



# Eco Route

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## ENVIRONMENTAL BACKGROUND INFORMATION DOCUMENT:

**ERF 1627 SEDGEFIELD, IN THE MUNICIPALITY DISTRICT AND  
DIVISION OF KNYSNA PROVINCE OF THE WESTERN CAPE.**



Photo Supplied by: Dr Jackie Dabrowski of Confluent Environmental (Pty)Ltd

**Prepared For:**

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## Table of Contents

Locality .....	4
Background Information .....	4
Purpose of the BID .....	6
CapeFarmMapper Findings .....	6
Protected Area .....	6
Critical Biodiversity Area .....	7
Rivers.....	8
Wetlands .....	8
Vegetation.....	9
Topography .....	10
The National based Environmental Screening Tool.....	14
Table 1: Identified Environmental Sensitivities .....	14
Identified Specialist assessments.....	14
Results of the verification of the environmental sensitivity of the proposed area:.....	15
Relative Agricultural Theme Sensitivity .....	15
Landscape/Visual Impact Assessment: .....	19
Relative Archaeological & Cultural Heritage Theme Sensitivity: .....	19
Relative Terrestrial Biodiversity Theme Sensitivity.....	19
Relative Aquatic Biodiversity Theme Sensitivity .....	19
Relative Theme Hydrology Assessment .....	20
Socio-economic Impact Assessment.....	20
Relative Plant Species Theme Sensitivity .....	20
Relative Animal Species Theme Sensitivity .....	20
Specialist Studies.....	21
Proposed Development .....	22
Concept of Proposed Development.....	24
Environmental Legislation.....	25
Applicability of the National Water Act, Act 36 of 1998.....	25
Applicable NEMA EIA Regulations 2014, as amended Listed Activities.....	26
Identified Environmental Impacts as per Specialist.....	31
Impacts and Proposed Mitigation Measures .....	34
Development of the SDP taking Mitigation Measures into Account.....	39
Specialist Conclusions .....	39
Aquatic Specialist Study .....	39

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Flood Lone Management .....	40
Botanical Assessment .....	40
Stakeholder Engagement.....	40
NEMA Process to Proceed .....	41

**APPENDICES**

**App A: Site Development Plan**

**APP B: Auquatic Specailist Report**

**App C: Floodline Management Reopty**

**App D: Terrestrial Biodiversity Environmental Sensitivity Report**

**App E: Draft Town planning Report**

**App F: Screening Tool**

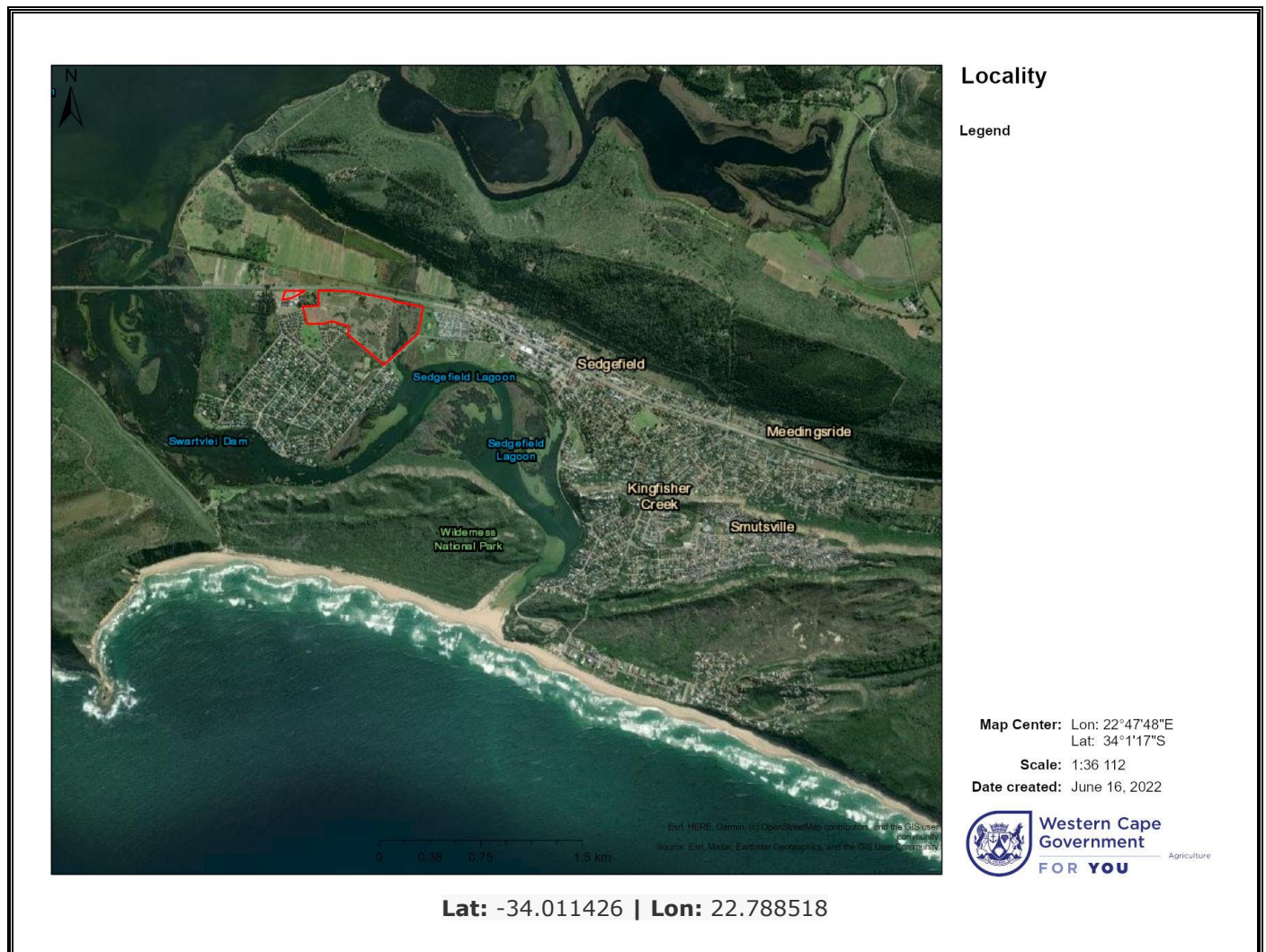
**App G: Surveyor Diagrams**

**App H: AIS Control Plan**

**App I: Sedgefield-pre feasibility Borman 2006 Report**

## Locality

The Remainder of Erf 1627 is situated to the west of Sedgefield, south of the N2 and directly east of Scarab Village Arts and Craft Market/ Engen Garage, and to the north and east of Island Village Group Housing Development.



Erf Nr:	RE/1627
Area (SQM):	265056.3
SG Code:	C03900100000162700000
SG Region:	KNYSNA
Township:	SEDFIELD

## Background Information

Rodney Nel Management Services Proprietary Limited appointed Eco Route Environmental Consultancy to assess the RE/1627, Sedgefield in order to:

1. Identify all applicable listed activities as per the National Environmental Management Act (NEMA) (Act 107 of 1998, as amended 2017).
2. Identify any other applicable legislation, policies and/or guidelines.
3. Identify the correct Environmental Procedure to follow.
4. Identify the possible Specialist studies required in order to inform the Environmental Application.
5. Identify Environmental Sensitivities on site.
6. Assist with possible development options taking the site sensitivity and possible environmental impacts into consideration.

In order to achieve the above Eco Route conducted three site visits and completed a desktop study using the following tools:

1. CapeFarmMapper which is a product of the Western Cape Department of Agriculture. This online mapping tool is designed to assist with spatial information queries and decision making in the fields of agriculture and environmental management.
2. The National based Environmental Screening Tool which is a geographical based web-enabled application which allows a proponent intending to submit an application for environmental authorisation in terms of the Environmental Impact Assessment (EIA) Regulations 2014, as amended to screen their proposed site for any environmental sensitivity.
3. Assessing and identifying all applicable legislation, policies and/or guidelines.

The assessment took Chapter 1 of the National Environmental Management Act (Act 107 of 1998 as amended 2017), National Environmental Management Principles, **2 Principles** into consideration and to guide the proposed site development plan:

**(4)(a) Sustainable development requires the consideration of all the relevant factors including the following:**

- (i) That the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be avoided, are minimised and remedied;
- (ii) That pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;
- (iii) That the disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied;
- (iv) That waste is avoided, or where it cannot be altogether avoided, minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner;
- (v) That the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of depletion of the resource;
- (vi) That the development, use and exploitation of a renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised;



- (vii) That a risk-averse and cautious approach is applied, which takes into account the limits of the current knowledge about the consequences of decision and actions; and
- (viii) That the negative impacts on the environment and on people’s environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.

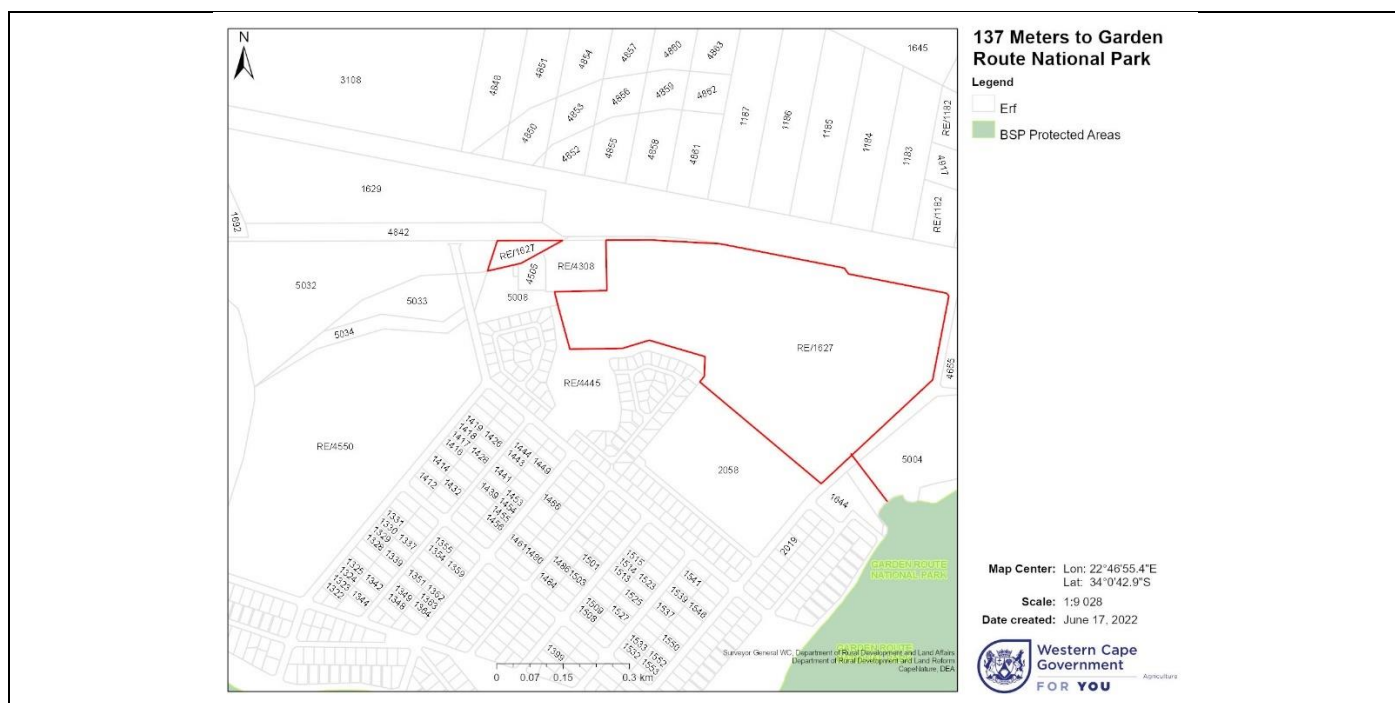
## Purpose of the BID

The main purpose of this Background Information Document (BID) is to:

- Provide potential “Interested and Affected Parties” (I&APs) with information regarding the development proposal;
- Describe the environmental process being undertaken in terms of the National Environmental Management Act (NEMA, Act 107 of 1998 as amended) & including the NEMA Environmental Impact Assessment Regulations 2014, as amended;
- Obtain Input from all applicable Governmental Authorities, Organs of State and State Departments; and
- Determine the way forward.

