



## PRE – APPLICATION BASIC ASSESSMENT REPORT

For

### PROPOSED DEVELOPMENT ON ERF RE/1627, SEDGEFIELD, KNYSNA, WESTERN CAPE



|                            |                                                                                                     |
|----------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Prepared for:</b>       | Rodney Nel Management Services Proprietary Limited                                                  |
| <b>Prepared by:</b>        | Eco Route Environmental Consultancy (Janet Ebersohn - 2019/1286 and Justin Britton Cand. 2023/6648) |
| <b>Document reference:</b> | 2025.43.01 – Pre-application Basic Assessment Report – RE/1627                                      |
| <b>DFFE Reference:</b>     | To be obtained in application phase                                                                 |
| <b>Date:</b>               | 11/112025                                                                                           |
| <b>Submitted to:</b>       | Interested and Affected Parties including Organs of State and State Departments                     |

*“On 08 December 2014 the Minister of Environmental Affairs promulgated regulations in terms of Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), viz, the NEMA Environmental Impact Assessment (EIA) Regulations 2014, (GN R982, R983, R984 and R985 of 04 December 2014) as amended. The NEMA EIA Regulations, 2014 and listing notices, were subsequently amended on 07 April 2017 (refer to GN R324, R325, R327 of 07 April 2017) and is being referred to as NEMA EIA Regulations, 2014, as amended. The same referencing would apply to the listing notice containing the listed activities that would require Environmental Authorisation.*

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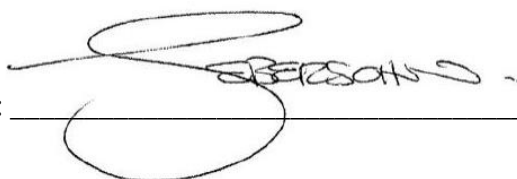
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## STATEMENT OF INDEPENDENCE

I, **Janet Ebersohn**, of Eco Route Environmental Consultancy, in terms of section 33 of the NEMA, 1998 (Act No. 107 of 1998), as amended, hereby declare that I provide services as an independent Environmental Assessment Practitioner (**EAPASA Reg: 2019/1286**) and receive remuneration for services rendered for undertaking tasks required in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment Regulations, 2014 (as amended). I have no financial or other vested interest in the project.

EAP SIGNATURE: \_\_\_\_\_



## ASSUMPTIONS & LIMITATIONS

This section provides a brief overview of specific assumptions and limitations having an impact on this environmental application process:

**To be completed in Application phase after the first round of Public Participation**

DRAFT

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## ATTACHMENTS

Table 1: Applicable Basic Assessment Report Attachments

| Appendix    | Description                                                                                                        |
|-------------|--------------------------------------------------------------------------------------------------------------------|
| Appendix A  | Locality Map of RE/1627                                                                                            |
| Appendix B  | Preferred layout plan                                                                                              |
| Appendix C  | Environmental Consideration maps                                                                                   |
| Appendix D1 | Terrestrial Biodiversity / Plant Species specialist assessment & Faunal Species specialist assessment              |
| Appendix D2 | Flood Line Study                                                                                                   |
| Appendix D3 | Aquatic Biodiversity specialist assessment                                                                         |
| Appendix D4 | Engineering Services Report                                                                                        |
| Appendix D5 | Electrical Bulk Services                                                                                           |
| Appendix D6 | Town Planning Report                                                                                               |
| Appendix E  | 2025.09.08 – Pre-Application Site sensitivity verification report for RE/1627 to be completed in application phase |
| Appendix F  | Pre application EMPr RE/1627                                                                                       |
| Appendix G1 | Screening Tool Report                                                                                              |
| Appendix H  | J Ebersohn CV 2025                                                                                                 |
| Appendix H1 | CV Justin Britton April 2025                                                                                       |

| Annexure   | Description                           |
|------------|---------------------------------------|
| Annexure 1 | Alien Invasive Plan                   |
| Annexure 2 | Oscae Permit                          |
| Annexure 3 | Background Information Document (BID) |
| Annexure 4 | Newspaper advert for BID              |

## SCOPE OF ASSESSMENT AND CONTENT OF BASIC ASSESSMENT REPORT

Appendix 1 of Regulation 982 of the 2014 EIA Regulations describes the contents required to complete a basic assessment report. The below table indicates how Appendix 1 requirements were incorporated into the basic assessment report:

| Scope of assessment and content of basic assessment reports                                                                                                                                                                                                                                                                                                                                                                                 | Index                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| (1) A basic assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include -                                                                                                                                                                                                                                                          |                                                                         |
| (a) Details of –<br>(i) The EAP who prepared the report; and<br>(ii) The expertise of the EAP, including curriculum vitae.                                                                                                                                                                                                                                                                                                                  | <b>Annexure A.</b>                                                      |
| (b) The location of the activity, including –<br>(i) The 21 digit surveyor General Code of each cadastral land parcel.<br>(ii) Where available the physical address and farm name.<br>(iii) Where the required information items (i) and (ii) is not available, the co-ordinates of the boundary of the property.                                                                                                                           | (i) <b>Section B</b><br>(ii) <b>Section B</b><br>(iii) <b>Section B</b> |
| (c) a plan which locates the proposed activity or activities applied for as well as the associated structures and infrastructure at an appropriate scale, or, if it is<br>(i) A linear Activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or<br>(ii) On land where the property has not been defined, the coordinates within which the activity is to be undertaken. | <b>Section B</b><br>(i) N/A<br>(ii) N/A                                 |
| (d) a description of the scope of the proposed activity, including –<br>(i) All listed and specified activities triggered and being applied for; and<br>(ii) A description of the activities to be undertaken including associated structures and infrastructure                                                                                                                                                                            | <b>Section C</b><br>(i) <b>Section C</b><br>(ii) <b>Section C</b>       |
| (e) A description of the policy and legislative context within which the development is proposed, including –<br>(i) An identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and have been considered in preparation of the report; and                                                                            | <b>Section D</b><br>(i) <b>Section D</b>                                |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (ii) How the proposed activity complies with and responds to the legislation and policy context, plans, guidelines, tools frameworks and instruments.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (ii) <b>Section D</b>                                                                                                                                                                                                                                                                                                                        |
| (f) A motivation for the need and desirability for the proposed development, including the need and desirability of the activity in the context of the preferred location.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Section E</b>                                                                                                                                                                                                                                                                                                                             |
| (g) A motivation for the preferred site, activity and technology alternative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Section F</b>                                                                                                                                                                                                                                                                                                                             |
| <p>(h) A full description of the process followed to reach the proposed preferred alternative within the site including:</p> <ul style="list-style-type: none"> <li>(i) Details of all alternatives considered.</li> <li>(ii) Details of the public participation process undertaken in terms of regulation 41 of the regulations, including copies and supporting documents and inputs.</li> <li>(iii) A Summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them.</li> <li>(iv) The environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects.</li> <li>(v) The impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts – <ul style="list-style-type: none"> <li>(aa) can be reversed</li> <li>(bb) may cause irreplaceable loss of resources; and</li> <li>(cc) can be avoided, managed or mitigated.</li> </ul> </li> <li>(vi) The methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks associated with the alternatives.</li> <li>(vii) Positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects.</li> <li>(viii) The possible mitigation measures that could be applied and level residual risk</li> <li>(ix) The outcome of the site selection matrix</li> <li>(x) If no alternatives, including alternative locations for the activity were investigated, the motivation for not considering such; and</li> </ul> | <p><b>Section F</b><br/> <b>Section G</b> to be completed in Draft and Final BAR.</p> <p><b>Section G</b> to be completed in Draft and Final BAR.</p> <p><b>Section H</b></p> <p><b>Section H</b></p> <p><b>Section H</b></p> <p><b>Section H</b></p> <p><b>Section H</b></p> <p><b>Section H</b> to be included in Draft and Final BAR.</p> |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| (xi) A concluding statement indicating the preferred alternatives, including the preferred location of the activity.                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <p><b>Section H</b> to be included in Draft and Final BAR.</p> <p><b>Section I</b> to be included in Draft and Final BAR.</p> |
| (i) A full description of the process undertaken to identify, assess and rank the impacts the activity will impose on the preferred location through the life of the activity, including - A description of all environmental issues and risks that were identified during the basic assessment process; and An assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures                                                                   | <b>Section H (7)</b>                                                                                                          |
| (j) An assessment of each identified potentially significant impact and risk, including - Cumulative impacts; The nature, significance and consequences of the impact and risk; The extent and duration of the impact and risk; The probability of the impact and risk occurring; The degree to which the impact and risk can be reversed; The degree to which the impact and risk may cause irreplaceable loss of resources; and The degree to which the impact and risk can be mitigated                                                                               | <b>Section H (7)</b>                                                                                                          |
| (k) Where applicable, a summary of the findings and impact management measures identified in any specialist report complying with Appendix 6 to these Regulations and an indication as to how these findings and recommendations have been included in the final assessment report.                                                                                                                                                                                                                                                                                      | <b>Section H (7)</b>                                                                                                          |
| (l) An environmental impact statement which contains: <ul style="list-style-type: none"> <li>• A summary of the key findings of the environmental impact assessment;</li> <li>• A map at an appropriate scale which superimposes the proposed activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers; and</li> <li>• A summary of the positive and negative impacts and risks of the proposed activity and identified alternatives</li> </ul> | <p><b>Section H and I, Appendix B</b></p> <p><b>Appendix D</b></p> <p><b>Section F and H</b></p>                              |
| (m) Based on the assessment, and where applicable, impact management measures from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr.                                                                                                                                                                                                                                                                                                                         | To be completed in Draft and Final BAR                                                                                        |
| (n) Any aspects which were conditional to the findings of the assessment either by the EAP or specialist which are to be included as conditions of authorisation.                                                                                                                                                                                                                                                                                                                                                                                                        | To be completed in Draft and Final BAR                                                                                        |
| (o) A description of assumptions, uncertainties and gaps in knowledge which relate to the assessment and mitigation measures proposed                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Section B</b>                                                                                                              |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| (p) A reasoned opinion as to whether the proposed activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation.                                                                                                                                                                                                                                             | To be completed in Draft and Final BAR                                                                    |
| (q) Where the proposed activity does not include operational aspects, the period for which the environmental authorisation is required, the date on which the activity will be concluded and the post construction monitoring requirements finalised.                                                                                                                                                                                                               | To be completed in Draft and Final BAR                                                                    |
| (r) An undertaking under oath or affirmation by the EAP in relation to: The correctness of the information provided in the reports; The inclusion of comments and inputs from stakeholders and I&APs; The inclusion of inputs and recommendations from the specialist reports where relevant; and Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties | To be included on submission of Draft BAR                                                                 |
| (s) Where applicable, details of any financial provisions for the rehabilitation, closure and ongoing post decommissioning management of negative environmental impacts                                                                                                                                                                                                                                                                                             | This environmental assessment does not include application for decommissioning and closure of activities. |
| (t) Any specific information that may be required by the competent authority.                                                                                                                                                                                                                                                                                                                                                                                       | To be completed in Draft and Final BAR                                                                    |
| (u) Any other matters required in terms of section 24(4)(a) and (b) of the Act.                                                                                                                                                                                                                                                                                                                                                                                     | Refer to report below in entirety.                                                                        |

## SECTION A – ADMINISTRATIVE DETAILS

### Applicant details:

|                                                                    |                                                        |
|--------------------------------------------------------------------|--------------------------------------------------------|
| Title                                                              | Mr                                                     |
| Name of the Applicant                                              | Clifford                                               |
| Surname of the Applicant                                           | Elion                                                  |
| Name of contact person for applicant (name and surname) (if other) | Clifford Elion                                         |
| Company/ Trading name (if any)                                     | Rodney Nel Management Services Proprietary Limited     |
| Company Registration Number                                        | 1988/004020/07                                         |
| Physical address                                                   | Office 2 Mosaic Village, Paul Kruger Street Sedgefield |
| Postal address                                                     | PO Box 499 Sedgefield                                  |
| Postal code                                                        | 6753                                                   |
| Cell phone                                                         | 0826789900                                             |
| E-mail                                                             | cliffprop@gamil.com                                    |

### Landowner details:

|                          |               |
|--------------------------|---------------|
| Name of the Landowner    | Same as above |
| Surname of the Landowner |               |
| Postal address           |               |
| Postal code              |               |
| Telephone                |               |
| Cell phone               |               |
| E-mail                   |               |

### Provincial Authority details:

|                                                                    |                                                                           |
|--------------------------------------------------------------------|---------------------------------------------------------------------------|
| Provincial Environmental Authority:                                | Western Cape Department of Environmental Affairs and Development Planning |
| Name of contact person in Environmental Section (name and surname) | Danie Swanepoel                                                           |
| Postal address                                                     | 4th Floor, York Park Building, 93 York Street,                            |
| Postal code                                                        | 6529                                                                      |
| Telephone                                                          | 0448142002                                                                |
| Cell phone                                                         | -                                                                         |
| E-mail                                                             | Danie.Swanepoel@westerncape.gov.za                                        |

### Local Municipal details:

|                                                                    |                     |
|--------------------------------------------------------------------|---------------------|
| Municipality                                                       | Knysna Municipality |
| Name of contact person in Environmental Section (name and surname) | Kate Southey        |

|                |                                                                  |
|----------------|------------------------------------------------------------------|
| Postal address | P O Box 21. Knysna                                               |
| Postal code    | 6570                                                             |
| Telephone      | +27 (0)44 302 6300                                               |
| Cell phone     | 0609986940                                                       |
| E-mail:        | <a href="mailto:ksouthy@knysna.gov.za">ksouthy@knysna.gov.za</a> |

**Environmental Assessment Practitioner details:**

|                                                        |                                                                                                                                                                                                    |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Company of Environmental Assessment Practitioner (EAP) | Eco Route                                                                                                                                                                                          |
| EAP name and surname                                   | Eco Route Environmental Consultancy (Janet Ebersohn - 2019/1286 and Justin Brittion Cand. 2023/6648)                                                                                               |
| EAP Qualifications and Professional affiliations       | Janet Ebersohn – Bsc. Hons Environmental Management _EAP<br>Justin Brittion – MSc. Environmental Science – Can. EAPASA                                                                             |
| Physical address                                       | 6 Parakiet Road, Sedgefield, Western Cape                                                                                                                                                          |
| Postal address                                         | PO BOX 1252 Sedgefield                                                                                                                                                                             |
| Postal code                                            | 6573                                                                                                                                                                                               |
| Telephone                                              | -                                                                                                                                                                                                  |
| Cell phone                                             | 082 557 7122 (Janet) / 081 208 2170 (Justin)                                                                                                                                                       |
| E-mail                                                 | <a href="mailto:janet@ecoroute.co.za">janet@ecoroute.co.za</a> / <a href="mailto:justin@ecoroute.co.za">justin@ecoroute.co.za</a> / <a href="mailto:admin@ecoroute.co.za">admin@ecoroute.co.za</a> |

## SECTION B – DESCRIPTIVE DETAILS

### 1. LOCATION DESCRIPTION

The property known as Remainder of Erf 1627, Sedgefield is situated on The Island in the coastal town of Sedgefield, within the Knysna Local Municipality, Western Cape. The site is located immediately west of the Sedgefield central area, bordered by the Swartvlei Estuary system to the north and surrounded by a mosaic of residential and natural areas. The site falls within proximity to the Swartvlei, Hoekraal River, and Myoli Beach, with the Protected Natural Dune Fynbos area lying to the south. Access is primarily via local roads that connect to the N2 national route situated to the east of the property.

The entire property, like most of the low-lying areas in Sedgefield, is located within the Estuarine Functional Zone (EFZ; below the 5m contour) of Swartvlei Estuary. According to Dabrowski (2021), 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, totaling 57 % above the 2.5m amsl contour.

The undeveloped property has been used for agricultural purposes as early as 1936 based on aerial imagery, and was cleared of vegetation. Thus the receiving environment is currently mostly transformed and with successive invasions by Invasive Alien Species has caused degradation of the fynbos ecosystem.

Based on site surveying the study area contains plant species representative of Dune Fynbos and Wetland ecosystems

The site is currently vacant and the vegetation of the site is complex and comprised of multiple distinct types which are influenced by aquatic features, historical agriculture, and alien invasion. The latter was dominated by Port Jackson (*Acacia saligna*) 40%, Myrtle (*Leptospermum laevigatum*) 30%, Rooikrans (*Acacia cyclops*) 20% and Inkberry (*Cestrum laevigatum*) 10% (Approximate proportions provided by landowner). The site has recently been cleared of extensive stands of alien vegetation and very little remains thanks to the efforts of the landowner.

RE/1627 is situated approximately 137 meters from the Garden Route National Park of which SANParks are the custodians.

Approximately 90% of RE/1627 falls within a CBA Aquatic Area and the site is classified as a greenfield site.

|                   |                       |
|-------------------|-----------------------|
| <b>SG Region:</b> | KNYSNA                |
| <b>Erf Nr:</b>    | RE/1627               |
| <b>Area (Ha):</b> | 26.51                 |
| <b>SG Code:</b>   | C03900100000162700000 |



Figure 1: Locality Map of Remainder of Erf 1627

| FEATURE           | LATITUDE (S) |     |        | LONGITUDE (E) |     |        |
|-------------------|--------------|-----|--------|---------------|-----|--------|
|                   | DEG          | MIN | SEC    | DEG           | MIN | SEC    |
| Northern Boundary | 34°          | 00' | 35.00" | 22°           | 47' | 10.75" |
| Eastern Boundary  | 34°          | 00' | 34.94" | 22°           | 47' | 25.38" |
| Southern Boundary | 34°          | 00' | 51.75" | 22°           | 47' | 15.32" |
| Western Boundary  | 34°          | 00' | 40.89" | 22°           | 46' | 52.99" |

## 2. PROPERTY BACKGROUND INFORMATION

The property has undergone several stages of planning, during which the proposed development has evolved considerably in response to various inputs and considerations. This section aims to summarise the background and key developments leading up to the current proposal. The details should be read chronologically, with only the most recent information taken as applicable. This section is included solely to ensure transparency for both Interested and Affected Parties (I&APs) and for the Competent Authority.

- 2010 – Initial Town Planning Input (Marike Vreken)

The initial town planning considerations for the property was undertaken by Marike Vreken. These early reports confirmed the strategic intention for the property to transition from its previous agricultural status to urban township development. At that time (according to the Knysna Spatial Development Framework – SDF of 2008), the property was included in the urban edge.

- 2019 – Alien Vegetation Control and Outeniqua Sensitive Coastal Area Extension (OSCAE) permit

The property was originally heavily infested with alien invasive vegetation species. Google Earth Pro imagery shows that large sections of the property were affected by these infestations (Figure 2).



Figure 2: Google Earth Pro image (2018) indicating alien infestation on RE/1627

In 2019, an alien invasive vegetation species control plan was developed to control the identified species on the property. The Invasive Alien Control Plan (Annexure 1) recorded that species such as Port Jackson, Myrtle, Rooikrans, and Inkberry covered large portions of the site, a situation that had developed since the 1980's due to historic abandonment of agricultural fields. The execution of the control plan was done under authorisation from the Knysna Municipality by means of an OSCAE permit (Annexure 2). The OSCAE Permit laid out conditions for phased clearing and rehabilitation measures to restore portions of the site to its original dune fynbos system. This process was an important compliance step to ensure the site was properly prepared for any future development proposals. By 2020 most of the alien invasive vegetation clearing has commenced (Figure 3).



Figure 3: Google Earth Pro image (2020) indicating alien clearing progress on RE/1627

## Site Sensitivities and detailed approach for the Proposed Development:

### Site Sensitivities:

The National Based Screening Tool is 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.

Based on the selected Application Category: Agriculture\_Forestry\_Fisheries|Crop Production, the screening tool identified specialist assessments required to inform the BAR.

The screening tool identified the following 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                     |                  |                    |                 |

| 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                                                 |

- 2021 – Aquatic Sensitivity Verification and Land Surveys

In 2021, Dr. Jackie Dabrowski from Confluent Environmental undertook the first updated Aquatic Specialist Assessment and generated a report (APPENDIX D3). This study built on the 2006 Bornmann pre-feasibility assessment and confirmed that the Perdespruit watercourse, which crosses the eastern extent of the site, functions as an arm of the Swartvlei Estuary and falls entirely within the Estuarine Functional Zone (EFZ). The report delineated the wetland boundary and recommended a minimum 30 m buffer to safeguard sensitive estuarine habitat and hydrophytic vegetation (Figure 4).



Figure 4: Synthesis of sensitive aquatic habitats and relevant surveyed contours (Confluent Environmental, 2021)

Topographical surveys confirmed that the site is generally low-lying, with elevations ranging between 2.4 m and 3.5 m above mean sea level (amsl) (Figure 5).

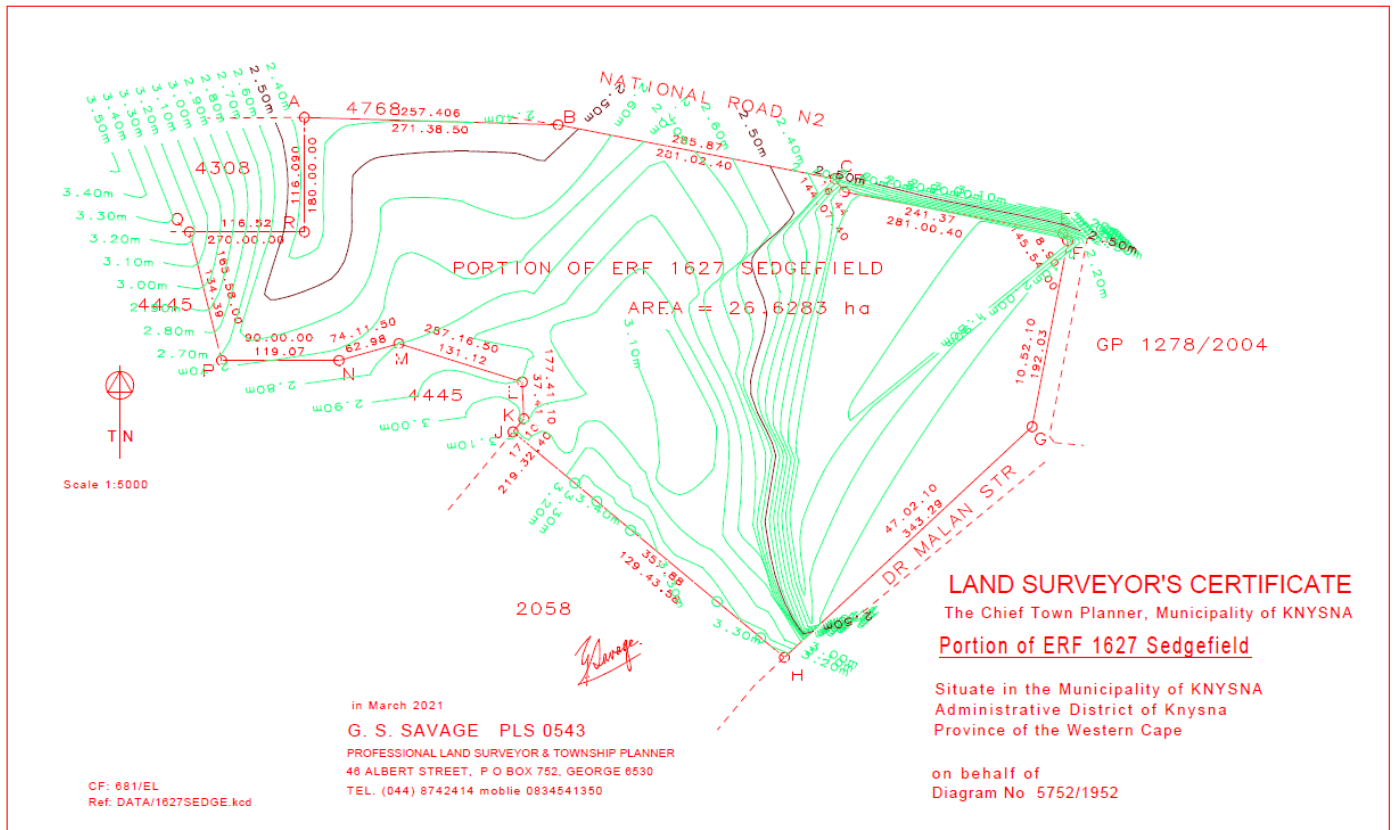


Figure 5: Land Surveyor's Certificate (March 2021)

The findings in the draft specialist reports resulted in the SDP being amended to ensure less impact on the receiving environment.

As per the latest aquatic report was updated in March 2025 to reflect:

Three options have been proposed for development at the site and are summarised in Table 1. The accompanying layout for each option is provided in Figure 6, Figure 7, and Figure 8. In each of the three SDPs the Perdespruit is indicated as a wetland area along with a 30m buffer area, both of which were determined and delineated as part of the first version of this aquatic assessment in 2021. For the purposes of this assessment only Plan 7 and Plan 10 will be assessed because Plan 4 has already been rejected due to excessive development in the wetland and adjacent conservation area. The layout is still included here to provide the reader with some perspective on the evolution of the SDP.

Table 1. Comparison of development zone areas for each of three alternative SDPs proposed for RE/1627, Sedgefield.

| Development Zones                                                                                                         | Plan 4<br>Rejected Alternative                                       | Plan 7<br>Alternative | Plan 10<br>Preferred |
|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------------------|----------------------|
| <b>Business Zone 1</b><br>Tourist facility, restaurants, food markets                                                     | 1.16 ha                                                              | -                     | -                    |
| <b>General Residential Zone II</b><br>Semi-detached townhouses                                                            | 3.91 ha<br>54 units                                                  | -                     | -                    |
| <b>General Residential Zone 1</b><br>Group housing                                                                        | 4.72 ha<br>46 units                                                  | 3.1 ha<br>61 units    | 3.65 ha<br>70 units  |
| <b>Agricultural Zone 2</b><br>Smallholding for intensive agriculture /<br>horticulture and renewable energy<br>structures | 3.12 ha                                                              | 6.4 ha                | -                    |
| <b>Transport Zone 3</b><br>Internal roads and parking                                                                     | 1.14 ha                                                              | 1 ha                  | 1.17 ha              |
| <b>Private Open Space Zone II</b><br>Tourist and recreation, restaurants and food<br>market                               | -                                                                    | 1.4 ha                | 5.43 ha              |
| <b>Open Space Zone III</b><br>Conservation area including Perdespruit                                                     | 12.58 ha<br>Accommodation, tourism node,<br>boardwalks and bird hide | 14.7 ha               | 16.34 ha             |

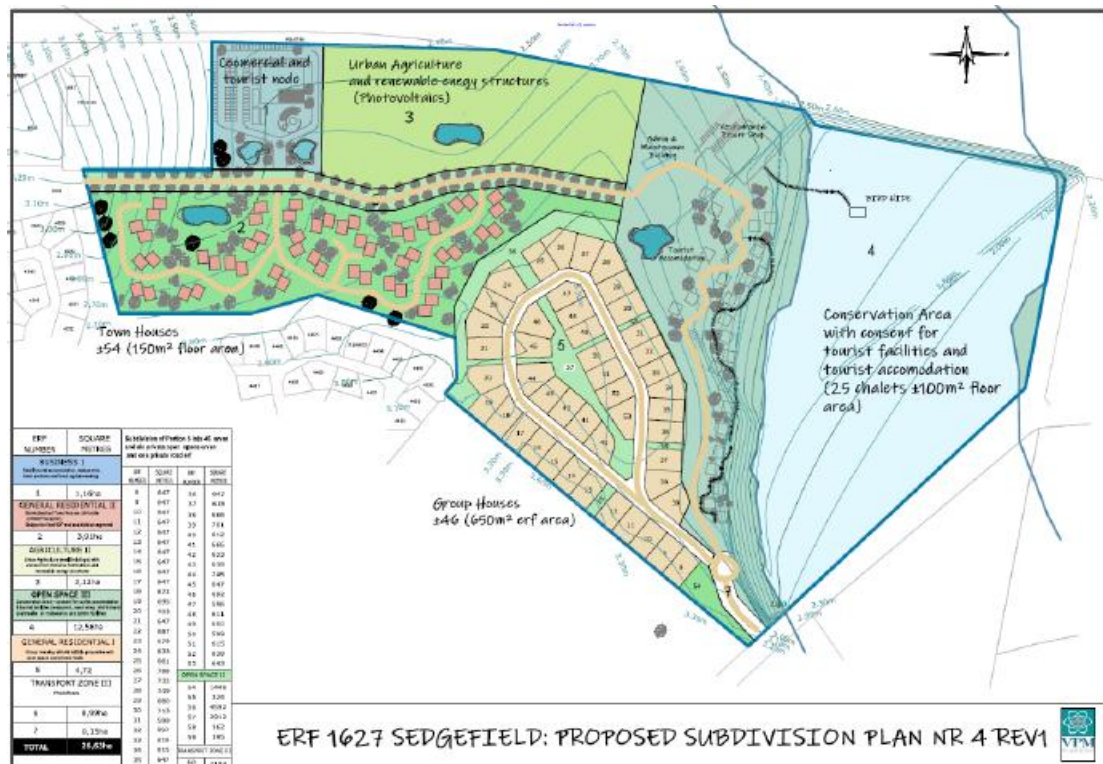


Figure 6: Plan 4 Alternative Site Development Plan

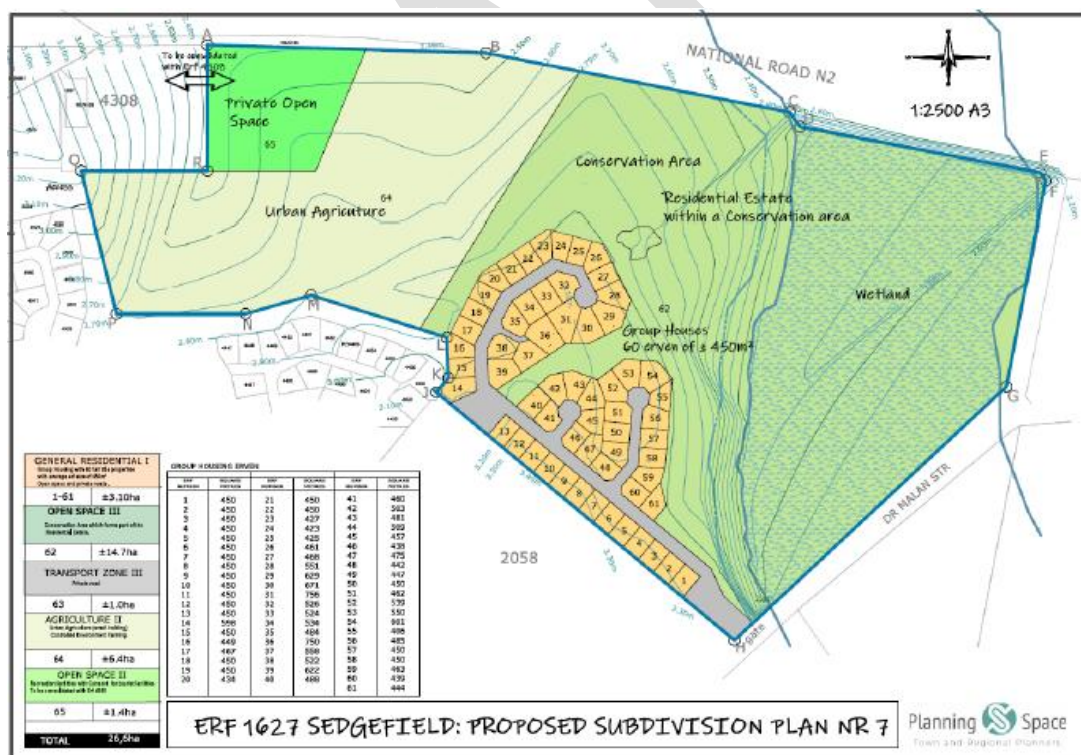
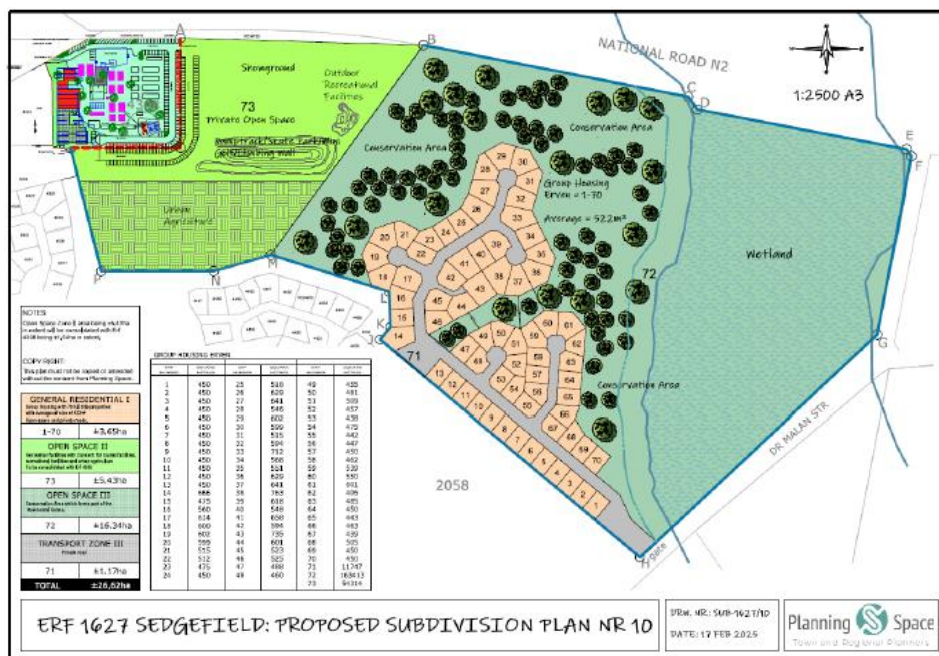


Figure 7: Plan 7 Alternative Site Development Plan



- **Terrestrial Biodiversity Specialist Assessment by Benjamin Wlaton from Cape Vegetation Sensitivity Surveys**

Please refer to the Terrestrial Biodiversity Specialist report as APPENDIX D1

Three broad habitats are depicted in Figure 9 below. Heavily degraded Fynbos habitat covered in *Pinus pinaster* and various other woody plants; Fynbos habitat in the middle and the Perdespruit at the eastern extent of the property with terrestrial and non-terrestrial vegetation within the Estuarine Functional Zone.



