



## DRAFT BASIC ASSESSMENT REPORT

### Proposed Residential Development on Portion 12 (a Portion of Portion 1) of the Farm Uitzigt No. 216, Belvidere, Knysna

*“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.*”



**PREPARED FOR:**

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**DATE:**

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18/05/2023

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## SECTION A

### 1. Introduction

Portion 12 (a Portion of Portion 1) of the Farm Uitzigt No 216 is located in Belvidere (Knysna Municipality) and is ±9584m<sup>2</sup> in extent. The property is currently vacant with only ruins on the property, after the Knysna Fires in 2017. It is currently zoned 'Agricultural Zone I' in terms of the Knysna Municipality: Zoning Scheme By-law.

During 2004, the Department of Forestry, fisheries and the Environment (DFFE) issued an Environmental Authorisation (Appendix F) for (18) residential units. The authorised activities did not commence lawfully before the lapsing date, and therefore the Environmental Authorisation lapsed. No Land Development Application was ever lodged. The owners of the property wish to apply for development rights on the property in order to allow a group housing development consisting of thirty (30) freehold title group housing units. The development of the proposed new group housing development will require Environmental Authorisation in terms of the National Environmental Management Act, 1998 (Act 107 of 1998), as well as a land development approval from Knysna Municipality in terms of the Knysna Municipality By-Law on Municipal Land Use Planning (2016).

The proposed group housing development will consist of thirty (30) freehold title group housing erven, and one (1) private open space / private street property, as indicated on the Site Development Plan (Appendix B1). The proposed development will have access control. Erf sizes of the proposed group housing development will vary between 195m<sup>2</sup> and 300m<sup>2</sup>. The density of the proposed development calculates to 31 units/ha.

Please refer to the attached town planning report for a full description. Attached as Appendix G1.

### 2. Scope of assessment and contents of basic assessment reports

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 – (i) The EAP who prepared the report; and (ii) The expertise of the EAP, including curriculum vitae.	<b>Annexure A.</b>
(b) The location of the activity, including – (i) The 21 digit surveyor General Code of each cadastral land parcel. (ii) Where available the physical address and farm name.	(i) <b>Section B</b>  (ii) <b>Section B</b>  (iii) <b>Section B</b>

<p>(iii) Where the required information items (i) and (ii) is not available, the co-ordinates of the boundary of the property.</p>	
<p>(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</p> <ul style="list-style-type: none"> <li>(i) A linear Activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or</li> <li>(ii) On land where the property has not been defined, the coordinates within which the activity is to be undertaken.</li> </ul>	<p><b>Section B</b></p> <p>(i) N/A</p> <p>(ii) N/A</p>
<p>(d) a description of the scope of the proposed activity, including –</p> <ul style="list-style-type: none"> <li>(i) All listed and specified activities triggered and being applied for; and</li> <li>(ii) A description of the activities to be undertaken including associated structures and infrastructure</li> </ul>	<p><b>Section C</b></p> <p>(i) <b>Section C</b></p> <p>(ii) <b>Section C</b></p>
<p>(e) A description of the policy and legislative context within which the development is proposed, including –</p> <ul style="list-style-type: none"> <li>(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</li> <li>(ii) How the proposed activity complies with and responds to the legislation and policy context, plans, guidelines, tools frameworks and instruments.</li> </ul>	<p><b>Section D</b></p> <p>(i) <b>Section D</b></p> <p>(ii) <b>Section D</b></p>
<p>(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.</p>	<p><b>Section E</b></p>
<p>(g) A motivation for the preferred site, activity and technology alternative</p>	<p><b>Section F</b></p>
<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</li> </ul>	<p><b>Section F</b></p> <p><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>incorporated, or the reasons for not including them.</p> <p>(iv) The environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects.</p> <p>(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 –  (aa) can be reversed  (bb) may cause irreplaceable loss of resources; and  (cc) can be avoided, managed or mitigated.</p> <p>(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.</p> <p>(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.</p> <p>(viii) The possible mitigation measures that could be applied and level residual risk</p> <p>(ix) The outcome of the site selection matrix</p> <p>(x) If no alternatives, including alternative locations for the activity were investigated, the motivation for not considering such; and</p> <p>(xi) A concluding statement indicating the preferred alternatives, including the preferred location of the activity.</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> <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>
<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</p>	<p><b>Section H (7)</b></p>
<p>(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</p>	<p><b>Section H (7)</b></p>