## CapeFarmMapper Findings

### Protected Area



The International Union for Conservation of Nature (IUCN), defines a protected area as: **a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature.**

RE/1627 is situated approximately 137 meters from the Garden Route National Park of which SANParks are the custodians. As per SANPARKS POLICY CONTEXT: SANPARKS’ MANDATE AND VALUES, 2.4 Core components of Protected Area Management;

The five sets of activities are:

- Ecosystem management aimed at conservation of biodiversity and cultural heritage.
- Sustainable Tourism in synergy with conservation and socio-economic development.
- Building co-operation with stakeholders through cooperative governance and participatory management. ☑  
Managing day to day operations effectively and within budget.
- Providing, or using, support services to ensure accountable and cost-effective management that meets corporate values, principles and vision.

These components and activities are interdependent. Ecosystem management must take place in a co-operative manner that includes, and empowers all stakeholders. At the same biodiversity provides the basis for tourism that must be sustainable within those biodiversity constraints.

As per the above it is imperative to obtain input from SANParks to ensure that the proposed development does not negatively impact on the receiving environment or the protected area.

## Critical Biodiversity Area



CapeFarmMapper defines Critical Biodiversity Areas as follow:

Category 1: CBA: Aquatic

Category 2: CBA: Estuary

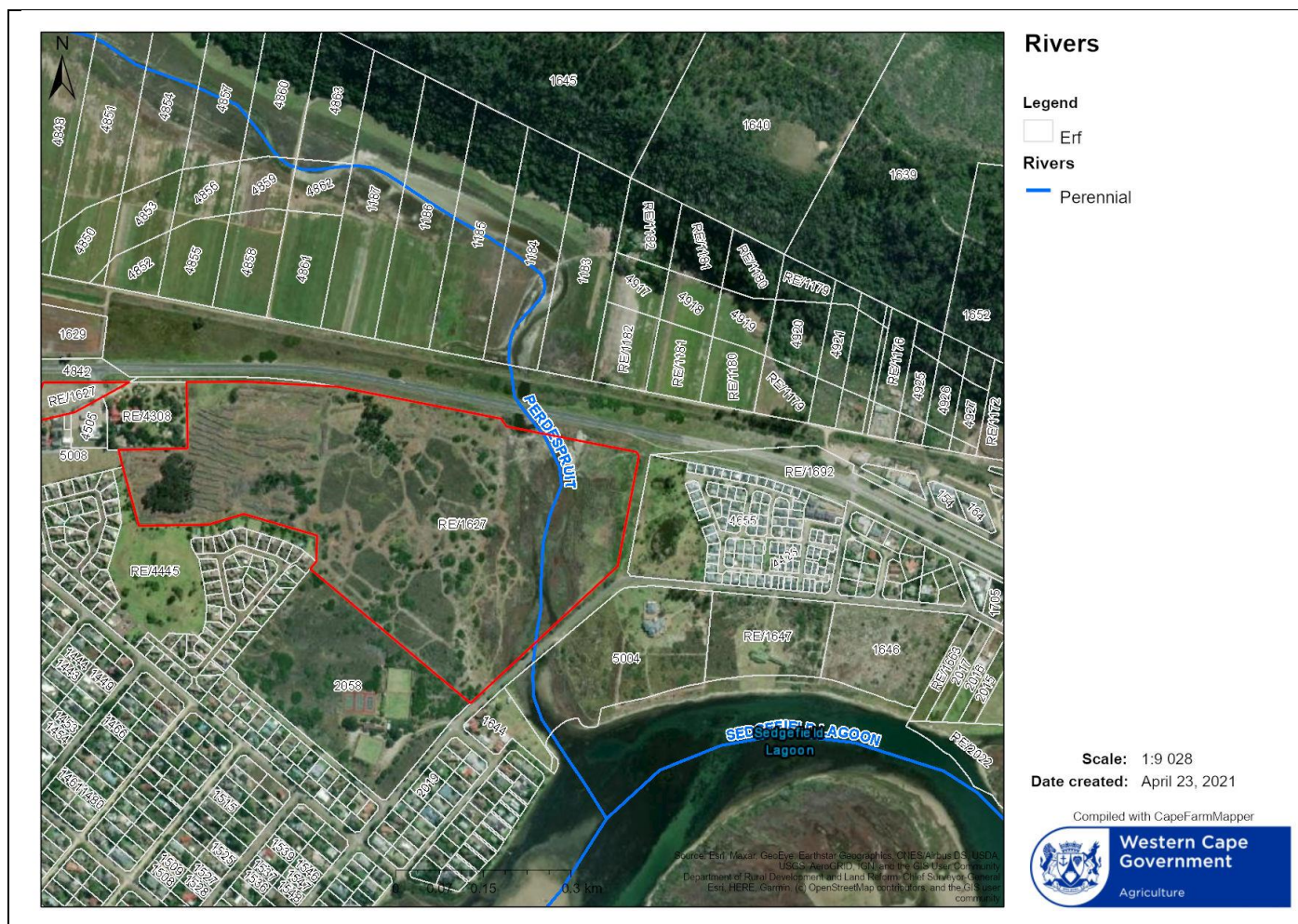
Definition: Areas in a natural condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.

Objective: Maintain in a natural or near-natural state, with no further loss of natural habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land uses are appropriate.



It is important to note that CBA areas has not yet been adopted by the competent authority, however relevant consideration must be given to an area earmarked as a CBA area.

### Rivers

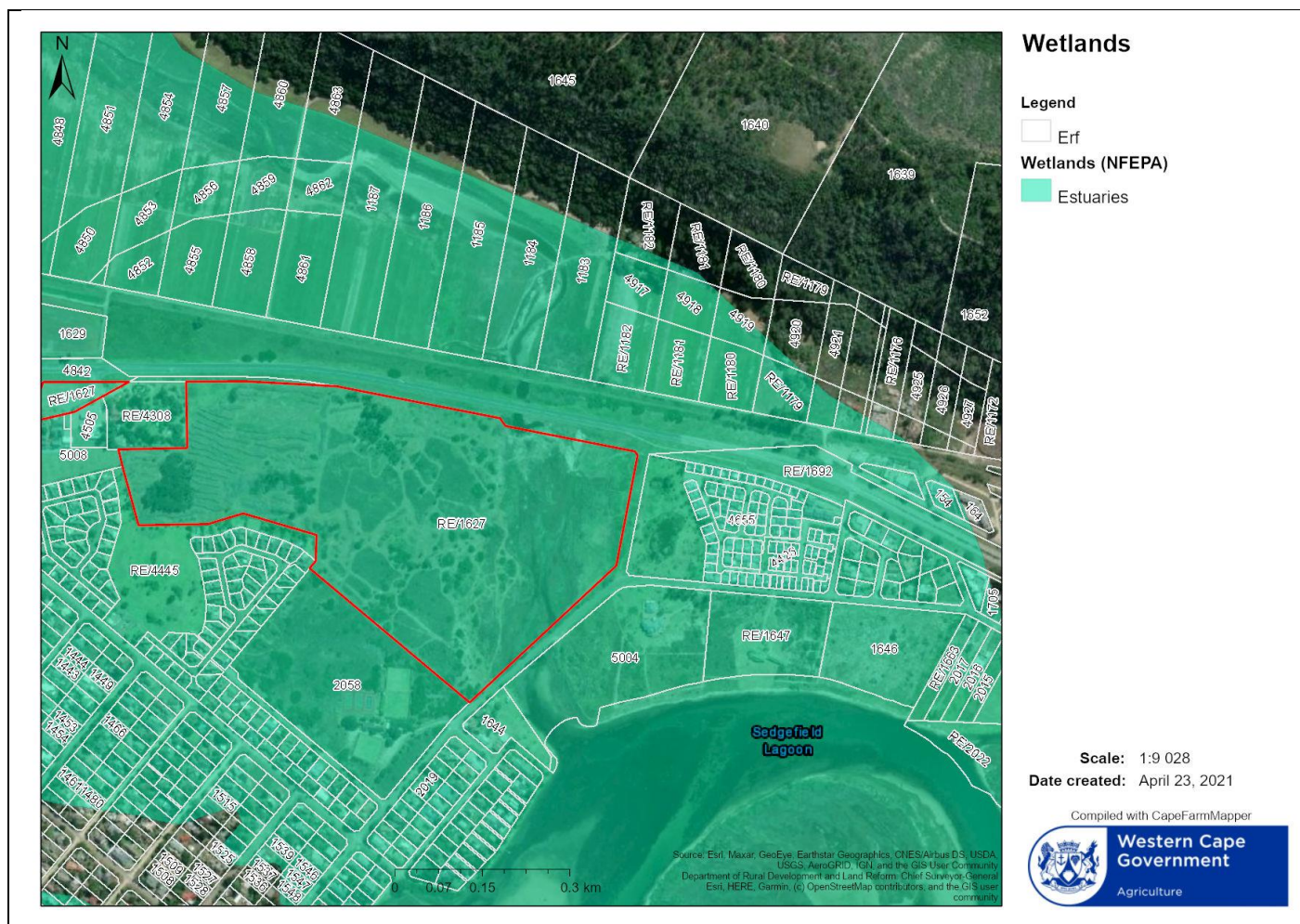


As a result of the Perdespruit intercepting RE/1627 an Dr Jackie Dabrowski from Confluent Environmental (PTY) LTD was appointed to conduct an Aquatic Assessment on site. As per The Aquatic Assessment for proposed multi-use development on RE/1627, Sedgfield Report:

The Perdespruit channel flows across the entire eastern portion of the property where it enters beneath the N2 and exits under Dr Malan Street to the estuary. The upper portion of the Perdespruit beyond the N2 extends north and then west into Swartvlei Lake. It can be considered an extended arm of the Swartvlei Estuary, but has additional freshwater inflows from the dune catchment and stormwater from roads and buildings.