Figure 10 below show the three broad habitats during 2023. The heavily degraded Fynbos habitat at west is now transformed from infestations of invasive plants and clearing of woody vegetation. The middle section is still suitable Fynbos habitat but is partly degraded with distinct patches of Fynbos vegetation. The Perdespruit Wetland area at the eastern extent of the property shows flushing of the ecosystem by recent rainfall events.



Figure 10: showing three board habitats at the property during 2023

### Sensitivity Map and Assessment of impact

Figure 11 indicates the sensitivity map of the property. The proposed development will impact on a section of transformed or disturbed and degraded mosaic of exotic ruderal and invasive species, and Dune Fynbos elements of Low to Medium Terrestrial Biodiversity Environmental Sensitivity. To summarize, the vegetation at the receiving environment is mostly secondary in nature following transformative landuse and successive infestations of invasive plants like Rooikrans. The dominant plants in vegetated areas are common indigenous plants like *Anthospermum paniculatum*; *Dischisma ciliatum*; *Ehrharta villosa* var. *villosa*; *Geranium incanum*; *Helichrysum* spp.; *Metalasia muricata*; *Passerina corymbosa*; *Pentameris barbata*; *Salvia aurea*; *Searsia* spp.; *Trachyandra ciliata* and scattered individual indigenous tree species.



Figure11: Showing the sensitivity map of the property

- 2022 – Town Planning (Lizemarie), Engineering Scoping (Alistair Fraser), and First Round Public Participation

In 2022, formal town planning efforts advanced under Lizemarie (Planning Space), who prepared a draft town planning report (APPENDIX D5). This report proposed a multi-use development model, including General Residential I (Group Housing), General Residential II (Duplex Sectional Title), Business Zone 1 for local craft retail and food markets, Open Space III for conservation areas, and Agriculture II to support sustainable agrivoltaic operations. This report also included a proposed project plan referred to then as (Plan Nr 4 Rev 1).

The town planning report cannot be updated currently as the proposed new Municipal SDF has not yet been approved. This report will be updated to reflect the status of the SDF in the application phase.

- Alistair Fraser (Fraser Engineers) undertook civil engineering scoping, including a flood management study

Simultaneously, Alistair Fraser (Fraser Engineers) undertook civil engineering scoping, including a flood management study (APPENDIX D2 & D4). These studies determined that the 100-year and the 50 year Flood management study.

In Figure 12 pink areas indicate areas above 3.1 m.a.m.s.l. (1:100 year RI) and areas in orange are above 2.8 m.a.m.s.l. (1:50 year RI). Yellow areas are lower lying and most frequently flooded at 2.5 m.a.m.s.l. (1:20 year RI).

To mitigate the flood risk to residential dwellings, the flood management study recommends that floor levels and any power distribution structures be raised to 3.6m amsl as a minimum, as this should accommodate the 100 year RI flood level. All manhole covers to underground services other than stormwater runoff be raised to 3.1m amsl. The report recommends that earthfill is cut to create artificial wetlands as water features and placed between the 3.0 and 3.1m contours.

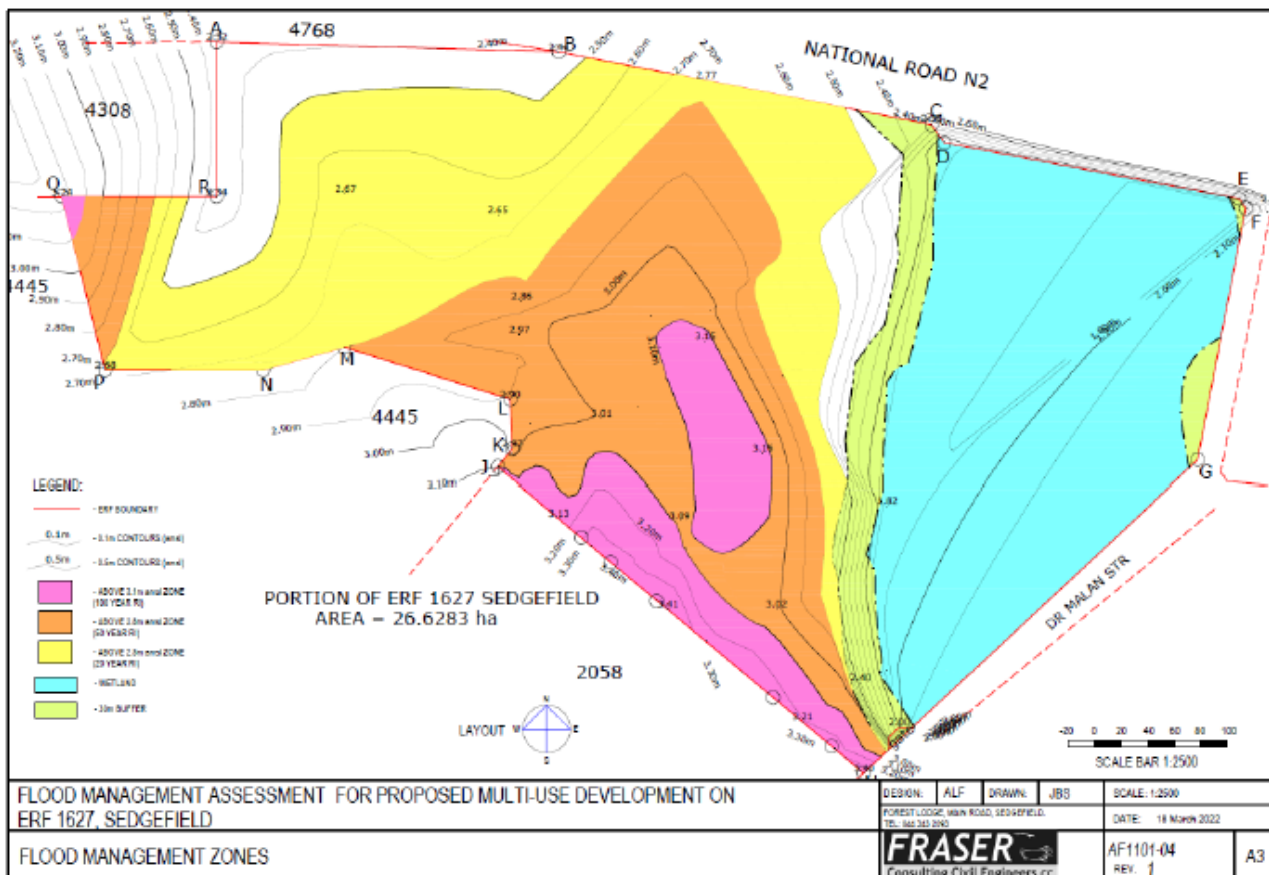


Figure 12: Flood management Assessment indicating areas prone to flooding during different rainfall interval periods

- **Water supply, stormwater and wastewater**

Potable water supply has been confirmed by the Knysna Municipality via the existing pipeline which runs along Dr Malan Street.

According to the engineer (pers. comm. A. Fraser 2/05/24) no pipes will be installed for stormwater management across the site due to the high infiltration rates expected from soil at the site. Grassed swales adjacent to roads will retain stormwater during rainfall events. Ponds indicated on the SDP layouts are not intended to function in the management of stormwater, but rather as artificial wetlands following excavation of material required for infilling to raise floor levels of residential dwellings.

The proposed sewerage layout plan for the Preferred Layout is provided in Appendix 1 (Tuiniqua Consulting Engineers). Sewer will gravitate from each stand to a sump with a pump from where it will be pumped to pump station 1 (PS1). From there, sewage will be pumped to the municipal ring main on the causeway. The pump in PS1 will have a float switch to activate the pump on regular intervals during the day. These intervals depend on the inflow and will be shorter during peak hours than for the rest of the day.

Pump stations sumps should have a 48-hour capacity to give some time to replace or repair the pumps (if maintenance or repairs are necessary) or during power outages. The sump is not a conservancy tank

- **Public Participation**

A Background Information Document (BID) (Annexure 3) and newspaper adverts (Annexure 4) were circulated to notify interested and affected parties. The Public Participation Process (PPP) commenced at the same time.

## **Detailed Approach for the proposed development**

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

## **SECTION C – RECEIVING ENVIRONMENTAL CONSIDERATIONS**

This section presents the available environmental data alongside specialist confirmations to assess the current state of the receiving environment. It considers historical classifications and identifications, integrating ground-truthing information to provide context for the present conditions. This approach is necessary because desktop data may not always align with the actual findings on-site.

### **1. VEGETATION**

According to the National Vegetation Map of South Africa (SANBI, 2018) (Figure 13) the expected vegetation type on the property would be Sothern Cape Dune Fynbos with a Threatened Ecosystem of least concerned.



Figure 13: SANBI Original Ecosystem Status including Southern Cape Dune Fynbos

As per the Terrestrial Biodiversity report attached as Appendix D1

Southern Cape Dune Fynbos is similar in vegetation patterning to Goukamma Dune Thicket and colonize coastal dune cordons and flats as in Sedgefield. According to the Vegetation Map of South Africa the vegetation unit is characterized by sclerophyllous shrubs and restioids (reeds). Exclusion of natural fire cycle intervals has enabled indigenous woody elements to advance into Dune Fynbos as well as invasive *Acacia cyclops* (Rooikrans) and *Acacia saligna* (Port Jackson Willow). The invasive plant species allow for further ingress of thicket vegetation which form bushclumps and displace Dune Fynbos elements in certain instances. The bushclump thickets are not species rich with *Pterocelastrus tricuspidatus*, *Rhus lucida*, *Sideroxylon inerme* and *Tarchonanthus littoralis* as the dominant species.”

The composite fine-scale Vegetation Map for the Garden Route5 delineated broad habitat types with associated vegetation variants, here as: Sedgefield Coastal Grassland over most of the property; and dissected by the Perdespruit mapped as Wilderness Estuary with Sedgefield Thicket Sandplain Fynbos at the eastern extent of the property; broadly corresponding with the baseline habitats occurring on site (see Fig. 14); and in this instance depicting the habitat type as Grassy Fynbos.

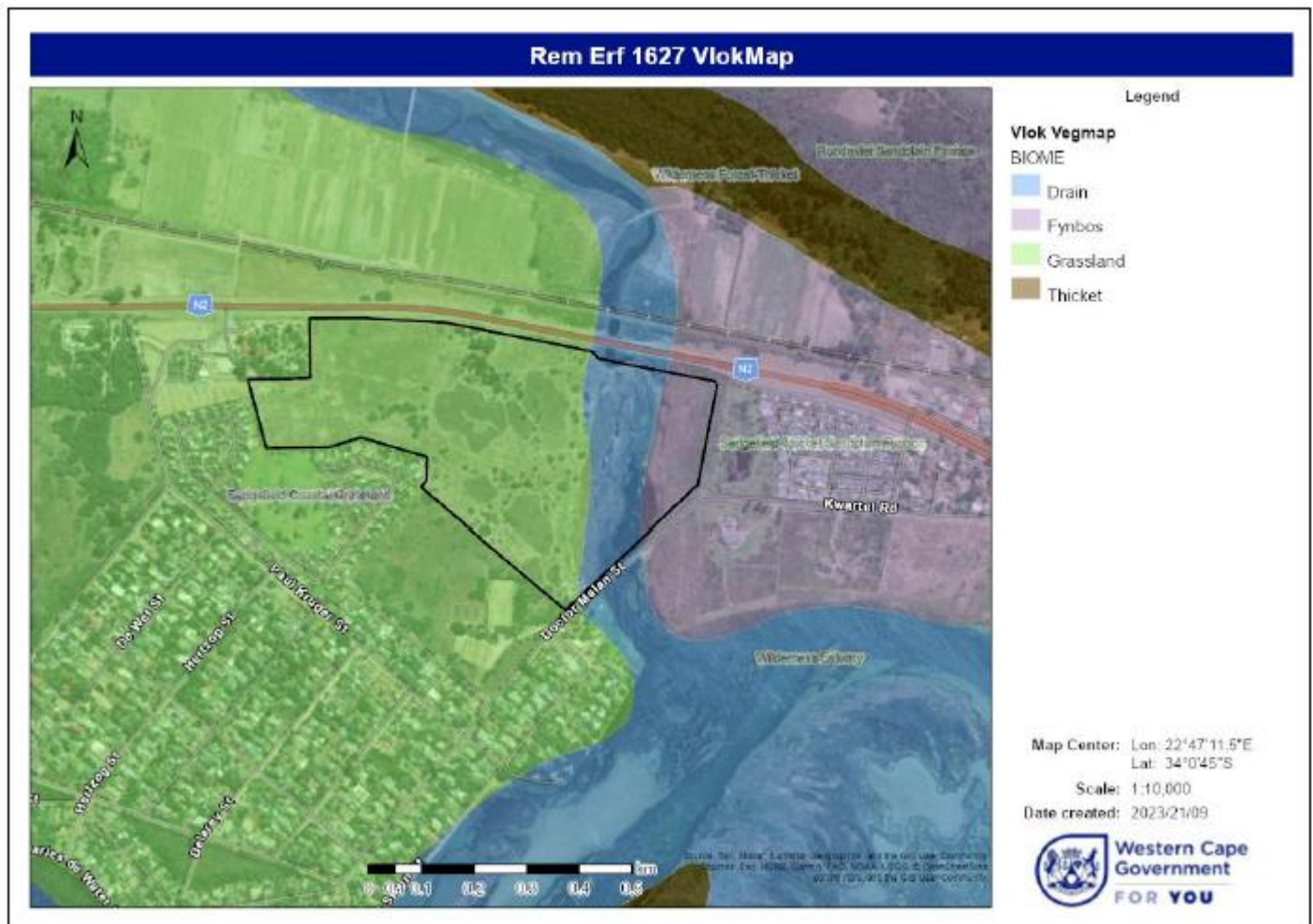


Figure 13: The property in context of fine-scale vegetation variants as indicated within the Sedgefield Coastal Grassland, Wilderness Estuary and Sedgefield Thicket Sandplain Fynbos

## 2. SENSITIVE AREAS (CBA, ESA, and PA)

According to the screening tool the sensitivity for aquatic biodiversity is Very High due to the following features:

- Critical Biodiversity Area 1 (CBA1): Aquatic
- Swartvlei Estuary
- FEPA Sub catchment
- Strategic Water Source Area (SWSA) Outeniqua
- Wetlands, Estuary

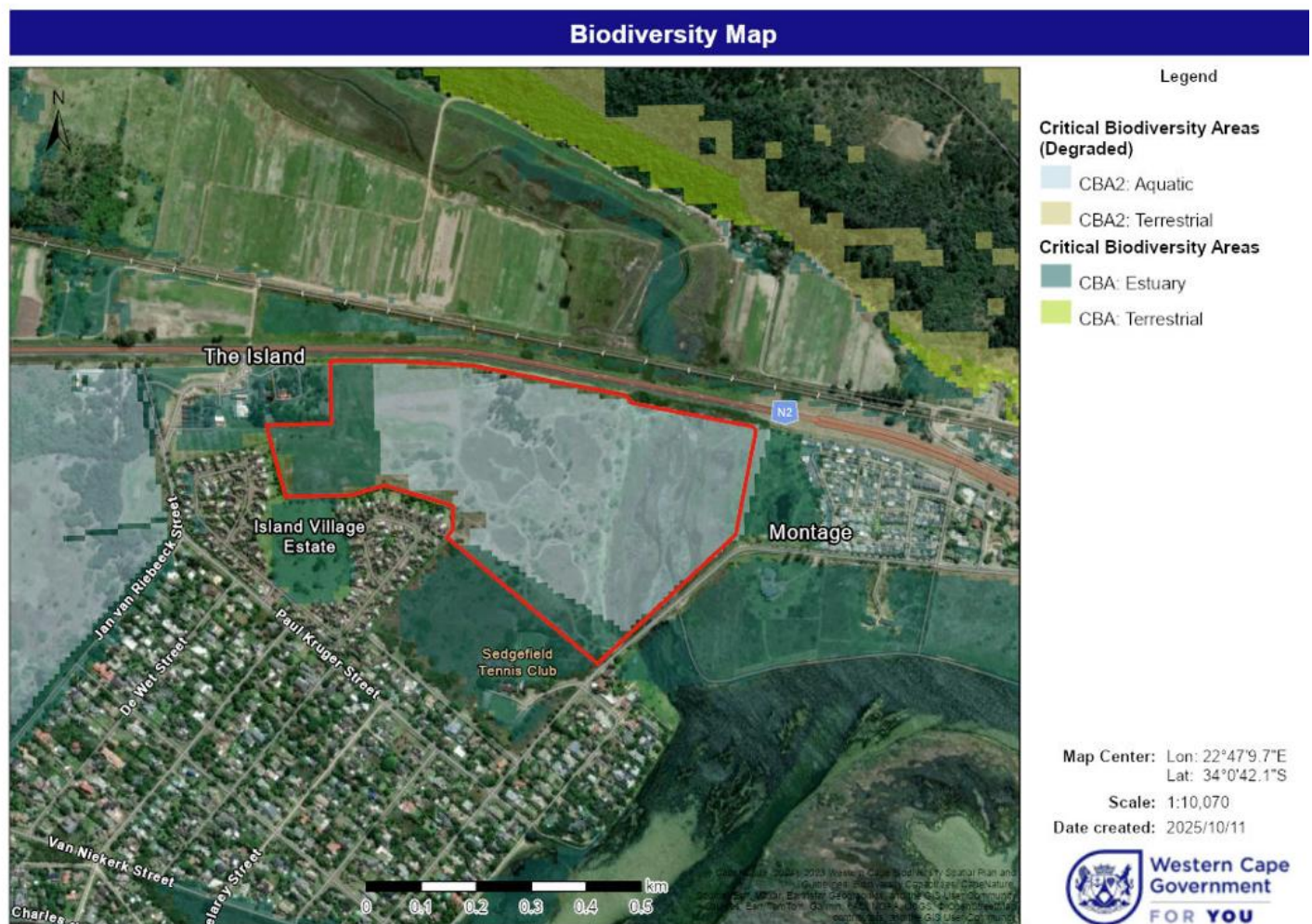


Figure 14: CBA Areas

As per the Aquatic Specialist Report: Most of the property is classified as a Critical Biodiversity Area1: Estuary according to the Western Cape Biodiversity Spatial Plan

The management objective for this category is to *“maintain the habitat 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”*

CBA1 areas are considered essential for meeting biodiversity targets because there are insufficient other options for meeting biodiversity targets for features associated with the site.

There is a small area to the north-west and a strip along the south-western boundary that are not classified at any level in the WCBSP. From a development perspective, this is the easiest area to justify any development.

Swartvlei Estuary is listed as the 7th most important estuarine system in South Africa (Turpie et al., 2002). The estuary is one of three estuaries only where the Near Threatened Knysna seahorse (*Hippocampus capensis*) occurs.

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. This does not mean these areas should be fenced off from humans, rather that they be

supported by good planning, decision-making and management to ensure they are not degraded. The recommended condition for all estuary FEPAs is an ecological category of A or B (Nel et al., 2011).

Any work undertaken at the site needs to be carefully implemented to comply with these conservation management objectives.

### 3. ESTUARY DELINEATION AND BUFFERS

As per the Aquatic Specialist Report: The estuarine area was delineated using methods prescribed by DWAF (2005) which are primarily for the delineation of wetlands but are also applicable to estuarine systems. The delineation relied heavily on the presence of hydrophytic plants because sandy soil present at the site does not reliably show typical indicators of saturation such as mottling. The buffer area was determined using the detailed site-based model for estuaries developed by Macfarlane & Bredin (2017) which is the more detailed of the two available models. The buffers are then mapped from the edge of the delineated estuarine area.

The recommended buffer is 30 m from the delineated edge of the wetland / estuarine area which is indicated in Figure 14. This buffer is applicable in both the construction and operational phase of development



Figure 15: Delineated wetland area and associated 30 m buffer from RE/1627 Sedgfield

## 4. FAUNA

As per the terrestrial Biodiversity Specialist Assessment:

Based on the iNaturalist observations from Sedgefield Island Conservancy domain, including the property and the Perdespruit, there are approximately 109 bird species potentially occurring at the property. As the property includes the Perdespruit Wetland many bird species observations are based on their occurrence in the Wetland.

Table 2: indicates the list of species of high & medium relative animal species sensitivity List of plant SCC and their estimated geographic area of occurrence.

| Family       | Taxon                                                             | Common name                     | IUCN status     | Distribution                     | Habitat                             | EOO (km <sup>2</sup> ) | Occurrence probability         |
|--------------|-------------------------------------------------------------------|---------------------------------|-----------------|----------------------------------|-------------------------------------|------------------------|--------------------------------|
| Aves         | <i>Circus ranivorus</i>                                           | African Marsh Harrier           | Endangered      | South Africa - Sudan             | Wetland                             | 12615.35               | Medium – in vicinity           |
| Aves         | <i>Hydroprogne caspia</i>                                         | Caspian Tern                    | Vulnerable (ZA) | Sub-cosmopolitan                 | Lakes & Coast                       |                        | High - at Swartvlei            |
| Aves         | <i>Bradypterus sylvaticus</i>                                     | Knysna Warbler                  | Vulnerable      | Cape Town – East London - Durban | Forest scrub                        | 2519.99                | Low – in vicinity              |
| Aves         | ( <i>Gorsachius leuconotus</i> )<br><i>Calherodius leuconotus</i> | White-backed Night Heron        | Vulnerable      | Central & Southern Africa        | Forest & Wetland                    | 301.73                 | High-N2 Perdespruit & Erf 4655 |
| Aves         | <i>Stephanoaetus coronatus</i>                                    | Crowned Eagle                   | Vulnerable      | Eastern South Africa             | Forest                              | 23373.95               | Low-Saasveld & Harkerville     |
| Aves         | <i>Neotis denhami</i> subsp. <i>stanleyi</i>                      | Denham's Bustard                | Vulnerable      | Southern Coast                   | Shrubland, farmland – Dry marshland | 13633.16               | Low                            |
| Invertebrate | <i>Aneuryphymus montanus</i>                                      | Yellow-winged Agile Grasshopper | Vulnerable      | Overberg                         | Fynbos                              | 55010.12               | Very low                       |
| Mammalia     | <i>Chlorotalpa duthieae</i>                                       | Duthie's Golden Mole            | Vulnerable      | George - Bitou                   | Grassland, pastureland, Forest      | 0.17                   | Low                            |
| Mammalia     | Sensitive                                                         |                                 | Vulnerable      |                                  |                                     | 30.37                  | Very Low                       |
|              | species 8                                                         |                                 |                 |                                  |                                     |                        |                                |

For the bird SSC listed in the screening report only the White-backed Night Heron has been observed in the vicinity at the bridge with the N2 National Route (Fig. 16) and at the eastern neighbouring property in a large Eucalyptus tree.

The Caspian Tern has been observed at Swartvlei's sandbanks in the vicinity of the property but not at Perdespruit itself.

The Knysna Warbler has been observed in the vicinity within dense vegetation near Swartvlei mouth and is unlikely to occur here in the open areas.

The Crowned Eagle has been observed in areas with dense Coastal Forest vegetation and prefers tree perches and may visit the area, but it is unlikely.

Denham's Bustard is highly unlikely to occur in the vicinity pasted on historical disturbances in the area.

The Yellow-winged Agile Grasshopper is unlikely to occur in the Dune Fynbos habitat. Duthie's Golden Mole is unlikely to occur at the property as it favours forested habitat.

#### 4.1. Mammals

The terrestrial Biodiversity Assessment Report made use of a list of animal species observed within the Sedgefield Island Conservancy.

Table 3: List of animal species (Class Mammalia) observed within Sedgefield Island Conservancy

|                                 |                                              |
|---------------------------------|----------------------------------------------|
| Cape Dune Mole                  | <i>Bathyergus suillus</i>                    |
| Cape Fur Seal                   | <i>Arctocephalus pusillus pusillus</i>       |
| Cape Golden Mole                | <i>Chrysochloris asiatica</i>                |
| Cape Grey Mongoose              | <i>Herpestes pulverulentus</i>               |
| Cape Porcupine                  | <i>Hystrix africaeaustralis</i>              |
| Common Straw-coloured Fruit Bat | <i>Eidolon helvum helvum</i>                 |
| Four-striped mice               | <i>Rhabdomys</i>                             |
| Marsh Mongoose                  | <i>Atilax paludinosus</i>                    |
| Southern Cape Grey Mongoose     | <i>Herpestes pulverulentus pulverulentus</i> |
| Southern Marsh Mongoose         | <i>Atilax paludinosus paludinosus</i>        |
| Southern Vervet Monkey          | <i>Chlorocebus pygerythrus pygerythrus</i>   |
| Southern Vlei Rat               | <i>Otomys irroratus</i>                      |

## 5. HERITAGE

A Notice of Intent to Develop (NID) under Section 38(1) and (8) of the NHR Act will be submitted to Heritage Western Cape. Heritage Western Cape will determine whether the proposed development might have an impact on heritage resources. Comment will be included in this section of the final Basic Assessment Report.

## SECTION D – ENVIRONMENTAL SCREENING TOOL INPUT

A Department of Forestry, Fisheries, and the Environment (DFFE) national web-based screening tool was generated (21 August 2024) to review the environmental sensitivities for *Transformation of land / Indigenous vegetation*. It was generated once more (21 August 2024) to review the environmental sensitivities for *Infrastructure / Localised infrastructure / Infrastructure in the Sea-Estuary-Littoral Active Zone-Development Setback\_100M Inland or coastal public property*.

The screening reports both list a variety of specialist studies to be undertaken based on the data informants of the tool at the study area.

The application classifications selected for the screening report was –

- *Transformation of land | Indigenous vegetation.*
- *Infrastructure / Localised infrastructure / Infrastructure in the Sea-Estuary-Littoral Active Zone-Development Setback\_100M Inland or coastal public property*

### 1. ENVIRONMENTAL MANAGEMENT FRAMEWORKS RELEVANT TO THE APPLICATION

The Garden Route Environmental Management Framework is applicable to the proposed development. ([https://screening.environment.gov.za/ScreeningDownloads/EMF/gardenroute\\_finalreport.pdf](https://screening.environment.gov.za/ScreeningDownloads/EMF/gardenroute_finalreport.pdf))

The Basic Assessment process should consider impacts on biodiversity, water resources, soil stability, air quality, and noise. It must also address socio-economic factors, such as effects on the local community and cultural significance, while ensuring compliance with the National Environmental Management Act (Act 107 of 1998) and local zoning laws. Mitigation measures should include an Environmental Management Plan and continuous monitoring. Public participation is essential to involve and address concerns from stakeholders and the community.

### 2. RELEVANT DEVELOPMENT INCENTIVES, RESTRICTIONS, EXCLUSIONS OR PROHIBITIONS

The Screening Tool indicated that the proposed site is within both a South African Conservation Area (SACAD) and a South African Protected Area (SAPAD). Conservation Areas have recently become regulated through national and provincial legislation. Read in conjunction with NEMA (Act 107 of 1998), these areas have been considered in the Basic Assessment. The proposed development further takes into consideration governance of protected areas and the proposed development, the coastal area of the property is within the Garden Route National Park, which is declared a Protected Area under Section 9 of the National Environmental Management Protected Areas Act (Act 57 of 2003).

