medium Sensitivity)

The screening tool identified this theme as being “medium” with no specific reason provided.

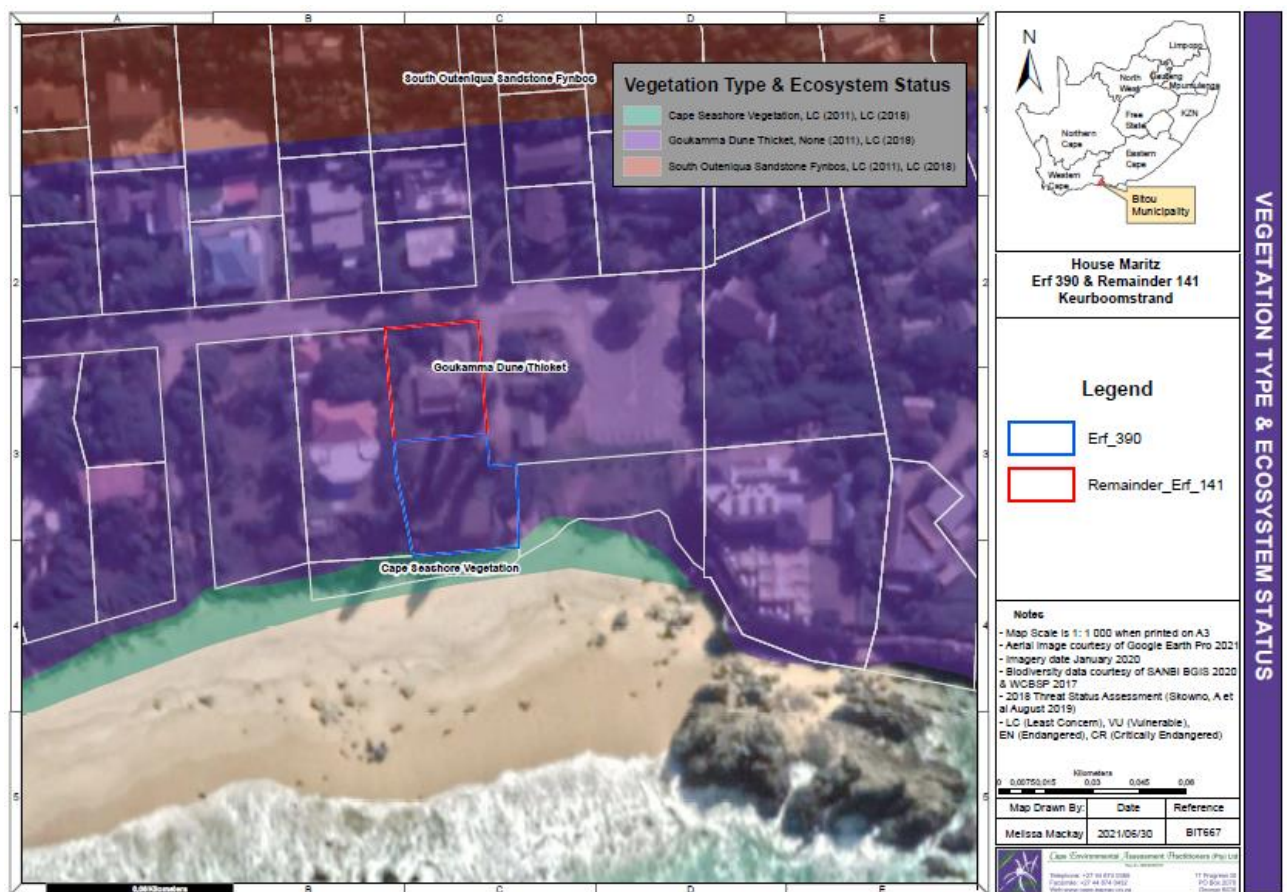
A Heritage Impact Statement has been drawn up and submitted to Heritage Western Cape (HWC).

Any further studies will depend on the outcome from HWC.

Plant Species (Medium Sensitivity)

The screening tool identified this theme as being “medium”. A Botanical and Terrestrial Biodiversity Compliance statement is being drafted for this application. The properties have been extensively gardened over many decades and there is not expected to be a significant level of biodiversity remaining on site.

The mapped vegetation is Goukamma Dune Thicket according to the latest SANBI datasets.



Terrestrial Biodiversity (Very High Sensitivity)

The screening tool identified this them as being "very high", notably for being in a Vulnerable Ecosystem. It must be noted that in 2018 the vegetation types were reassessed and categorised by SANBI, and this area was previously considered to form part of Garden Route Shale Fynbos which is listed as a Vulnerable ecosystem. The confirmed change in ecosystem by SANBI to Goukamma Dune Thicket with a Least Concern status means this information is incorrect and outdated.

Sensitivity	Feature(s)
Very High	Vulnerable ecosystem

A Botanical and Terrestrial Biodiversity Compliance statement is being drafted for this application. The properties have been extensively gardened over many decades and there is not expected to be a significant level of biodiversity remaining on site.

Specialist Assessments

Based on the site sensitives identified, the screening tool identified 10 possible specialist assessments for the development. These are as follows:

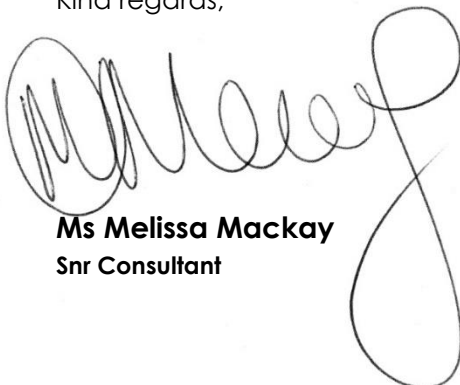
1. Landscape/Visual Impact Assessment
2. Archaeological and Cultural Heritage Impact Assessment
3. Palaeontology Impact Assessment
4. Terrestrial Biodiversity Impact Assessment
5. Aquatic Biodiversity Impact Assessment
6. Marine Impact Assessment
7. Hydrology Assessment
8. Socio-Economic Assessment
9. Plant Species Assessment
10. Animal Species Assessment

The site verification per theme as provided above motivates that only the following assessments will be undertaken:

1. Heritage Impact Statement (which considers impacts on built environment and heritage resources)
2. Terrestrial Compliance Statement
3. Coastal Engineering Assessment (which considers the impact on the beach (marine), and hydrology of the proposal)
4. Plant Compliance Statement

Please feel free to contact this office should you require any further information.

Kind regards,



Ms Melissa Mackay
Snr Consultant