### Wetlands



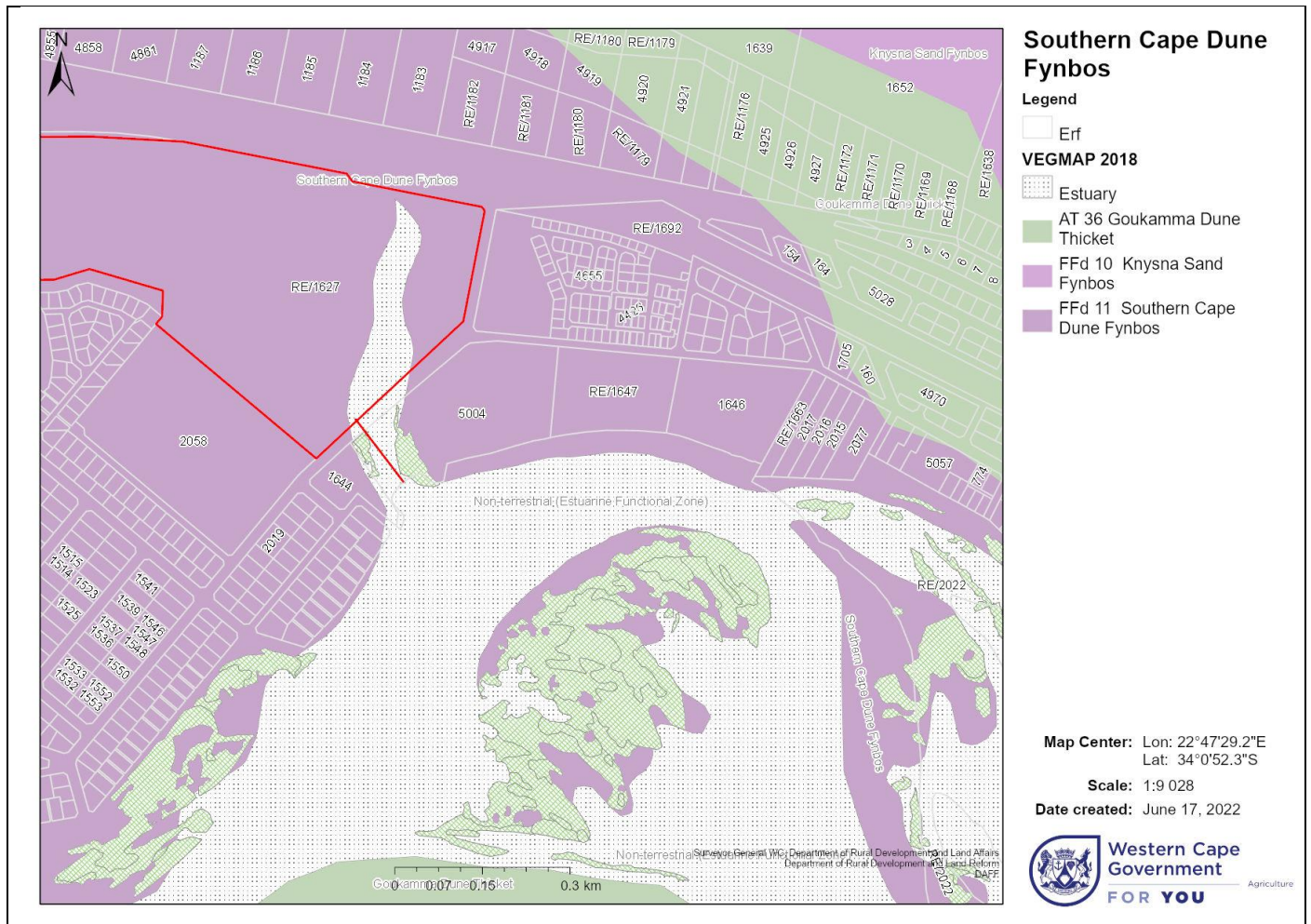


As a result of the wetland on the RE/1627 an Dr Jackie Dabrowski from Confluent Environmental (PTY) LTD was appointed to conduct an Aquatic Assessment on site.

As a greenfield site with significant estuarine and wetland features this input from a specialist is required to avoid or mitigate any negative environmental impacts from the proposed development, focusing on:

- Incorporate existing literature available for the site
- Conduct a desktop study of relevant catchment and watercourse features
- Delineate sensitive aquatic features during a site visit
- Determine the Present Ecological State and Ecological Importance and Sensitivity of aquatic systems on the property
- Recommend protective buffer (setback) areas to protect sensitive habitat
- Make recommendations about the proposed development layout based on site sensitivities
- Provide comment on the water use authorisations that will be required if the development goes ahead

## Vegetation



CapeFarmMapper identifies the following vegetation on site:

**VegMap 2018**

Name:	Southern Cape Dune Fynbos
Code:	FFd11
Biome:	Fynbos
Bioregion:	South Strandveld Bioregion
Protection Level:	PP
Threat Status:	LC

Even through the threat status of the vegetation is of least concern Benjamin Walton for Cape Vegetation Surveys was appointed to assess and submit a Terrestrial Biodiversity Environmental sensitivity report taking the following terms of reference into consideration:

The terms of reference were to conduct a vegetation survey to confirm the vegetation unit and conservation status at the property; and describe the vegetation and sensitivity, with reference to the fynbos forum ecosystems and NEMA specialist guidelines. This is to inform the environmental impact (specifically botanical) of activities within Southern Cape Dune Fynbos habitat; and identify risks, suggest mitigation and make recommendations for implementation.

**Topography**

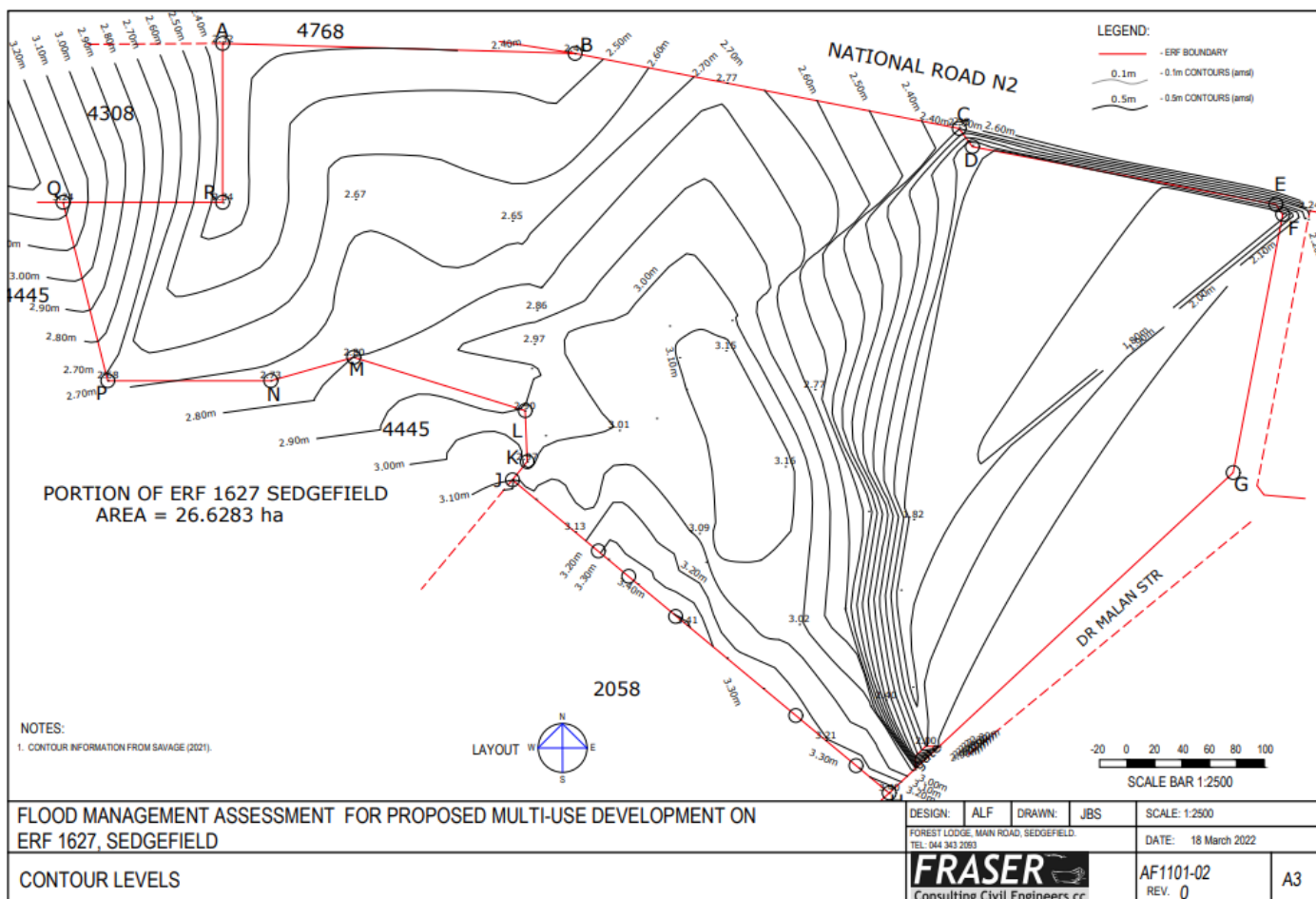


As per the Multi-use development of Erf 1627 Sedgfield: Flood Management Study by Fraser Consulting Civil Engineers cc March 2022:

The erf RE1627 is 26.6 ha in extent.

The site is in the low-lying areas of Sedgfield and falls below the 5m contour. The topography is described by Drawing AF1101-02.

*AFF1101-02*



According to Dabrowski (2021) (Aquatic Impact Assessment), 11.4 ha of the 26.6 ha property lies between the 2.5m and the 3m amsl contours, while 3.7 ha is above the 3m amsl contour. This represents 43% and 14 % of the property, totalling 57 % above the 2.5m amsl contour.

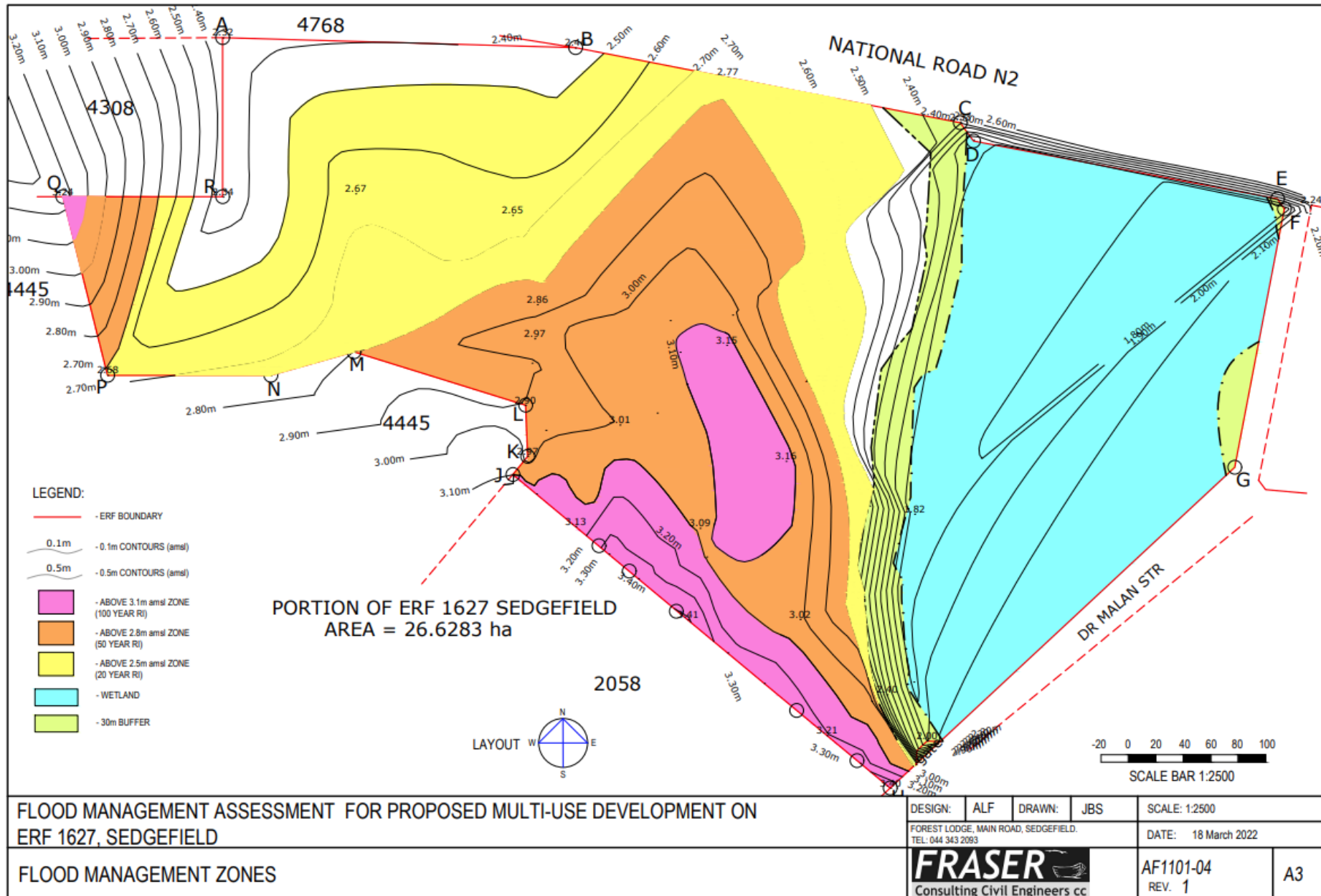
The remaining 43% is mainly around the Perdespruit, with a small section towards the Scarab Market. It is also evident from Drawing AF1101-02 that the erf is significantly higher on the western side of the Perdespruit, as opposed to the eastern or Montage Village side.