In Section 50(5) it further states that –

- No **development**, construction or farming may be permitted in a national park, nature reserve or world heritage site without the prior written approval of the management authority.

In which case South African National Parks (SANParks) is the management authority. Although no development is proposed within the boundaries of the Garden Route National Park, SANParks will be consulted.

### 3. PROPOSED DEVELOPMENT AREA ENVIRONMENTAL SENSITIVITY

The Screening Tool Report identifies the following summary of environmental sensitivities on the property, highlighting only the areas of highest sensitivity. These sensitivities, as reflected in the Screening Tool output, are indicative and have been verified on site. While this section presents the mapped sensitivities as generated by the Screening Tool, the verified sensitivities are detailed in the accompanying Site Sensitivity Verification Report (SSVR).

Table 4: Environmental Sensitivities according to the DFFE screening tool report

| 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                     |                  |                    |                 |

### 4. IDENTIFIED SPECIALIST INPUT REQUIRED

Based on both the selected classifications (*Transformation of land | Indigenous vegetation*) as well as (*Infrastructure / Localised infrastructure / Infrastructure in the Sea-Estuary-Littoral Active Zone-Development Setback\_100M Inland or coastal public property*). Including considerations of the environmental sensitivities of the proposed development footprint. The following specialist assessments have been identified for inclusion in the Basic Assessment Report.

Table 5: Combined identified specialist assessments for (*Transformation of land | Indigenous vegetation*) as well as (*Infrastructure / Localised infrastructure / Infrastructure in the Sea-Estuary-Littoral Active Zone-Development Setback\_100M Inland or coastal public property*).

| 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                                                 |

It must be taken into consideration that the current use of the land and the environmental sensitivity of the site, as identified by the national web-based environmental screening tool, was first reviewed and verified (or disputed) in the SSVR. During this verification, the reasons for not including certain specialist assessments were explained. This verification may change under additional input provided during the pre-application public participation.

The following specialist studies have been conducted on site, and their reports are attached to the DBAR as appendices to this report:

1. Aquatic Specialist Study by Dr J Dabrowski of Confluent Environmental (Pty)Ltd (July 2021 & 2025).
2. Terrestrial Biodiversity Environmental Sensitivity Report by B Walton for Cape Vegetation Surveys (September 2021 & 2025).
3. Flood Management Study by A. Fraser (March 2022) reviewed by GCS 2025
4. Draft Town Planning Report by Liza-Marie Hussy from Planning Space Town and Regional Planners (2022) to be reviewed once draft Knysna Municipality SDF has been Gazetted.
5. Land Surveyed by G.S. Savage

## SECTION E – PROJECT SCOPE

### 1. PROPOSED DEVELOPMENT (PREFERRED ALTERNATIVE – ALTERNATIVE A)

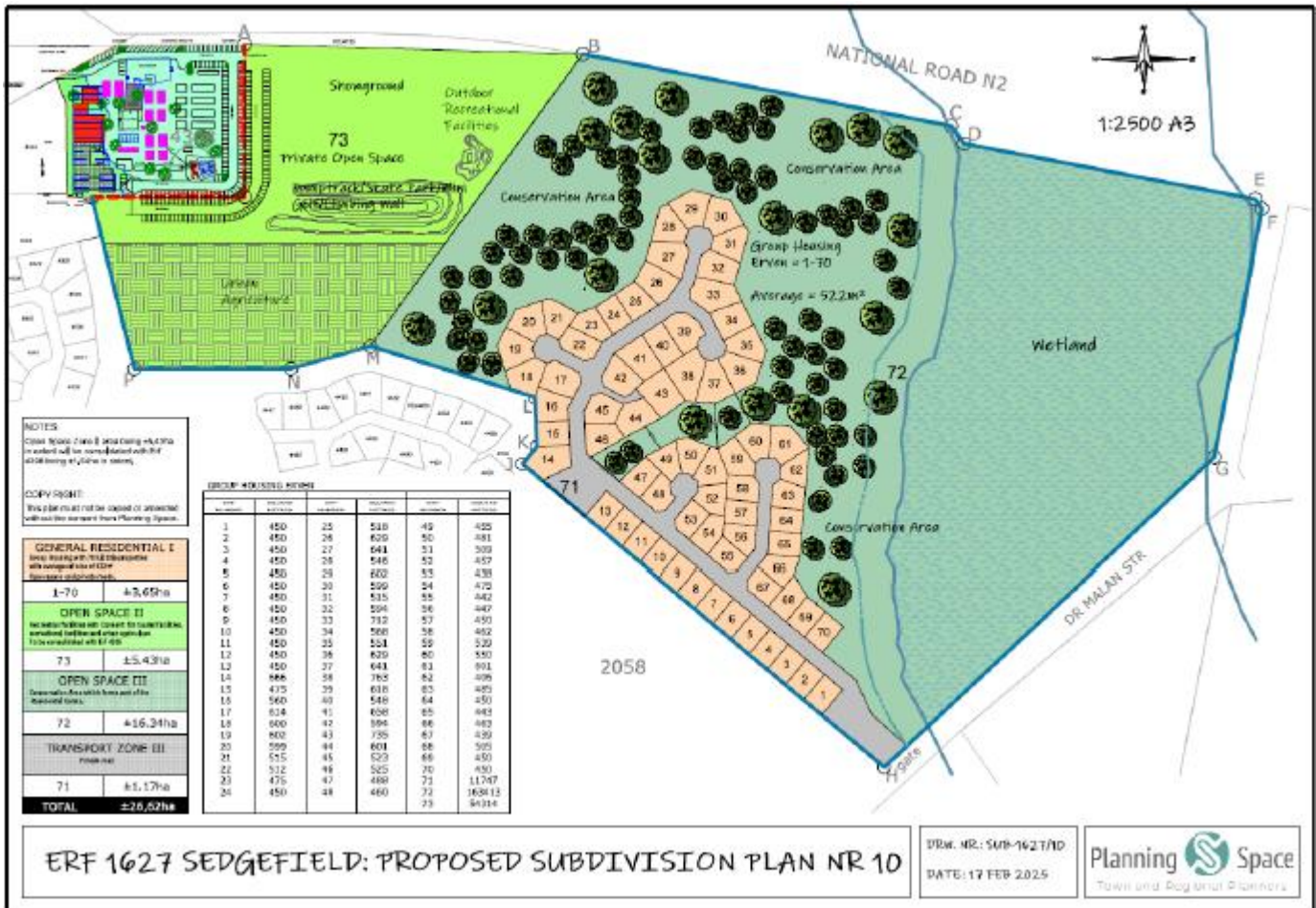


Figure 16: Plan 10 Preferred Alternative

#### 1.1. Development Components

As a result of intensive specialist studies conducted over a 3-year period, the first proposed SDP was amended to ensure the least impact on the receiving environment.

Plan 10 the preferred alternative now entails the following proposed development:

| DEVELOPMENT ZONE                                    | PLAN 10 - PREFERRED |
|-----------------------------------------------------|---------------------|
| General Residential Zone 1                          | 3.65 ha             |
| Group housing                                       | 70 units            |
| Transport Zone 3                                    | 1.17 ha             |
| Internal roads and parking                          |                     |
| Private Open Space Zone II                          | 5.43 ha             |
| Tourist and recreation, restaurants and food market |                     |
| Open Space Zone III                                 | 16.34 ha            |
| Conservation area including Perdespruit             |                     |

Table 6: Preferred Alternative Development Zones

The property is approximately 26.50 Hectares as per table 6 above the proposed development will disturb 10.25 hectares of untransformed land and conserve 16.34 hectares as open space III. Resulting in approximately only 38% of the property being developed.

## 1.2. Service considerations

- Access

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.

- Water / Sewage / Electrical

### Water

The development will be supplied from two sources, viz.:

- i) Shallow boreholes or “spikes” which are approximately 1.4m deep below ground; and
- ii) Municipal treated water supply

The open space and transport zones will be supplied only by shallow boreholes.

### Sewage

The site is extremely flat like the adjacent Island Village. The ground levels vary between 2.5m amsl and 3.1m amsl. Over and above this the water table is fairly high due to the porous soils and the proximity of the Estuary. At times of open river mouth the water table could be as high as 0.7m amsl, and at the times of closed river mouth, when the Estuary water level rise, the water table could be as high as 1.3m amsl to 2.0m amsl.

Therefore it is necessary to have sewers at shallow depths. The proposed system is an enclosed system where each house has a 1 m<sup>3</sup> tank that has a stainless steel sewage cutter pump that pumps the sewage to one central bulk sewage pumping station, PS 1. The proposed pressure mains range from diameter 75mm pipes to diameter 110mm diameter pipes. The proposed pipelines will be HDPE class PE80.

From the bulk sewage pumping station, it is proposed to pump the sewerage from erf 1627 to the rising main connecting Island Village with the Sedgfield Municipal system. The detail of this connection and the capacity of the downstream system will form part of the Service level Agreement Planning.

## Electrical

There is an existing municipal 95mm<sup>2</sup> x 3c (Cu) 11kV PILC cable which supplies the mini-substation next to the Engen Garage. The cable is terminated on the overhead line on the other side of the N2.

There is also an existing 95mm<sup>2</sup> x 3c (Cu) 11kV PILC cable on Dr Malan Drive supplied from the main 66/11kV substation.

It is the Municipality's intention to connect the two cables together to strengthen their network in the area by creating a ring feed.

The Municipality confirmed during our meeting with them as well as by email that there is capacity on this cable to supply the required demand.

## 2. DETAILS OF DEVELOPMENT ALTERNATIVE(S)

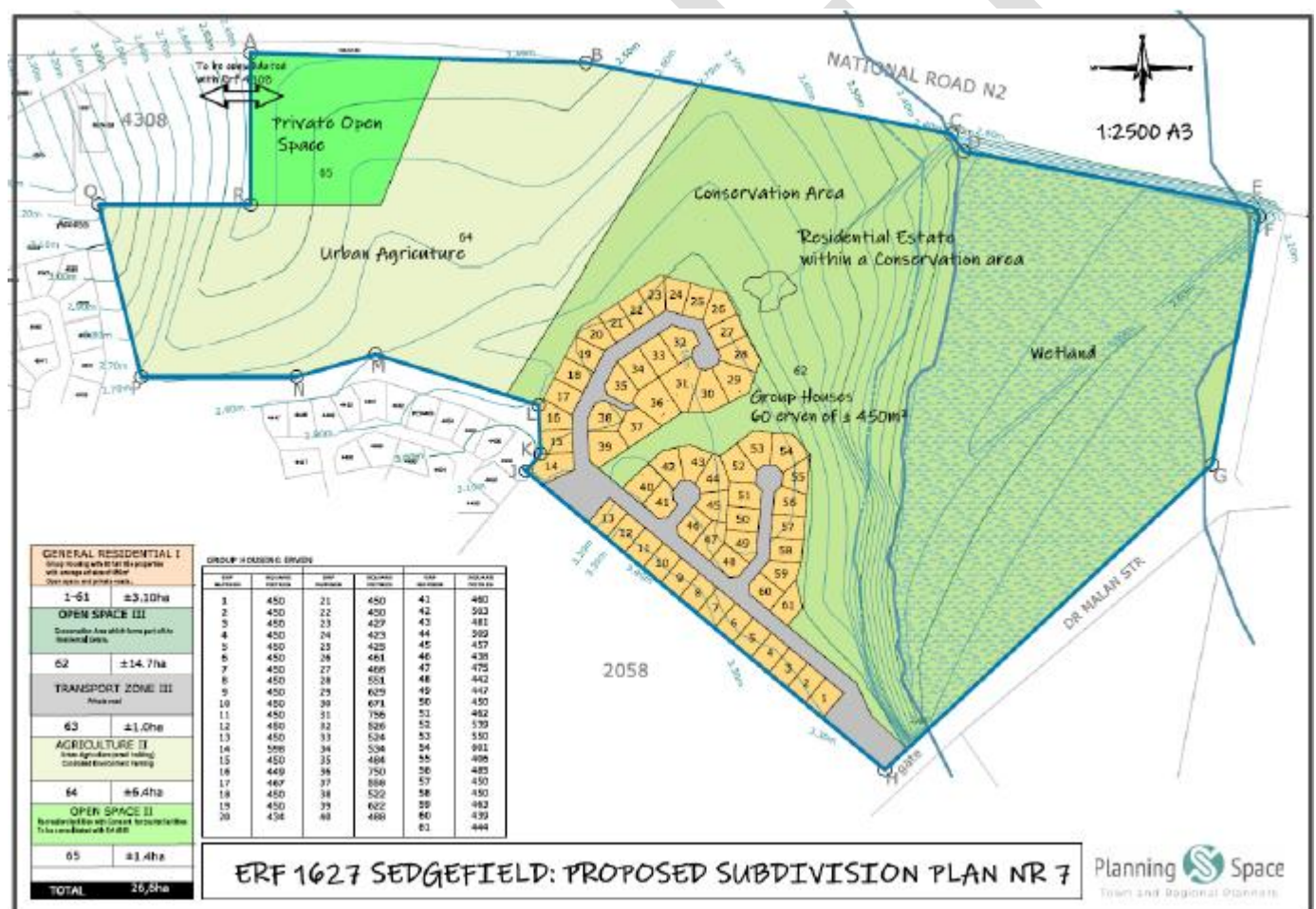


Figure 17: Plan 7 Alternative Site Development Plan

| DEVELOPMENT ZONE                                                                                                   | PLAN 7 - Alternative |
|--------------------------------------------------------------------------------------------------------------------|----------------------|
| General Residential Zone 1<br>Group housing                                                                        | 3.1 ha<br>61 units   |
| Agricultural Zone 2<br>Smallholding for intensive agriculture<br>/ horticulture and renewable energy<br>structures | 6.4 ha               |
| Transport Zone 3<br>Internal roads and parking                                                                     | 1 ha                 |
| Private Open Space Zone II<br>Tourist and recreation, restaurants<br>and food market                               | 1.4 ha               |
| Open Space Zone III<br>Conservation area including<br>Perdespruit                                                  | 14.7ha               |

Table 7: Alternative 1 Plan 7 site development plan

The property is approximately 26.50 Hectares as per table 7 above the proposed development will disturb 11.9 hectares of untransformed land and conserve 14.7 hectares as open space III. Resulting in approximately only 44.9% of the property being developed.

### 3. MOTIVATION FOR PREFERRED ALTERNATIVE

After 3 years of conducting specialist studies and taking the site sensitivity into consideration the preferred alternative has been developed taking Chapter 5 of NEMA into consideration as described in all specialist reports.

#### As per the Aquatic Assessment:

This report provides a preliminary assessment of two alternative development layouts proposed for RE/1627. Of the two proposed layouts, Option 10 (the Preferred Layout) is supported. However, this preference is of a low confidence given that the specific agricultural activities proposed in both of the layouts are unknown. Given that both the Preferred and Alternative layouts have a similar footprint of Residential Zone 1 housing near the main aquatic feature (the Perdespruit), their direct impacts to the aquatic ecosystem are considered very similar.

The history of disturbance to terrestrial areas, with decreasing sensitivity in a westerly direction (away from the Perdespruit) lends the site to development. However, as a large remaining fragment of relatively untransformed land linked to the Perdespruit which is of high conservation value, corridors and connections must be carefully considered in the design and layout of the proposed development. Several suggestions to this effect have been made in the impact assessment of this report.

Most anticipated impacts relating to the construction and operational phase of the development can be mitigated to a negligible negative level provided mitigation measures are fully implemented.

Ideally the long-term protection of the Perdespruit should be established through a conservancy of sorts to which all adjacent landowners are participants. There is currently a great divergence in how the Perdespruit is managed. Long-term protection of this important habitat and significant natural space in Sedgefield should be informed by a dedicated Environmental Management Plan. The 30m

buffer for instance, should be included throughout the Perdespruit and be implemented by all land-owners.

#### **As per the Terrestrial Biodiversity Impact Assessment**

The receiving environment was investigated for a Basic Assessment application for environmental authorization for a proposed mixed-use development in Sedgefield.

Although some biodiversity pattern and process will be impacted upon, and fragmentation of the landscape and ecological connectivity of the area reduced 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.

Future mitigation of erosion, invasive plants, and fire risk by persistent control of Invasive Alien Species and conservation of any remaining Dune Fynbos elements will ensure ecological and hydrological services and linkages are maintained in the undeveloped area.

To conclude, from a terrestrial biodiversity perspective Option 3 (Plan 10 – Preferred Alternative) is recommended and Options 1 and 2 are unfavourable.

#### **4. NEED AND DESIREABILITY**

Based on the Integrated Environmental Management Guideline from the Department of Environmental Affairs (DEA), the proposed development on RE/1627 Sedgefield would need to align with the principles of sustainability and consider the need and desirability as outlined in the Guidelines.

Key points to consider:

| <b>Principle</b>                            | <b>Development Response</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ecological Sustainability                   | The site development planning has taken into consideration all specialist findings and recommendations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Justifiable Economic and Social Development | While the SDF thus acknowledges the spatial and economic need for residential and commercial development, in contrast, the urban edge has been reduced, relying solely on small-scale densification to absorb the expected growth. The principle of densification is not frowned upon as such but is not always achievable, especially not in a small town like Sedgefield where the low-key character is protected and intensification and densification within existing residential areas are fiercely opposed. This property is situated between two residential areas to the east and the west, the N2 to the north and Dr. Malan Drive to the south. It effectively represents vacant urban land within the physical and functional urban footprint of Sedgefield. The development of this land will contribute to the consolidated form of Sedgefield and will not lead to urban sprawl or leapfrog development. |

Furthermore, the proposed development must adhere to the strategic context set by various policies and plans, such as the National Development Plan 2030 (NDP) and comply with statutory requirements. The development should serve the public interest, align with the local Integrated Development Plans (IDP), Spatial Development Frameworks (SDF), and Environmental Management Frameworks (EMF), and reflect the broader community's needs and interests.

Based on these key considerations, several assessment points will be addressed as part of this Basic Assessment Report (Table ).

Table 8: Assessment of need and desirability

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Explain how the proposed development is in line with the existing land use rights of the property? |
| <p>As per the Town Planning Report</p> <p>The property is outside the Urban Edge for Sedgefield. It should however be noted that the property was included all the preceding urban edges which include the previously approved 2008 SDF, the Draft 2016 ISDF, and the approved 2017 SDF. Furthermore in 1988 the Knysna Wilderness Plettenberg Bay Guide plan was amended from "Agriculture" to "Township Development".</p> <p>This property was for the first time excluded from the Urban edge in the 2020 SDF, without any consultation with the landowner or any explanation of the reason for the exclusion. Section 11 (2) b of the Western Cape Land Use Planning Act (act 3 of 2013) LUPA states that an SDF must promote predictability in the utilisation of land. Likewise, Section 12. (1) (l) of SPLUMA also states that SDF's must "promote a rational and predictable land development environment to create trust and to stimulate investment".</p> <p>This KSDF2020 does not meet the legal requirement of consistency and predictability and the urban edge is therefore contested.</p> <p>The SDF identifies Sedgefield as a consolidated coastal centre, where compact urban form rather than outward expansion is proposed. Subsequently, the urban edge is used as a growth management tool and has been shrunk to fit snugly around the existing development footprint of the town, leaving no opportunity for greenfield development.</p> <p>On the other hand, the SDF confirms that natural population growth coupled with smaller household sizes and the ongoing trend of urbanisation increases pressure on space for accommodation. The document also acknowledged that Sedgefield has very limited expansion options due to the surrounding topography and natural features.</p> <p>While the SDF thus acknowledges the spatial and economic need for residential and commercial development, in contrast, the urban edge has been reduced, relying solely on small-scale densification to absorb the expected growth. The principle of densification is not frowned upon as such but is not always achievable, especially not in a small town like Sedgefield where the low-key character is protected and intensification and densification within existing residential areas are fiercely opposed.</p> |                                                                                                    |

This property is situated between two residential areas to the east and the west, the N2 to the north and Dr. Malan Drive to the south. It effectively represents vacant urban land within the physical and functional urban footprint of Sedgefield.

The development of this land will contribute to the consolidated form of Sedgefield and will not lead to urban sprawl or leapfrog development.

It is assumed the property has been excluded because of the designation of the area as a CBA area. Both the KSDF and the WCBSP however advocate for “ground-truthing” of this data set. Recent Biodiversity Sensitivity Study and an Aquatic Study indicated that the site can be developed subject to certain restraints which will be accommodated in the layout.

The new Draft SDF is in the final stages of competition and in this draft SDF 2025 the property has been earmarked for inclusion in the urban Edge.

|    |                                                                                          |
|----|------------------------------------------------------------------------------------------|
| 2. | Explain how potential conflict with respect to existing approvals for the proposed site. |
|----|------------------------------------------------------------------------------------------|

There is no conflict of interest.

|    |                                                                          |
|----|--------------------------------------------------------------------------|
| 3. | Explain how the proposed development will be in line with the following? |
|----|--------------------------------------------------------------------------|

|      |                                                                                                             |
|------|-------------------------------------------------------------------------------------------------------------|
| 3.1. | The Provincial Spatial Development Framework (Western Cape Provincial Spatial Development Framework; PSDF). |
|------|-------------------------------------------------------------------------------------------------------------|

This will be updated in the town planning report

|      |                                                            |
|------|------------------------------------------------------------|
| 3.2. | The Integrated Development Plan of the local municipality. |
|------|------------------------------------------------------------|

This will be updated in the town planning report

|      |                                                              |
|------|--------------------------------------------------------------|
| 3.3. | The Spatial Development Framework of the local municipality. |
|------|--------------------------------------------------------------|

The new Draft SDF is in the final stages of competition and in this draft SDF 2025 the property has been earmarked for inclusion in the urban Edge

|      |                                                                |
|------|----------------------------------------------------------------|
| 3.4. | The Environmental Management Framework applicable to the area. |
|------|----------------------------------------------------------------|

The most recent Environmental Management Framework (EMF) for the Garden Route outlines overarching principles binding all state organs, including local authorities and officials. These principles emphasize the avoidance or minimization and remediation of ecosystem disturbances and biodiversity loss. Specifically, ecosystems like coastal shores, estuaries, and wetlands, which are sensitive or under stress, require careful management and planning consideration. Additionally, the sustainable use of renewable resources must not exceed thresholds that jeopardize ecosystem integrity.

In the context of the proposed development, adherence to these principles mandates comprehensive environmental assessments. These assessments, conducted by specialists, analyse environmental sensitivities such as botanical and aquatic aspects, crucial for informing Environmental Authorisation decisions. This process ensures that potential impacts are identified and mitigated through strategies like no-go areas, buffer zones, and ongoing management measures, safeguarding sensitive environments throughout the project's lifecycle. All these identifications and mitigations are highlighted in this report, thus falling in line with the Garden Route Environmental Management Framework.

## SECTION F – APPLICABLE LISTED ACTIVITIES

In accordance with the National Environmental Management Act (Act 107 of 1998) (NEMA) and its amendments any proposal that triggers listed activities under Listing Notices 1 and 3 (R 327 & R 324) requires an Environmental Impact Assessment (EIA) process to secure Environmental Authorisation (EA) from the Department of Forestry, Fisheries, and the Environment (DFFE), prior to commencement.

Table 8: Relevant listed activities that require environmental authorisation

| 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>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 weeks of the commencement of development and where indigenous vegetation will not be cleared.</li> </ul> |



## Rivers

### Legend

- Erf
- Rivers
- Perennial

Scale: 1:9 028  
Date created: April 23, 2021



## Wetlands

### Legend

- Erf
- Wetlands (NFEPA)
- Estuaries

Scale: 1:9 028  
Date created: April 23, 2021



## Definition of a watercourse as per NEMA:

“watercourse” means –

- (a) a river or spring;
  - (b) a natural channel in which water flows regularly or intermittently;
  - (c) a wetland, pan, lake or dam into which, or from which, water flows; and
- any collection of water which the Minister may, by notice in the *Gazette*, declare to be a watercourse as defined in the National Water Act, 1998 (Act No. 36 of 1998); and a reference

to a watercourse includes, where relevant, its bed and banks; and

**“wetland”** means land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil.

CapeFarmMapper (CFM) 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. The data presented on this site originates from various sources and custodians and its correctness cannot be guaranteed.

As per the Aquatic Specialist Report:

*The wetland area was delineated using methods prescribed by DWAF (2005). The delineation relied heavily on the presence of hydrophytic plants because sandy soil present at the site does not reliably show typical indicators of saturation such as mottling. The buffer area was determined using the detailed site-based model developed by Macfarlane & Bredin (2017) which is the more detailed of the two available models. The buffers are then mapped from the edge of the delineated wetland area (DWAF, 2005). The recommended buffer is 30 m from the delineated edge of the wetland / estuarine area which is indicated in Figure 9. This buffer is applicable in both the construction and operational phase development.*



Figure 9. Delineated wetland area and associated 30 m buffer for RE/1627 Sedgefield

**This Listed activity is included as a result of the proposed bird hide and boardwalks abutting the area within 32 meters of a watercourse.**



The wetland was delineated by the aquatic specialist and a 30 meter buffer was established where no development will take place, however as a result of previous floods experienced in 2006 and 2007 and the area was periodically covered by shallow water as per the NEMA wetland definition, this listed activity is included.

The flood line specialist recommends that a number of stormwater detention ponds is established on site and that the excavated material is used as infill to localised low areas within the erf to raise ground levels to approximately 3.1m to 3.2 asml to safe guard against climate change and possible 1:50 & 1:100 year floods.

**Listing  
Notice 1:  
GN R327**

**27**

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-

- (i) the undertaking of a linear activity; or
- (ii) maintenance purposes undertaken in accordance with a maintenance management plan.

As per the proposed SDP approximately 14.05 hectares of vegetation will be disturbed.

**Listing  
Notice 3:  
GN R324**

**4**

The development of a road wider than 4 metres with a reserve less than 13,5 metres.

- a. Western Cape**
  - i. Areas zoned for use as public open space or equivalent zoning;
- ii. Areas outside urban areas;**
  - (aa) Areas containing indigenous vegetation;**
  - (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
- i. Inside urban areas:
  - (aa)** Areas zoned for conservation use; or
  - (bb)** Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.

The property is Zoned undetermined as per the town planning report:

*The objective of this zone is to enable the Municipality to defer a decision regarding a specific land use and development management provisions until the circumstances affecting the land unit have been properly investigated; or until the owner of the land makes an application for rezoning; or a zoning determination is made by the Municipality.*

As per NEMA an Urban Area is defined as follow:

**“urban areas”** means areas situated within the urban edge (as defined or adopted by the competent authority) or in instances where no urban edge or boundary has been defined or adopted, it refers to areas situated with the edge of built-up areas;

The property is outside the urban edge of Sedgefield, please refer to the town planning report 3 to 4.

The internal roads for the proposed development will be wider than 4 meters with a reserve less than 13 meters

**Listing  
Notice 3:  
GN R324**

**6**

The development of resorts, lodges, hotels, tourism or hospitality facilities that sleeps 15 people or more.

**a. Western Cape**

i. Inside a protected area identified in terms of NEMPAA;

ii. **Outside urban areas;**

**(aa) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; or**

**(bb) Within 5km from national parks, world heritage sites, areas identified in terms of NEMPAA or from the core area of a biosphere reserve; -**

excluding the conversion of existing buildings where the development footprint will not be increased.

The proposed tourist accommodation will sleep more than 15 people and the site is situated outside the urban edge.



The majority of the site is classed as an Estuary CBA area. The site is located within the Garden Route National Park.

|                                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Listing<br/>Notice 3:<br/>GN R324</b> | <b>12</b> | <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> |



## Critical Biodiversity Area

### Legend

Erf

### BSP CBA

CBA: Terrestrial

CBA: Estuary

Scale: 1:9 028

Date created: April 23, 2021

Compiled with CapeFarmMapper



**Western Cape Government**  
Agriculture

More than 300m<sup>2</sup> of vegetation will be removed within a CBA area

## Listing

## Notice 3: GN R324

14

The development of—

- (i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or
- (ii) infrastructure or structures with a physical footprint of 10 square metres or more;

where such development occurs—

- (a) within a watercourse;
- (b) in front of a development setback; or
- (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;

excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.

## a. Western Cape

### i. Outside urban areas:

- (aa) A protected area identified in terms of NEMPAA, excluding conservancies;
- (bb) National Protected Area Expansion Strategy Focus areas;
- (cc) World Heritage Sites;

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | <p>(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;</p> <p>(ee) Sites or areas listed in terms of an international convention;</p> <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> |
| <p>As a result of previous floods in Sedgefield an application for Environmental Authorisation was submitted obtained in 2009, for SANParks to artificially breach the estuary mouth in anticipation of peak estuary flood flow rates. This provides a safeguard against similar extreme rainfalls resulting in high flood levels. The flood risks have been significantly reduced by the early mouth breaching policy.</p> <p>The wetland was delineated by the aquatic specialist and a 30 meter buffer was established where no development will take place, however as a result of previous floods experienced in 2006 and 2007 and the area was periodically covered by shallow water as per the NEMA wetland definition, this listed activity is included.</p> <p>The bird hide and boardwalk will be more than 10m<sup>2</sup> in total.</p> |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

\* This list is not exhaustive within the pre-application Basic Assessment Report (BAR). It should be noted that additional listed activities may be identified by organs of state, stakeholders, or the competent authorities during the public participation processes.