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	
(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>	<b>Section H and I, Appendix B</b>  <b>Appendix D</b>  <b>Section F and H</b>
(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	To be included on submission of Draft BAR

comments or inputs made by interested and affected parties	
(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 B

### 1. Location Information

<b>Province:</b>	Western Cape
<b>District Municipality:</b>	Garden Route Municipality
<b>Local Municipality:</b>	Knysna Municipality
<b>Ward number(s):</b>	Ward 5
<b>Nearest town(s):</b>	Knysna
<b>Erf name(s) and number(s):</b>	Portion 12 (a portion of portion 1) of the Farm Uitzigt 216

### 2. Property Information

<b>Erf Number</b>	Portion 12 (a portion of portion 1) of the Farm Uitzigt 216
<b>Surveyor General 21 digit code:</b>	C03900000000021 600012
<b>Zoning:</b>	Agriculture Zone I
<b>Urban Edge:</b>	Yes
<b>Applicant name:</b>	Zelpy 1825 (Pty) Ltd
<b>Registration number (if applicant is a company):</b>	2003/004607/07
<b>Trading name (if any):</b>	Zelpy
<b>Responsible person name:</b>	Phil Parvus
<b>Applicant/ Responsible person ID number:</b>	4611235081189
<b>Responsible position, e.g. Director, CEO, etc.:</b>	
<b>Physical address of applicant:</b>	
<b>Postal address:</b>	PO Box 873 Walkerville
<b>Postal code:</b>	1876
<b>Telephone:</b>	0794545766
<b>Fax:</b>	
<b>E-mail:</b>	parvus@mweb.co.za
<b>GPS point middle of property:</b>	34°02'42.6"S 22°59'35.7"E

### 3. Property Description

Portion 12 of the Farm Uitzigt No 216 is located to the west of Belvidere Park Retirement Village, and to the north of the Belvidere Municipal Stores and Offices, and to the east of the Belvidere Wastewater Treatment works. The GPS coordinates to the property is 34°02'42.6"S 22°59'35.7"E.

Portion 12 of the Farm Uitzigt No 216 is currently vacant with only ruins on the property, after the Knysna Fires. The property is currently zoned "Agriculture Zone I" in terms of the Knysna Municipality: Zoning Scheme By-law, 2020 (figure 1).



Figure 1: Knysna Zoning Map.

The proposed site has a gradual slope in an easterly direction, with the lowest point positioned in the north-east corner of the property (figure 2). The site drops down from approximately 62m in the west, to approximately 52m in the east. The site is land locked and is bordered by the Belvidere Park Retirement Village to the east and north, and municipal property to the west and south.



Figure 2: Slope and contour of the site.

## 4. Locality Maps



### Portion 12 of Farm Uitzigt 216, Belvidere,

#### Legend

-  Local Municipalities
-  Wards
-  Allotment Township
-  Parent Farms
-  Farm Portions
-  Erf

Map Center: Lon: 22°59'25.1"E

Lat: 34°2'36.2"S

Scale: 1:18 056

Date created: May 16, 2023



**Western Cape  
Government**  
FOR YOU

Agriculture



## Portion 12 of Farm Uitzigt 216, Belvidere,

### Legend

-  Allotment Township
-  Parent Farms
-  Farm Portions
-  Erf

Map Center: Lon: 22°59'34.7"E  
Lat: 34°2'42.9"S

Scale: 1:2 257

Date created: May 16, 2023



**Western Cape  
Government**  
FOR YOU

Agriculture

Department of Rural Development and Land Reform, Chief Surveyor-General  
Surveyor-General WC, Department of Rural Development and Land Reform  
Department of Rural Development & Land Reform, Chief Surveyor-General, Cadastral  
Spatial Information, Branch: Cadastral Surveys Management  
Chief Surveyor-General (DRDLR)

## 5. Site Sensitivities and detailed approach for the Proposed Development

The proposed layout is specifically planned and designed in accordance with the topography (contours) of the site and to allow a larger buffer between the proposed development and the Belvidere Wastewater Treatment Works, situated to the west of the application area, on Erf 328. The site slopes down towards the eastern boundary of the property, making it much more cost effective and ensure less earthworks to construct the units on the same contour levels, allowing them to step down towards the eastern parts of the site. The proposed semidetached units will be terraced with the slope, in order to minimise unnecessary earth works and excavations. The internal road is proposed along the shared western boundary with Erf 328 (the Belvidere Sewage Treatment Plant), which will ensure a space of  $\pm 8.5\text{m}$  between the boundary and the actual units.