Dabrowski (2021) describes the site’s environmental sensitivity to development in an easterly to westerly direction. In the East the site is wetland and sensitive to development, whilst the site becomes progressively less sensitive to the West where the site is modified grassland.

As per the town planning report and Fraser consulting Engineers:



The contour plan below shows that only a portion of the site is situated above the 3m above MSL. Recommendations from the flood line study and engineers will be required to finalise the layout. Portions of the site will require filling, as per recommendations from the flood line study.



## The National based Environmental Screening Tool

As required to compliment a Basic Assessment application the national web-based screening tool was used to generate a screening report. The screening report lists a variety of specialist studies to be undertaken based on the data informants of the tool at the study area. This site sensitivity verification report, following ground-truthing of the site, motivates why certain specialist studies will not be required or conducted for the proposed development application.

Table 1: Identified Environmental Sensitivities

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			

### Identified Specialist assessments

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation:

No:	Specialist Assessment	Assessment Protocol
1.	Landscape/Visual Impact Assessment	General
2.	Archaeological and Cultural Heritage Impact Assessment	NID to be submitted to Department Heritage Western Cape
3.	Palaeontology Impact Assessment	NID to be submitted to Department Heritage Western Cape
4.	Terrestrial Biodiversity Impact Assessment	Terrestrial Biodiversity
5.	Aquatic Biodiversity Impact Assessment	Aquatic Biodiversity
6.	Avian Impact Assessment	Avifaunal
7.	Socio-Economic Assessment	General
8.	Plant Species Assessment	General
9.	Animal Species Assessment	General



Results of the verification of the environmental sensitivity of the proposed area:

Relative Agricultural Theme Sensitivity

The screening report indicates that the receiving environment has a High Relative Agricultural Sensitivity. As per the Biodiversity report:

The undeveloped property has been used for agricultural purposes as early as 1936 based on aerial imagery, and was cleared of vegetation.

As per the Protocol for specialist assessment and minimum report requirements for environmental impacts on agricultural resources:

**Specialist Assessment and Minimum Report Content Requirements:**

<p><b>HIGH SENSITIVITY RATING - Land capability evaluation values of 8 - 10 including all cultivated areas<sup>3</sup> including sugar cane areas and demarcated high value agricultural areas with a priority rating of C and/or D.</b></p> <p>High sensitivity areas are still preservation worthy since they include land with an agricultural production potential and suitability for specific crops.</p>	<p><b>2. Agricultural Agro-Ecosystem Specialist Assessment</b></p> <p>2.1. The assessment must be undertaken by a soil scientist or agricultural specialist registered with the South African Council for Natural Scientific Professionals (SACNASP).</p> <p>2.2. The assessment must be undertaken on the preferred site and within the proposed development footprint.</p> <p>2.3. The assessment must be undertaken based on a site inspection as well as an investigation of the current production figures, where the land is under cultivation or has been within the past 5 years, and must identify:</p> <p>2.3.1. the extent of the impact of the proposed development on the agricultural resources; and</p> <p>2.3.2. whether or not the proposed development will have an unacceptable impact on the agricultural production capability of the site, and in the event where it does, whether such a negative impact is outweighed by the positive impact of the proposed development on agricultural resources.</p> <p>2.4. The status quo of the site must be described, including the following aspects which must be considered as a minimum in the baseline description of the agro-ecosystem:</p> <p>2.4.1. the soil form/s, soil depth (effective and total soil depth), top and sub-soil clay percentage, terrain unit and slope;</p> <p>2.4.2. where applicable, the vegetation composition, available water sources as well as agro-climatic information; HIGH SENSITIVITY RATING - Land capability evaluation values of 8 - 10 including all cultivated</p>
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areas<sup>3</sup> including sugar cane areas and demarcated high value agricultural areas with a priority rating of C and/or D.

The Field Crop boundary and Land Capability dataset has been provided by the DAFF. For details of the datasets, click on the options button to the right of the Field Crop Boundary layer and Land Capability layer respectively, in the Agricultural Theme to view the metadata. Published in Government Notice No. 320 GOVERNMENT GAZETTE 43110 20 MARCH 2020 GAZETTED FOR IMPLEMENTATION This gazette is also available free online at [www.gpwonline.co.za](http://www.gpwonline.co.za) High sensitivity areas are still preservation worthy since they include land with an agricultural production potential and suitability for specific crops.

2.4.3. the current productivity of the land based on production figures for all agricultural activities undertaken on the land for the past 5 years, expressed as an annual figure and broken down into production units;

2.4.4. the current employment figures (both permanent and casual) for the land for the past 3 years, expressed as an annual figure; and

2.4.5. existing impacts on the site, located on a map (e.g. erosion, alien vegetation, non-agricultural infrastructure, waste, etc.).

2.5. Assessment of impacts, including the following aspects which must be considered as a minimum in the predicted impact of the proposed development on the agroecosystem:

2.5.1. change in productivity for all agricultural activities based on the figures of the past 5 years, expressed as an annual figure and broken down into production units;

2.5.2. change in employment figures (both permanent and casual) for the past 5 years expressed as an annual figure; and 2.5.3. any alternative development footprints within the preferred site which would be of "medium" or "low" sensitivity for agricultural resources as identified by the screening tool and verified through the site sensitivity verification.

2.6. The findings of the Agricultural Agro-Ecosystem Specialist Assessment must be written up in an Agricultural Agro-Ecosystem Specialist Report.

2.7. This report must contain the findings of the agro-ecosystem specialist assessment and the following information, as a minimum:

2.7.1. details and relevant experience as well as the SACNASP registration number of the soil scientist or agricultural specialist preparing the assessment including a curriculum vitae;

2.7.2. a signed statement of independence by the specialist;

2.7.3. the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment;

2.7.4. a description of the methodology used to undertake the on-site assessment inclusive of the equipment and models used, as relevant;

2.7.5. a map showing the proposed development footprint (including supporting infrastructure) with a 50m buffered development envelope, overlaid on the agricultural sensitivity map generated by the screening tool;

2.7.6. an indication of the potential losses in production and employment from the change of the agricultural use of the land as a result of the proposed development;

2.7.7. an indication of possible long-term benefits that will be generated by the project in relation to the benefits of the agricultural activities on the affected land;

2.7.8. additional environmental impacts expected from the proposed development based on the current status quo of the land including erosion, alien vegetation, waste, etc.;

2.7.9. information on the current agricultural activities being undertaken on adjacent land parcels;

2.7.10. an identification of any areas to be avoided, including any buffers;

2.7.11. a motivation must be provided if there were development footprints identified as per paragraph 2.5.3 above that were identified as having a "medium" or "low" agriculture sensitivity and that were not considered appropriate; Published in Government Notice No. 320 GOVERNMENT GAZETTE 43110 20 MARCH 2020 GAZETTED FOR IMPLEMENTATION This



gazette is also available free online at [www.gpwonline.co.za](http://www.gpwonline.co.za)

2.7.12. confirmation from the soil scientist or agricultural specialist that all reasonable measures have been considered in the micro-siting of the proposed development to minimise fragmentation and disturbance of agricultural activities;

2.7.13. a substantiated statement from the soil scientist or agricultural specialist with regards to agricultural resources on the acceptability or not of the proposed development and a recommendation on the approval or not of the proposed development;

2.7.14. any conditions to which this statement is subjected;

2.7.15. where identified, proposed impact management outcomes or any monitoring requirements for inclusion in the Environmental Management Programme (EMPr); and

2.7.16. a description of the assumptions made and any uncertainties or gaps in knowledge or data.

2.8. The findings of the Agricultural Agro-Ecosystem Specialist Assessment must be incorporated into the Basic Assessment Report or Environmental Impact Assessment Report, including the mitigation and monitoring measures as identified, which are to be contained in the EMPr.

2.9. A signed copy of the assessment must be appended to the Basic Assessment Report or Environmental Impact Assessment Report.

## Conclusion:

No agricultural impact assessment has been identified for inclusion in the assessment process and report. The Department of Agriculture, however will be included in the I&AP register, and will be provided with an opportunity to provide comment.

### Landscape/Visual Impact Assessment:

The screening report identified that a visual impact assessment be conducted for inclusion in the assessment process and application. The proposed development is in line with development adjoining the site. However, care will be taken to reduce visual impacts. The visual impact can be mitigated using the following methods:

1. Earthy colours and down lighting
2. Ecological corridors
3. Using vegetation screens

### Relative Archaeological & Cultural Heritage Theme Sensitivity:

The screening report indicates that the receiving environment has a Medium Relative Archaeological & Cultural Heritage Sensitivity; and indicated that specialist assessments be undertaken for Archaeological & Cultural Heritage Sensitivity as well as a Paleontological Impact Assessment;

#### **Conclusion:**

A Notice of intent to develop (NID) will be included as a general process requirement for the Basic Assessment process and be sent to Heritage Western Cape to determine the applicability of the requirement for specialist heritage studies.

### Relative Terrestrial Biodiversity Theme Sensitivity.

The screening report indicates that the receiving environment has a Very High Terrestrial Biodiversity Sensitivity

#### **Conclusion:**

As identified for inclusion in the assessment and application process by the screening report a Terrestrial Biodiversity Sensitivity Report has been completed.

### Relative Aquatic Biodiversity Theme Sensitivity

The screening report indicates that the receiving environment has a Very High Aquatic Biodiversity Sensitivity; based on the Strategic Water Resource Area feature.

#### **Conclusion:**

As identified for inclusion in the assessment and application process by the screening report an Aquatic Sensitivity Report has been completed.