## SECTION G – ADDITIONAL POLICIES AND LEGISLATIVE CONTEXT

The applicant is required to comply with all the required legislation and policies for the proposed development. The following table below indicates the legislation, and guidelines of all spheres of government that are applicable to the application as contemplated in the EIA regulations

| LEGISLATION                                     | ADMINISTERING AUTHORITY                                                                                                                                                                          | TYPE Permit/ license/ authorisation/ comment / relevant consideration (e.g. rezoning or consent use, building plan approval)   | APPLICABILITY TO THE PROPOSED DEVELOPMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ENVIRONMENTAL CONSERVATION ACT (ACT 73 OF 1989) | Department of Environmental Affairs, Republic of South Africa.<br>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities. | <del>PERMIT/</del><br><del>LICENSE/</del><br><del>AUTHORIZATION</del><br><del>/COMMENT/</del><br><b>RELEVANT CONSIDERATION</b> | The Environment Conservation Act makes provision for the protection of areas which have particular environmental importance, which are sensitive, or which are under intense pressure from development. In many regions, our coastal zone needs protection for all these reasons.<br><b>The Proposed development is outside the urban area. The Perdespruit and a wetland is present on site. The entire property, like most of the low-lying areas in Sedgefield, is located within the Estuarine Functional Zone (EFZ; below the 5m contour) of Swartvlei Estuary. The recommended buffer is 30 m from the delineated edge of the wetland / estuarine area. This buffer are is to be excluded in the development during construction and operational phase.</b> |

|                                                                                                                                                                                   |                                                                                                                                                                                                  |                                                                                                    |                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998) AND THE 2014 EIA REGULATIONS AS AMENDED IN 2017                                                                           | Department of Environmental Affairs, Republic of South Africa.<br>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities. | <del>PERMIT /<br/>LICENSE /<br/>AUTHORIZATION<br/>/ COMMENT /<br/>RELEVANT<br/>CONSIDERATION</del> | In process of a BAR application. <b>As per the Triggered listed activities in NEMA EIA Regulations 2014 as amended April 2017 (GN R324, R325, R326, R327) an application will be submitted to DEA for Environmental Authorization.</b>                                                                                                                        |
| NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT (ACT NO 10 OF 2004)                                                                                                           | Department of Environmental Affairs, Republic of South Africa.<br>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities. | <del>PERMIT /<br/>LICENSE /<br/>AUTHORIZATION<br/>/ COMMENT /<br/>RELEVANT<br/>CONSIDERATION</del> | <b>Cape Nature will be asked to comment on the DBAR. The applicant is reminded of his duty to comply with the NEM:BA Act and remove alien vegetation regardless of Environmental Authorisation being granted. This is addressed in the “no-go” option.</b>                                                                                                    |
| NATIONAL ENVIRONMENTAL MANAGEMENT: INTEGRATED COASTAL MANAGEMENT ACT (ACT NO 24 OF 2008)                                                                                          | Department of Environmental Affairs, Republic of South Africa.<br>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities. | <del>PERMIT /<br/>LICENSE /<br/>AUTHORIZATION<br/>/ COMMENT /<br/>RELEVANT<br/>CONSIDERATION</del> | The ICM Act is a specific environmental management act under the umbrella of NEMA.<br><br><b>This Act is not applicable to the proposed development as we are not within the coastal Zone</b>                                                                                                                                                                 |
| NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT (ACT 57 OF 2003)<br><br>REGULATIONS FOR THE PROPER ADMINISTRATION OF THE KNYSNA PROTECTED ENVIRONMENT (R 1175 OF DEC 2009) | Department of Environmental Affairs, Republic of South Africa.<br>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities. | <del>PERMIT /<br/>LICENSE /<br/>AUTHORIZATION<br/>/ COMMENT /<br/>RELEVANT<br/>CONSIDERATION</del> | SANParks has been to site and has had the opportunity to comment on the BID. SANParks commented the following:<br><br><i>The development proposal above cannot be supported by SANParks but a compromise can be reached to achieve a good conservation outcome and allow for more sustainable development in a wetland area with high biodiversity value.</i> |

|  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  | <p><i>SANParks would like to highlight the following points:</i></p> <ul style="list-style-type: none"> <li><i>• As a principle, SANParks does not support development below the 3m contour but in this instance developing the area adjacent to the urban edge (blue block) can be supported thereby increasing the size of the conservation area (OSZ III) and maintaining the conservation corridor that links up with the adjacent Knysna Municipality property (red arrow).</i></li> <li><i>• In principle, SANParks supports the 3 ha solar farm but a Visual Impact Assessment is required. The N2 is a scenic route and viewshed protection is important (black block) not to scale.</i></li> <li><i>• The Coastal Management Line (CML) should be indicated on a map.</i></li> <li><i>• The remaining natural vegetation on site should not be disturbed.</i></li> <li><i>• Mowing should stop to allow wetland vegetation to re-establish.</i></li> <li><i>• Alien clearing should continue by hand.</i></li> <li><i>• No development should be allowed in the OSZ III although we realise consent use can be applied for. The two bird hides are supported. The OSZ III should be managed for conservation. The proposed 25 chalets are not supported</i></li> </ul> |
|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                        |                                                                                                                                                                                                                                             |                                                                                                                                               |                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                        |                                                                                                                                                                                                                                             |                                                                                                                                               | <p><i>The conservation area of 12.5ha (even without the 25 chalets) on a 26.6 ha property that should be managed for biodiversity conservation is not sustainable</i></p> <p><b>The above considerations were taken into consideration and this resulted in the development of Alternative 1 in the DBAR.</b></p> |
| NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT (ACT 59 OF 2008)          | <p>Department of Environmental Affairs, Republic of South Africa.</p> <p>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p>                                 | <p><del>PERMIT /</del><br/><del>LICENSE /</del><br/><del>AUTHORIZATION</del><br/><del>/ COMMENT /</del><br/><b>RELEVANT CONSIDERATION</b></p> | <p>The Waste Hierarchy will be adhered too during the construction and operational phase. The Empr covers the waste disposal aspect in detail.</p>                                                                                                                                                                |
| NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT (ACT NO 39 OF 2004) | <p>Department of Environmental Affairs, Republic of South Africa.</p> <p>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p>                                 | <p><del>PERMIT /</del><br/><del>LICENSE /</del><br/><del>AUTHORIZATION</del><br/><del>/ COMMENT /</del><br/><b>RELEVANT CONSIDERATION</b></p> | N/A                                                                                                                                                                                                                                                                                                               |
| NATIONAL FORESTS ACT (ACT 84 OF 1998)                                  | <p>Department of Environmental Affairs, Republic of South Africa.</p> <p>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p> <p><u>DFFE Jurisdiction</u></p> | <p><del>PERMIT /</del><br/><del>LICENSE /</del><br/><del>AUTHORIZATION</del><br/><del>/ COMMENT /</del><br/><b>RELEVANT CONSIDERATION</b></p> | <p>DFFE will be asked to comment during the DBAR process</p>                                                                                                                                                                                                                                                      |
|                                                                        | Department of Environmental Affairs,                                                                                                                                                                                                        | <p><del>PERMIT /</del><br/><del>LICENSE /</del></p>                                                                                           | Refer to above                                                                                                                                                                                                                                                                                                    |

|                                                    |                                                                                                                                                                                                                                                           |                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FORESTRY LAWS<br>AMENDMENT ACT (ACT 35<br>OF 2005) | <p>Republic of South Africa.<br/>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p> <p><u>DAFF Jurisdiction</u></p>                                                       | <del>AUTHORIZATION</del><br><del>/ COMMENT /</del><br><b>RELEVANT<br/>CONSIDERATION</b>                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| NATIONAL WATER ACT (ACT<br>36 OF 1998)             | <p>Department of Environmental Affairs, Republic of South Africa.<br/>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p> <p><u>Dept of Water Affairs Jurisdiction</u></p> | <del>PERMIT /<br/>LICENSE /</del><br><b>AUTHORIZATION<br/>/ COMMENT /<br/>RELEVANT<br/>CONSIDERATION</b> | <p>Estuaries are excluded from the definition of a watercourse, unless there is a presence of significant areas of freshwater habitat associated with the site. This is not the case with the Perdespruit which is strongly estuarine in character.</p> <p>This entails that Section 21 c) and i) water uses are excluded from further assessment given that they apply to developments within the regulated area of a watercourse. An estuary is however, defined as a Water Resource in terms of the NWA. GN 665 (2013) provides limits of the General Authorisation for Section 21g) water use classified as 'Disposing of waste in a manner which may detrimentally impact on a water resource.' Therefore, the disposal of waste could trigger a Section 21g) water use that requires authorisation. This will be confirmed with the Breede-Olifants Catchment Management Agency during the Pre- Application meeting.</p> |
| WATER SERVICES ACT (ACT<br>108 OF 1997)            | Department of Environmental Affairs, Republic of South Africa.                                                                                                                                                                                            | <del>PERMIT /<br/>LICENSE /</del><br><b>AUTHORIZATION<br/>/ COMMENT /</b>                                | As above                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|                                                                     |                                                                                                                                                                                                                                                             |                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                     | <p>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p> <p><u>Dept of Water Affairs Jurisdiction</u></p>                                                                      | <b>RELEVANT CONSIDERATION</b>                                                                                                                     |                                                                                                                                                                                                                                                                                                                                    |
| SEA SHORE ACT (ACT 21 OF 1935)                                      | <p>Department of Environmental Affairs, Republic of South Africa.</p> <p>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p>                                                 | <p><del>PERMIT /</del><br/><del>LICENSE /</del><br/><del>AUTHORIZATION</del><br/><del>/ COMMENT /</del><br/><del>RELEVANT CONSIDERATION</del></p> | N/A                                                                                                                                                                                                                                                                                                                                |
| WESTERN CAPE NATURE CONSERVATION LAWS AMENDMENT ACT (ACT 3 OF 2000) | <p>Department of Environmental Affairs, Republic of South Africa.</p> <p>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p> <p><u>CapeNature Jurisdiction</u></p>           | <p><del>PERMIT /</del><br/><del>LICENSE /</del><br/><del>AUTHORIZATION</del><br/><del>/ COMMENT /</del><br/><del>RELEVANT CONSIDERATION</del></p> | <p><b>Cape Nature will be asked to comment in the DBAR. An Alien Invasive management Plan has been included in the EMPr. The applicant is reminded of his duty to comply with the NEM:BA Act and remove alien vegetation regardless of Environmental Authorisation being granted. This is addressed in the “no-go” option.</b></p> |
| CONSERVATION OF AGRICULTURAL RESOURCES ACT (ACT 43 OF 1983)         | <p>Department of Environmental Affairs, Republic of South Africa.</p> <p>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p> <p><u>Dept. of Agriculture Jurisdiction</u></p> | <p><del>PERMIT /</del><br/><del>LICENSE /</del><br/><del>AUTHORIZATION</del><br/><del>/ COMMENT /</del><br/><del>RELEVANT CONSIDERATION</del></p> | <p>The Department of Agriculture will be asked to provide comments during the DBAR.</p>                                                                                                                                                                                                                                            |

|                                                                               |                                                                                                                                                                                                                                                        |                                                                                                     |                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)                              | <p>Department of Environmental Affairs, Republic of South Africa.</p> <p>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p>                                            | <p><b>PERMIT /<br/>LICENSE/<br/>AUTHORIZATION<br/>/ COMMENT/<br/>RELEVANT<br/>CONSIDERATION</b></p> | <p>A NID will be submitted to the Department of Heritage.</p>                                                                                                                                                                 |
| NATIONAL HEALTH ACT (ACT 61 OF 2003)                                          | <p>Department of Environmental Affairs, Republic of South Africa.</p> <p>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p> <p><u>Dept. of Health Jurisdiction</u></p> | <p><b>PERMIT /<br/>LICENSE/<br/>AUTHORIZATION<br/>/ COMMENT/<br/>RELEVANT<br/>CONSIDERATION</b></p> | <p>In terms of this Act, a Health and Safety Officer and protocol must be implemented during the construction phase, this is addressed in the EMPr.</p> <p>The Department of Health will be asked to comment on the DBAR.</p> |
| THE SOUTH AFRICAN ROADS AGENCY LIMITED AND NATIONAL ROADS ACT (ACT 7 OF 1998) | <p>Department of Environmental Affairs, Republic of South Africa.</p> <p>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p> <p><u>SANRAL Jurisdiction</u></p>          | <p><b>PERMIT /<br/>LICENSE/<br/>AUTHORIZATION<br/>/ COMMENT/<br/>RELEVANT<br/>CONSIDERATION</b></p> | <p>SANRAL will be asked to comment on the DBAR.</p>                                                                                                                                                                           |
| Outiniqua Sensitive Coastal Area Extension Report (OSCAER)                    | <p>Department of Environmental Affairs, Republic of South Africa.</p> <p>All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p>                                            | <p><b>PERMIT /<br/>LICENSE/<br/>AUTHORIZATION<br/>/ COMMENT/<br/>RELEVANT<br/>CONSIDERATION</b></p> | <p>N/A as we are in the process of obtaining Environmental Authorisation</p>                                                                                                                                                  |

## SECTION H – IMPACT ASSESSMENT

According to the DFFE Screening Tool report, potential impacts on the receiving environment were identified (Table), along with the necessary specialist input required (Table ) for assessment. Site sensitivity verification can be found in **APPENDIX E**, based on the specialist input. It should be noted that the primary difference between the impact assessment of Alternative A and Alternative B, is that Alternative A has a slightly less impact on the identified SCC than Alternative B.

### 1. METHODOLOGY FOR ASSESSMENT OF IMPACTS

To assess the impact of the development on the receiving environment, the environmental considerations of the area were identified. This was followed by a detailed review of the project scope, an evaluation of its need and desirability within the Knysna region. The implications of the National Environmental Management Act (Act 107 of 1998) were accounted for, which necessitated environmental authorization based on the triggered listed activities.

Together with the with specialist input presented in APPENDIX D, the impact will be assessed with the mentioned considerations in mind, and according to the following criteria –

Each potential environmental impact and risk identified was assessed according to specific criteria. These included the nature, extent, duration, consequence, probability and frequency of identified impacts, including the degree to which these impacts can be reversed, may cause irreplaceable loss of resources, and can be avoided, managed or mitigated. The criteria are based on the EIA Regulations, published by the Department of Forestry, Fisheries and the Environment (April 1998) in terms of the Environmental Conservation Act No. 73 of 1989. These criteria include:

#### **Nature of the impact**

This is an estimation of the type of effect the construction, operation and maintenance of a development would have on the affected environment. This description should include what is to be affected and how.

#### **Mitigation Measures**

Ways in which an impact can be avoided, minimised, or managed to reduce its environmental significance.

| Extent of the impact - the scale of the impact |                                                     |
|------------------------------------------------|-----------------------------------------------------|
| Rating                                         | Definition of Rating                                |
| Very Limited                                   | Extending only as far as the development site area  |
| Limited                                        | Limited to the site and its immediate surroundings  |
| Local                                          | Extending across the site and to nearby settlements |

|          |                                                                                           |
|----------|-------------------------------------------------------------------------------------------|
| Regional | The region, which may be defined in various ways, e.g. cadastral, catchment, topographic. |
| National | National scale or across international borders                                            |

**Duration of the impact** - the lifespan or length of time the impact will last

| Rating      | Definition of Rating                                                    |
|-------------|-------------------------------------------------------------------------|
| Brief       | Impact will not last longer than 1 year                                 |
| Short term  | Impact will last between 1 and 2 years                                  |
| Medium Term | Impact will last between 2 and 15 years                                 |
| Long Term   | Impact will last more than 15 years                                     |
| Permanent   | Impact may be permanent, or in excess of 20 years                       |
| Very High   | Natural and/ or social functions and/ or processes are severely altered |

**Intensity** - the severity of the impact

| Rating     | Definition of Rating                                                         |
|------------|------------------------------------------------------------------------------|
| Negligible | Natural and/ or social functions and/ or processes are negligibly altered    |
| Low        | Natural and/or social functions and/or processes are slightly altered        |
| Medium     | Natural and/or social functions and/or processes are notably altered         |
| High       | Natural and/ or social functions and/ or processes are significantly altered |
| Very High  | Natural and/ or social functions and/ or processes are severely altered      |

**Probability of occurrence** - the probability of the impact occurring

| Rating     | Definition of Rating                                                                                                                        |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Possible   | Has occurred here or elsewhere and could therefore occur                                                                                    |
| Probable   | It is most likely that the impact will occur                                                                                                |
| Definite   | There are sound scientific reasons to expect that the impact will occur                                                                     |

**Reversibility** - the ability of the impacted environment to return to its pre-impacted state

| Rating                | Definition of Rating                                                             |
|-----------------------|----------------------------------------------------------------------------------|
| Completely reversible | the impact can be reversed with the implementation of minor mitigation measures. |
| Partly reversible     | the impact is reversible but more intense mitigation measures are required       |
| Barely reversible     | the impact is unlikely to be reversed even with intense mitigation measures      |
| Irreversible          | the impact is irreversible, and no mitigation measures exist                     |

| <b>Irreplaceable loss of resources</b> - the degree to which resources will be irreplaceably lost |                                                                         |
|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <b>Rating</b>                                                                                     | <b>Definition of Rating</b>                                             |
| Negligible                                                                                        | No loss of resources                                                    |
| Low                                                                                               | Marginal loss, the resource is not damaged irreparably or is not scarce |
| Medium                                                                                            | the resource is damaged irreparably but is represented elsewhere        |
| High                                                                                              | Irreparable damage and is not represented elsewhere                     |

| <b>Cumulative effect</b> - An effect which in itself may not be significant but may become significant if added to other existing or potential impacts that may result from activities associated with the proposed development. |                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| <b>Rating</b>                                                                                                                                                                                                                    | <b>Definition of Rating</b>                                   |
| Negligible                                                                                                                                                                                                                       | the impact would result in negligible to no cumulative effect |
| Low                                                                                                                                                                                                                              | the impact would result in insignificant cumulative effects   |
| Medium                                                                                                                                                                                                                           | the impact would result in minor cumulative effects           |
| High                                                                                                                                                                                                                             | the impact would result in significant cumulative effects     |

| <b>Confidence</b> - the level of confidence in the assessment rating |                                                              |
|----------------------------------------------------------------------|--------------------------------------------------------------|
| Low                                                                  | Judgement is based on intuition                              |
| Medium                                                               | Determination is based on common sense and general knowledge |
| High                                                                 | Substantive supportive data exists to verify the assessment  |

| <b>Significance</b> - Significance of impacts are determined through a synthesis of the assessment criteria |                        |                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Rating</b>                                                                                               |                        | <b>Definition of Rating</b>                                                                                                      |
|                                                                                                             | high negative (-)      | The impact will have highly significant effects and are unlikely to be able to be mitigated adequately                           |
|                                                                                                             | Moderate negative (-)  | The impact will have significant effects and will require significant mitigation measures to achieve an accepted level of impact |
|                                                                                                             | Minor negative (-)     | The impact will have moderate negative effects and will require moderate mitigation                                              |
|                                                                                                             | Low negative (-)       | The impact will have minimal effects and would require little mitigation                                                         |
|                                                                                                             | Negligible             | The impact will have negligible effects and would require little or no mitigation                                                |
|                                                                                                             | Low positive (+)       | The impact will have minor positive effects                                                                                      |
|                                                                                                             | Medium positive (+)    | The impact will have moderate positive effects                                                                                   |
|                                                                                                             | High positive (+)      | The impact will have significant positive effects                                                                                |
|                                                                                                             | Very High positive (+) | The impact will have highly significant positive effects.                                                                        |

## 1.2 Site Specific Impacts

As per the Aquatic Specialist report page 22:

Simplified methods to determine the PES of a section of estuary, or a lake have not been developed in South Africa and are still limited to rivers and wetlands. While the PES has been determined for the estuary as a whole system, site-specific impacts may be present which provide insights into localised factors affecting the ecosystem.

**Hydrology** of the system is mostly influenced by open / closed mouth conditions, and to a lesser extent by tidal flows in both directions. The site has been assessed during both closed and open mouth conditions (February 2024; Figure 14). During closed mouth conditions, water levels were about as high as they will get under the normal mouth management regime (without flooding) as the mouth was breached by SANParks approximately a week later (June 2021). Hydrology is the parameter most negatively affected with multiple factors resulting in reduced flows, flushing and the gradual drying out of the system. These factors include:

- Reduction in freshwater inflows due to increased abstraction for agriculture in the catchment;
- Major change in flood peaks due to rigorous mouth management, breaching at 2m amsl;
- Modified channel of the Perdespruit due to 2 road crossings and the railway which include infilling of significant areas with small channels through which water can move. Additional infilling for road crossings has occurred in the Perdespruit north of the site.

**Geomorphology** relates to interaction between the physical structure of the estuary as a result of water and sediment transport. This aspect was considered to be in a moderately modified state, with the major impact being sedimentation and deposition due to reduced movement of water through the system (Figure 13).

**Vegetation** on the site is moderately modified, having been influenced by historical alien vegetation and clearing for agriculture. The extent and composition of wetland vegetation is also likely reduced due to breaching the mouth at 2m amsl and reduced flushing through this arm of the estuary. This is directly observable as the line of hydrophytic vegetation closely follows the high-water mark at the 2 m contour. While significant efforts have been made to keep the site clear of aliens, some of the cleared debris has been stacked in piles in estuarine habitat (Figure 15). Ongoing maintenance of and follow up control of alien invasive plant species at the site is necessary as emergent small trees were observed (Figure 16). While not numerous, the planting of exotic palm trees in the estuarine buffer should be discontinued and all exotic plants removed from the site.

**Water quality** is strongly influenced by the state of the mouth. In open conditions it is more saline than in closed mouth conditions. Salinity is variable which is to be expected and is tolerated by estuarine organisms. Reduced flushing rates related to lower freshwater inflows can lead to more extended periods of water stagnation resulting in lower oxygen levels which could kill off fish fry and other organisms. In addition, stormwater runoff from the N2 and Dr Malan Drive introduces pollutants such as oil and grease, heavy metals and nutrients along with macro pollutants such as cigarettes, plastic and packaging (Robertson et al., 2019). While a comprehensive physico-chemical assessment of the site is beyond the scope of this report, it is assumed that water quality is moderately to largely modified at the site. Conditions worsen when water levels and dilution rates are low.

### 1.3 Comparison of Plan 7 and Plan 10

As per the Aquatic Specialist Report page 31

The remainder of the SDP west of the residential zone 1 area differs significantly between Plans 7 and 10 with urban agriculture mostly proposed for the former, and a mix of urban agriculture and recreational facilities on the latter (Figure 23). Both proposed SDPs carry potential impacts to the Perdespruit and associated conservation/open space areas. Details of the urban agriculture proposed for either plan have not been refined, and therefore the degree to which soils on site would need to be ameliorated or improved for a range of agricultural produce is unknown. The addition of inorganic and organic fertilisers, mulch, liming agents, and minerals on sandy soil with a high-water table could result in altered and possibly reduced water quality in the Perdespruit. Furthermore, the use of pesticides could potentially pose a risk. This type of impact is already occurring north of the N2 Highway at Eden Lawns instant lawns, although the land use in that case is immediately adjacent to the Perdespruit and therefore higher risk. Plan 10 proposes recreational facilities such as a cycling pump track, rock-climbing wall, skate park or mini golf. A showground and general outdoor recreational facilities are also indicated.

The impacts associated with the layout, construction and operational phases of either plan are difficult to determine without knowledge of the type of agriculture proposed. One positive impact however, is that it seems likely that a lot less vehicle and foot traffic would be entering the property for Plan 7 than for the periodic busy periods anticipated with facilities proposed in Plan 10 (Figure 18). More people mean more cars, waste, recreational areas, noise, lights, and disturbance in general. This could negate some of the positive impacts intended by the inclusion of green corridors.

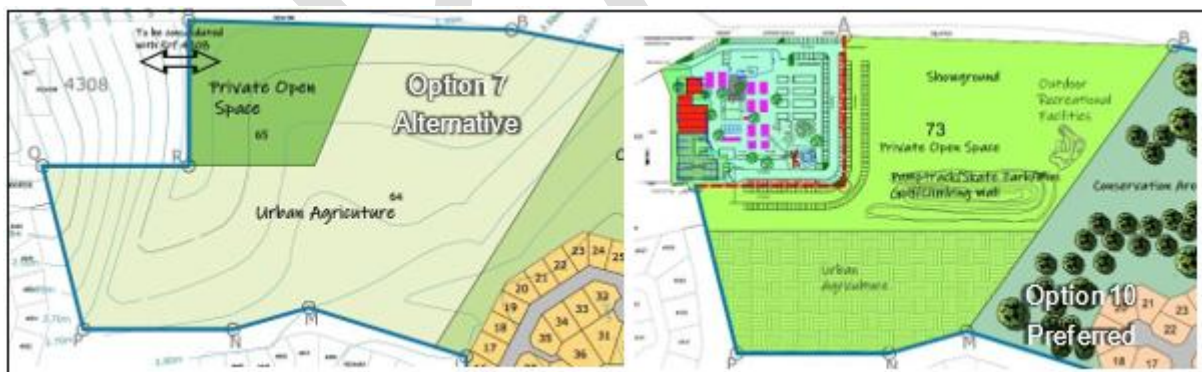


Figure 18: Comparison of remaining development proposal between Option 7 (left) and Option 10 (right) SDPs.

## 2. PREFERRED ALTERNATIVE (ALTERNATIVE A) IMPACTS ASSOCIATED WITH THE CONSTRUCTION PHASE

Here follows impacts that may result from the construction phase for Alternative A (preferred). A brief description of potential impact, significance rating of impacts, proposed mitigation, and significance rating of impacts after mitigation will be provided.

Here follows impacts that may result from the construction phase for Alternative B. A brief description of potential impact, significance rating of impacts, proposed mitigation, and significance rating of impacts after mitigation will be provided.

| Project Phase            | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                          |                 |                                                                       |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------|
| Impact                   | Loss of terrestrial biodiversity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                          |                 |                                                                       |
| Description of impact    | Loss of indigenous vegetation, sensitive vegetation, ecological processes, ecologically important species, ecological connectivity, and terrestrial biodiversity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                          |                 |                                                                       |
| Potential for mitigation | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Mitigation measures are unlikely to be effective or necessary, with minimal chance of significantly reducing the impact. |                 |                                                                       |
| Potential mitigation     | <ul style="list-style-type: none"><li>• The vegetation in areas of thicket fynbos habitat that are not earmarked for development must be rehabilitated to a state that is at least partially representative of the original fynbos ecosystem and capable of supporting moderate to high levels of ecological functioning.</li><li>• Rehabilitation must be implemented in a phased manner, guided by a formal rehabilitation plan and overseen by a qualified botanist or restoration ecologist.</li><li>• The first step involves the removal and control of all invasive alien plant species (IAPs) on the property, with erosion control measures implemented where necessary.</li><li>• Passive rehabilitation is recommended for areas where no earthworks have taken place. These areas should be allowed to recover for one winter season following IAP removal.</li><li>• After this period, the site must be assessed by the restoration contractor to determine the appropriate level of active rehabilitation, which will be required in areas where topsoil has been disturbed or removed.</li><li>• Follow-up clearing of all exotic and listed IAPs must occur every six months for the first three years, and annually thereafter, to prevent re-establishment and dominance within the fynbos vegetation.</li><li>• Areas that will not be developed must be clearly marked before the commencement of any works to prevent unnecessary disturbance to adjacent vegetation.</li><li>• Locations for storing building materials, vehicles, toilets, and other infrastructure must be clearly demarcated and restricted to within the building footprint, existing roads, or previously disturbed areas.</li></ul> |                                                                                                                          |                 |                                                                       |
| Assessment               | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                          | With mitigation |                                                                       |
| Nature                   | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                          | Negative        |                                                                       |
| Duration                 | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Impact may be permanent, or in excess of 20 years                                                                        | Permanent       | Impact may be permanent, or in excess of 20 years                     |
| Extent                   | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Limited to the site and its immediate surroundings                                                                       | Very limited    | Limited to the site and its immediate surroundings                    |
| Intensity                | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Natural and/or social functions and/or processes are notably altered                                                     | Low             | Natural and/or social functions and/or processes are slightly altered |
| Probability              | Definite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Has occurred here or elsewhere and could therefore occur                                                                 | Probable        | It is most likely that the impact will occur                          |
| Confidence               | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Substantive supportive data exists to verify the assessment                                                              | High            | Substantive supportive data exists to verify the assessment           |

|                           |                                                                                                                                                                                                                     |                                                                                          |                    |                                                                                          |
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| Reversibility             | Barely reversible                                                                                                                                                                                                   | The affected environment will only recover from the impact with significant intervention | Medium             | The affected environment will only recover from the impact with significant intervention |
| Resource irreplaceability | Low                                                                                                                                                                                                                 | The impact is unlikely to be reversed even with intense mitigation measures              | Low                | The impact is unlikely to be reversed even with intense mitigation measures              |
| Significance              | Low – negative (-)                                                                                                                                                                                                  |                                                                                          | Low – negative (-) |                                                                                          |
| Comment on significance   | The significance of the impact is assessed to be low. Implementation of the recommended mitigation measures will promote environmental best practice and further support the viability of the proposed development. |                                                                                          |                    |                                                                                          |
| Cumulative impacts        | The impact would result in very low cumulative effects.                                                                                                                                                             |                                                                                          |                    |                                                                                          |