The Knysna Integrated Zoning Scheme Bylaw stipulates that there should be at least  $50\text{m}^2$  of private outdoor space per group housing unit. Since the proposed development will be a freehold title development, all outdoor spaces are provided on the individual group housing erven. The wide private road will also have enough space for pedestrians and cyclists and can serve as active recreation space.

The Town Planning report by Marike Vreken Urban and Environmental Planners concluded the following:

- ❖ The application area is located inside the urban edge and therefore suitable for development.
- ❖ The proposal encourages densification within urban areas.
- ❖ No impact on heritage resources.
- ❖ This development aims to contribute to the number of available units, and more importantly it aims to provide a range of housing typologies for the various income groups.
- ❖ Adequate access to the application area is obtained via the servitude road.
- ❖ The proposal will have no impact on the character of the area, it will complement the existing residential character of the area.
- ❖ Is consistent with the various applicable spatial planning policies and land use management legislation.
- ❖ There is a great need for a proposal; it is highly desirable and suitable for the area.

It is the considered opinion that the proposed development will achieve a sensitive balance between the natural environment, the built environment, and the social-economic environment, that is imperative to ensure sustainable development.

The planning process for the proposed development took into consideration environmental sensitivities of the site. An Environmental Screening Tool and Site Sensitivity Verification Report were produced to inform the process (Appendix I). The Screening Tool Report indicated that the receiving environment has a very high Terrestrial Biodiversity Sensitivity. The site is not within a Critical Biodiversity Area. The vegetation type is Knysna Sand Fynbos which is described as Endangered, and the Ecosystem Threat Status is Critically Endangered. The site is within the Knysna Lakes Area and will require comment from SANParks.

Portion 12 of the Farm Uitzigt 216 is currently vacant with only ruins on the property. The property was burnt in the 2017 Knysna Fires (figure 3), and invasive alien vegetation has subsequently infested the property.



**Figure 3: Historical photographs from 2006 to 2022 and before and after of the Knysna Fires in 2017.**

A site inspection revealed that the remaining vegetation on the property is invasive alien species dominated by black wattle (*Acacia mearnsii*) and eucalyptus species (figure 4). A few mature keurbooms were found along the northern entrance road to the Belvidere Wastewater Treatment Works, however this is located on the neighbouring property erf 289 to the north and will not be disturbed. Much of the disturbed area from the previous building and associated activities is overgrown with grasses. No vegetation associated with Knysna Sand Fynbos was observed on site, or any indigenous vegetation with conservation value.





**Figure 4: Photographic evidence of vegetation on site.**

The property is “land locked” by developments, roads, and fences. To the north is the main road (to Brenton on Sea), to the south is the Belvidere Municipal Stores and Offices as well as the Belvidere Park tennis courts, to the east is the Belvidere Park Retirement Village, and to the west is the Belvidere Wastewater Treatment Works (figure 5). These physical structures, hard surfaces, and barriers have negatively impacted wildlife movement and effectively cut off ecological connectivity. The property therefore does not serve any functional corridor for connectivity across the landscape.





**Figure 5: Position of Portion 12 of Farm 216 in the landscape.**

## 6. ASSUMPTIONS & LIMITATIONS

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

- ❖ It is assumed that the information on which this report is based (specialist studies and project information, as well as existing information) is correct, factual and truthful.
- ❖ The proposed development is in line with the statutory planning vision for the area (namely the local Spatial Development Plan), and thus it is assumed that issues such as the cumulative impact of development in terms of character of the area and its resources, have been taken into account during the strategic planning for the area.
- ❖ It is assumed that all the relevant mitigation and management measures and agreements specified in this report will be implemented in order to ensure minimal negative impacts and maximum environmental benefits.
- ❖ It is assumed that Stakeholders and Interested and Affected Parties notified of the availability of draft reports during the PPP have submitted all relevant comments within the designated 30-days review and comment period, for inclusion in the Final BAR.