## Relative Theme Hydrology Assessment

The screening report indicates that a Hydrology Assessment Specialist study is required. A Flood Management study has been completed.

## Socio-economic Impact Assessment

The screening report identified that a socio-economic impact assessment be conducted for inclusion in the assessment process and report. As the proposed development will require permanent staff an assessment will be conducted for the Basic Assessment Report; and may not require a specialist study.

## Relative Plant Species Theme Sensitivity

The screening report indicates that the receiving environment has a Medium Relative Plant Species Sensitivity. As identified for inclusion in the assessment process and application by the screening report a Terrestrial Biodiversity Sensitivity Report has been compiled that also assesses the relative plant species theme.

## Relative Animal Species Theme Sensitivity

The screening report indicates that the receiving environment has a High Relative Animal Species Sensitivity and indicated the following features for the theme below.

Protocol for the specialist assessment and minimum report content requirements for environmental impacts on terrestrial animal species:

### **ASSESSMENT AND REPORTING OF IMPACTS ON TERRESTRIAL ANIMAL SPECIES**

1.1 An applicant intending to undertake an activity identified in the scope of this protocol, on a site identified by the screening tool as being of “very high” or “high” sensitivity for terrestrial animal species must submit a Terrestrial Animal Species Specialist Assessment Report.

1.2 An applicant intending to undertake an activity identified in the scope of this protocol on a site identified by the screening tool as being of “medium sensitivity” for terrestrial animal species must submit either a Terrestrial Animal Species Specialist Assessment Report or a Terrestrial Animal Species Compliance Statement, depending on the outcome of a site inspection undertaken in accordance with paragraph 4.

1.3 An applicant intending to undertake an activity identified in the scope of this protocol on a site identified by the screening tool as being of “low” sensitivity for terrestrial animal species must submit a Terrestrial Animal Species Compliance Statement.

1.4 Where the information gathered from the site sensitivity verification differs from the screening tool designation of “very high” or “high”, for terrestrial animal species sensitivity and it is found to be of a “low” sensitivity, then a Terrestrial Animal Species Compliance Statement must be submitted.



1.5 Where the information gathered from the site sensitivity verification differs from the screening tool designation of “low” terrestrial animal species sensitivity and it is found to be of a “very high” or “high” terrestrial animal species sensitivity, a Terrestrial Animal Species Specialist Assessment must be conducted.

1.6 If any part of the development falls within an area of confirmed “very high” or “high” sensitivity, the assessment and reporting requirements prescribed for the “very high” or “high” sensitivity, apply to the entire development footprint. Development footprint in the context of this protocol means, the area on which the proposed development will take place and includes the area that will be disturbed or impacted.

1.7 The Terrestrial Animal Species Specialist Assessment and the Terrestrial Animal Species Compliance Statement must be undertaken within the study area.

1.8 Where the nature of the activity is not expected to have an impact on species of conservation concern (SCC) beyond the boundary of the preferred site, the study area means the proposed development footprint within the preferred site.

1.9 Where the nature of the activity is expected to have an impact on SCC beyond the boundary of the preferred site, the project areas of influence (PAOI) must be determined by the specialist in accordance with Species Environmental Assessment Guideline<sup>3</sup>, and the study area must include the PAOI, as determined.

## Conclusion

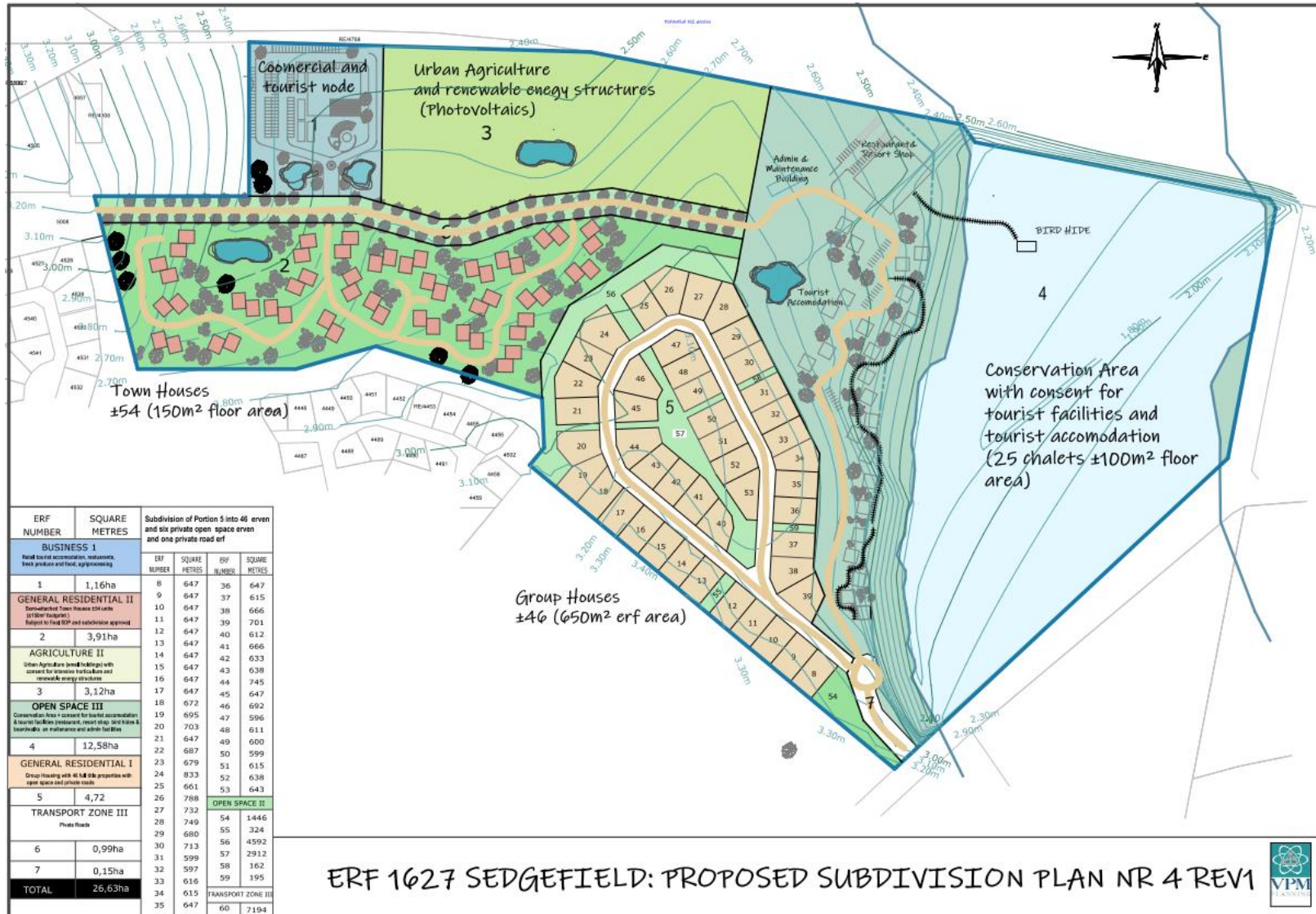
At this stage this is considered a GAP in knowledge and after discussions and onsite meetings with SANParks and CapeNature the importance of this study will be determined.

## Specialist Studies

The following specialist studies have been conducted on site, and their reports are attached to the BID as appendices to this report. The specialist studies conducted assisted in identifying the possible proposed site development plan in order to ensure the least impact on the receiving environment:

1. Aquatic Specialist Study by Dr J Dabrowski of Confluent Environmental (Pty)Ltd (July 2021).
2. Terrestrial Biodiversity Environmental Sensitivity Report by B Walton for Cape Vegetation Surveys (September 2021).
3. Flood Management Study by A. Fraser (March 2022)
4. Draft Town Planning Report by Liza-Marie Hussy from Planning Space Town and Regional Planners

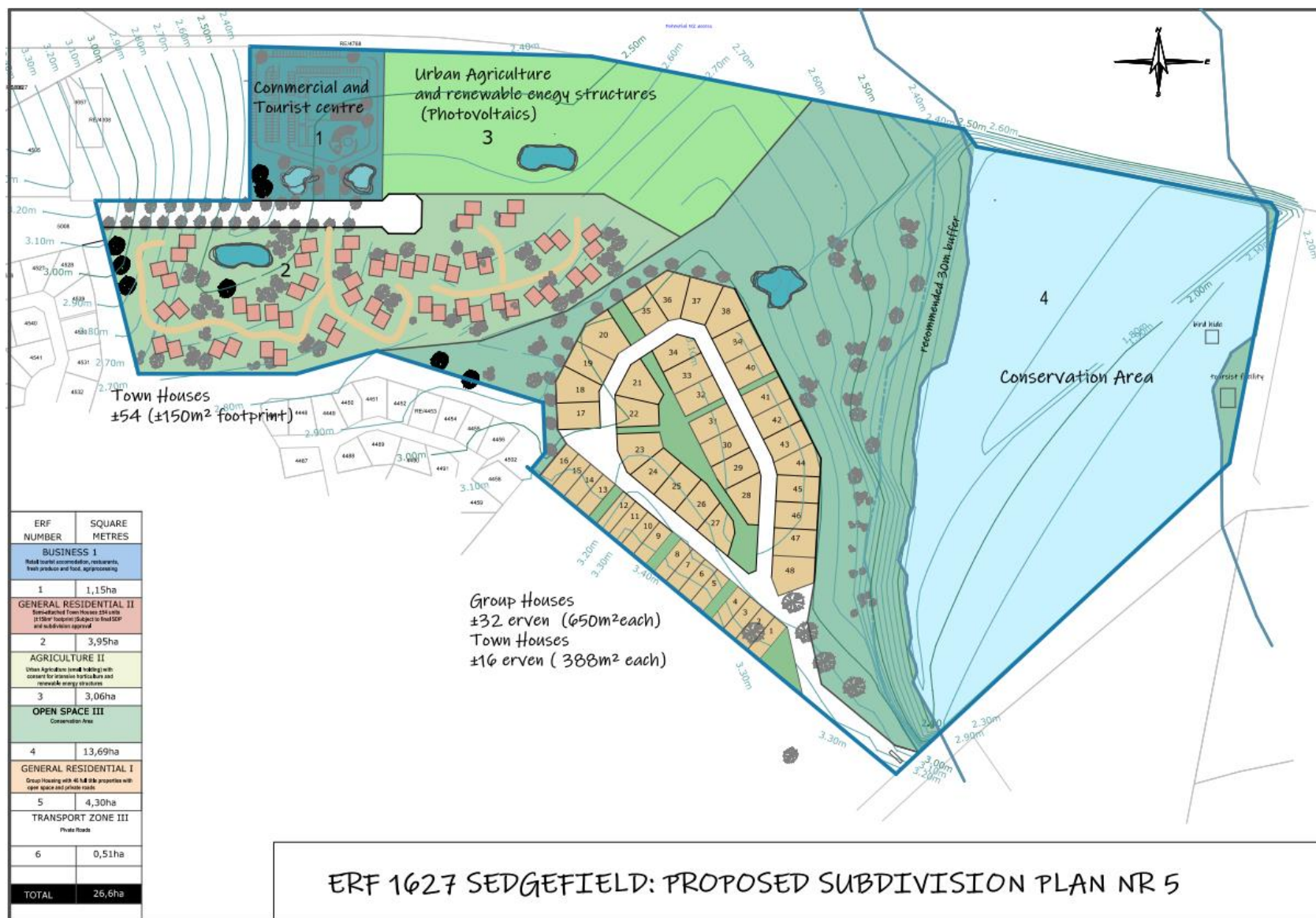
# Proposed Development



ERF 1627 SEDGEFIELD: PROPOSED SUBDIVISION PLAN NR 4 REV1



# Alternative 1





## Concept of Proposed Development

As per the town planning report compiled by Planning Space Town and Regional Planners:

“The proposed development concept comprises a mixture of land uses that shows that conserving nature while providing, housing, jobs, food, and energy for a growing human population is possible. The development concept was derived from Sedgfield's character as a place of conscious living, mindfulness, and being in sync with nature. The fundamental idea is that peoples’ interaction with their environment should create a sense of well-being.