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| Project Phase             | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                    |                           |                                                                                  |
| Impact                    | Loss of species of conservation concern                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                    |                           |                                                                                  |
| Description of impact     | Loss of indigenous vegetation pertaining to species of conservation concern.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                    |                           |                                                                                  |
| Potential for mitigation  | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | There is a moderate probability that mitigation measures can be effectively implemented to reduce or manage the identified impact. |                           |                                                                                  |
| Potential mitigation      | <ul style="list-style-type: none"><li>• In cases where construction areas are located near SCC or protected trees and cannot be relocated, site layout and infrastructure placement must be carefully designed to avoid direct disturbance to these individuals.</li><li>• All construction activities in proximity to SCCs must incorporate strict mitigation measures, including physical demarcation of the SCC locations, the establishment of no-go buffer zones, and supervision by a suitably qualified Environmental Control Officer (ECO) during construction.</li><li>• Micro-siting of platforms and pathways must be adapted on-site to ensure minimal impact, and no excavation, vegetation clearing, or material storage may occur within the buffer zones surrounding SCCs or protected trees.</li></ul> |                                                                                                                                    |                           |                                                                                  |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                    | With mitigation           |                                                                                  |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                    | Negative                  |                                                                                  |
| Duration                  | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Impact may be permanent, or in excess of 20 years                                                                                  | Short term                | Impact will last between 1 and 2 years                                           |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Limited to the site and its immediate surroundings                                                                                 | Very limited              | Limited to the site and its immediate surroundings                               |
| Intensity                 | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Natural and/or social functions and/or processes are notably altered                                                               | Low                       | Natural and/or social functions and/or processes are slightly altered            |
| Probability               | Definite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Has occurred here or elsewhere and could therefore occur                                                                           | Possible                  | Has occurred here or elsewhere and could therefore occur                         |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Substantive supportive data exists to verify the assessment                                                                        | High                      | Substantive supportive data exists to verify the assessment                      |
| Reversibility             | Partly reversible                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | the impact is reversible, but more intense mitigation measures are required                                                        | Completely reversible     | the impact can be reversed with the implementation of minor mitigation measures. |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | The impact is unlikely to be reversed even with intense mitigation measures                                                        | Low                       | The impact is unlikely to be reversed even with intense mitigation measures      |
| Significance              | Low – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                    | Negligible – negative (-) |                                                                                  |
| Comment on significance   | The impact will have negligible effects and would require little or no mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                    |                           |                                                                                  |
| Cumulative impacts        | Regardless of whether the proposed mitigation measures are implemented, the cumulative impact has been assessed as very low.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                    |                           |                                                                                  |

| Project Phase             | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                          |                    |                                                                             |
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| Impact                    | Disturbance / loss of faunal habitat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                          |                    |                                                                             |
| Description of impact     | The proposed development will result in some loss of faunal habitat space.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                          |                    |                                                                             |
| Potential for mitigation  | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Mitigation measures are unlikely to be effective or necessary, with minimal chance of significantly reducing the impact. |                    |                                                                             |
| Potential mitigation      | <ul style="list-style-type: none"><li>• Prior to construction, the disturbance footprint of the development should be clearly defined and demarcated to prevent unnecessary additional damage to the surrounding environment.</li><li>• Where vegetation will be cleared to make way for construction, filled sandbags, silt socks or a silt fence must be used to reduce the intensity of water runoff and flow over the site and thereby reduce erosion potential.</li><li>• Protection and reuse of topsoil can be critical for the success of rehabilitation of vegetation following construction processes as it contains valuable seedbank of indigenous plants that regenerate after the soil is replaced. Topsoil removed during construction should be treated with care for all the proposed developments on the property.</li></ul> |                                                                                                                          |                    |                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                          | With mitigation    |                                                                             |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                          | Negative           |                                                                             |
| Duration                  | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Impact may be permanent, or in excess of 20 years                                                                        | Permanent          | Impact may be permanent, or in excess of 20 years                           |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Limited to the site and its immediate surroundings                                                                       | Very limited       | Limited to the site and its immediate surroundings                          |
| Intensity                 | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Natural and/ or social functions and/ or processes are significantly altered                                             | Negligible         | Natural and/ or social functions and/ or processes are negligibly altered   |
| Probability               | Definite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Has occurred here or elsewhere and could therefore occur                                                                 | Probable           | It is most likely that the impact will occur                                |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Substantive supportive data exists to verify the assessment                                                              | High               | Substantive supportive data exists to verify the assessment                 |
| Reversibility             | Barely reversible                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | The affected environment will only recover from the impact with significant intervention                                 | Partly reversible  | the impact is reversible, but more intense mitigation measures are required |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | The impact is unlikely to be reversed even with intense mitigation measures                                              | Low                | The impact is unlikely to be reversed even with intense mitigation measures |
| Significance              | Medium – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                          | Low – negative (-) |                                                                             |
| Comment on significance   | The impact will have minimal effects and would require little mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                          |                    |                                                                             |
| Cumulative impacts        | The impact would result in very low cumulative effects.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                          |                    |                                                                             |

| Project Phase            | Construction                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                          |
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| Impact                   | Loss of fauna                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                          |
| Description of impact    | Fauna may occur on site and be killed or seriously harmed during construction related activities.                                                                                                                                                                                                                                                                                                                                         |                                                                                                                          |
| Potential for mitigation | Low                                                                                                                                                                                                                                                                                                                                                                                                                                       | Mitigation measures are unlikely to be effective or necessary, with minimal chance of significantly reducing the impact. |
| Potential mitigation     | <ul style="list-style-type: none"><li>Construction should happen in phases, such that construction related activities are confined to one area at a time on the property and can be monitored for faunal impacts appropriately.</li><li>Before construction commences at the start of new phase, an ECO should do a walk-through of the demarcated area and access roads that will be used to look fauna with limited mobility.</li></ul> |                                                                                                                          |
| Assessment               | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                        | With mitigation                                                                                                          |
| Nature                   | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                  | Negative                                                                                                                 |

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| Duration                  | Short term                                                               | Impact will last between 1 and 2 years                                                   | Brief                     | Impact will not last longer than 1 year                                     |
| Extent                    | Limited                                                                  | Limited to the site and its immediate surroundings                                       | Very limited              | Limited to the site and its immediate surroundings                          |
| Intensity                 | High                                                                     | Natural and/ or social functions and/ or processes are significantly altered             | Negligible                | Natural and/ or social functions and/ or processes are negligibly altered   |
| Probability               | Definite                                                                 | Has occurred here or elsewhere and could therefore occur                                 | Probable                  | It is most likely that the impact will occur                                |
| Confidence                | High                                                                     | Substantive supportive data exists to verify the assessment                              | High                      | Substantive supportive data exists to verify the assessment                 |
| Reversibility             | Barely reversible                                                        | The affected environment will only recover from the impact with significant intervention | Partly reversible         | the impact is reversible, but more intense mitigation measures are required |
| Resource irreplaceability | Low                                                                      | The impact is unlikely to be reversed even with intense mitigation measures              | Low                       | The impact is unlikely to be reversed even with intense mitigation measures |
| Significance              | Low – negative (-)                                                       |                                                                                          | Negligible – negative (-) |                                                                             |
| Comment on significance   | The impact will have minimal effects and would require little mitigation |                                                                                          |                           |                                                                             |
| Cumulative impacts        | The impact would result in very low cumulative effects.                  |                                                                                          |                           |                                                                             |

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| Project Phase            | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                            |                 |                                         |
| Impact                   | Sedimentation of estuarine habitat caused by removal of vegetation and erosion of soil.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                            |                 |                                         |
| Description of impact    | As vegetation is cleared for construction, the highly erodible soils will be exposed to the elements, which will result in a short-term increase in the likelihood of erosion and runoff of sediments and other pollutants down the slope towards the estuary.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                            |                 |                                         |
| Potential for mitigation | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Mitigation exists and will considerably reduce the significance of impacts |                 |                                         |
| Potential mitigation     | <ul style="list-style-type: none"><li>Do not clear vegetation outside the proposed development footprint.</li><li>Only use one access road for each.</li><li>Use the existing road as far as possible.</li><li>Install silt fences or sediment barriers around the perimeter of the construction site to trap sediment-laden runoff and prevent it from entering the estuary.</li><li>Implement phased construction to minimise the area of exposed soil at any given time and reduce the potential for erosion.</li><li>Apply mulch or erosion control mats on exposed slopes and disturbed areas to stabilise soils and reduce erosion rates.</li><li>A 36 m buffer from the Knysna Estuary must be maintained and demarcated as a no-go area.</li><li>The laydown areas must be constructed on flat surfaces with a minimum distance of 20 m from the buffer.</li><li>All stockpiles must be covered at the end of the day.</li><li>Install temporary drainage controls such as swales or berms to manage runoff where necessary.</li><li>All materials used during construction must follow the best practice guidelines set out for each product.</li><li>Check weather reports ahead and prepare the site when rainfall is predicted. Discontinue any earthworks on the site during rainfall.</li></ul> |                                                                            |                 |                                         |
| Assessment               | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                            | With mitigation |                                         |
| Nature                   | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                            | Low Negative    |                                         |
| Duration                 | Short term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Impact will last between 1 and 5 years                                     | Brief           | Impact will not last longer than 1 year |

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| <b>Extent</b>                    | Very limited                                                                                           | Limited to specific isolated parts of the site                                           | Very limited                     | Limited to specific isolated parts of the site                                                                                              |
| <b>Intensity</b>                 | High                                                                                                   | Natural and/ or social functions and/ or processes are significantly altered             | Negligible                       | Natural and/ or social functions and/ or processes are negligibly altered                                                                   |
| <b>Probability</b>               | Probable                                                                                               | It is most likely that the impact will occur                                             | Improbable                       | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| <b>Confidence</b>                | High                                                                                                   | Substantive supportive data exists to verify the assessment                              | High                             | Substantive supportive data exists to verify the assessment                                                                                 |
| <b>Reversibility</b>             | Medium                                                                                                 | The affected environment will only recover from the impact with significant intervention | High                             | The affected environmental will be able to recover from the impact                                                                          |
| <b>Resource irreplaceability</b> | Low                                                                                                    | The resource is not damaged irreparably or is not scarce                                 | Low                              | The resource is not damaged irreparably or is not scarce                                                                                    |
| <b>Significance</b>              | <b>Low – negative (-)</b>                                                                              |                                                                                          | <b>Negligible – negative (-)</b> |                                                                                                                                             |
| <b>Comment on significance</b>   | The impact will have negligible effects and would require little or no mitigation.                     |                                                                                          |                                  |                                                                                                                                             |
| <b>Cumulative impacts</b>        | Without mitigation this impact could result in the loss of faunal species and cause potential erosion. |                                                                                          |                                  |                                                                                                                                             |

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| Project Phase            | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                            |                 |                                                                      |
| Impact                   | Visual Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                            |                 |                                                                      |
| Description of impact    | The proposed development might have an aesthetic impact on the surrounding                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                            |                 |                                                                      |
| Potential for mitigation | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Mitigation exists and will considerably reduce the significance of impacts |                 |                                                                      |
| Potential mitigation     | <ul style="list-style-type: none"><li>Minimise vegetation clearance to only what is essential for construction and access.</li><li>Retain existing vegetation where possible to act as a natural screen, especially from key viewpoints (e.g. Leisure Island, Knysna Heads).</li><li>Define strict construction boundaries with visible demarcation to prevent accidental disturbance.</li><li>Use non-reflective, natural tones (earthy browns, greens) on all visible infrastructure (walls, roofs, decks) to blend with the landscape.</li></ul> |                                                                            |                 |                                                                      |
| Assessment               | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                            | With mitigation |                                                                      |
| Nature                   | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                            | Low Negative    |                                                                      |
| Duration                 | Short term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Impact will last between 1 and 5 years                                     | Short term      | Impact will last between 1 and 5 years                               |
| Extent                   | Local                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Extending across the site and to nearby settlements                        | Local           | Extending across the site and to nearby settlements                  |
| Intensity                | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Natural and/or social functions and/or processes are notably altered       | Medium          | Natural and/or social functions and/or processes are notably altered |
| Probability              | Probable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | It is most likely that the impact will occur                               | Probable        | It is most likely that the impact will occur                         |
| Confidence               | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Substantive supportive data exists to verify the assessment                | High            | Substantive supportive data exists to verify the assessment          |

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| Reversibility             | Partly reversible                                                                                      | the impact is reversible, but more intense mitigation measures are required | Partly reversible         | the impact is reversible, but more intense mitigation measures are required |
| Resource irreplaceability | Low                                                                                                    | The resource is not damaged irreparably or is not scarce                    | Low                       | The resource is not damaged irreparably or is not scarce                    |
| Significance              | Low – negative (-)                                                                                     |                                                                             | Negligible – negative (-) |                                                                             |
| Comment on significance   | The impact will have negligible effects and would require little or no mitigation.                     |                                                                             |                           |                                                                             |
| Cumulative impacts        | Without mitigation this impact could result in the loss of faunal species and cause potential erosion. |                                                                             |                           |                                                                             |

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| Project Phase             | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                        |                           |                                                                                                                                             |
| Impact                    | Waste Pollution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                        |                           |                                                                                                                                             |
| Description of impact     | Pollution caused by waste generated by the construction process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                        |                           |                                                                                                                                             |
| Potential for mitigation  | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Mitigation exists and will considerably reduce significance of impacts |                           |                                                                                                                                             |
| Potential mitigation      | <ul style="list-style-type: none"><li>All construction waste generated on-site during construction must be adequately managed. Separation and recycling of different waste materials should be supported.</li><li>All construction waste materials must be collected and disposed of at a suitable waste facility.</li><li>No dumping of construction material within the site and surrounding areas may take place.</li><li>The site must be monitored on a weekly basis to clean-up any waste that may have been blown from the construction site.</li><li>Adequate sanitary facilities and ablutions must be provided for all personnel throughout the project area. Use of these facilities must be enforced.</li></ul> |                                                                        |                           |                                                                                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                        | With mitigation           |                                                                                                                                             |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                        | Low negative              |                                                                                                                                             |
| Duration                  | Short term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Impact will last between 1 and 5 years                                 | Brief                     | Impact will not last longer than 1 year                                                                                                     |
| Extent                    | Very limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Limited to the site and its immediate surroundings                     | Very limited              | Limited to the site and its immediate surroundings                                                                                          |
| Intensity                 | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Natural and/or social functions and/or processes are somewhat altered  | Very low                  | Natural and/or social functions and/or processes are slightly altered                                                                       |
| Probability               | Likely                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | The impact may occur                                                   | Rare / improbable         | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Substantive supportive data exists to verify the assessment            | High                      | Substantive supportive data exists to verify the assessment                                                                                 |
| Reversibility             | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | The affected environmental will be able to recover from the impact     | High                      | The affected environmental will be able to recover from the impact                                                                          |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The resource is not damaged irreparably or is not scarce               | Low                       | The resource is not damaged irreparably or is not scarce                                                                                    |
| Significance              | Low- negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                        | Negligible – negative (-) |                                                                                                                                             |
| Comment on significance   | Construction activities are likely to generate significant quantities of solid waste that could pollute natural areas. In addition, the high numbers of construction workers present on site will generate a significant amount of human waste, which could pollute the environment.                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                        |                           |                                                                                                                                             |
| Cumulative impacts        | The impact would result in insignificant cumulative effects.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                        |                           |                                                                                                                                             |

| Project Phase             | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                        |                           |                                                                                                                                             |
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| Impact                    | Construction Vehicles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                        |                           |                                                                                                                                             |
| Description of impact     | Pollution caused by the operation of vehicles and heavy machinery.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                        |                           |                                                                                                                                             |
| Potential for mitigation  | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Mitigation exists and will considerably reduce significance of impacts |                           |                                                                                                                                             |
| Potential mitigation      | <ul style="list-style-type: none"><li>Construction activities must be confined to clearly demarcated areas so as to prevent unnecessary disturbance the surrounding environment.</li><li>No vehicles are to park or operate within “no-go” areas.</li><li>Excavators and all other machinery and vehicles must be checked for oil and fuel leaks daily. No machinery or vehicles with leaks are permitted to work on site.</li><li>Refuelling and fuel storage areas, and areas used for the servicing or parking of vehicles and machinery, must be located on impervious bases and should have bunds around them (sized to contain 110 % of the tank capacity) to contain any possible spills.</li><li>The contractors used for the project should have spill kits available to ensure that any fuel or oil spills are clean-up and discarded correctly.</li></ul> |                                                                        |                           |                                                                                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                        | With mitigation           |                                                                                                                                             |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                        | Low negative              |                                                                                                                                             |
| Duration                  | Short term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Impact will last between 1 and 5 years                                 | Brief                     | Impact will not last longer than 1 year                                                                                                     |
| Extent                    | Very limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Limited to the site and its immediate surroundings                     | Very limited              | Limited to the site and its immediate surroundings                                                                                          |
| Intensity                 | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Natural and/or social functions and/or processes are somewhat altered  | Very low                  | Natural and/or social functions and/or processes are slightly altered                                                                       |
| Probability               | Likely                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The impact may occur                                                   | Rare / improbable         | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Substantive supportive data exists to verify the assessment            | High                      | Substantive supportive data exists to verify the assessment                                                                                 |
| Reversibility             | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | The affected environmental will be able to recover from the impact     | High                      | The affected environmental will be able to recover from the impact                                                                          |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The resource is not damaged irreparably or is not scarce               | Low                       | The resource is not damaged irreparably or is not scarce                                                                                    |
| Significance              | Low- negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                        | Negligible – negative (-) |                                                                                                                                             |
| Comment on significance   | Operation of vehicles could result in spillages or leaks of hydrocarbons (fuel and oil) and could lead to unnecessary disturbance of natural areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                        |                           |                                                                                                                                             |
| Cumulative impacts        | The impact would result in insignificant cumulative effects.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                        |                           |                                                                                                                                             |

| Project Phase            | Construction                                                                                                                                                                                                                                                                                                                               |                                                                                           |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Impact                   | Noise pollution                                                                                                                                                                                                                                                                                                                            |                                                                                           |
| Description of impact    | Noise caused by machinery and staff                                                                                                                                                                                                                                                                                                        |                                                                                           |
| Potential for mitigation | Low                                                                                                                                                                                                                                                                                                                                        | Mitigation does not exist; or mitigation will slightly reduce the significance of impacts |
| Potential mitigation     | <ul style="list-style-type: none"><li>Construction activities must only take place during normal working times between 07:00-17:00 on weekdays.</li><li>Machinery may be fitted with silences to dampen noise.</li><li>Staff must be reminded that they are working within a residential area and noise levels must be kept low.</li></ul> |                                                                                           |
| Assessment               | Without mitigation                                                                                                                                                                                                                                                                                                                         | With mitigation                                                                           |

|                           |                                                                                                                      |                                                                         |                                  |                                                                           |
|---------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------|
| Nature                    | Negative                                                                                                             |                                                                         | Negative                         |                                                                           |
| Duration                  | Brief                                                                                                                | Impact will not last longer than 1 year                                 | Brief                            | Impact will not last longer than 1 year                                   |
| Extent                    | Limited                                                                                                              | Limited to the site and its immediate surroundings                      | Limited                          | Limited to the site and its immediate surroundings                        |
| Intensity                 | Very low                                                                                                             | Natural and/ or social functions and/ or processes are slightly altered | Negligible                       | Natural and/ or social functions and/ or processes are negligibly altered |
| Probability               | Almost certain / Highly probable                                                                                     | It is most likely that the impact will occur                            | Almost certain / Highly probable | It is most likely that the impact will occur                              |
| Confidence                | Medium                                                                                                               | Determination is based on common sense and general knowledge            | Medium                           | Determination is based on common sense and general knowledge              |
| Reversibility             | High                                                                                                                 | The affected environmental will be able to recover from the impact      | High                             | The affected environmental will be able to recover from the impact        |
| Resource irreplaceability | Not relevant                                                                                                         |                                                                         | Not relevant                     |                                                                           |
| Significance              | Low- negative (-)                                                                                                    |                                                                         | Negligible – negative (-)        |                                                                           |
| Comment on significance   | Some extent of noise pollution during construction is expected; however, with mitigation the impact will be reduced. |                                                                         |                                  |                                                                           |
| Cumulative impacts        | No cumulative impacts exist.                                                                                         |                                                                         |                                  |                                                                           |

|                           |                                                                                                                                                                                                                        |                                                                                                                                             |                                  |                                                                         |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------|
| Project Phase             | Construction                                                                                                                                                                                                           |                                                                                                                                             |                                  |                                                                         |
| Impact                    | Employment                                                                                                                                                                                                             |                                                                                                                                             |                                  |                                                                         |
| Description of impact     | Empowerment of the local community members living in the area relating to temporary employment opportunities                                                                                                           |                                                                                                                                             |                                  |                                                                         |
| Potential for mitigation  | Medium                                                                                                                                                                                                                 | Mitigation only exists to ensure that the positive impact is followed through.                                                              |                                  |                                                                         |
| Potential mitigation      | <ul style="list-style-type: none"><li>• Use existing social structures and communication channels to ensure social representation.</li><li>• Use local labour and source local materials as far as possible.</li></ul> |                                                                                                                                             |                                  |                                                                         |
| Assessment                | Without mitigation                                                                                                                                                                                                     |                                                                                                                                             | With mitigation                  |                                                                         |
| Nature                    | Negative                                                                                                                                                                                                               |                                                                                                                                             | Positive                         |                                                                         |
| Duration                  | Short term                                                                                                                                                                                                             | Impact will last between 1 and 5 years                                                                                                      | Short term                       | Impact will last between 1 and 5 years                                  |
| Extent                    | Local                                                                                                                                                                                                                  | Extending across the site and to nearby settlements                                                                                         | Local                            | Extending across the site and to nearby settlements                     |
| Intensity                 | Low                                                                                                                                                                                                                    | Natural and/ or social functions and/ or processes are somewhat altered                                                                     | Low                              | Natural and/ or social functions and/ or processes are somewhat altered |
| Probability               | Rare / improbable                                                                                                                                                                                                      | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere | Almost certain / Highly probable | It is most likely that the impact will occur                            |
| Confidence                | Medium                                                                                                                                                                                                                 | Determination is based on common sense and general knowledge                                                                                | Medium                           | Determination is based on common sense and general knowledge            |
| Reversibility             | Not relevant                                                                                                                                                                                                           |                                                                                                                                             | Not relevant                     |                                                                         |
| Resource irreplaceability | Not relevant                                                                                                                                                                                                           |                                                                                                                                             | Not relevant                     |                                                                         |

| Significance            | Low – negative (-)                                                                | Negligible – positive (+) |
|-------------------------|-----------------------------------------------------------------------------------|---------------------------|
| Comment on significance | The impact will have negligible effects and would require little or no mitigation |                           |
| Cumulative impacts      | Minor upliftment for the local community.                                         |                           |

### 3. (ALTERNATIVE A - PREFERRED) IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE

| Project Phase             | Operational                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                          |                           |                                                                                          |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------------------------------------------------------------------|
| Impact                    | Loss of terrestrial biodiversity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                          |                           |                                                                                          |
| Description of impact     | Loss of indigenous vegetation, sensitive vegetation, ecological processes, ecologically important species, ecological connectivity, and terrestrial biodiversity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                          |                           |                                                                                          |
| Potential for mitigation  | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Mitigation measures are unlikely to be effective or necessary, with minimal chance of significantly reducing the impact. |                           |                                                                                          |
| Potential mitigation      | <ul style="list-style-type: none"><li>All operational-phase activities must remain strictly confined to the approved development footprint and previously disturbed areas. While informal footpaths may form naturally through use during hiking, no additional vegetation clearing should be permitted during the operational phase.</li><li>The vegetation from the thicket fynbos habitat that is not developed must be rehabilitated to a state where it is at least partially representative of the original fynbos ecosystem and supports ecological functioning to a moderate or high level. This rehabilitation must be undertaken in a phased approach, according to a rehabilitation plan and undertaken by a qualified botanist or restoration ecologist.</li><li>The initial step is to ensure that all IAPs on the property are removed, with erosion control implemented where necessary. Passive rehabilitation is recommended on the parts of the site where no earthworks have taken place. The site must be assessed by the restoration contractor to determine the level of active rehabilitation input. Active rehabilitation will be required for areas where topsoil has been removed.</li><li>Follow-up clearing of all exotic and listed IAPs is required every 6 months for the first three years, and annually thereafter to ensure that the IAPs do not dominate the fynbos.</li></ul> |                                                                                                                          |                           |                                                                                          |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                          | With mitigation           |                                                                                          |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                          | Negative                  |                                                                                          |
| Duration                  | Medium Term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Impact will last between 2 and 15 years                                                                                  | Medium Term               | Impact will last between 2 and 15 years                                                  |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Limited to the site and its immediate surroundings                                                                       | Very limited              | Limited to the site and its immediate surroundings                                       |
| Intensity                 | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Natural and/or social functions and/or processes are slightly altered                                                    | Low                       | Natural and/or social functions and/or processes are slightly altered                    |
| Probability               | Probable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | It is most likely that the impact will occur                                                                             | Probable                  | It is most likely that the impact will occur                                             |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Substantive supportive data exists to verify the assessment                                                              | High                      | Substantive supportive data exists to verify the assessment                              |
| Reversibility             | Barely reversible                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | The affected environment will only recover from the impact with significant intervention                                 | Barely reversible         | The affected environment will only recover from the impact with significant intervention |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The impact is unlikely to be reversed even with intense mitigation measures                                              | Low                       | The impact is unlikely to be reversed even with intense mitigation measures              |
| Significance              | Negligible – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                          | Negligible – negative (-) |                                                                                          |
| Comment on significance   | The impact will have negligible effects and would require little or no mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                          |                           |                                                                                          |
| Cumulative impacts        | The impact would result in very low cumulative effects.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                          |                           |                                                                                          |

| Project Phase             | Operational                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                          |                           |                                                                                          |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------------------------------------------------------------------|
| Impact                    | Loss of species of conservation concern                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                          |                           |                                                                                          |
| Description of impact     | Loss of indigenous vegetation pertaining to species of conservation concern.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                          |                           |                                                                                          |
| Potential for mitigation  | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Mitigation measures are unlikely to be effective or necessary, with minimal chance of significantly reducing the impact. |                           |                                                                                          |
| Potential mitigation      | <ul style="list-style-type: none"><li>All operational-phase activities must remain strictly confined to the approved development footprint and previously disturbed areas. While informal footpaths may form naturally through use during hiking, no additional vegetation clearing should be permitted during the operational phase.</li><li>All identified SCC locations must be demarcated as permanent no-go zones. These areas must be visibly marked on site. No foot traffic, landscaping, firewood collection, or infrastructure maintenance may occur within these zones.</li></ul> |                                                                                                                          |                           |                                                                                          |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                          | With mitigation           |                                                                                          |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                          | Negative                  |                                                                                          |
| Duration                  | Medium Term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Impact will last between 2 and 15 years                                                                                  | Medium Term               | Impact will last between 2 and 15 years                                                  |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Limited to the site and its immediate surroundings                                                                       | Very limited              | Limited to the site and its immediate surroundings                                       |
| Intensity                 | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Natural and/or social functions and/or processes are slightly altered                                                    | Low                       | Natural and/or social functions and/or processes are slightly altered                    |
| Probability               | Probable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | It is most likely that the impact will occur                                                                             | Probable                  | It is most likely that the impact will occur                                             |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Substantive supportive data exists to verify the assessment                                                              | High                      | Substantive supportive data exists to verify the assessment                              |
| Reversibility             | Barely reversible                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | The affected environment will only recover from the impact with significant intervention                                 | Barely reversible         | The affected environment will only recover from the impact with significant intervention |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | The impact is unlikely to be reversed even with intense mitigation measures                                              | Low                       | The impact is unlikely to be reversed even with intense mitigation measures              |
| Significance              | Negligible – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                          | Negligible – negative (-) |                                                                                          |
| Comment on significance   | The impact will have negligible effects and would require little or no mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                          |                           |                                                                                          |
| Cumulative impacts        | The impact would result in very low cumulative effects.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                          |                           |                                                                                          |

| Project Phase            | Operational                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                          |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Impact                   | Disturbance of fauna due to noise and lighting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                          |
| Description of impact    | The development on the site will alter the disturbance regime of the largely natural area on the property through changes in noise and artificial lighting levels. For the most part, these disturbances will be restricted to the immediate surroundings of the road (i.e. traffic noise) and residential units (i.e. people talking/shouting, music). However, this can have a significant impact on biodiversity and alter the way fauna use the landscape (i.e. the creation of a landscape of fear resulting in animals avoiding certain habitats/areas around human disturbances; insects attracted to lights decreases their survival, negatively impacts on the ecosystem services they provide and has negative knock-on consequences for their associated predators). |                                                                                                                          |
| Potential for mitigation | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Mitigation measures are unlikely to be effective or necessary, with minimal chance of significantly reducing the impact. |
| Potential mitigation     | <ul style="list-style-type: none"><li>Light pollution must be reduced and avoided wherever possible during the operational phase of the project. White LED lights have the worst negative effects for the environment, therefore dimmer lights with more natural warm light colours must be used. This must be outlined for guests making use of the residential facilities as well by means of visible signage.</li><li>Permanent lighting along roads must be avoided. Given the low traffic volumes expected for this development, road-side lighting along the access roads is unnecessary and will cause avoidable impacts on biodiversity, particularly increasing the risk of roadkill.</li></ul>                                                                        |                                                                                                                          |

|                           |                                                                                                                                                                                           |                                                                             |                    |                                                                             |
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|                           | <ul style="list-style-type: none"><li>Noise should be minimised on the site and loud sirens/alarms must not be permitted. Guests are to be informed of this measure by signage.</li></ul> |                                                                             |                    |                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                        |                                                                             | With mitigation    |                                                                             |
| Nature                    | Negative                                                                                                                                                                                  |                                                                             | Negative           |                                                                             |
| Duration                  | On-going                                                                                                                                                                                  |                                                                             | On-gong            |                                                                             |
| Extent                    | Limited                                                                                                                                                                                   | Limited to the site and its immediate surroundings                          | Very limited       | Limited to the site and its immediate surroundings                          |
| Intensity                 | Very High                                                                                                                                                                                 | Natural and/ or social functions and/ or processes are severely altered     | Low                | Natural and/or social functions and/or processes are slightly altered       |
| Probability               | Definite                                                                                                                                                                                  | There are sound scientific reasons to expect that the impact will occur     | Definite           | There are sound scientific reasons to expect that the impact will occur     |
| Confidence                | High                                                                                                                                                                                      | Substantive supportive data exists to verify the assessment                 | High               | Substantive supportive data exists to verify the assessment                 |
| Reversibility             | Partly reversible                                                                                                                                                                         | The impact is reversible, but more intense mitigation measures are required | Partly reversible  | The impact is reversible, but more intense mitigation measures are required |
| Resource irreplaceability | Low                                                                                                                                                                                       | The impact is unlikely to be reversed even with intense mitigation measures | Low                | The impact is unlikely to be reversed even with intense mitigation measures |
| Significance              | Medium – negative (-)                                                                                                                                                                     |                                                                             | Low – negative (-) |                                                                             |
| Comment on significance   | The impact will have minimal effects and would require little mitigation                                                                                                                  |                                                                             |                    |                                                                             |
| Cumulative impacts        | The impact would result in very low cumulative effects.                                                                                                                                   |                                                                             |                    |                                                                             |

| Project Phase            | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                            |                 |                                                   |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------|---------------------------------------------------|
| Impact                   | Sedimentation of estuarine habitat due to erosion of soil caused by increased stormwater volumes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                            |                 |                                                   |
| Description of impact    | The addition of hardened, impermeable surfaces (e.g. housing/ roads ect.) will lead to an increase in stormwater runoff which can increase the likelihood of erosion along the sandy cliff.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                            |                 |                                                   |
| Potential for mitigation | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Mitigation exists and will considerably reduce the significance of impacts |                 |                                                   |
| Potential mitigation     | <ul style="list-style-type: none"><li>• Rainwater harvesting tanks should be installed at each house. The tanks should be connected with the plumbing of the building (e.g. toilets and showers) to reduce the likelihood of the tanks overflowing and to save water.</li><li>• Use of permeable paving must be implemented in all new paving area to encourage infiltration of water into the soil.</li><li>• Maintain good vegetation cover around residential areas.</li><li>• Maintain the 36 m buffer area.</li><li>• Control of alien invasive plant species must be carried out within buffer areas to encourage recolonisation by indigenous vegetation and improve the structural integrity of the buffer.</li><li>• Only use the existing access road for access to the residential areas.</li><li>• Only use the existing staircase to access the beach.</li><li>• Control of alien invasive plant species must be carried out within the buffer area to encourage recolonisation by indigenous vegetation and improve the structural integrity of the buffer.</li></ul> |                                                                            |                 |                                                   |
| Assessment               | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                            | With mitigation |                                                   |
| Nature                   | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                            | Low Negative    |                                                   |
| Duration                 | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Impact may be permanent, or in excess of 20 years                          | Permanent       | Impact may be permanent, or in excess of 20 years |
| Extent                   | Very limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Limited to specific isolated parts of the site                             | Very limited    | Limited to specific isolated parts of the site    |

|                           |                                                                                                        |                                                                                          |                           |                                                                                                                                             |
|---------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Intensity                 | High                                                                                                   | Natural and/ or social functions and/ or processes are significantly altered             | Negligible                | Natural and/ or social functions and/ or processes are negligibly altered                                                                   |
| Probability               | Probable                                                                                               | It is most likely that the impact will occur                                             | Improbable                | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence                | High                                                                                                   | Substantive supportive data exists to verify the assessment                              | High                      | Substantive supportive data exists to verify the assessment                                                                                 |
| Reversibility             | Medium                                                                                                 | The affected environment will only recover from the impact with significant intervention | High                      | The affected environmental will be able to recover from the impact                                                                          |
| Resource irreplaceability | Low                                                                                                    | The resource is not damaged irreparably or is not scarce                                 | Low                       | The resource is not damaged irreparably or is not scarce                                                                                    |
| Significance              | Medium – negative (-)                                                                                  |                                                                                          | Negligible – negative (-) |                                                                                                                                             |
| Comment on significance   | The impact will have negligible effects and would require little or no mitigation.                     |                                                                                          |                           |                                                                                                                                             |
| Cumulative impacts        | Without mitigation this impact could result in the loss of faunal species and cause potential erosion. |                                                                                          |                           |                                                                                                                                             |

| Project Phase            | Operation                                                                                                                                                                                                                                                                                                                        |                                                                         |                   |                                                                                                                                             |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Impact                   | Visual / Sense of place                                                                                                                                                                                                                                                                                                          |                                                                         |                   |                                                                                                                                             |
| Description of impact    | Visual impacts of structures / aesthetic consequences due to incorrect or excessive lighting, especially outdoor lighting                                                                                                                                                                                                        |                                                                         |                   |                                                                                                                                             |
| Potential for mitigation | Medium                                                                                                                                                                                                                                                                                                                           | Mitigation exists and will notably reduce significance of impacts       |                   |                                                                                                                                             |
| Potential mitigation     | <ul style="list-style-type: none"><li>• Municipal by-laws need to be adhered to.</li><li>• Re-vegetation and Landscaping of open space areas with suitable indigenous vegetation.</li><li>• Systematic removal and follow-up operations of invasive alien plants.</li><li>• Adhere to Architectural Design Guidelines.</li></ul> |                                                                         |                   |                                                                                                                                             |
| Assessment               | Without mitigation                                                                                                                                                                                                                                                                                                               |                                                                         | With mitigation   |                                                                                                                                             |
| Nature                   | Negative                                                                                                                                                                                                                                                                                                                         |                                                                         | Negative Low      |                                                                                                                                             |
| Duration                 | Permanent                                                                                                                                                                                                                                                                                                                        | Impact may be permanent, or in excess of 20 years                       | Brief             | Impact will not last longer than 1 year                                                                                                     |
| Extent                   | Limited                                                                                                                                                                                                                                                                                                                          | Limited to the site and its immediate surroundings                      | Limited           | Limited to the site and its immediate surroundings                                                                                          |
| Intensity                | Low                                                                                                                                                                                                                                                                                                                              | Natural and/ or social functions and/ or processes are somewhat altered | Very low          | Natural and/or social functions and/or processes are slightly altered                                                                       |
| Probability              | Probable                                                                                                                                                                                                                                                                                                                         | Has occurred here or elsewhere and could therefore occur                | Rare / improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence               | Medium                                                                                                                                                                                                                                                                                                                           | Determination is based on common sense and general knowledge            | Medium            | Determination is based on common sense and general knowledge                                                                                |

|                           |                                                                                                                                                                                                                                                          |                                                                                          |                           |                                                                    |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------|--------------------------------------------------------------------|
| Reversibility             | Medium                                                                                                                                                                                                                                                   | The affected environment will only recover from the impact with significant intervention | High                      | The affected environmental will be able to recover from the impact |
| Resource irreplaceability | Not relevant                                                                                                                                                                                                                                             |                                                                                          | Not relevant              |                                                                    |
| Significance              | Low – negative (-)                                                                                                                                                                                                                                       |                                                                                          | Negligible – negative (-) |                                                                    |
| Comment on significance   | Lighting, specifically outdoor lighting is not only aesthetic, but it provides a level of security to property owners. Therefore, outdoor lighting is essential, but should be implemented in a way which does not cause negative impacts to neighbours. |                                                                                          |                           |                                                                    |
| Cumulative impacts        | Without mitigation the development would not be meeting design guidelines enforced by the municipality. Specifically design guidelines for the local area.                                                                                               |                                                                                          |                           |                                                                    |