## SECTION C

### 1. Description of the scope of the proposed activity

The applicant intends to develop a group housing development with access off the Upper Duthie Drive, via a new right of way servitude of 13m wide, over Erf 328 Belvidere, along the eastern boundary of Erf 328, that has been approved by the Knysna Council (figure 6).

The proposed group housing development will consist of thirty (30) freehold title group housing erven, and one (1) private open space / private street property, as indicated on the Site Development Plan (Appendix B1). The proposed development will have access control. Erf sizes of the proposed group housing development will vary between 195m<sup>2</sup> and 300m<sup>2</sup>. The density of the proposed development calculates to 31 units/ha.

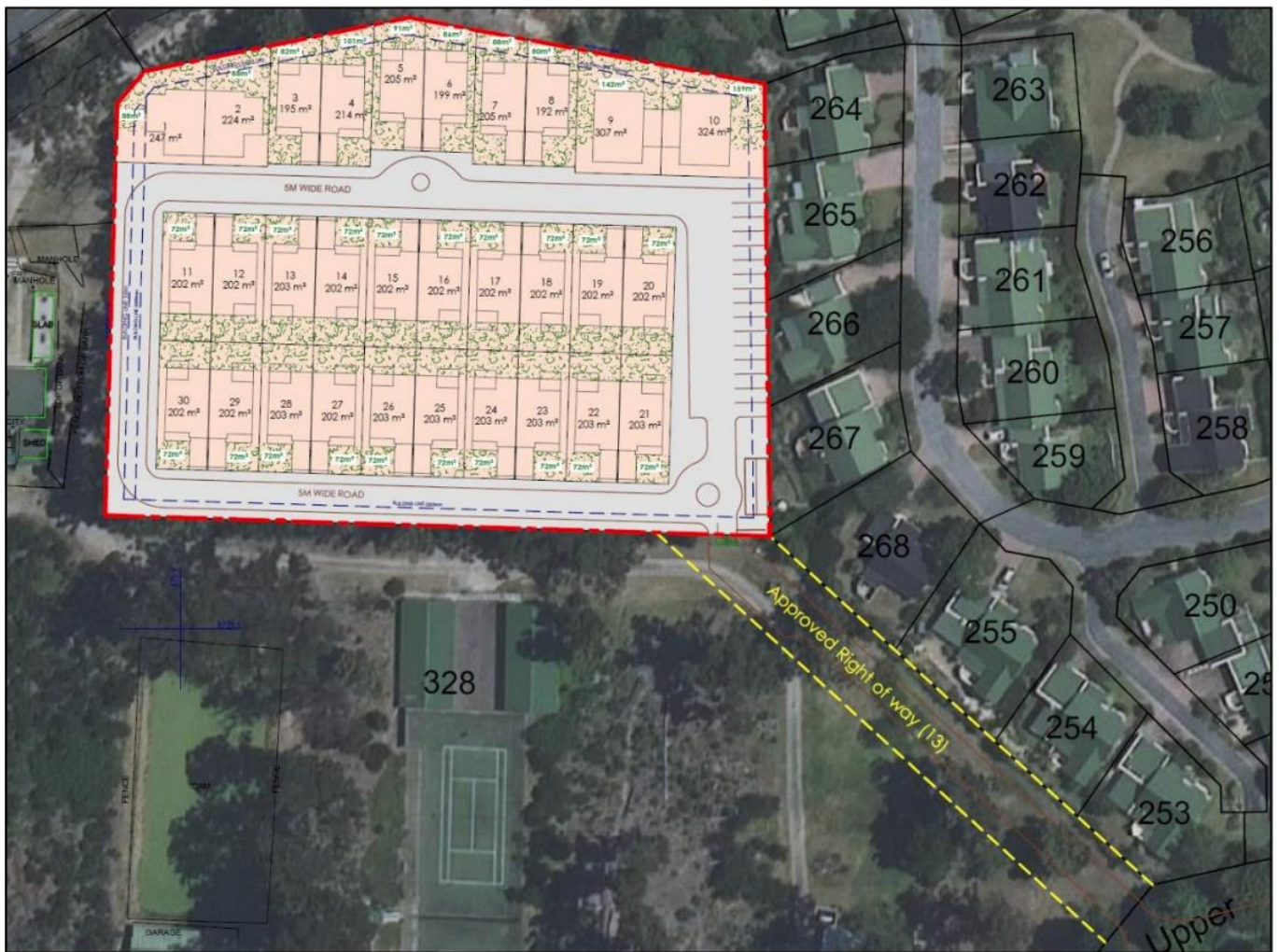


Figure 6: Proposed SDP.

The units will be semi-detached and double storey, consisting of two (2) or three (3) bedrooms each. The floor area of the units will be  $\pm 175\text{m}^2$  each. The proposed layout is specifically planned and designed in accordance with the topography (contours) of the site and to allow a larger buffer between the proposed development and the Belvidere Wastewater Treatment Works, situated to the west of the application area, on Erf 328. The site slopes down towards the eastern boundary of the property, making it much more cost effective and ensure less earthworks to construct the units on the same contour levels – allowing them to step down towards the eastern parts of the site. Also, given that the internal road is proposed along the western boundary, it ensures a space of  $\pm 8.5\text{m}$  between the boundary of Erf 328 and the actual units.

## Housing Design and Layout:

The layout of the units is also designed to maximise the northern sun, and then the semidetached units will be terraced with the slope, in order to minimise unnecessary earth works and excavations. The ground floor of the units will consist of the living, dining, kitchen area, with a single garage. The first floor will consist of the bedrooms, either two (2) bedrooms or three (3) bedrooms. The Design of the proposed units is shown in the figure below.