The layout has been informed by the special site characteristic that has been identified during the initial site assessment phase. The biophysical element that shaped the layout includes the wetland on the eastern portion of the land and the 30m buffer to the west. The low-lying topography of the land was also a consideration. The footprint of the conventional urban development is limited to the 3m height contour where other more flexible land uses are proposed on the rest of the site.

Access to the Group Housing site and the Resort will be from Dr. Malan Drive in the south. The townhouses, commercial area, and Agricultural area will gain access from a road over Erf 5008 that is currently zoned for “Business 1” purposes. Erf 5008 will be subdivided and rezoned accordingly as part of a separate town planning application. Erf 5008 belongs to the same owner as Erf 1627.

Engineering Services have not been investigated yet and confirmation of bulk services will be required.”

As per the Plan NR 4 REV1 (page 21 above) the proposed SDP has divided the property into 7 different Portions as indicated in table below:

Portion Number:	Proposed SDP:	Size:	Proposed Zoning:
1	<b>Business 1:</b> Retail tourist accommodation, restaurants, fresh produce and food, Agri processing	1.16 Hectare	Business I
2	<b>General Residential II:</b> ➤ ± 54 Semi-attached Town Houses ➤ ±150m <sup>2</sup> Footprint	3.9 Hectares	General Residential II
3	<b>Agriculture II:</b> Urban Agriculture (small holdings) with consent for intensive horticulture and renewable energy structures	3.12 Hectares	Agriculture II
4	<b>Open Space III:</b> Conservation Area with consent use for tourist accommodation and tourist facilities (restaurant, resort shop, bird hides & boardwalks and a maintenance and admin facility	12.58 Hectares	Open Space III
5	<b>General Residential I:</b> Group Houses: ➤ ± 46 Group Houses ➤ 650m <sup>2</sup> Erf Area ➤ Open Space Areas ➤ Private road	4.72 Hectares	General Residential I
6	<b>Transport Zone III</b> Access Roads	0.99 Hectares	Transport Zone III
7	<b>Transport Zone III</b> Access Roads	0.15 Hectares	Transport Zone III



Further information with regards to each development proposal on each portion can be found in the Draft Town Planning Report by Planning Space Town and Regional Planners (pages 9 – 17), attached as an Appendix to this BID.

## Environmental Legislation

The proposed development will require prior authorisation in terms of the following:

- National Environmental Management Act/ NEMA (Act no. 107 Of 1998);
- The NEMA EIA Regulations 2014, as amended;
- National Environmental Management: Biodiversity Act (Act 10 of 2004);
- National Water Act (Act 36 of 1998); and
- National Heritage Resources Act (NHRA) (Act 25 of 1999)

## Applicability of the National Water Act, Act 36 of 1998

The proposed development may in all probability not require a water use authorisation in terms of NWA, however the Aquatic Report will be submitted to BGCMA to confirm their stance on whether the proposed development would require authorisation or not. As per the Aquatic Specialist Report page 22 – 23:

“Legislative acts in South Africa differ in their definition of estuarine systems. According to the National Environmental Management: Coastal Management Act (NEMA: CMA; 2008) and listing notices 1 (GN R. 983) and 2 (GN R. 984) published under the National Environmental Management Act (NEMA), Environmental Impact Assessment (EIA) Regulations (2014), which define an estuary as an open body of surface water:

- a) that is part of a watercourse that is permanently or periodically open to the sea;
- b) in which as rise or fall of the water level as a result of the tides is measurable at spring tides when the watercourse is open to the sea; or
- c) in respect of which the salinity is measurably higher as a result of the influence of the sea.

The National Water Act (NWA; Act No. 36 of 1998) defines an estuary as “a partially or fully enclosed body of water:

- a) which is open to the sea permanently or periodically; and,
- b) within which the sea water can be diluted, to an extent that is measurable, with fresh water derived from land”.

The definition of estuarine habitat is more extensive in terms of listing Notice 3 (GN R 985) published under the NEMA EIA regulations (2014), which define an estuary as the Estuarine Functional Zone (EFZ) as defined in the National Biodiversity Assessment: Estuary Component (van Niekerk & Turpie, 2012). The EFZ is delimited by the 5 m topographical contour surrounding an estuary, which is provided as a spatial layer in the South African National Biodiversity Institute’s BGIS website (<http://bgis.sanbi.org>).

The full extent of RE/1627 is located below the 5 m topographical contour and is therefore defined as part of the estuary because it is located within the EFZ

Furthermore, the NWA defines a watercourse as:

- a) a river or spring;
- b) a natural channel in which water flows regularly or intermittently;
- c) a wetland, lake or dam into which, or from which, water flows; and
- d) any collection of water which the Minister may, by notice in the Gazette, declare to be a watercourse, and a reference to a watercourse includes, where relevant, its bed and banks.

This definition excludes estuaries which means these areas are not subject to authorisation under the NWA. On occasion, if extensive freshwater habitat is shown to be present within the EFZ, this may prompt regulatory requirements under the NWA, but given the obvious estuarine conditions present in the Perdespruit this seems unlikely. Nonetheless, the Breede Gouritz Catchment Management Agency (BCMA) have suggested that this assessment be reviewed by their freshwater specialist to confirm their stance on whether proposed developments would require authorisation or not.

## Applicable NEMA EIA Regulations 2014, as amended Listed Activities

NEMA specifies various 'listed activities' that require prior environmental authorisation. The following listed activities are applicable to this development (please note that these are subject to change as more information becomes available):

Listing Notice	Activity Number	Description
<b>Listing Notice 1: GN R327</b>	<b>12</b>	<p>The development of—</p> <ul style="list-style-type: none"> <li>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or</li> <li>(ii) <b>infrastructure or structures with a physical footprint of 100 square metres or more;</b></li> </ul> <p>where such development occurs—</p> <ul style="list-style-type: none"> <li><b>a) within a watercourse;</b></li> <li>b) in front of a development setback; or</li> <li><b>c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse;</b></li> </ul> <p>—</p> <p>excluding—</p> <ul style="list-style-type: none"> <li>(aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</li> <li>(bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;</li> <li>(cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;</li> <li>(dd) where such development occurs within an urban area;</li> <li>(ee) where such development occurs within existing roads, road reserves or railway line reserves; or</li> <li>(ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6</li> </ul>

weeks of the commencement of development and where indigenous vegetation will not be cleared.



**Rivers**

Legend

- Erf
- Rivers
- Perennial

Scale: 1:9 028  
Date created: April 23, 2021  
Compiled with CapeFarmMapper

**Listing Notice 1: GN R327**

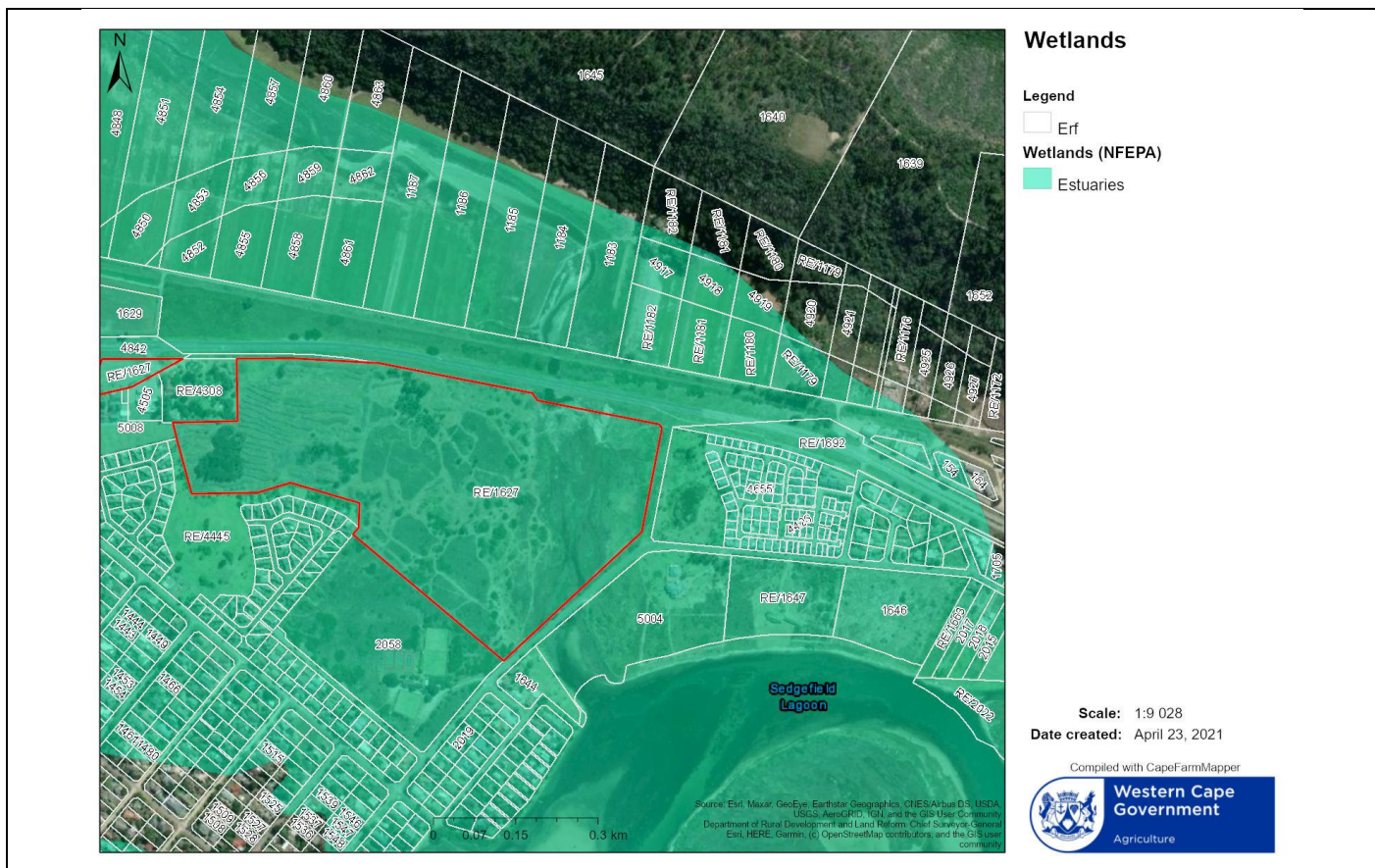
**19**

The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;

but excluding where such infilling, depositing, dredging, excavation, removal or moving—

- a) will occur behind a development setback;
- b) is for maintenance purposes undertaken in accordance with a maintenance management plan;
- c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;
- d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or
- e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.