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                          |                           |                                                                                                                                             |
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| Project Phase             | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                          |                           |                                                                                                                                             |
| Impact                    | Stormwater Management                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                          |                           |                                                                                                                                             |
| Description of impact     | Accelerated erosion / pollution into sub-surface water.                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                           |                                                                                                                                             |
| Potential for mitigation  | High                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Mitigation exists and will considerably reduce the significance of impacts               |                           |                                                                                                                                             |
| Potential mitigation      | <ul style="list-style-type: none"><li>The storm water drainage system must be adhered to, and the system should lead runoff water away from sensitive areas to prevent soil erosion.</li><li>Use rainwater collection tanks to serve as a retention vessel in downpours.</li><li>Driveways can also be utilised for rainwater harvesting.</li><li>Stormwater management should encourage collection and infiltration of water into the soil profile.</li></ul> |                                                                                          |                           |                                                                                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                          | With mitigation           |                                                                                                                                             |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                          | Low Negative              |                                                                                                                                             |
| Duration                  | Short term                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Impact will last between 1 and 5 years                                                   | Brief                     | Impact will not last longer than 1 year                                                                                                     |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Limited to the site and its immediate surroundings                                       | Very limited              | Limited to specific isolated parts of the site                                                                                              |
| Intensity                 | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Natural and/or social functions and/or processes are somewhat altered                    | Very low                  | Natural and/ or social functions and/ or processes are slightly altered                                                                     |
| Probability               | Almost certain                                                                                                                                                                                                                                                                                                                                                                                                                                                 | It is most likely that the impact will occur                                             | Rare / improbable         | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Substantive supportive data exists to verify the assessment                              | High                      | Substantive supportive data exists to verify the assessment                                                                                 |
| Reversibility             | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The affected environment will only recover from the impact with significant intervention | High                      | The affected environmental will be able to recover from the impact                                                                          |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                            | The resource is not damaged irreparably or is not scarce                                 | Low                       | The resource is not damaged irreparably or is not scarce                                                                                    |
| Significance              | Low – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                          | Negligible – negative (-) |                                                                                                                                             |
| Comment on significance   | The stormwater design of the development will make provision for rainwater harvesting via collection from the roof and driveway / access road.                                                                                                                                                                                                                                                                                                                 |                                                                                          |                           |                                                                                                                                             |
| Cumulative impacts        | Without mitigation this impact could result in potential erosion on the site caused by stormwater flow.                                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                           |                                                                                                                                             |

| Project Phase             | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                    |                    |                                                                                                                                             |
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| Impact                    | Eradication of Alien Vegetation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                    |                    |                                                                                                                                             |
| Description of impact     | Impacts on biodiversity / natural habitats / increased fire risk                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                    |                    |                                                                                                                                             |
| Potential for mitigation  | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Mitigation exists and will considerably reduce significance of impacts             |                    |                                                                                                                                             |
| Potential mitigation      | <ul style="list-style-type: none"><li>All invasive alien plants should be completely cleared from the property, and where a tree or bush cover is desired, replaced with suitable indigenous species.</li><li>Rehabilitation of disturbed areas, as well as previously invaded areas, should promote establishment of site-appropriate indigenous species.</li><li>A suitable planting list of trees and shrubs must be compiled and incorporated into the landscape planning.</li><li>Reduce fire hazard on site.</li></ul> |                                                                                    |                    |                                                                                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                    | With mitigation    |                                                                                                                                             |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                    | Positive           |                                                                                                                                             |
| Duration                  | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Impact may be permanent, or in excess of 20 years                                  | Brief              | Impact will not last longer than 1 year                                                                                                     |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Limited to the site and its immediate surroundings                                 | Limited            | Limited to the site and its immediate surroundings                                                                                          |
| Intensity                 | Very low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Natural and/or social functions and/or processes are slightly altered              | Low                | Natural and/or social functions and/or processes are somewhat altered                                                                       |
| Probability               | Certain / Definite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | There are sound scientific reasons to expect that the impact will definitely occur | Rare / improbable  | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence                | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Determination is based on common sense and general knowledge                       | Medium             | Determination is based on common sense and general knowledge                                                                                |
| Reversibility             | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The affected environmental will be able to recover from the impact                 | High               | The affected environmental will be able to recover from the impact                                                                          |
| Resource irreplaceability | Not relevant                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                    | Not relevant       |                                                                                                                                             |
| Significance              | Low – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                    | Low – positive (+) |                                                                                                                                             |
| Comment on significance   | With mitigation the impact is likely to have more beneficial impact on natural biodiversity.                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                    |                    |                                                                                                                                             |
| Cumulative impacts        | Without mitigation this impact could result in the spread of alien invasive plants.                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                    |                    |                                                                                                                                             |

| Project Phase            | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                             |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| Impact                   | Formal gardens                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                             |
| Description of impact    | Habitat loss for terrestrial wildlife, fragmentation of ecological corridor                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                             |
| Potential for mitigation | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Mitigation will slightly reduce the significance of impacts |
| Potential mitigation     | <ul style="list-style-type: none"><li>• Areas that are not required for development purposes should remain natural with indigenous vegetation.</li><li>• All alien invasive plants must be removed from the site on an on-going basis.</li><li>• Investing landowners within the proposed development should be encouraged to avoid planting exotic plants in favour of locally indigenous plants.</li><li>• Landscaping must be done with locally occurring indigenous vegetation.</li></ul> |                                                             |
| Assessment               | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | With mitigation                                             |
| Nature                   | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Positive                                                    |

|                                  |                                                                                                                                 |                                                                                          |                                  |                                                                         |
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| <b>Duration</b>                  | Brief                                                                                                                           | Impact will not last longer than 1 year                                                  | Permanent                        | Impact may be permanent, or in excess of 20 years                       |
| <b>Extent</b>                    | Limited                                                                                                                         | Limited to the site and its immediate surroundings                                       | Very limited                     | Limited to specific isolated parts of the site                          |
| <b>Intensity</b>                 | Negligible                                                                                                                      | Natural and/ or social functions and/ or processes are negligibly altered                | Very low                         | Natural and/ or social functions and/ or processes are slightly altered |
| <b>Probability</b>               | Highly unlikely / None                                                                                                          | Expected never to happen                                                                 | Almost certain / Highly probable | It is most likely that the impact will occur                            |
| <b>Confidence</b>                | Medium                                                                                                                          | Determination is based on common sense and general knowledge                             | Medium                           | Determination is based on common sense and general knowledge            |
| <b>Reversibility</b>             | Medium                                                                                                                          | The affected environment will only recover from the impact with significant intervention | Not relevant                     |                                                                         |
| <b>Resource irreplaceability</b> | Low                                                                                                                             | The resource is not damaged irreparably or is not scarce                                 | Not relevant                     |                                                                         |
| <b>Significance</b>              | <b>Low – negative (-)</b>                                                                                                       |                                                                                          | <b>Minor – positive (+)</b>      |                                                                         |
| <b>Comment on significance</b>   | With mitigation the impact is likely to have more beneficial impact to retaining natural biodiversity, than without mitigation. |                                                                                          |                                  |                                                                         |
| <b>Cumulative impacts</b>        | Without mitigation this impact could result in the spread of alien invasive plants and the loss of indigenous vegetation.       |                                                                                          |                                  |                                                                         |

#### 4. (ALTERNATIVE B) IMPACTS ASSOCIATED WITH THE CONSTRUCTION PHASE

Here follows impacts that may result from the construction phase for Alternative B. A brief description of potential impact, significance rating of impacts, proposed mitigation, and significance rating of impacts after mitigation will be provided.

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                          |
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| <b>Project Phase</b>            | <b>Construction</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                          |
| <b>Impact</b>                   | <b>Loss of terrestrial biodiversity</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                          |
| <b>Description of impact</b>    | Loss of indigenous vegetation, sensitive vegetation, ecological processes, ecologically important species, ecological connectivity, and terrestrial biodiversity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                          |
| <b>Potential for mitigation</b> | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Mitigation measures are unlikely to be effective or necessary, with minimal chance of significantly reducing the impact. |
| <b>Potential mitigation</b>     | <ul style="list-style-type: none"> <li>The vegetation in areas of thicket fynbos habitat that are not earmarked for development must be rehabilitated to a state that is at least partially representative of the original fynbos ecosystem and capable of supporting moderate to high levels of ecological functioning.</li> <li>Rehabilitation must be implemented in a phased manner, guided by a formal rehabilitation plan and overseen by a qualified botanist or restoration ecologist.</li> <li>The first step involves the removal and control of all invasive alien plant species (IAPs) on the property, with erosion control measures implemented where necessary.</li> <li>Passive rehabilitation is recommended for areas where no earthworks have taken place. These areas should be allowed to recover for one winter season following IAP removal.</li> <li>After this period, the site must be assessed by the restoration contractor to determine the appropriate level of active rehabilitation, which will be required in areas where topsoil has been disturbed or removed.</li> </ul> |                                                                                                                          |

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|                           | <ul style="list-style-type: none"><li>Follow-up clearing of all exotic and listed IAPs must occur every six months for the first three years, and annually thereafter, to prevent re-establishment and dominance within the fynbos vegetation.</li><li>Areas that will not be developed must be clearly marked before the commencement of any works to prevent unnecessary disturbance to adjacent vegetation.</li><li>Locations for storing building materials, vehicles, toilets, and other infrastructure must be clearly demarcated and restricted to within the building footprint, existing roads, or previously disturbed areas.</li></ul> |                                                                                          |                    |                                                                                          |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                          | With mitigation    |                                                                                          |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                          | Negative           |                                                                                          |
| Duration                  | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Impact may be permanent, or in excess of 20 years                                        | Permanent          | Impact may be permanent, or in excess of 20 years                                        |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Limited to the site and its immediate surroundings                                       | Very limited       | Limited to the site and its immediate surroundings                                       |
| Intensity                 | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Natural and/or social functions and/or processes are notably altered                     | Low                | Natural and/or social functions and/or processes are slightly altered                    |
| Probability               | Definite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Has occurred here or elsewhere and could therefore occur                                 | Probable           | It is most likely that the impact will occur                                             |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Substantive supportive data exists to verify the assessment                              | High               | Substantive supportive data exists to verify the assessment                              |
| Reversibility             | Barely reversible                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | The affected environment will only recover from the impact with significant intervention | Medium             | The affected environment will only recover from the impact with significant intervention |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The impact is unlikely to be reversed even with intense mitigation measures              | Low                | The impact is unlikely to be reversed even with intense mitigation measures              |
| Significance              | Low – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                          | Low – negative (-) |                                                                                          |
| Comment on significance   | The significance of the impact is assessed to be low. Implementation of the recommended mitigation measures will promote environmental best practice and further support the viability of the proposed development.                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                          |                    |                                                                                          |
| Cumulative impacts        | The impact would result in very low cumulative effects.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                          |                    |                                                                                          |

| Project Phase            | Construction                                                                                                                                                          |                                                                                                                                    |                 |                                                                       |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------|
| Impact                   | Loss of species of conservation concern                                                                                                                               |                                                                                                                                    |                 |                                                                       |
| Description of impact    | Loss of indigenous vegetation pertaining to species of conservation concern.                                                                                          |                                                                                                                                    |                 |                                                                       |
| Potential for mitigation | Medium                                                                                                                                                                | There is a moderate probability that mitigation measures can be effectively implemented to reduce or manage the identified impact. |                 |                                                                       |
| Potential mitigation     | <ul style="list-style-type: none"><li>Maintain natural and set aside areas for conservation. Rehabilitate excavated areas &amp; control and monitor erosion</li></ul> |                                                                                                                                    |                 |                                                                       |
| Assessment               | Without mitigation                                                                                                                                                    |                                                                                                                                    | With mitigation |                                                                       |
| Nature                   | Negative                                                                                                                                                              |                                                                                                                                    | Negative        |                                                                       |
| Duration                 | Permanent                                                                                                                                                             | Impact may be permanent, or in excess of 20 years                                                                                  | Short term      | Impact will last between 1 and 2 years                                |
| Extent                   | Limited                                                                                                                                                               | Limited to the site and its immediate surroundings                                                                                 | Very limited    | Limited to the site and its immediate surroundings                    |
| Intensity                | Medium                                                                                                                                                                | Natural and/or social functions and/or processes are notably altered                                                               | Low             | Natural and/or social functions and/or processes are slightly altered |
| Probability              | Definite                                                                                                                                                              | Has occurred here or elsewhere and could therefore occur                                                                           | Possible        | Has occurred here or elsewhere and could therefore occur              |

|                           |                                                                                                                                   |                                                                             |                       |                                                                                  |
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| Confidence                | High                                                                                                                              | Substantive supportive data exists to verify the assessment                 | High                  | Substantive supportive data exists to verify the assessment                      |
| Reversibility             | Partly reversible                                                                                                                 | the impact is reversible, but more intense mitigation measures are required | Completely reversible | the impact can be reversed with the implementation of minor mitigation measures. |
| Resource irreplaceability | Low                                                                                                                               | The impact is unlikely to be reversed even with intense mitigation measures | Low                   | The impact is unlikely to be reversed even with intense mitigation measures      |
| Significance              | High – negative (-)                                                                                                               |                                                                             | Low – negative (-)    |                                                                                  |
| Comment on significance   | The impact will have significant effects and will require significant mitigation measures to achieve an accepted level of impact. |                                                                             |                       |                                                                                  |
| Cumulative impacts        | Regardless of whether the proposed mitigation measures are implemented, the cumulative impact has been assessed as very low.      |                                                                             |                       |                                                                                  |

| Project Phase             | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                          |                    |                                                                             |
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| Impact                    | Disturbance / loss of faunal habitat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                          |                    |                                                                             |
| Description of impact     | The proposed development will result in some loss of faunal habitat space.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                          |                    |                                                                             |
| Potential for mitigation  | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Mitigation measures are unlikely to be effective or necessary, with minimal chance of significantly reducing the impact. |                    |                                                                             |
| Potential mitigation      | <ul style="list-style-type: none"><li>Prior to construction, the disturbance footprint of the development should be clearly defined and demarcated to prevent unnecessary additional damage to the surrounding environment.</li><li>Where vegetation will be cleared to make way for construction, filled sandbags, silt socks or a silt fence must be used to reduce the intensity of water runoff and flow over the site and thereby reduce erosion potential.</li><li>Protection and reuse of topsoil can be critical for the success of rehabilitation of vegetation following construction processes as it contains valuable seedbank of indigenous plants that regenerate after the soil is replaced. Topsoil removed during construction should be treated with care for all the proposed developments on the property.</li></ul> |                                                                                                                          |                    |                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                          | With mitigation    |                                                                             |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                          | Negative           |                                                                             |
| Duration                  | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Impact may be permanent, or in excess of 20 years                                                                        | Permanent          | Impact may be permanent, or in excess of 20 years                           |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Limited to the site and its immediate surroundings                                                                       | Very limited       | Limited to the site and its immediate surroundings                          |
| Intensity                 | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Natural and/ or social functions and/ or processes are significantly altered                                             | Negligible         | Natural and/ or social functions and/ or processes are negligibly altered   |
| Probability               | Definite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Has occurred here or elsewhere and could therefore occur                                                                 | Probable           | It is most likely that the impact will occur                                |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Substantive supportive data exists to verify the assessment                                                              | High               | Substantive supportive data exists to verify the assessment                 |
| Reversibility             | Barely reversible                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | The affected environment will only recover from the impact with significant intervention                                 | Partly reversible  | the impact is reversible, but more intense mitigation measures are required |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | The impact is unlikely to be reversed even with intense mitigation measures                                              | Low                | The impact is unlikely to be reversed even with intense mitigation measures |
| Significance              | Medium – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                          | Low – negative (-) |                                                                             |
| Comment on significance   | The impact will have minimal effects and would require little mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                          |                    |                                                                             |
| Cumulative impacts        | The impact would result in very low cumulative effects.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                          |                    |                                                                             |

| Project Phase             | Construction                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                          |                           |                                                                             |
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| Impact                    | Loss of fauna                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                          |                           |                                                                             |
| Description of impact     | Fauna may occur on site and be killed or seriously harmed during construction related activities.                                                                                                                                                                                                                                                                                                                                         |                                                                                                                          |                           |                                                                             |
| Potential for mitigation  | Low                                                                                                                                                                                                                                                                                                                                                                                                                                       | Mitigation measures are unlikely to be effective or necessary, with minimal chance of significantly reducing the impact. |                           |                                                                             |
| Potential mitigation      | <ul style="list-style-type: none"><li>Construction should happen in phases, such that construction related activities are confined to one area at a time on the property and can be monitored for faunal impacts appropriately.</li><li>Before construction commences at the start of new phase, an ECO should do a walk-through of the demarcated area and access roads that will be used to look fauna with limited mobility.</li></ul> |                                                                                                                          |                           |                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                          | With mitigation           |                                                                             |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                          | Negative                  |                                                                             |
| Duration                  | Short term                                                                                                                                                                                                                                                                                                                                                                                                                                | Impact will last between 1 and 2 years                                                                                   | Brief                     | Impact will not last longer than 1 year                                     |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                   | Limited to the site and its immediate surroundings                                                                       | Very limited              | Limited to the site and its immediate surroundings                          |
| Intensity                 | High                                                                                                                                                                                                                                                                                                                                                                                                                                      | Natural and/ or social functions and/ or processes are significantly altered                                             | Negligible                | Natural and/ or social functions and/ or processes are negligibly altered   |
| Probability               | Definite                                                                                                                                                                                                                                                                                                                                                                                                                                  | Has occurred here or elsewhere and could therefore occur                                                                 | Probable                  | It is most likely that the impact will occur                                |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                      | Substantive supportive data exists to verify the assessment                                                              | High                      | Substantive supportive data exists to verify the assessment                 |
| Reversibility             | Barely reversible                                                                                                                                                                                                                                                                                                                                                                                                                         | The affected environment will only recover from the impact with significant intervention                                 | Partly reversible         | the impact is reversible, but more intense mitigation measures are required |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                       | The impact is unlikely to be reversed even with intense mitigation measures                                              | Low                       | The impact is unlikely to be reversed even with intense mitigation measures |
| Significance              | Low – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                          | Negligible – negative (-) |                                                                             |
| Comment on significance   | The impact will have minimal effects and would require little mitigation                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                          |                           |                                                                             |
| Cumulative impacts        | The impact would result in very low cumulative effects.                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                          |                           |                                                                             |

| Project Phase            | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                            |
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| Impact                   | Sedimentation of estuarine habitat caused by removal of vegetation and erosion of soil.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                            |
| Description of impact    | As vegetation is cleared for construction, the highly erodible soils will be exposed to the elements, which will result in a short-term increase in the likelihood of erosion and runoff of sediments and other pollutants down the slope towards the estuary.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                            |
| Potential for mitigation | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Mitigation exists and will considerably reduce the significance of impacts |
| Potential mitigation     | <ul style="list-style-type: none"><li>Do not clear vegetation outside the proposed development footprint.</li><li>Only use one access road for each residential unit.</li><li>Use the existing road as far as possible.</li><li>Install silt fences or sediment barriers around the perimeter of the construction site to trap sediment-laden runoff and prevent it from entering the estuary.</li><li>Implement phased construction to minimise the area of exposed soil at any given time and reduce the potential for erosion.</li><li>Apply mulch or erosion control mats on exposed slopes and disturbed areas to stabilise soils and reduce erosion rates.</li><li>A 36 m buffer from the Knysna Estuary must be maintained and demarcated as a no-go area.</li></ul> |                                                                            |

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|                           | <ul style="list-style-type: none"><li>• The laydown areas must be constructed on flat surfaces with a minimum distance of 20 m from the buffer.</li><li>• All stockpiles must be covered at the end of the day.</li><li>• Install temporary drainage controls such as swales or berms to manage runoff where necessary.</li><li>• All materials used during construction must follow the best practice guidelines set out for each product.</li><li>• Check weather reports ahead and prepare the site when rainfall is predicted. Discontinue any earthworks on the site during rainfall.</li></ul> |                                                                                          |              |                                                                                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                          |              | With mitigation                                                                                                                             |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                          |              | Low Negative                                                                                                                                |
| Duration                  | Short term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Impact will last between 1 and 5 years                                                   | Brief        | Impact will not last longer than 1 year                                                                                                     |
| Extent                    | Very limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Limited to specific isolated parts of the site                                           | Very limited | Limited to specific isolated parts of the site                                                                                              |
| Intensity                 | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Natural and/ or social functions and/ or processes are significantly altered             | Negligible   | Natural and/ or social functions and/ or processes are negligibly altered                                                                   |
| Probability               | Probable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | It is most likely that the impact will occur                                             | Improbable   | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Substantive supportive data exists to verify the assessment                              | High         | Substantive supportive data exists to verify the assessment                                                                                 |
| Reversibility             | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The affected environment will only recover from the impact with significant intervention | High         | The affected environmental will be able to recover from the impact                                                                          |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The resource is not damaged irreparably or is not scarce                                 | Low          | The resource is not damaged irreparably or is not scarce                                                                                    |
| Significance              | Low – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                          |              | Negligible – negative (-)                                                                                                                   |
| Comment on significance   | The impact will have negligible effects and would require little or no mitigation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                          |              |                                                                                                                                             |
| Cumulative impacts        | Without mitigation this impact could result in the loss of faunal species and cause potential erosion.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                          |              |                                                                                                                                             |

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| Project Phase            | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                            |
| Impact                   | Visual Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                            |
| Description of impact    | The proposed development might have an aesthetic impact on the surrounding                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                            |
| Potential for mitigation | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Mitigation exists and will considerably reduce the significance of impacts |
| Potential mitigation     | <ul style="list-style-type: none"><li>Minimise vegetation clearance to only what is essential for construction and access.</li><li>Retain existing vegetation where possible to act as a natural screen, especially from key viewpoints (e.g. Leisure Island, Knysna Heads).</li><li>Define strict construction boundaries with visible demarcation to prevent accidental disturbance.</li><li>Use non-reflective, natural tones (earthy browns, greens) on all visible infrastructure (walls, roofs, decks) to blend with the landscape.</li></ul> |                                                                            |
| Assessment               | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | With mitigation                                                            |
| Nature                   | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Low Negative                                                               |

|                           |                                                                                                        |                                                                             |                           |                                                                             |
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| Duration                  | Short term                                                                                             | Impact will last between 1 and 5 years                                      | Short term                | Impact will last between 1 and 5 years                                      |
| Extent                    | Local                                                                                                  | Extending across the site and to nearby settlements                         | Local                     | Extending across the site and to nearby settlements                         |
| Intensity                 | Medium                                                                                                 | Natural and/or social functions and/or processes are notably altered        | Medium                    | Natural and/or social functions and/or processes are notably altered        |
| Probability               | Probable                                                                                               | It is most likely that the impact will occur                                | Probable                  | It is most likely that the impact will occur                                |
| Confidence                | High                                                                                                   | Substantive supportive data exists to verify the assessment                 | High                      | Substantive supportive data exists to verify the assessment                 |
| Reversibility             | Partly reversible                                                                                      | the impact is reversible, but more intense mitigation measures are required | Partly reversible         | the impact is reversible, but more intense mitigation measures are required |
| Resource irreplaceability | Low                                                                                                    | The resource is not damaged irreparably or is not scarce                    | Low                       | The resource is not damaged irreparably or is not scarce                    |
| Significance              | Low – negative (-)                                                                                     |                                                                             | Negligible – negative (-) |                                                                             |
| Comment on significance   | The impact will have negligible effects and would require little or no mitigation.                     |                                                                             |                           |                                                                             |
| Cumulative impacts        | Without mitigation this impact could result in the loss of faunal species and cause potential erosion. |                                                                             |                           |                                                                             |

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                        |                   |                                                                                     |
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| Project Phase            | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                        |                   |                                                                                     |
| Impact                   | Waste Pollution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                        |                   |                                                                                     |
| Description of impact    | Pollution caused by waste generated by the construction process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                        |                   |                                                                                     |
| Potential for mitigation | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Mitigation exists and will considerably reduce significance of impacts |                   |                                                                                     |
| Potential mitigation     | <ul style="list-style-type: none"><li>• All construction waste generated on-site during construction must be adequately managed. Separation and recycling of different waste materials should be supported.</li><li>• All construction waste materials must be collected and disposed of at a suitable waste facility.</li><li>• No dumping of construction material within the site and surrounding areas may take place.</li><li>• The site must be monitored on a weekly basis to clean-up any waste that may have been blown from the construction site.</li><li>• Adequate sanitary facilities and ablutions must be provided for all personnel throughout the project area. Use of these facilities must be enforced.</li></ul> |                                                                        |                   |                                                                                     |
| Assessment               | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                        | With mitigation   |                                                                                     |
| Nature                   | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                        | Low negative      |                                                                                     |
| Duration                 | Short term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Impact will last between 1 and 5 years                                 | Brief             | Impact will not last longer than 1 year                                             |
| Extent                   | Very limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Limited to the site and its immediate surroundings                     | Very limited      | Limited to the site and its immediate surroundings                                  |
| Intensity                | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Natural and/or social functions and/or processes are somewhat altered  | Very low          | Natural and/or social functions and/or processes are slightly altered               |
| Probability              | Likely                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | The impact may occur                                                   | Rare / improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project |

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|                           |                                                                                                                                                                                                                                                                                      |                                                                    |                           | although this has rarely been known to result elsewhere            |
| Confidence                | High                                                                                                                                                                                                                                                                                 | Substantive supportive data exists to verify the assessment        | High                      | Substantive supportive data exists to verify the assessment        |
| Reversibility             | High                                                                                                                                                                                                                                                                                 | The affected environmental will be able to recover from the impact | High                      | The affected environmental will be able to recover from the impact |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                  | The resource is not damaged irreparably or is not scarce           | Low                       | The resource is not damaged irreparably or is not scarce           |
| Significance              | Low- negative (-)                                                                                                                                                                                                                                                                    |                                                                    | Negligible – negative (-) |                                                                    |
| Comment on significance   | Construction activities are likely to generate significant quantities of solid waste that could pollute natural areas. In addition, the high numbers of construction workers present on site will generate a significant amount of human waste, which could pollute the environment. |                                                                    |                           |                                                                    |
| Cumulative impacts        | The impact would result in insignificant cumulative effects.                                                                                                                                                                                                                         |                                                                    |                           |                                                                    |