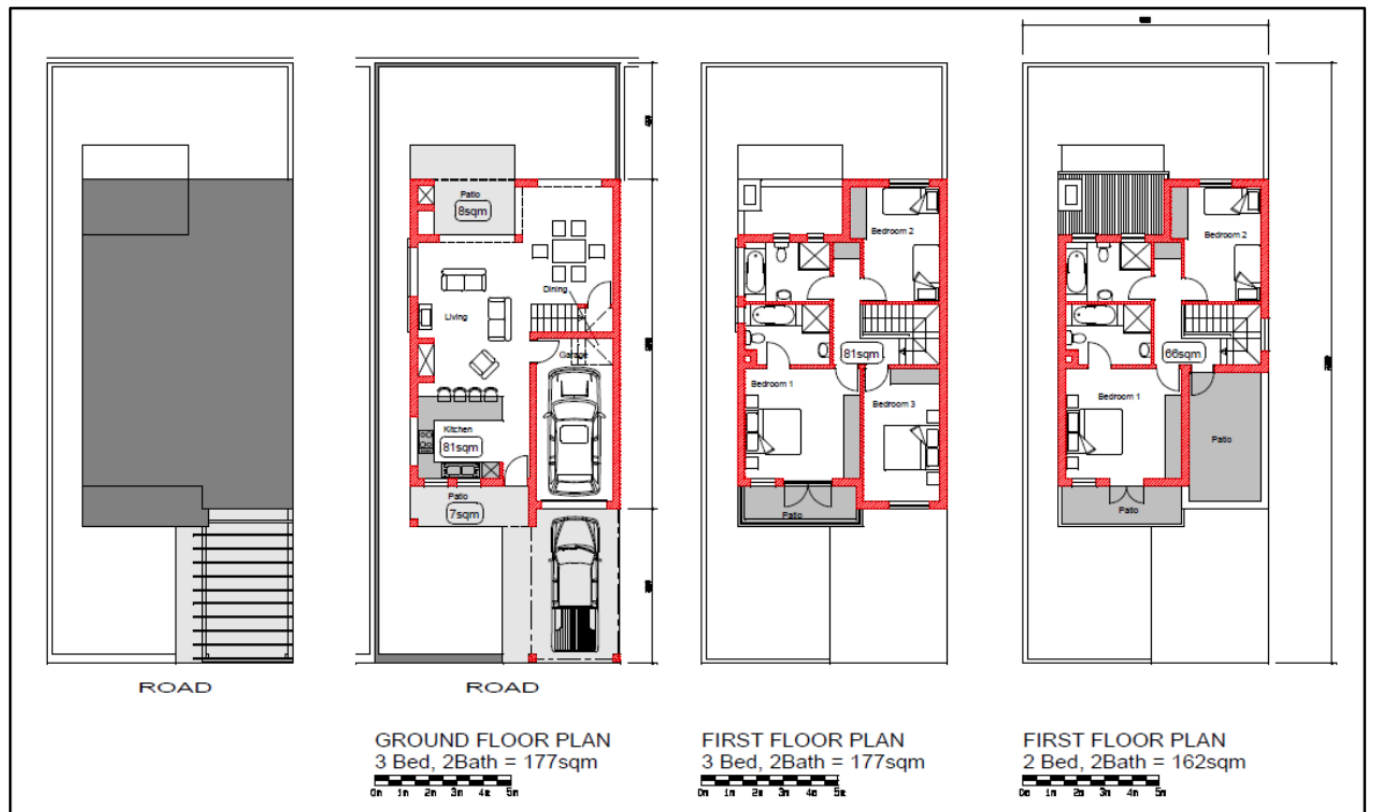


Figure 7: Ground and first floor plans.

## Access and Egress:

There is an existing road network servicing this area, the road leading to this property is tarred and of good quality. Access to the proposed development will be obtained off Upper Duthie Drive, via a new right of way servitude of 13m wide, over Erf 328 Belvidere, along the eastern boundary of Erf 328, that has been approved by the Knysna Council. Traffic flow will be in a one-way, single direction flow through the development. Security control will be implemented at the access to the property approximately 100m from Upper Duthie Drive. The access road as well as all the internal roads will be private roads. All roads to be brick paved surfaces with a minimum width of 5m.

## Parking:

Each group housing unit will have a single garage and private parking bay. Hence at least two (2) parking bays per group housing unit will be provided. In addition to these parking's, there will be a designated parking area along the eastern boundary of the property that makes provision for 16 visitor parking bays. The Knysna Municipality: Zoning Scheme By-law prescribes 2 bays per dwelling unit plus 0.25 bays/unit for visitors for group housing purposes.



Figure 8: Private Road and Parking.

**Open Space:**

The Knysna Integrated Zoning Scheme Bylaw stipulates that there should be at least 50m<sup>2</sup> of private outdoor space per group housing unit. Since the proposed development will be a freehold title development, all outdoor spaces are provided on the individual group housing erven. The wide private road will also have enough space for pedestrians and cyclists and can serve as active recreation space. The total open space provided is 5668m<sup>2</sup>, this includes private outdoor space and functional community space.