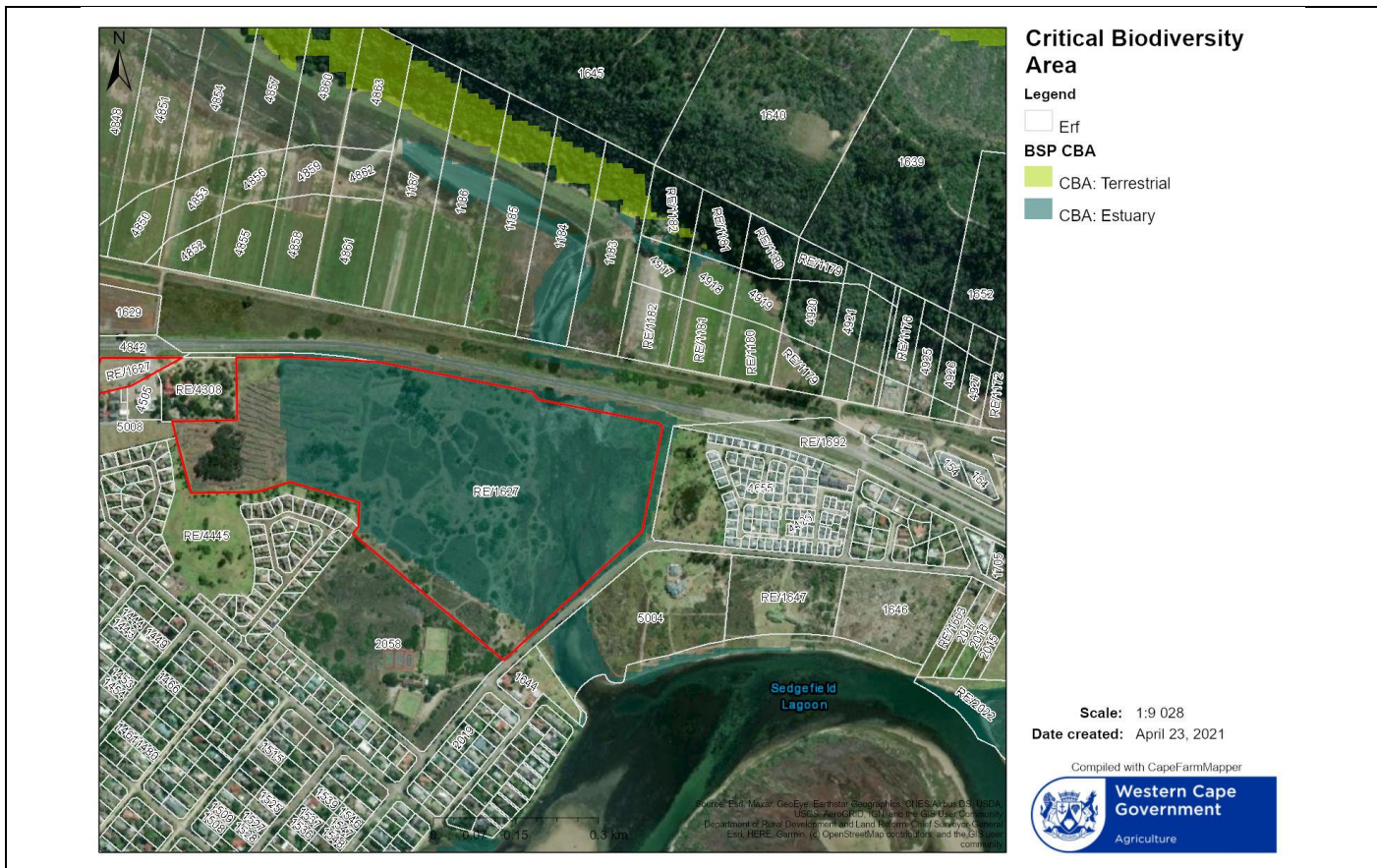




<p><b>Listing Notice 1: GN R327</b></p>	<p><b>27</b></p>	<p>The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for-</p> <p>(i) the undertaking of a linear activity; or                  (ii) maintenance purposes undertaken in accordance with a maintenance management plan.</p>
<p><b>Listing Notice 3: GN R324</b></p>	<p><b>4</b></p>	<p>The development of a road wider than 4 metres with a reserve less than 13,5 metres.</p> <p><b>a. Western Cape</b></p> <p>i. Areas zoned for use as public open space or equivalent zoning;</p> <p>ii. <b>Areas outside urban areas;</b></p> <p>(aa) <b>Areas containing indigenous vegetation;</b>                  (bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or</p> <p>i. Inside urban areas:</p> <p>(aa) Areas zoned for conservation use; or                  (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.</p>
<p><b>Listing Notice 3: GN R324</b></p>	<p><b>6</b></p>	<p>The development of resorts, lodges, hotels, tourism or hospitality facilities that sleeps 15 people or more.</p> <p><b>a. Western Cape</b></p> <p>i. Inside a protected area identified in terms of NEMPAA;</p>

		<p><b>ii. Outside urban areas;</b>  <b>(aa) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; or</b>  <b>(bb) Within 5km from national parks, world heritage sites, areas identified in terms of NEMPAA or from the core area of a biosphere reserve; -</b></p> <p>excluding the conversion of existing buildings where the development footprint will not be increased.</p>
<p><b>Listing Notice 3: GN R324</b></p>	<p><b>12</b></p>	<p>The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</p> <p><b>i. Western Cape</b></p> <p>i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</p> <p><b>ii. Within critical biodiversity areas identified in bioregional plans;</b></p> <p>iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;</p> <p>iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or</p> <p>v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.</p>





<p><b>Listing Notice 3: GN R324</b></p>	<p><b>14</b></p>	<p>The development of—</p> <ul style="list-style-type: none"> <li>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or</li> <li>(ii) infrastructure or structures with a physical footprint of 10 square metres or more;</li> </ul> <p>where such development occurs—</p> <ul style="list-style-type: none"> <li>(a) within a watercourse;</li> <li>(b) in front of a development setback; or</li> <li>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</li> </ul> <p>excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.</p> <p><b>a. Western Cape</b></p> <ul style="list-style-type: none"> <li>i. Outside urban areas:             <ul style="list-style-type: none"> <li>(aa) A protected area identified in terms of NEMPAA, excluding conservancies;</li> <li>(bb) National Protected Area Expansion Strategy Focus areas;</li> <li>(cc) World Heritage Sites;</li> <li>(dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</li> <li>(ee) Sites or areas listed in terms of an international convention;</li> </ul> </li> </ul>
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		<p>(ff) <b>Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</b></p> <p>(gg) Core areas in biosphere reserves; or</p> <p>(hh) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined.</p>
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## Identified Environmental Impacts as per Specialist

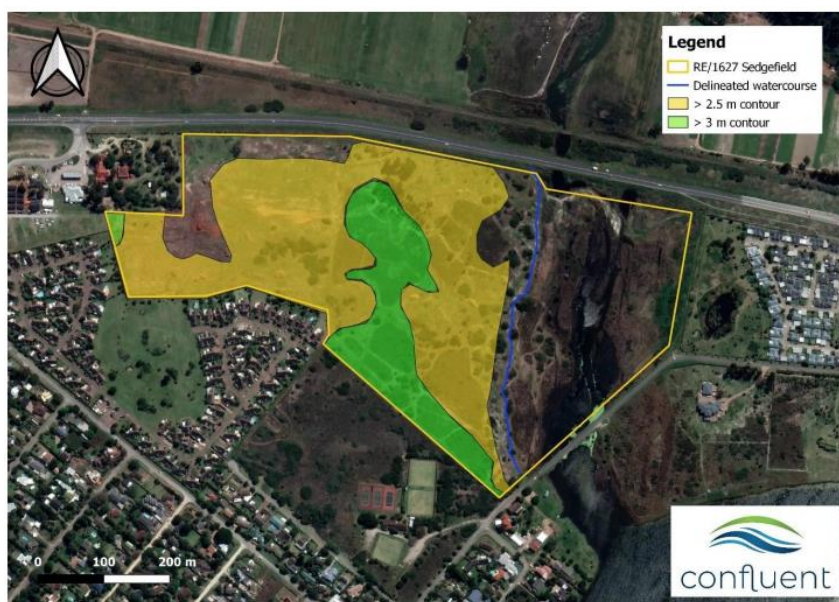
**An Ecological pre-feasibility study of Erf 1627 by Dr. TG Bornman (May 2006, CER Report No. C01/06) identified the following constraints on any future development of Erf 1627:**

1. The sensitive wetland areas have a high conservation value and must be protected.
2. The wetlands form an important riparian corridor and a vital link between Swartvlei Lake and Swartvlei Estuary and a suitable buffer around the corridor and wetlands must be maintained.
3. Any future development of properties below + 3 m should not be allowed and this contour is recommended as the lower limit for future development.

The specialist terms of reference were to identify and mitigate probable impacts on the receiving environment and assist in establishing a proposed site development plan taking into account all the negative environmental impacts and guiding the proposed SDP to ensure that the least impacted route is followed to protect the receiving environment.

**Aquatic assessment for proposed multi-use development on RE/1627, Sedgfield by Dr. J Dabrowski (July 2021), reviewed Dr Bormans report and found it a helpful; comparison of historic conditions at the site 15 years ago. The identified constraints on development are:**

1. Only a small portion of the site is above the 3-meter contour.
2. Approximately 11.4 hectares is above the 2.5-meter contour.





3. Most of the property is classified as a Critical Biodiversity Area: Estuary according to the Western Cape Biodiversity Spatial Plan (WCBSP, 2017).
4. The property is identified as a FEPA, which is a Freshwater Ecosystem Priority Area. FEPAs must remain in a good condition to manage and conserve freshwater ecosystems, and to protect water resources for human use.
5. The site contains a functional wetland ( $\pm 7.3$  ha) and is situated in the Estuarine Functional Zone (EFZ; below the 5-meter contour) of Swartvlei Estuary.
6. Dabrowski (2021) describes the site's environmental sensitivity to development in an easterly to westerly direction. In the East the site is wetland and sensitive to development, whilst the site becomes progressively less sensitive to the West where the site is modified grassland.



*Aquatic Specialist Report Figure 10*

7. While this is an aquatic specialist assessment, it is necessary to highlight the potential sensitivity of terrestrial habitat on RE/1627, especially to fragmentation. As one of the last remaining green spaces within Sedgfield, the property has existing and important habitat for a range of animals and plants and may provide important corridors of connectivity to other areas within Sedgfield.
8. An often-overlooked impact is the abundance of lights that accompany development. It is important that the entire buffer and wetland area remain free of lighting, and the development in general minimises the use of unnecessary lighting. This is to preserve natural circadian rhythms of wildlife and reduce unnatural interactions and behaviour such as increased predation pressure or insects accumulating pointlessly at lights.

**The Multi-use development of Erf RE1627 Sedgfield, Flood Management Study by Fraser Consulting Civil Engineers (March 2022) site sensitivities were identified as follow:**

1. The site is in the low-lying areas of Sedgfield and falls below the 5m contour.
2. The site has previously flooded in November 1996, March 2003, August 2006 & November 2007

**The terrestrial Biodiversity Environmental Sensitivity Report Remainder Erf 1627 Sedgfield by Mr B. Walton (September 2021) identified the following impacts on the terrestrial biodiversity:**

1. The study area is within an aquatic Critical Biodiversity Area
2. The proposed activity may be inconsistent with CBA management objectives.
3. The proposed activity will impact on species composition and vegetation structure of vegetation of Low to Moderate Terrestrial Biodiversity Sensitivity.