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| Project Phase             | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                        |                           |                                                                                                                                             |
| Impact                    | Construction Vehicles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                        |                           |                                                                                                                                             |
| Description of impact     | Pollution caused by the operation of vehicles and heavy machinery.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                        |                           |                                                                                                                                             |
| Potential for mitigation  | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Mitigation exists and will considerably reduce significance of impacts |                           |                                                                                                                                             |
| Potential mitigation      | <ul style="list-style-type: none"><li>Construction activities must be confined to clearly demarcated areas so as to prevent unnecessary disturbance the surrounding environment.</li><li>No vehicles are to park or operate within “no-go” areas.</li><li>Excavators and all other machinery and vehicles must be checked for oil and fuel leaks daily. No machinery or vehicles with leaks are permitted to work on site.</li><li>Refuelling and fuel storage areas, and areas used for the servicing or parking of vehicles and machinery, must be located on impervious bases and should have bunds around them (sized to contain 110 % of the tank capacity) to contain any possible spills.</li><li>The contractors used for the project should have spill kits available to ensure that any fuel or oil spills are clean-up and discarded correctly.</li></ul> |                                                                        |                           |                                                                                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                        | With mitigation           |                                                                                                                                             |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                        | Low negative              |                                                                                                                                             |
| Duration                  | Short term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Impact will last between 1 and 5 years                                 | Brief                     | Impact will not last longer than 1 year                                                                                                     |
| Extent                    | Very limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Limited to the site and its immediate surroundings                     | Very limited              | Limited to the site and its immediate surroundings                                                                                          |
| Intensity                 | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Natural and/or social functions and/or processes are somewhat altered  | Very low                  | Natural and/or social functions and/or processes are slightly altered                                                                       |
| Probability               | Likely                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The impact may occur                                                   | Rare / improbable         | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Substantive supportive data exists to verify the assessment            | High                      | Substantive supportive data exists to verify the assessment                                                                                 |
| Reversibility             | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | The affected environmental will be able to recover from the impact     | High                      | The affected environmental will be able to recover from the impact                                                                          |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | The resource is not damaged irreparably or is not scarce               | Low                       | The resource is not damaged irreparably or is not scarce                                                                                    |
| Significance              | Low- negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                        | Negligible – negative (-) |                                                                                                                                             |
| Comment on significance   | Operation of vehicles could result in spillages or leaks of hydrocarbons (fuel and oil) and could lead to unnecessary disturbance of natural areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                        |                           |                                                                                                                                             |
| Cumulative impacts        | The impact would result in insignificant cumulative effects.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                        |                           |                                                                                                                                             |

| Project Phase             | Construction                                                                                                                                                                                                                                                                                                                               |                                                                                           |                                  |                                                                           |
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| Impact                    | Noise pollution                                                                                                                                                                                                                                                                                                                            |                                                                                           |                                  |                                                                           |
| Description of impact     | Noise caused by machinery and staff                                                                                                                                                                                                                                                                                                        |                                                                                           |                                  |                                                                           |
| Potential for mitigation  | Low                                                                                                                                                                                                                                                                                                                                        | Mitigation does not exist; or mitigation will slightly reduce the significance of impacts |                                  |                                                                           |
| Potential mitigation      | <ul style="list-style-type: none"><li>Construction activities must only take place during normal working times between 07:00-17:00 on weekdays.</li><li>Machinery may be fitted with silences to dampen noise.</li><li>Staff must be reminded that they are working within a residential area and noise levels must be kept low.</li></ul> |                                                                                           |                                  |                                                                           |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                         |                                                                                           | With mitigation                  |                                                                           |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                   |                                                                                           | Negative                         |                                                                           |
| Duration                  | Brief                                                                                                                                                                                                                                                                                                                                      | Impact will not last longer than 1 year                                                   | Brief                            | Impact will not last longer than 1 year                                   |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                    | Limited to the site and its immediate surroundings                                        | Limited                          | Limited to the site and its immediate surroundings                        |
| Intensity                 | Very low                                                                                                                                                                                                                                                                                                                                   | Natural and/ or social functions and/ or processes are slightly altered                   | Negligible                       | Natural and/ or social functions and/ or processes are negligibly altered |
| Probability               | Almost certain / Highly probable                                                                                                                                                                                                                                                                                                           | It is most likely that the impact will occur                                              | Almost certain / Highly probable | It is most likely that the impact will occur                              |
| Confidence                | Medium                                                                                                                                                                                                                                                                                                                                     | Determination is based on common sense and general knowledge                              | Medium                           | Determination is based on common sense and general knowledge              |
| Reversibility             | High                                                                                                                                                                                                                                                                                                                                       | The affected environmental will be able to recover from the impact                        | High                             | The affected environmental will be able to recover from the impact        |
| Resource irreplaceability | Not relevant                                                                                                                                                                                                                                                                                                                               |                                                                                           | Not relevant                     |                                                                           |
| Significance              | Low- negative (-)                                                                                                                                                                                                                                                                                                                          |                                                                                           | Negligible – negative (-)        |                                                                           |
| Comment on significance   | Some extent of noise pollution during construction is expected; however, with mitigation the impact will be reduced.                                                                                                                                                                                                                       |                                                                                           |                                  |                                                                           |
| Cumulative impacts        | No cumulative impacts exist.                                                                                                                                                                                                                                                                                                               |                                                                                           |                                  |                                                                           |

| Project Phase            | Construction                                                                                                                                                                                                           |                                                                                |                 |                                                     |
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| Impact                   | Employment                                                                                                                                                                                                             |                                                                                |                 |                                                     |
| Description of impact    | Empowerment of the local community members living in the area relating to temporary employment opportunities                                                                                                           |                                                                                |                 |                                                     |
| Potential for mitigation | Medium                                                                                                                                                                                                                 | Mitigation only exists to ensure that the positive impact is followed through. |                 |                                                     |
| Potential mitigation     | <ul style="list-style-type: none"><li>• Use existing social structures and communication channels to ensure social representation.</li><li>• Use local labour and source local materials as far as possible.</li></ul> |                                                                                |                 |                                                     |
| Assessment               | Without mitigation                                                                                                                                                                                                     |                                                                                | With mitigation |                                                     |
| Nature                   | Negative                                                                                                                                                                                                               |                                                                                | Positive        |                                                     |
| Duration                 | Short term                                                                                                                                                                                                             | Impact will last between 1 and 5 years                                         | Short term      | Impact will last between 1 and 5 years              |
| Extent                   | Local                                                                                                                                                                                                                  | Extending across the site and to nearby settlements                            | Local           | Extending across the site and to nearby settlements |

|                                  |                                                                                   |                                                                                                                                             |                                  |                                                                         |
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| <b>Intensity</b>                 | Low                                                                               | Natural and/ or social functions and/ or processes are somewhat altered                                                                     | Low                              | Natural and/ or social functions and/ or processes are somewhat altered |
| <b>Probability</b>               | Rare / improbable                                                                 | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere | Almost certain / Highly probable | It is most likely that the impact will occur                            |
| <b>Confidence</b>                | Medium                                                                            | Determination is based on common sense and general knowledge                                                                                | Medium                           | Determination is based on common sense and general knowledge            |
| <b>Reversibility</b>             | Not relevant                                                                      |                                                                                                                                             | Not relevant                     |                                                                         |
| <b>Resource irreplaceability</b> | Not relevant                                                                      |                                                                                                                                             | Not relevant                     |                                                                         |
| <b>Significance</b>              | <b>Low – negative (-)</b>                                                         |                                                                                                                                             | <b>Negligible – positive (+)</b> |                                                                         |
| <b>Comment on significance</b>   | The impact will have negligible effects and would require little or no mitigation |                                                                                                                                             |                                  |                                                                         |
| <b>Cumulative impacts</b>        | Minor upliftment for the local community.                                         |                                                                                                                                             |                                  |                                                                         |

## 5. (ALTERNATIVE B) IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE

| Project Phase            | Operational                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                          |                 |                                                                       |
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| Impact                   | Loss of terrestrial biodiversity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                          |                 |                                                                       |
| Description of impact    | Loss of indigenous vegetation, sensitive vegetation, ecological processes, ecologically important species, ecological connectivity, and terrestrial biodiversity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                          |                 |                                                                       |
| Potential for mitigation | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Mitigation measures are unlikely to be effective or necessary, with minimal chance of significantly reducing the impact. |                 |                                                                       |
| Potential mitigation     | <ul style="list-style-type: none"><li>• All operational-phase activities must remain strictly confined to the approved development footprint and previously disturbed areas. While informal footpaths may form naturally through use during hiking, no additional vegetation clearing should be permitted during the operational phase.</li><li>• The vegetation from the thicket fynbos habitat that is not developed must be rehabilitated to a state where it is at least partially representative of the original fynbos ecosystem and supports ecological functioning to a moderate or high level. This rehabilitation must be undertaken in a phased approach, according to a rehabilitation plan and undertaken by a qualified botanist or restoration ecologist.</li><li>• The initial step is to ensure that all IAPs on the property are removed, with erosion control implemented where necessary. Passive rehabilitation is recommended on the parts of the site where no earthworks have taken place. The site must be assessed by the restoration contractor to determine the level of active rehabilitation input. Active rehabilitation will be required for areas where topsoil has been removed.</li><li>• Follow-up clearing of all exotic and listed IAPs is required every 6 months for the first three years, and annually thereafter to ensure that the IAPs do not dominate the fynbos.</li></ul> |                                                                                                                          |                 |                                                                       |
| Assessment               | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                          | With mitigation |                                                                       |
| Nature                   | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                          | Negative        |                                                                       |
| Duration                 | Medium Term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Impact will last between 2 and 15 years                                                                                  | Medium Term     | Impact will last between 2 and 15 years                               |
| Extent                   | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Limited to the site and its immediate surroundings                                                                       | Very limited    | Limited to the site and its immediate surroundings                    |
| Intensity                | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Natural and/or social functions and/or processes are slightly altered                                                    | Low             | Natural and/or social functions and/or processes are slightly altered |

|                           |                                                                                   |                                                                                          |                           |                                                                                          |
|---------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------|------------------------------------------------------------------------------------------|
| Probability               | Probable                                                                          | It is most likely that the impact will occur                                             | Probable                  | It is most likely that the impact will occur                                             |
| Confidence                | High                                                                              | Substantive supportive data exists to verify the assessment                              | High                      | Substantive supportive data exists to verify the assessment                              |
| Reversibility             | Barely reversible                                                                 | The affected environment will only recover from the impact with significant intervention | Barely reversible         | The affected environment will only recover from the impact with significant intervention |
| Resource irreplaceability | Low                                                                               | The impact is unlikely to be reversed even with intense mitigation measures              | Low                       | The impact is unlikely to be reversed even with intense mitigation measures              |
| Significance              | Negligible – negative (-)                                                         |                                                                                          | Negligible – negative (-) |                                                                                          |
| Comment on significance   | The impact will have negligible effects and would require little or no mitigation |                                                                                          |                           |                                                                                          |
| Cumulative impacts        | The impact would result in very low cumulative effects.                           |                                                                                          |                           |                                                                                          |

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| Project Phase             | Operational                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                          |                           |                                                                                          |
| Impact                    | Loss of species of conservation concern                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                          |                           |                                                                                          |
| Description of impact     | Loss of indigenous vegetation pertaining to species of conservation concern.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                          |                           |                                                                                          |
| Potential for mitigation  | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Mitigation measures are unlikely to be effective or necessary, with minimal chance of significantly reducing the impact. |                           |                                                                                          |
| Potential mitigation      | <ul style="list-style-type: none"><li>All operational-phase activities must remain strictly confined to the approved development footprint and previously disturbed areas. While informal footpaths may form naturally through use during hiking, no additional vegetation clearing should be permitted during the operational phase.</li><li>All identified SCC locations must be demarcated as permanent no-go zones. These areas must be visibly marked on site. No foot traffic, landscaping, firewood collection, or infrastructure maintenance may occur within these zones.</li></ul> |                                                                                                                          |                           |                                                                                          |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                          | With mitigation           |                                                                                          |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                          | Negative                  |                                                                                          |
| Duration                  | Medium Term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Impact will last between 2 and 15 years                                                                                  | Medium Term               | Impact will last between 2 and 15 years                                                  |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Limited to the site and its immediate surroundings                                                                       | Very limited              | Limited to the site and its immediate surroundings                                       |
| Intensity                 | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Natural and/or social functions and/or processes are slightly altered                                                    | Low                       | Natural and/or social functions and/or processes are slightly altered                    |
| Probability               | Probable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | It is most likely that the impact will occur                                                                             | Probable                  | It is most likely that the impact will occur                                             |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Substantive supportive data exists to verify the assessment                                                              | High                      | Substantive supportive data exists to verify the assessment                              |
| Reversibility             | Barely reversible                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | The affected environment will only recover from the impact with significant intervention                                 | Barely reversible         | The affected environment will only recover from the impact with significant intervention |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | The impact is unlikely to be reversed even with intense mitigation measures                                              | Low                       | The impact is unlikely to be reversed even with intense mitigation measures              |
| Significance              | Negligible – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                          | Negligible – negative (-) |                                                                                          |
| Comment on significance   | The impact will have negligible effects and would require little or no mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                          |                           |                                                                                          |
| Cumulative impacts        | The impact would result in very low cumulative effects.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                          |                           |                                                                                          |

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| <b>Project Phase</b> | <b>Operational</b> |
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| Impact                    | Disturbance of fauna due to noise and lighting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                          |                    |                                                                             |
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| Description of impact     | The development on the site will alter the disturbance regime of the largely natural area on the property through changes in noise and artificial lighting levels. For the most part, these disturbances will be restricted to the immediate surroundings of the road (i.e. traffic noise) and residnetial units (i.e. people talking/shouting, music). However, this can have a significant impact on biodiversity and alter the way fauna use the landscape (i.e. the creation of a landscape of fear resulting in animals avoiding certain habitats/areas around human disturbances; insects attracted to lights decreases their survival, negatively impacts on the ecosystem services they provide and has negative knock-on consequences for their associated predators).                                                                            |                                                                                                                          |                    |                                                                             |
| Potential for mitigation  | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Mitigation measures are unlikely to be effective or necessary, with minimal chance of significantly reducing the impact. |                    |                                                                             |
| Potential mitigation      | <ul style="list-style-type: none"><li>Light pollution must be reduced and avoided wherever possible during the operational phase of the project. White LED lights have the worst negative effects for the environment, therefore dimmer lights with more natural warm light colours must be used. This must be outlined for guests making use of the residnetial facilities as well by means of visible signage.</li><li>Permanent lighting along roads must be avoided. Given the low traffic volumes expected for this development, road-side lighting along the access roads is unnecessary and will cause avoidable impacts on biodiversity, particularly increasing the risk of roadkill.</li><li>Noise should be minimised on the site and loud sirens/alarms must not be permitted. Guests are to be informed of this measure by signage.</li></ul> |                                                                                                                          |                    |                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                          | With mitigation    |                                                                             |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                          | Negative           |                                                                             |
| Duration                  | On-going                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                          | On-gong            |                                                                             |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Limited to the site and its immediate surroundings                                                                       | Very limited       | Limited to the site and its immediate surroundings                          |
| Intensity                 | Very High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Natural and/ or social functions and/ or processes are severely altered                                                  | Low                | Natural and/or social functions and/or processes are slightly altered       |
| Probability               | Definite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | There are sound scientific reasons to expect that the impact will occur                                                  | Definite           | There are sound scientific reasons to expect that the impact will occur     |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Substantive supportive data exists to verify the assessment                                                              | High               | Substantive supportive data exists to verify the assessment                 |
| Reversibility             | Partly reversible                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | The impact is reversible, but more intense mitigation measures are required                                              | Partly reversible  | The impact is reversible, but more intense mitigation measures are required |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | The impact is unlikely to be reversed even with intense mitigation measures                                              | Low                | The impact is unlikely to be reversed even with intense mitigation measures |
| Significance              | Medium – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                          | Low – negative (-) |                                                                             |
| Comment on significance   | The impact will have minimal effects and would require little mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                          |                    |                                                                             |
| Cumulative impacts        | The impact would result in very low cumulative effects.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                          |                    |                                                                             |

| Project Phase                | Construction                                                                                                                                                                               |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Impact</b>                | <b>Sedimentation of estuarine habitat due to erosion of soil caused by increased stormwater volumes.</b>                                                                                   |
| <b>Description of impact</b> | The addition of hardened, impermeable surfaces (e.g. housing/roads ect.) will lead to an increase in stormwater runoff which can increase the likelihood of erosion along the sandy cliff. |

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                          |                           |                                                                                                                                             |
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| Potential for mitigation  | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Mitigation exists and will considerably reduce the significance of impacts               |                           |                                                                                                                                             |
| Potential mitigation      | <ul style="list-style-type: none"><li>• Rainwater harvesting tanks should be installed at each ablution block. The tanks should be connected with the plumbing of the building (e.g. toilets and showers) to reduce the likelihood of the tanks overflowing and to save water.</li><li>• Use of permeable paving must be implemented in all new paving area to encourage infiltration of water into the soil.</li><li>• Maintain good vegetation cover around residential areas.</li><li>• Maintain the 36 m buffer area.</li><li>• Control of alien invasive plant species must be carried out within buffer areas to encourage recolonisation by indigenous vegetation and improve the structural integrity of the buffer.</li><li>• Only use the existing access road for access to the residential areas.</li><li>• Only use the existing staircase to access the beach.</li><li>• Control of alien invasive plant species must be carried out within the buffer area to encourage recolonisation by indigenous vegetation and improve the structural integrity of the buffer.</li></ul> |                                                                                          |                           |                                                                                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                          | With mitigation           |                                                                                                                                             |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                          | Low Negative              |                                                                                                                                             |
| Duration                  | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Impact may be permanent, or in excess of 20 years                                        | Permanent                 | Impact may be permanent, or in excess of 20 years                                                                                           |
| Extent                    | Very limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Limited to specific isolated parts of the site                                           | Very limited              | Limited to specific isolated parts of the site                                                                                              |
| Intensity                 | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Natural and/ or social functions and/ or processes are significantly altered             | Negligible                | Natural and/ or social functions and/ or processes are negligibly altered                                                                   |
| Probability               | Probable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | It is most likely that the impact will occur                                             | Improbable                | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Substantive supportive data exists to verify the assessment                              | High                      | Substantive supportive data exists to verify the assessment                                                                                 |
| Reversibility             | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | The affected environment will only recover from the impact with significant intervention | High                      | The affected environmental will be able to recover from the impact                                                                          |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | The resource is not damaged irreparably or is not scarce                                 | Low                       | The resource is not damaged irreparably or is not scarce                                                                                    |
| Significance              | Medium – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                          | Negligible – negative (-) |                                                                                                                                             |
| Comment on significance   | The impact will have negligible effects and would require little or no mitigation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                          |                           |                                                                                                                                             |
| Cumulative impacts        | Without mitigation this impact could result in the loss of faunal species and cause potential erosion.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                          |                           |                                                                                                                                             |

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| <b>Project Phase</b>         | <b>Operation</b>                                                                                                          |
| <b>Impact</b>                | <b>Visual / Sense of place</b>                                                                                            |
| <b>Description of impact</b> | Visual impacts of structures / aesthetic consequences due to incorrect or excessive lighting, especially outdoor lighting |

|                           |                                                                                                                                                                                                                                                                                                                                  |                                                                                          |                           |                                                                                                                                             |
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| Potential for mitigation  | Medium                                                                                                                                                                                                                                                                                                                           | Mitigation exists and will notably reduce significance of impacts                        |                           |                                                                                                                                             |
| Potential mitigation      | <ul style="list-style-type: none"><li>• Municipal by-laws need to be adhered to.</li><li>• Re-vegetation and Landscaping of open space areas with suitable indigenous vegetation.</li><li>• Systematic removal and follow-up operations of invasive alien plants.</li><li>• Adhere to Architectural Design Guidelines.</li></ul> |                                                                                          |                           |                                                                                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                               |                                                                                          | With mitigation           |                                                                                                                                             |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                         |                                                                                          | Negative Low              |                                                                                                                                             |
| Duration                  | Permanent                                                                                                                                                                                                                                                                                                                        | Impact may be permanent, or in excess of 20 years                                        | Brief                     | Impact will not last longer than 1 year                                                                                                     |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                          | Limited to the site and its immediate surroundings                                       | Limited                   | Limited to the site and its immediate surroundings                                                                                          |
| Intensity                 | Low                                                                                                                                                                                                                                                                                                                              | Natural and/ or social functions and/ or processes are somewhat altered                  | Very low                  | Natural and/or social functions and/or processes are slightly altered                                                                       |
| Probability               | Probable                                                                                                                                                                                                                                                                                                                         | Has occurred here or elsewhere and could therefore occur                                 | Rare / improbable         | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence                | Medium                                                                                                                                                                                                                                                                                                                           | Determination is based on common sense and general knowledge                             | Medium                    | Determination is based on common sense and general knowledge                                                                                |
| Reversibility             | Medium                                                                                                                                                                                                                                                                                                                           | The affected environment will only recover from the impact with significant intervention | High                      | The affected environmental will be able to recover from the impact                                                                          |
| Resource irreplaceability | Not relevant                                                                                                                                                                                                                                                                                                                     |                                                                                          | Not relevant              |                                                                                                                                             |
| Significance              | Low – negative (-)                                                                                                                                                                                                                                                                                                               |                                                                                          | Negligible – negative (-) |                                                                                                                                             |
| Comment on significance   | Lighting, specifically outdoor lighting is not only aesthetic, but it provides a level of security to property owners. Therefore, outdoor lighting is essential, but should be implemented in a way which does not cause negative impacts to neighbours.                                                                         |                                                                                          |                           |                                                                                                                                             |
| Cumulative impacts        | Without mitigation the development would not be meeting design guidelines enforced by the municipality. Specifically design guidelines for the local area.                                                                                                                                                                       |                                                                                          |                           |                                                                                                                                             |

| Project Phase            | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                            |                 |                                                |
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| Impact                   | Stormwater Management                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                            |                 |                                                |
| Description of impact    | Accelerated erosion / pollution into sub-surface water.                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                            |                 |                                                |
| Potential for mitigation | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Mitigation exists and will considerably reduce the significance of impacts |                 |                                                |
| Potential mitigation     | <ul style="list-style-type: none"><li>• The storm water drainage system must be adhered to, and the system should lead runoff water away from sensitive areas to prevent soil erosion.</li><li>• Use rainwater collection tanks to serve as a retention vessel in downpours.</li><li>• Driveways can also be utilised for rainwater harvesting.</li><li>• Stormwater management should encourage collection and infiltration of water into the soil profile.</li></ul> |                                                                            |                 |                                                |
| Assessment               | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                            | With mitigation |                                                |
| Nature                   | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                            | Low Negative    |                                                |
| Duration                 | Short term                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Impact will last between 1 and 5 years                                     | Brief           | Impact will not last longer than 1 year        |
| Extent                   | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Limited to the site and its immediate surroundings                         | Very limited    | Limited to specific isolated parts of the site |

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| <b>Intensity</b>                 | Low                                                                                                                                            | Natural and/or social functions and/or processes are somewhat altered                    | Very low                         | Natural and/ or social functions and/ or processes are slightly altered                                                                     |
| <b>Probability</b>               | Almost certain                                                                                                                                 | It is most likely that the impact will occur                                             | Rare / improbable                | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| <b>Confidence</b>                | High                                                                                                                                           | Substantive supportive data exists to verify the assessment                              | High                             | Substantive supportive data exists to verify the assessment                                                                                 |
| <b>Reversibility</b>             | Medium                                                                                                                                         | The affected environment will only recover from the impact with significant intervention | High                             | The affected environmental will be able to recover from the impact                                                                          |
| <b>Resource irreplaceability</b> | Low                                                                                                                                            | The resource is not damaged irreparably or is not scarce                                 | Low                              | The resource is not damaged irreparably or is not scarce                                                                                    |
| <b>Significance</b>              | <b>Low – negative (-)</b>                                                                                                                      |                                                                                          | <b>Negligible – negative (-)</b> |                                                                                                                                             |
| <b>Comment on significance</b>   | The stormwater design of the development will make provision for rainwater harvesting via collection from the roof and driveway / access road. |                                                                                          |                                  |                                                                                                                                             |
| <b>Cumulative impacts</b>        | Without mitigation this impact could result in potential erosion on the site caused by stormwater flow.                                        |                                                                                          |                                  |                                                                                                                                             |

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| Project Phase            | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                    |                   |                                                                                                                                             |
| Impact                   | Eradication of Alien Vegetation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                    |                   |                                                                                                                                             |
| Description of impact    | Impacts on biodiversity / natural habitats / increased fire risk                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                    |                   |                                                                                                                                             |
| Potential for mitigation | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Mitigation exists and will considerably reduce significance of impacts             |                   |                                                                                                                                             |
| Potential mitigation     | <ul style="list-style-type: none"><li>• All invasive alien plants should be completely cleared from the property, and where a tree or bush cover is desired, replaced with suitable indigenous species.</li><li>• Rehabilitation of disturbed areas, as well as previously invaded areas, should promote establishment of site-appropriate indigenous species.</li><li>• A suitable planting list of trees and shrubs must be compiled and incorporated into the landscape planning.</li><li>• Reduce fire hazard on site.</li></ul> |                                                                                    |                   |                                                                                                                                             |
| Assessment               | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                    | With mitigation   |                                                                                                                                             |
| Nature                   | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                    | Positive          |                                                                                                                                             |
| Duration                 | Permanent                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Impact may be permanent, or in excess of 20 years                                  | Brief             | Impact will not last longer than 1 year                                                                                                     |
| Extent                   | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Limited to the site and its immediate surroundings                                 | Limited           | Limited to the site and its immediate surroundings                                                                                          |
| Intensity                | Very low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Natural and/or social functions and/or processes are slightly altered              | Low               | Natural and/or social functions and/or processes are somewhat altered                                                                       |
| Probability              | Certain / Definite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | There are sound scientific reasons to expect that the impact will definitely occur | Rare / improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence               | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Determination is based on common sense and general knowledge                       | Medium            | Determination is based on common sense and general knowledge                                                                                |

|                           |                                                                                              |                                                                    |                    |                                                                    |
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| Reversibility             | High                                                                                         | The affected environmental will be able to recover from the impact | High               | The affected environmental will be able to recover from the impact |
| Resource irreplaceability | Not relevant                                                                                 |                                                                    | Not relevant       |                                                                    |
| Significance              | Low – negative (-)                                                                           |                                                                    | Low – positive (+) |                                                                    |
| Comment on significance   | With mitigation the impact is likely to have more beneficial impact on natural biodiversity. |                                                                    |                    |                                                                    |
| Cumulative impacts        | Without mitigation this impact could result in the spread of alien invasive plants.          |                                                                    |                    |                                                                    |

| Project Phase             | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                          |                                  |                                                                         |
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| Impact                    | Formal gardens                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                          |                                  |                                                                         |
| Description of impact     | Habitat loss for terrestrial wildlife, fragmentation of ecological corridor                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                          |                                  |                                                                         |
| Potential for mitigation  | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Mitigation will slightly reduce the significance of impacts                              |                                  |                                                                         |
| Potential mitigation      | <ul style="list-style-type: none"><li>• Areas that are not required for development purposes should remain natural with indigenous vegetation.</li><li>• All alien invasive plants must be removed from the site on an on-going basis.</li><li>• Investing landowners within the proposed development should be encouraged to avoid planting exotic plants in favour of locally indigenous plants.</li><li>• Landscaping must be done with locally occurring indigenous vegetation.</li></ul> |                                                                                          |                                  |                                                                         |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                          | With mitigation                  |                                                                         |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                          | Positive                         |                                                                         |
| Duration                  | Brief                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Impact will not last longer than 1 year                                                  | Permanent                        | Impact may be permanent, or in excess of 20 years                       |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Limited to the site and its immediate surroundings                                       | Very limited                     | Limited to specific isolated parts of the site                          |
| Intensity                 | Negligible                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Natural and/ or social functions and/ or processes are negligibly altered                | Very low                         | Natural and/ or social functions and/ or processes are slightly altered |
| Probability               | Highly unlikely / None                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Expected never to happen                                                                 | Almost certain / Highly probable | It is most likely that the impact will occur                            |
| Confidence                | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Determination is based on common sense and general knowledge                             | Medium                           | Determination is based on common sense and general knowledge            |
| Reversibility             | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | The affected environment will only recover from the impact with significant intervention | Not relevant                     |                                                                         |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | The resource is not damaged irreparably or is not scarce                                 | Not relevant                     |                                                                         |
| Significance              | Low – negative (-)                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                          | Minor – positive (+)             |                                                                         |
| Comment on significance   | With mitigation the impact is likely to have more beneficial impact to retaining natural biodiversity, than without mitigation.                                                                                                                                                                                                                                                                                                                                                               |                                                                                          |                                  |                                                                         |
| Cumulative impacts        | Without mitigation this impact could result in the spread of alien invasive plants and the loss of indigenous vegetation.                                                                                                                                                                                                                                                                                                                                                                     |                                                                                          |                                  |                                                                         |

## 6. Impacts assess by the Aquatic Specialists

Page 33 to page 41 of the Aquatic Specialist Report:

### Construction Phase

Note that it is essential that an Environmental Control Officer (ECO) be appointed for the full duration of the construction phase to ensure the stipulated control measures are fully implemented.

The construction phase impacts for the development of residential buildings whether for Option 7 or Option 10 are considered very similar. Albeit at a slightly wider scale for Option 10.

### Monitoring and Setback Lines

Prior to commencement of construction, it is necessary to set the clear buffer extent and establish baseline monitoring protocols and values. With mitigation this impact is rated a Negligible Negative (Table 4).