Figure 9: Open Space Provision.

**Bulk Services:**

**Water:** An existing 150Ø water main is located in Upper Duthie Drive. A new water connection and meter will be installed to supply the development with potable water.

**Sewer:** The existing municipal bulk sewer network in the area will not be utilized. A new sewer pump station will be constructed within the parameters of the development. The internal sewer network will consist of a gravitational pipe system. Sewer from the development will be pumped to the inlet structure of the Municipal Wastewater Treatment Plant, located on erf 328 (Western boundary). Minimum pipe diameter is 160mm for main lines and 110mm for house connections.

**Stormwater:** An existing stormwater network is located in Upper Duthie Drive. The runoff from the development drains towards the northeast and southeast corners of the property. The stormwater design of the development will make provision for minor and major storms. The minor stormwater system will be underground pipe system that will collect the runoff, to accommodate a 1 in 2 year storm event. The system will release into the exiting municipal storm water system. The major stormwater system will consist of suitably shaped roads with kerbing, to accommodate storm events in excess of 1 in 2 year storm event. Surface runoff will be channelized to the access road.

**Solid Waste:** A refuse removal storage area will be provided at the entrance gate. Provision will be made for the storage of 30 wheelie bins. The storage area to be constructed with a 100mm thick concrete floor, shaped and drained into a 110mm floor trap fitted with a grease trap. The area to be enclosed to prevent rodent and bird access. The collection and disposal of the solid waste from the storage area, will be done by the Knysna Municipality.