4. The impact will not elevate the ecosystem threat status of the remaining extent of Southern Cape Dune Fynbos.
5. The impact on Fynbos subtypes is unknown.
6. The impact on overall species and ecosystem diversity of the site is of low to medium intensity.
7. The impact on threat status of species of special concern is unknown based on the plant species observed.
8. Ecological services within and across the site may be impacted by the activity.
9. The activity may have a moderate impact on ecological processes and ESA functionality.
10. The proposed activity may reduce ecological connectivity at the surrounding areas.
11. The property is within a River Freshwater Ecosystem Priority Area.
12. The proposal may impact on the ecological integrity of remaining indigenous fynbos elements at the property.
13. Increased potential for stormwater erosion.

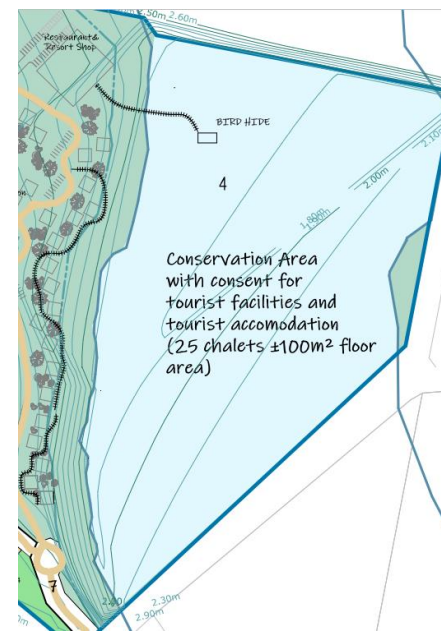
## Impacts and Proposed Mitigation Measures.

As described above all specialist reports and findings including mitigation measures determined the proposed SDP. The below table is a short summary of identified impacts and mitigation measures as per the appointed Specialist Reports. A detailed Impact Assessment will be assessed in the Draft Basic Assessment Report.

Environmental Impact	Proposed Mitigation
<p><b>Development can negatively impact the wetland on site, which is below the 20-year RI Flood line and is considered a high hazard zone.</b></p>	<p><b>As per the Aquatic Specialist report:</b></p> <p>The establishment of a 30-meter Buffer from the delineated edge of the wetland/ Estuarine area.</p> <p>This 30-meter buffer will be marked as a no-go during the construction and operational phase of the proposed development.</p> <p>It is recommended that infrastructure below the 2.5 m contour be reserved to roads, walkways, and structures that can withstand being fully inundated and do not impede floodwaters (are porous).</p> <p><b>As per the Flood Management Report:</b></p> <p>High hazard zones are where the depth or flow velocity restricts the ability to wade or gain vehicular access, or compromises the stability of structures such as dwellings or boundary walls. No development should be considered in a high hazard zone.</p> <p><b>As per the Botanical Assessment Report:</b></p> <p>It is recommended that the Perdespruit Wetland area and buffer be rezoned for Conservation use i.t.o. the municipal land use planning bylaw.</p> <p><b>As per the Town planning Report:</b></p> <p>The largest portion of the property, measuring about 12.5ha (almost 50% of the site) will be reserved for conservation purposes. This portion of land comprises the Perdespruit wetland, as delineated in the Aquatic Report, as well as a further 30m buffer area.</p>



**Development of the SDP taking Mitigation Measures into Account**



**Environmental Impact**

**Flooding of the Site**

**Proposed Mitigation**

**As per the Aquatic Specialist report:**

The largest area of the property outside of the watercourse is between the 2.5 and 3.0 m contour. It is recommended that any infrastructure in this area be constructed on a raised foundation to bring it above the 3 m contour. A suitable approach would be to construct buildings on stilts, platforms, or on elevated strip foundations. Buildings above the 3 m contour can take a more conventional approach but should nonetheless consider that rising sea level and increased frequency of severe climatic events due to climate change can increase the frequency and severity of flooding across the entire property.

In all areas, construction should strive to minimise the extent of impervious surfaces (e.g., paving and concrete) as this exacerbates the damage during heavy rainfall.

	<p>Reducing the amount of runoff from impervious surfaces also protects water resources and aquatic biota (e.g., fish and frogs) from pollutants present in runoff from roads etc.</p> <p><b>As per the Flood Management Report:</b></p> <p>Areas still available for residential development in Sedgefield are very limited. Even though erf RE1627 has areas that were previously flooded, we consider that it's topography, as described in this report, make it suitable for limited residential development, subject to adequate building requirements to be applied, i.e.:</p> <ul style="list-style-type: none"> <li>i. all floor areas of residential units to be raised to 3.6m amsl;</li> <li>ii. all power distribution structures to be installed above 3.6m amsl;</li> <li>iii. all manhole covers to underground services other than Stormwater run-off, to be raised to 3.1m amsl; and</li> <li>iv. excavation of a number of Stormwater detention ponds in open areas. The excavated material to be used as infill to localized low areas within the erf to raise ground levels to approximately 3.1m to 3.2m amsl.</li> </ul>
<p><b>Environmental Impact</b></p>	<p><b>Proposed Mitigation</b></p>
<p><b>Disturbance to Habitat and Habitat Fragmentation</b></p>	<p><b>As per the Aquatic Specialist report:</b></p> <p>The appointment of a general biodiversity specialist is recommended to provide guidance in terms of sensitive areas to be avoided, important corridors for the movement of animals on the property, and methods to mitigate any negative impacts associated with the development. The type of recommendations / guidelines envisaged are as follows:</p> <ul style="list-style-type: none"> <li>➤ Plant a dense, vegetated buffer of indigenous vegetation consisting of small trees and low shrubbery along existing / new walls and fence lines to provide habitat for small mammals and tortoises that are 'channelled' along these linear features.</li> <li>➤ Small strategic gaps in walls to facilitate the dispersal of wildlife would be recommended.</li> <li>➤ Active search and rescue for tortoises (especially in thickets) prior to, and during construction phase and retention in a temporary fenced area (must be large to reduce competition). They can be released when construction is finished.</li> <li>➤ Time construction activities outside of the spring and summer breeding season to reduce the destruction of nests (birds, tortoises, and animals).</li> </ul>

- Investigate patterns of movement of animals across the site and consider how modifying the site in terms of fencing and built infrastructure could expose them to greater risk (roads / predation) or exclusion.
- Identify areas of fynbos or thicket that may be of higher value than other areas from a biodiversity perspective to provide guidance on which of these should be retained. A mixture is envisaged to maintain sufficient diversity of habitat for the wildlife adapted to living on the property.

**As per the Botanical Assessment Report:**

- As sections of the property are generally sensitive the applicant must conduct activities carefully and reuse or relocate as much plant material as is practical prior to rehabilitation.
- An ECO must oversee the rescue and relocation of plant material and initial rehabilitation activities; and thereafter conduct follow up inspections.
- Prevent the spread of Invasive Alien Species from entering or dispersing from the property.
- It is recommended that the Perdespruit Wetland area and buffer be rezoned for Conservation use i.t.o. the municipal land use planning bylaw.

It is the opinion of the author that development may proceed over most of the transformed property and a set-aside area be maintained for conservation of the indigenous vegetation and diverse birdlife.

**As per the Town Planning Report:**

**Group Housing:**

An area measuring about 4,7ha is situated above the 3m MSL and is suitable for conventional residential development. A group housing site consisting of 46 Group housing units with communal open space and private roads is proposed. These units will be freehold and will be subject to a Homeowners Association and Design Guidelines.

The proposed open space allows for a buffer of about 10m around and through the security estate with smaller strips of open spaces connecting the estate with

surrounding open areas. These areas will be landscaped with dense indigenous vegetation consisting of small trees and low shrubbery to provide habitat for small mammals and tortoises that can be 'channelled' along with these linear features. Strategic gaps in the fence will further facilitate the dispersal of wildlife through development.

**Townhouses:**

The proposed townhouse property consists of smaller footprints placed in a garden setting with ponds and natural greenery and communal facilities.

**Conservation and Tourism**

The largest portion of the property, measuring about 12.5ha (almost 50% of the site) will be reserved for conservation purposes. This portion of land comprises the Perdespruit wetland, as delineated in the Aquatic Report, as well as a further 30m buffer area. Beyond the buffer area, an eco-resort is planned. Approximate 25 holiday units of 100m<sup>2</sup> footprints are proposed. The design of the units will be modern and will completely blend in with the surroundings. The units will be on stilts to ensure suitable floor levels and will be connected via boardwalks, as recommended in the Aquatic Study. Dedicated parking areas for the guest will be in placed in the least sensitive areas. The only development that is proposed in the wetland or buffer area is the creation of habitat for birds and the construction of a modest wooden boardwalk for walking or cycling which could incorporate a bird hide and interpretive information boards about the Perdespruit and estuarine habitat.





## Flood Lone Management

This report is based on a range of historical flood data, as detailed.

The alternative to using historical data would involve complex hydrological modelling, bathymetric surveys, bridge surveys, siltation modelling and other time consuming and expensive techniques. Such a study is typically done by Regional Authorities and not private Developers. We are of the opinion that such modelling would not significantly affect the conclusions reached as there is substantive historical data available.

The flood risks have been significantly reduced by the early mouth breaching policy. However, the flood lines are conservative and do not take this into account. Furthermore, the floor levels are recommended to be 3.6m amsl which is higher than the estimated 100-year RI flood lines. This allows a tolerance and for the possibilities of global warming. We therefore recommend that, subject to the restrictions outlined in Section 9, Development Possibilities, erf RE1627 is suitable for limited development.

## Botanical Assessment

It is the opinion of the author that development may proceed over most of the transformed property and a set-aside area be maintained for conservation of the indigenous vegetation and diverse birdlife.

## Stakeholder Engagement

The following Government Authorities, Organs of State and State Departments have been asked to provide comment on the BID

Identified Interested and Affected Party	Contact Person	Email
Department of Forestry Fisheries and Environment (DFFE)	[REDACTED]	[REDACTED]
Department of Environmental Affairs and Development Planning (DEA&DP)	[REDACTED]	[REDACTED]
SANParks	[REDACTED]	[REDACTED]
CapeNature	[REDACTED]	[REDACTED]
Knysna Municipality Environment	[REDACTED]	[REDACTED]
BGCMA	[REDACTED]	[REDACTED]
Department Agriculture	[REDACTED]	[REDACTED]

## NEMA Process to Proceed

The Competent Authority has been identified as the Department of Forestry Fisheries and the Environment (DFFE).

The procedures of a Basic Assessment Environmental Process, as per the NEMA EIA Regulations 2014, as amended are applicable for this development.

The following EIA process will be required:

- The requirement to conduct further specialist studies will be investigated after the PPP, to guide the Draft Basic Assessment Report.
- The Draft Basic Assessment Report (DBAR) including an Environmental Management Programme is to be submitted to all relevant State Departments, Organs of State, District and Local Municipalities, and the Registered Public Interested and Affected Parties for a commenting period of 30 days **after** the Environmental Impact Assessment Application has been submitted to the National Department of Forestry and Fisheries and Environment Affairs (DFFE)
- If no additional information is to be assessed after the DBAR has been circulated for comment; a Final Basic Assessment Report (FBAR) will be submitted to DFFE for final decision making.
- If additional information is to be assessed after the DBAR has been circulated for comment; an additional Public Participation Commenting Period must be undertaken – additional 30 days.
- Appendix 1 as per EIA Regulations GN R326 will be adhered to.