Table 4. Construction: Establishment of Wetland Buffer, Wildlife Corridor and Monitoring

| Project phase             | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                          |                       |                                                                                                                                             |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Impact                    | Establishment of Wetland Buffer and Wildlife Corridor, and Monitoring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                          |                       |                                                                                                                                             |
| Description of impact     | If baseline conditions are not clear and the limit of disturbance established then habitat could be impacted without detection or consequence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                       |                                                                                                                                             |
| Mitigatability            | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Mitigation exists and will considerably reduce the significance of impacts               |                       |                                                                                                                                             |
| Potential mitigation      | <ul style="list-style-type: none"><li>• The Perdespruit Buffer should be delineated by the site surveyor and clearly marked with temporary fencing which still allows the movement of animals through the remainder fo the site and maintains access to the Perdespruit.</li><li>• The wildlife corridor (except the road section) should be delineated with shade netting by the site surveyor and no indigenous vegetation should be disturbed in th corridor for the duration of the construction phase. This must be indicated as a No-Go area for all staff and vehicles.</li><li>• The ECO should conduct a baseline assessment and then weekly monitoring for the duration of earthworks on the site to confirm there is no disturbance to the buffer area. The full extent of the buffer must be walked to establish this.</li><li>• The ECO must take a weekly water clarity reading using a clarity meter from the Dr Swart Street bridge including a baseline value which can then be used for comparison throughout the earthworks phase of construction. This provides a measure of suspended sediment in the water. The aim is to detect the discharge of any water from the site with a high sediment load.</li></ul> |                                                                                          |                       |                                                                                                                                             |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                          | With mitigation       |                                                                                                                                             |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                          | Negative              |                                                                                                                                             |
| Duration                  | Short term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Impact will last between 1 and 5 years                                                   | Brief                 | Impact will not last longer than 1 year                                                                                                     |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Limited to the site and its immediate surroundings                                       | Very limited          | Limited to specific isolated parts of the site                                                                                              |
| Intensity                 | Moderate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Natural and/ or social functions and/ or processes are moderately altered                | Very low              | Natural and/ or social functions and/ or processes are slightly altered                                                                     |
| Probability               | Likely                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The impact may occur                                                                     | Rare / improbable     | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Substantive supportive data exists to verify the assessment                              | High                  | Substantive supportive data exists to verify the assessment                                                                                 |
| Reversibility             | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The affected environment will only recover from the impact with significant intervention | High                  | The affected environment will be able to recover from the impact                                                                            |
| Resource irreplaceability | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The resource is damaged irreparably but is represented elsewhere                         | High                  | The resource is irreparably damaged and is not represented elsewhere                                                                        |
| Significance              | Minor - negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                          | Negligible - negative |                                                                                                                                             |
| Comment on significance   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                          |                       |                                                                                                                                             |
| Cumulative impacts        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                          |                       |                                                                                                                                             |

### Excavations and Stormwater Management

Excavations for foundations, sewage sumps sewer lines or water lines could become inundated with water due to a high-water table, or to heavy rainfall during construction. Pumping to remove this water so work can continue is standard in construction, but if discharged to the Perdespruit, this water could cause serious impacts and must not be permitted under any circumstances.

Table 5. Construction: Pumping sediment-laden water out of excavations.

| Project phase             | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                            |                       |                                                                         |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------|
| Impact                    | Pumping sediment water out of excavations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                            |                       |                                                                         |
| Description of impact     | If discharged to the Perdespruit or nearby stormwater drains it will impact water quality and habitat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                            |                       |                                                                         |
| Mitigatability            | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Mitigation exists and will considerably reduce the significance of impacts |                       |                                                                         |
| Potential mitigation      | <ul style="list-style-type: none"><li>• Have materials available at the site office for such an event which include bidim fabric and sandbags or similar.</li><li>• In the event of needing to pump out dirty water, create a nearby temporary coffer dam out of sandbags lined with bidim. Pump the water into the coffer dam allowing the water to drain / evaporate while retaining the silt in the bidim / filter fabric.</li><li>• Place coffer dams well away from the Perdespruit and on areas of low terrestrial biodiversity.</li><li>• Under no circumstances can this water be pumped to stormwater drains as they lead to the estuary, or into the Perdespruit itself.</li><li>• Ensure the Resident Engineer and Construction Manager are fully aware of these mitigation measures.</li></ul> |                                                                            |                       |                                                                         |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                            | With mitigation       |                                                                         |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                            | Negative              |                                                                         |
| Duration                  | Medium term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Impact will last between 5 and 10 years                                    | Brief                 | Impact will not last longer than 1 year                                 |
| Extent                    | Local                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Extending across the site and to nearby settlements                        | Limited               | Limited to the site and its immediate surroundings                      |
| Intensity                 | Very high                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Natural and/ or social functions and/ or processes are majorly altered     | Low                   | Natural and/ or social functions and/ or processes are somewhat altered |
| Probability               | Almost certain / Highly probable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | It is most likely that the impact will occur                               | Probable              | The impact has occurred here or elsewhere and could therefore occur     |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Substantive supportive data exists to verify the assessment                | High                  | Substantive supportive data exists to verify the assessment             |
| Reversibility             | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | The affected environment will be able to recover from the impact           | High                  | The affected environment will be able to recover from the impact        |
| Resource irreplaceability | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | The resource is damaged irreparably but is represented elsewhere           | Low                   | The resource is not damaged irreparably or is not scarce                |
| Significance              | Moderate - negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                            | Negligible - negative |                                                                         |
| Comment on significance   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                            |                       |                                                                         |
| Cumulative impacts        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                            |                       |                                                                         |

### Construction Vehicles Working Near the Perdespruit

This impact relates to the operation of heavy vehicles in close proximity to sensitive habitat of the

Perdespruit. Provided all mitigation measures are fully implemented, this is considered to be a Negligible Negative impact (Table 6).

Table 6. Construction: Construction vehicles working near the Perdespruit.

| Project phase             | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                          |                       |                                                                         |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------|
| Impact                    | Construction vehicles may pollute or damage habtiat in the Perdespruit or adjacent buffer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                          |                       |                                                                         |
| Description of impact     | Pollution of water with petro-chemicals and destruction of plants                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                          |                       |                                                                         |
| Mitigatability            | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Mitigation exists and will considerably reduce the significance of impacts               |                       |                                                                         |
| Potential mitigation      | <ul style="list-style-type: none"><li>• Before construction begins, clearly fence off the Perdespruit buffer area with high visibility, durable material such as posts with orange shade-cloth supported by wire. Shade cloth must leave a significant gap for wildlife movement beneath at approximately 40 cm high. Signs must be erected indicating this area as a 'No-Go' area.</li><li>• Construction work must be stopped during and immediately following rainfall.</li><li>• Vehicle refuelling must take place at the site offices in an area with sandbags and spill kits immediately available to contain spills should they occur.</li><li>• All construction vehicles must be checked daily for leaks. Should leaks be detected, the vehicle must be removed from the site until it has been repaired.</li><li>• Consider a fining system for any sub-contractors involved in careless transgressions.</li></ul> |                                                                                          |                       |                                                                         |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                          | With mitigation       |                                                                         |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                          | Negative              |                                                                         |
| Duration                  | Short term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Impact will last between 1 and 5 years                                                   | Brief                 | Impact will not last longer than 1 year                                 |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Limited to the site and its immediate surroundings                                       | Very limited          | Limited to specific isolated parts of the site                          |
| Intensity                 | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Natural and/ or social functions and/ or processes are notably altered                   | Low                   | Natural and/ or social functions and/ or processes are somewhat altered |
| Probability               | Likely                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | The impact may occur                                                                     | Probable              | The impact has occurred here or elsewhere and could therefore occur     |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Substantive supportive data exists to verify the assessment                              | High                  | Substantive supportive data exists to verify the assessment             |
| Reversibility             | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | The affected environment will only recover from the impact with significant intervention | High                  | The affected environment will be able to recover from the impact        |
| Resource irreplaceability | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | The resource is irreparably damaged and is not represented elsewhere                     | Low                   | The resource is not damaged irreparably or is not scarce                |
| Significance              | Minor - negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                          | Negligible - negative |                                                                         |
| Comment on significance   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                          |                       |                                                                         |
| Cumulative impacts        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                          |                       |                                                                         |

This impact is related to the presence of large groups of workers where it is often assumed that all staff are aware of the site protocols in terms of Safety, Health, Environment and Quality (SHEQ). From an environmental perspective it is critical that all permanent and casual staff members are made aware of environmental issues. Many of the construction phase mitigation measures are applicable to all personnel working on the site, and site induction meetings are therefore necessary to introduce and orientate all staff to the site's environmental sensitivity.

Table 7. Construction: Construction staff on site

| Project phase             | Construction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                            |                       |                                                                                                                                        |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Impact                    | Construction staff on site                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                            |                       |                                                                                                                                        |
| Description of impact     | Litter, accidental damage, human waste disposal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                            |                       |                                                                                                                                        |
| Mitigatability            | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Mitigation exists and will considerably reduce the significance of impacts |                       |                                                                                                                                        |
| Potential mitigation      | <ul style="list-style-type: none"><li>• Clean and adquate toilet facilities (at least 1 toilet per 10 workers) must be provided for all staff working on site, and must be emptied on a regular basis.</li><li>• Rest areas to be designated for break and lunch times and must include waste disposal (bins) to be cleaned out regularly.</li><li>• Staff to be briefed that no animal may be deliberately harmed on the site. Protocols must be implemented by the ECO regarding the protection, capture and / or relocation of wildlife affected by construction.</li><li>• All staff to be informed that no waste disposal of litter or construction materials is permitted on the site.<ul style="list-style-type: none"><li>• All staff to be briefed about designated 'no-go' area in the Perdespruit or green corridor areas.</li></ul></li><li>• Staff operating heavy earth moving equipment must be informed that vehicles may not enter 'no-go' areas under any circumstances.</li><li>• New / casual staff must be briefed as above.</li></ul> |                                                                            |                       |                                                                                                                                        |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                            | With mitigation       |                                                                                                                                        |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                            | Negative              |                                                                                                                                        |
| Duration                  | Short term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Impact will last between 1 and 5 years                                     | Short term            | Impact will last between 1 and 5 years                                                                                                 |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Limited to the site and its immediate surroundings                         | Very limited          | Limited to specific isolated parts of the site                                                                                         |
| Intensity                 | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Natural and/ or social functions and/ or processes are somewhat altered    | Very low              | Natural and/ or social functions and/ or processes are slightly altered                                                                |
| Probability               | Almost certain / Highly probable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | It is most likely that the impact will occur                               | Unlikely              | Has not happened yet but could happen once in the lifetime of the project, therefore there is a possibility that the impact will occur |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Substantive supportive data exists to verify the assessment                | High                  | Substantive supportive data exists to verify the assessment                                                                            |
| Reversibility             | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | The affected environment will be able to recover from the impact           | High                  | The affected environment will be able to recover from the impact                                                                       |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The resource is not damaged irreparably or is not scarce                   | Low                   | The resource is not damaged irreparably or is not scarce                                                                               |
| Significance              | Minor - negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                            | Negligible - negative |                                                                                                                                        |
| Comment on significance   | These impacts can be easily mitigated through effective communication and regular follow ups from the construction team and foreman on site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                            |                       |                                                                                                                                        |
| Cumulative impacts        | Not applicable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                            |                       |                                                                                                                                        |

Any bare areas of soil, as well as gardens should aim to be revegetated with plants that naturally occur on the site and in the area associated with the mapped vegetation type. This will ensure that wildlife (birds, insects and other animals) have a continued source of habitat for feeding and breeding. These plants are also adapted to the sandy soils of the site, whereas many other species require serious improvement of the soil to survive and will likely never thrive. These plants will prove an attractive, low maintenance and sustainable solution to landscaping and rehabilitation. A list of plants recommended for this purpose is provided in Table 8.

The impact of not using these plants and revegetating bare areas is a Moderate Negative, but if active rehabilitation and gardening / landscaping utilises this list of plants, then the impact will be a Negligible Negative.

Table 8. Indigenous plants local to the site and surrounds which are recommended for planting and rehabilitation in terrestrial or wetland areas (artificial wetlands).

| Species                         | Common Name         | Growth Form            | Terrestrial | Wetland |
|---------------------------------|---------------------|------------------------|-------------|---------|
| <i>Aloe arborescens</i>         | Candelabra aloe     | Shrubby aloe           | ✓           |         |
| <i>Brunsvigia orientalis</i>    | Candelabra lily     | Low growing bulb       | ✓           |         |
| <i>Carprobrotus edulis</i>      | Edible sourfig      | Succulent ground cover | ✓           |         |
| <i>Diospyros dichrophylla</i>   | Poison starapple    | Shrub                  | ✓           |         |
| <i>Ekebergia capensis</i>       | Cape Ash            | Tree                   | ✓           |         |
| <i>Elegia tectorum</i>          | Cape thatching reed | Medium shrub           | ✓           |         |
| <i>Falkia repens</i>            | Pink ear            | Ground cover           | ✓           | ✓       |
| <i>Felicia echinate</i>         | Dune felicia        | Small shrub            | ✓           |         |
| <i>Gnidia anthyllodes</i>       | Brandbossie         | Small shrub            | ✓           |         |
| <i>Grewia occidentalis</i>      | Crossberry          | Shrub                  | ✓           |         |
| <i>Helichrysum cymosum</i>      | Fume everlasting    | Small, spreading shrub | ✓           | ✓       |
| <i>Helichrysum petiolare</i>    | Licorice plant      | Sprawling low shrub    | ✓           |         |
| <i>Juncus krausii</i>           | Brak rush           | Small shrub            |             | ✓       |
| <i>Leonotis Leonurus</i>        | Common lionspaw     | Large shrub            | ✓           |         |
| <i>Metalasia muricata</i>       | White bristle bush  | Small shrub            | ✓           |         |
| <i>Osteospermum monoliferum</i> | Bietou              | Small tree             | ✓           |         |
| <i>Passerina corymbosa</i>      | Common gonna        | Shrub                  | ✓           |         |
| <i>Pelargonium capitatum</i>    | Common storksbill   | Small shrub            | ✓           |         |
| <i>Phyllica ericoides</i>       | Hardebos            | Small shrub            | ✓           |         |
| <i>Pittosporum viridiflorum</i> | Cheesewood          | Tree                   | ✓           |         |
| <i>Polygala myrtifolia</i>      | September bush      | Large shrub            | ✓           |         |
| <i>Salvia aurea</i>             | Brown sage          | Small shrub            | ✓           |         |
| <i>Searsia crenata</i>          | Crowberry           | Large shrub            | ✓           |         |
| <i>Searsia glauca</i>           | Blue kunibush       | Shrub                  | ✓           |         |
| <i>Searsia laevigata</i>        | Dune curranthrus    | Large shrub            | ✓           |         |
| <i>Stenotaphrum secundatum</i>  | Buffalo Grass       | Grass                  | ✓           | ✓       |
| <i>Virgilia divaricata</i>      | Keurboom            | Tree                   | ✓           |         |
| <i>Wachendorfia paniculata</i>  | Butterfly lily      | Small shrub            |             | ✓       |
| <i>Zantedeschia aethiopica</i>  | Arum lily           | Small shrub            |             | ✓       |

Table 9. Construction: Post-construction Rehabilitation

| Project phase | Construction |
|---------------|--------------|
|---------------|--------------|

| Impact                    | Post Construction Rehabilitation                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                          |                       |                                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------|
| Description of impact     | Alien vegetation may spread through disturbed areas and there is a high likelihood of extensive planting of exotic plants inconsistent with support required by the conservation areas.                                                                                                                                                                                                                                                                                                           |                                                                                          |                       |                                                                                                 |
| Mitigatability            | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Mitigation exists and will considerably reduce the significance of impacts               |                       |                                                                                                 |
| Potential mitigation      | <ul style="list-style-type: none"><li>• Anywhere with exposed soil surfaces that were disturbed due to construction should undergo active rehabilitation using plants recommended in this report.</li><li>• the list of plants provided should be given to all new landowners are the baseline planting guide. At least 70% of gardens should aim to incorporate these species.</li><li>• Ensure the green corridors are well vegetated and offer adequate cover and food for wildlife.</li></ul> |                                                                                          |                       |                                                                                                 |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                          | With mitigation       |                                                                                                 |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                          | Negative              |                                                                                                 |
| Duration                  | Medium term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Impact will last between 5 and 10 years                                                  | Short term            | Impact will last between 1 and 5 years                                                          |
| Extent                    | Limited                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Limited to the site and its immediate surroundings                                       | Limited               | Limited to the site and its immediate surroundings                                              |
| Intensity                 | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Natural and/ or social functions and/ or processes are notably altered                   | Low                   | Natural and/ or social functions and/ or processes are somewhat altered                         |
| Probability               | Certain / definite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | There are sound scientific reasons to expect that the impact will definitely occur       | Unlikely              | Has not happened yet but could happen once in the lifetime of the project, therefore there is a |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Substantive supportive data exists to verify the assessment                              | High                  | Substantive supportive data exists to verify the assessment                                     |
| Reversibility             | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | The affected environment will only recover from the impact with significant intervention | High                  | The affected environment will be able to recover from the impact                                |
| Resource irreplaceability | Low                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The resource is not damaged irreparably or is not scarce                                 | Low                   | The resource is not damaged irreparably or is not scarce                                        |
| Significance              | Moderate - negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                          | Negligible - negative |                                                                                                 |
| Comment on significance   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                          |                       |                                                                                                 |
| Cumulative impacts        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                          |                       |                                                                                                 |

## Operational Phase

### Management of the Perdespruit and Buffer

The Perdespruit and buffer area require a mix of active and passive management approaches. Various proposals have been discussed regarding the recreational use of this area, and previous layouts included a bird hide, tea garden and walkway in the buffer and extending into the wetland (on the eastern side of the Perdespruit). These types of development are not supported given the CBA1 status of the Perdespruit, and the impact assessment assumes this type of development as the 'without mitigation' scenario presented in Table 10. With mitigation measures, the impacts are anticipated to be a Negligible Negative.

Table 10. Operation: Disturbance to wetland through excessive recreation and poor management

| Project phase             | Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                          |                       |                                                                                                 |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------|
| Impact                    | Disturbance to the wetland through recreation or management actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                          |                       |                                                                                                 |
| Description of impact     | Habitat degradation resulting from excessive human disturbance and poor vegetation management in the wetland.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                       |                                                                                                 |
| Mitigatability            | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Mitigation exists and will notably reduce significance of impacts                        |                       |                                                                                                 |
| Potential mitigation      | <ul style="list-style-type: none"><li>• The buffer should be marked out as soon as possible to ensure the delineation of this important setback line is clear. Periodic fence poles along the line, with a single rope running between poles could suffice.</li><li>• Continue follow up alien vegetation control along the Perdespruit and buffer, but do not pile cut alien trees in the wetland as this smothers habitat.<ul style="list-style-type: none"><li>• Remove alien vegetation in the wetland and buffer by hand, (saws, tree poppers, clippers). No heavy vehicles may enter the buffer or Perdespruit area.</li></ul></li><li>• No structures (bird hides or walkways can be built in the Perdespruit. There is already a heronry, but no further structures would be recommended.</li><li>• One bird hide and a walkway could be built within the buffer area provided the footprint is not covering sensitive vegetation. Choose a route that creates the lowest disturbance footprint possible.</li><li>• The boardwalk / walkway cannot run along the buffer for a significant distance or it will create a disturbance that fragments habitat, creating a barrier between the Perdespruit and adjacent areas. A length along the buffer of approximately 100m is recommended.</li><li>• It is strongly encouraged that interpretive information boards about the Perdespruit and estuarine habitat be included.</li><li>• 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.</li></ul> |                                                                                          |                       |                                                                                                 |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                          | With mitigation       |                                                                                                 |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                          | Negative              |                                                                                                 |
| Duration                  | Long term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Impact will last between 10 and 15 years                                                 | Short term            | Impact will last between 1 and 5 years                                                          |
| Extent                    | Local                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Extending across the site and to nearby settlements                                      | Limited               | Limited to the site and its immediate surroundings                                              |
| Intensity                 | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Natural and/ or social functions and/ or processes are notably altered                   | Low                   | Natural and/ or social functions and/ or processes are somewhat altered                         |
| Probability               | Almost certain / Highly probable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | It is most likely that the impact will occur                                             | Unlikely              | Has not happened yet but could happen once in the lifetime of the project, therefore there is a |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Substantive supportive data exists to verify the assessment                              | High                  | Substantive supportive data exists to verify the assessment                                     |
| Reversibility             | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The affected environment will only recover from the impact with significant intervention | High                  | The affected environment will be able to recover from the impact                                |
| Resource irreplaceability | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | The resource is damaged irreparably but is represented elsewhere                         | Low                   | The resource is not damaged irreparably or is not scarce                                        |
| Significance              | Moderate - negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                          | Negligible - negative |                                                                                                 |
| Comment on significance   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                          |                       |                                                                                                 |
| Cumulative impacts        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                          |                       |                                                                                                 |

Given the site is one of the last remaining areas of low transformation in Sedgefield, the complete loss of indigenous vegetation that occurs on the site would be undesirable and unsustainable. Indigenous vegetation to the area provides food for a host of insects (many have species-specific associations), birds and other wildlife. Other areas along the Perdespruit have been completely transformed and are now only covered by grass which does very little in terms of biodiversity support (Figure 25). Transformation of areas beyond individual gardens to the degree indicated in Figure 25 would create significant fragmentation of habitat and biodiversity loss and should not be considered. The opposite bank provides a comparative example of vegetation maintained in a natural state which supports a much higher degree of complexity and diversity. This should be the primary aim and is consistent with labelling the open space areas as 'conservation areas.'

The impact assessment indicates a Moderate High negative impact if no landscaping and gardening guidelines are followed. Whereas if mitigation measures are fully implemented as per Table 11 the risk is reduced to a Negligible Negative impact.

Table 11. Operation: Landscaping and Gardening

| Project phase             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Operation                                                                                |                       |                                                                         |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------|
| Impact                    | Landscaping and gardens introduce replace biodiversity with alien and exotic vegetation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                          |                       |                                                                         |
| Description of impact     | Loss of biodiversity and habitat, possible introduction of alien invasive species                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                          |                       |                                                                         |
| Mitigatability            | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Mitigation exists and will notably reduce significance of impacts                        |                       |                                                                         |
| Potential mitigation      | <ul style="list-style-type: none"><li>• Write into the terms and conditions of ownership that at least 70% of gardens should represent indigenous plants indicated on the list provided in this report.</li><li>• Any landscaped areas in the estate should use primarily rescued plants from other disturbed areas of the site, or purchased from nurseries if they are on the list provided in this report.</li><li>• Landscaped areas should not extend to more than 10 m beyond the residential boundary. Beyond this there should be no planting of vegetation unless it is only as provided, and even then it is preferable to leave the vegetation in a natural and undisturbed state.</li><li>• The main management required for the conservation area and along the Perdespruit is the removal of alien vegetation such as Port Jackson. When removed, this must not be discarded into the Perdespruit or left to die in situ where it smothers other vegetation. It must be chipped, cut smaller and scattered, or removed from the site.</li></ul> |                                                                                          |                       |                                                                         |
| Assessment                | Without mitigation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                          | With mitigation       |                                                                         |
| Nature                    | Negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                          | Negative              |                                                                         |
| Duration                  | Long term                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Impact will last between 10 and 15 years                                                 | Brief                 | Impact will not last longer than 1 year                                 |
| Extent                    | Local                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Extending across the site and to nearby settlements                                      | Very limited          | Limited to specific isolated parts of the site                          |
| Intensity                 | Very high                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Natural and/ or social functions and/ or processes are majorly altered                   | Low                   | Natural and/ or social functions and/ or processes are somewhat altered |
| Probability               | Almost certain / Highly probable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | It is most likely that the impact will occur                                             | Rare / improbable     | Conceivable, but only in extreme circumstances, and/or might occur      |
| Confidence                | High                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Substantive supportive data exists to verify the assessment                              | High                  | Substantive supportive data exists to verify the assessment             |
| Reversibility             | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | The affected environment will only recover from the impact with significant intervention | High                  | The affected environment will be able to recover from the impact        |
| Resource irreplaceability | Medium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | The resource is damaged irreparably but is represented elsewhere                         | Low                   | The resource is not damaged irreparably or is not scarce                |
| Significance              | Moderate - negative                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                          | Negligible - negative |                                                                         |
| Comment on significance   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                          |                       |                                                                         |
| Cumulative impacts        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                          |                       |                                                                         |

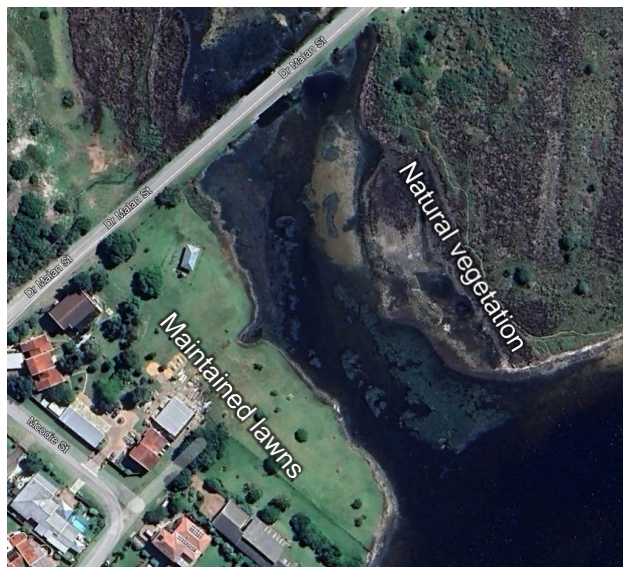


Figure 25. Vegetation abundance and biodiversity along opposite banks of the Perdespruit downstream of Dr Malan St.

## 7. NO GO' OR NO DEVELOPMENT SCENARIO

The 'No Go' or no development scenario takes into consideration the impacts associated with the no construction option. It is a prediction of the future state of the affected area in the event of no construction activities taking place and is based on the current and/or anticipated future land use. If no construction were to take place and the *status quo* would remain the same, it is likely that the site would remain in a similar condition. The owner currently removes IAPs from the property thereby reducing the likelihood of invasion. The exclusion of fire from the habitat is likely to result in further colonisation and proliferation of thicket species, ultimately leading to the loss of fynbos specialist species from the site. In the medium term the impact of the No-Go scenario is **Low Negative**, with a **Low Negative** impact in the long term. It should be noted that it is the legal responsibility of the landowner to remove and control these species so this should not be considered as a reason to allow development on the site.

## SECTION I – DETAILS OF THE PUBLIC PARTICIPATION PROCESS

Section 41 in Chapter 6 of regulation 982 details the public participation process that needs to be adhered to as part of an environmental process. Compliance of the Public Participation Process as per the Legislated Requirements will be confirmed during the Final Basic Assessment Report in the table below:

| Regulation with regard to conducting a Public Participation Process                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Description to adherence of the Legislated Requirements |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| 1) If the proponent is not the owner or person in control of the land on which the activity is to be undertaken, the proponent must, before applying for environmental authorisation in respect of such an activity, obtain written consent of the landowner or person in control of the land to undertake such activity on that land                                                                                                                                                                                                                                                                                                                                                                 | Yes                                                     |
| <b>2) The person conducting a public participation process must take into account any relevant guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties on an application or proposed application which is subjected to public participation by -</b>                                                                                                                                                                                                                                                                                                                                            |                                                         |
| (a) Fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of –<br>(i) The site where the activity to which the application or proposed application relates or is to be undertaken;<br>(ii) Any alternative site                                                                                                                                                                                                                                                                                                                                                                                                            | Yes                                                     |
| (b) Giving written notice, in any of the manners provided for in section 47D of the Act, to –<br>(i) The occupiers of the site and, if the proponent or applicant is not the owner or person in control of the site where the activity is to be undertaken and to any alternative site where the activity is to be undertaken.<br>(ii) Owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken and any alternative site where the activity is to be undertaken.<br>(iii) The municipal councillors of the ward in which the site and alternative site is situated and any organisation of ratepayers that the represent the community. | Yes                                                     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| <p>(iv) The Municipality which has jurisdiction in the area</p> <p>(v) Any organ of state having jurisdiction in respect of any activity; and</p> <p>(vi) Any other party as required by the competent authority</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |
| <p>(c) Placing an advertisement in –</p> <p>(i) One Local Newspaper; or</p> <p>(ii) Any official Gazette that is published specifically for the purpose of providing public notices of applications or other submissions made in terms of these Regulations;</p>                                                                                                                                                                                                                                                                                                                                                                                                           | Yes |
| <p>(d) Placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond its boundaries of the metropolitan or district municipality in which it is or will be undertaken: Provided that this paragraph need not to be complied with if an advertisement has been placed in an official gazette referred to in paragraph (c)(ii); and</p>                                                                                                                                                                                                                                                 | N/A |
| <p>(e) Using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desirous of but unable to participate in the process due to –</p> <p>(i) Illiteracy</p> <p>(ii) Disability; or</p> <p>(iii) Any other disadvantages</p>                                                                                                                                                                                                                                                                                                                                                                                         | TBC |
| <p>3) A notice, notice board or advertisement referred to in sub regulation (2) must –</p> <p>(a) Give details of the application or proposed application which is subjected to public participation ; and</p> <p>(b) State –</p> <p>(i) Whether basic assessment or S&amp;EIR procedures are being applied to the application;</p> <p>(ii) The nature and location of the activity to which the application relates;</p> <p>(iii) Where further information on the application or proposed application can be obtained; and</p> <p>(iv) The manner in which and the person to whom representations in respect of the application or proposed application may be made.</p> | YES |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <p>4) A notice board referred to in sub regulation (2) must –</p> <ul style="list-style-type: none"> <li>(a) Be of a size of at least 60cm by 42cm; and</li> <li>(b) Display the required information in lettering and in a format as may be determined by the competent authority</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <p>Yes</p> |
| <p>5) Where public participation is conducted in terms of this regulation for an application or proposed application, sub regulation (2)(a), (b), (c) and (d) need not be complied with again during the additional public participation process contemplated in regulations 19(1)(b) or 23(1)(b) or the public participation process contemplated in regulations 21(2)(d), on condition that –</p> <ul style="list-style-type: none"> <li>(a) Such a process has been preceded by a public participation process which included compliance with sub regulation (2)(a), (b), (c) and (d); and</li> <li>(b) Written notices is given to registered I&amp;AP's regarding where the – <ul style="list-style-type: none"> <li>(i) Revised basic assessment report or , EMPr or closure plan, as contemplated in regulation 19(1)(b);</li> <li>(ii) Revised environmental impact assessment report or EMPr as contemplated in regulation 23(1)(b); or</li> <li>(iii) Environmental impact assessment report and EMPr as contemplated in regulation 21(2)(d);</li> <li>(iv)</li> </ul> </li> </ul> <p>May be obtained, the manner in which and the person to whom representations on these reports or plans may be made and the date on which such representations are due.</p> | <p>Yes</p> |
| <p>6) When complying with this regulation, the person conducting the public participation process must ensure that –</p> <ul style="list-style-type: none"> <li>(a) Information containing all relevant facts in respect of the application or proposed application is made available to potential interested and affected parties; and</li> <li>(b) Participation by potential or registered interested and affected parties is facilitated in such a manner that all registered interested and affected parties are provided with a reasonable opportunity to comment on the application or proposed application.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>TBC</p> |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <p>7) Where an environmental authorisation is required in terms of these Regulations and an authorisation, permit or licence is required in terms of a specific environmental management Act, the public participation processes contemplated in this Chapter may be combined with any public participation processes prescribed in terms of a specific environmental management Act, on condition that all relevant authorities agree to such a combination of processes.</p> | <p>TBC</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|

## SECTION J – CONCLUSION AND RECOMMENDATIONS

To be completed upon review.