**Proposed Land Development Application:**


Marike Vreken Urban and Environmental Planners is undertaking the land development applications in order to obtain land development rights for the proposed housing development. The following land development application will have to be lodged to Knysna Municipality:

- (i) The rezoning of Portion 12 of the Farm Uitzigt No 216 from "Agriculture Zone I" to "General Residential Zone I" for group housing in terms of Section 15(2)(a) from the Knysna Municipality By-Law on Municipal Land Use Planning (2021).
- (ii) The subdivision of Portion 12 of the Farm Uitzigt No 216 into (31) portions; in terms of Section 15(2)(d) from the Knysna Municipality By-Law on Municipal Land Use Planning (2021):
  - (30) x 'General Residential Zone I' Erven (Group Housing)
  - (1) x 'Transport Zone III' Erf (Private Road)
- (iii) The removal of restrictive title deed conditions Condition B(a) from the Deed of Portion 12 of the Farm Uitzigt No 216, to allow subdivision, in terms of Section 15(2)(f) from the Knysna Municipality By-Law on Municipal Land Use Planning (2021).

*The above information was obtained from Specialist Planning Report for Environmental Authorisation purposes prepared by Marike Vreken Urban and Environmental Planners, May 2022, as well as the Services Report for Roads, Stormwater, water and sewer prepared by Tuiniqua Consulting Engineers, May 2022. Please refer to full reports attached as Appendix G1 & G2.*

**2. Description of the NEMA listed activities associated with the project**

Before any of the below listed activities can commence, authorisation must be obtained from the Department of Environmental Affairs (DEA). The following activities as per NEMA Regulations have been identified below:

Listed activity as described in GN R.325, 324, 327	Description of project activity
<p><b>GN R.324 activity 12:</b></p> <p>The clearance of an area of 300 square meters 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 a 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 a critically endangered in the National Biodiversity Assessment 2004.</p>	<p>The vegetation on site is classed as Knysna Sand Fynbos which has an ecosystem status of Endangered. The site is also within an Ecosystem Threat Status of Critically Endangered.</p> 

**Principals contained in Section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998),** as amend Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably. The development must be socially, environmentally, and economically sustainable:

#### **Socially:**

The site is situated within the Belvidere neighbourhood, which is predominantly a residential neighbourhood with several tourist accommodation establishments and couple of tourist facilities (restaurants & coffee shops). Belvidere Park Retirement Village and Frail Care Centre is also situated within Belvidere, which is a residential retirement village with assisted living facilities. Belvidere comprises of large family homes, a retirement village and a hotel. The character of the area is considered residential. The proposal to allow group housing units will contribute to the existing residential character of the area. The proposed development will create jobs during construction and operational phase.

The wide private road will contribute to outdoor space for pedestrians and cyclists and can serve as active recreation space.

#### **Environmentally:**

The site is not within a Critical Biodiversity Area (CBA), but a small portion on the western boundary is within an Ecological Support Area 2 (ESA2) (restore from plantation or high-density IAP). ESA2 areas are not essential for meeting biodiversity targets but may play an important role in supporting the functioning of Protected Areas or CBAs, and are often vital for delivering ecosystem services. The objective of the ESA2 is to restore and/or manage to minimize impact on ecological processes and ecological infrastructure functioning, especially soil and water-related services, and to allow for faunal movement. The small portion of ESA2 will be incorporated into a narrow buffer between the western boundary and the development. However, this will not realistically contribute to objectives of the ESA2 given its small area within the property, and the impacts on faunal movement that already exist in the landscape due to surrounding developments.

The property is "land locked" by developments, roads, and fences. To the north is the main road (to Brenton on Sea), to the south is the Belvidere Municipal Stores and Offices as well as the Belvidere Park tennis courts, to the east is the Belvidere Park Retirement Village, and to the west is the Belvidere Wastewater Treatment Works. These physical structures, hard surfaces, and barriers have negatively impacted wildlife movement and effectively cut off ecological connectivity. The property therefore does not serve any functional corridor for connectivity across the landscape.

The vegetation type is Knysna Sand Fynbos which is described as Endangered, and the Ecosystem Threat Status is Critically Endangered. The remaining vegetation on the property following the Knysna fires of 2017 is invasive alien species dominated by black wattle (*Acacia mearnsii*) and eucalyptus species. No vegetation associated with Knysna Sand Fynbos was observed on site, or any indigenous vegetation with conservation value.

#### **Economically:**

This is a strategically located underdeveloped site that will be developed with an appropriate use, creating additional employment opportunities and provides a different range of housing opportunities in the Knysna area. Even though this application area is not within walking distance from business nodes, the proposal constitutes infill development within an existing urban environment.

The proposal intends to cater for a range of income-groups such as first-time-buyer, small families and retirees. This residential development will attract new investors and visitors, contributing to the development and the

economical income of Knysna. It also provides the employment opportunities to several professional people and local people.

**a. Sustainable development requires the consideration of all relevant factors including the following:**

**(i) That the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied:**

The site is not within a Critical Biodiversity Area (CBA), but a small portion on the western boundary is within an Ecological Support Area 2 (ESA2) (restore from plantation or high-density IAP). ESA2 areas are not essential for meeting biodiversity targets but may play an important role in supporting the functioning of Protected Areas or CBAs, and are often vital for delivering ecosystem services. The objective of the ESA2 is to restore and/or manage to minimize impact on ecological processes and ecological infrastructure functioning, especially soil and water-related services, and to allow for faunal movement. The small portion of ESA2 will be incorporated into a narrow buffer between the western boundary and the development. However, this will not realistically contribute to objectives of the ESA2 given its small area within the property, and the impacts on faunal movement that already exist in the landscape due to surrounding developments.

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**(ii) That pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;**

Mitigations to prevent pollution and degradation of the environment will be included in the EMP (Appendix H), and strictly adhered to during the construction and operational phases of the development.

**(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;**

A Notice of Intent to Develop (NID) under Section 38(1) and (8) of the NHR Act was submitted to Heritage Western Cape. It was determined by Heritage Western Cape in their meeting held 7 March 2022 that there is no reason to believe that the proposed residential development on portion 12 of 216, Knysna will impact on heritage resources. No further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required.

**(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;**

The waste hierarchy will be followed during the construction and operational phase of the project.

- (v) that the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;**

No exploitation of non-renewable natural resources will be permitted during construction and operational phase.

- (vi) that the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised;**

It is proposed that bulk potable water supply for the development be sourced from municipal water supply. The annual average daily water demand for the proposed development will be 18.2kl/day according to the Services Report (Appendix G2). The existing Municipal network has sufficient capacity to accommodate the increase in the daily demand, according to the Knysna Municipality Technical Services Department.

- (vii) that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions;**

A risk-averse and cautious approach is being applied when assessing the receiving environment and people's environmental rights.

- (viii) that 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.**

Negative impacts on the environment and people's environmental rights will be identified and mitigation measures put in place to prevent negative impacts and enhance positive impacts.



## SECTION D

### 1. Description of the policy and legislative context within which the development is proposed:

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. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.	<del>PERMIT / LICENSE/ AUTHORIZATION / COMMENT/</del> <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. The Proposed development is located within the urban edge of Knysna and is regarded as infill development.
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. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.	<del>PERMIT / LICENSE/ AUTHORIZATION / COMMENT/</del> <b>RELEVANT CONSIDERATION</b>	In process of a BAR application. 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 DFFE for Environmental Authorization.

<p>NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT (ACT NO 10 OF 2004)</p>	<p>Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p>	<p><del>PERMIT / LICENSE/ AUTHORIZATION /</del> <b>COMMENT/ RELEVANT CONSIDERATION</b></p>	<p>SANParks and CapeNature will be consulted.  The applicant is reminded of his duty to comply with the NEM:BA Act and remove alien vegetation regardless of Environmental Authorisation being granted.</p>
<p>NATIONAL ENVIRONMENTAL MANAGEMENT: INTEGRATED COASTAL MANAGEMENT ACT (ACT NO 24 OF 2008)</p>	<p>Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p>	<p><del>PERMIT / LICENSE/ AUTHORIZATION /</del> <b>COMMENT/ RELEVANT CONSIDERATION</b></p>	<p>The ICM Act is a specific environmental management act under the umbrella of NEMA. The site is within the Coastal Protection Zone.</p>
<p>NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT (ACT 57 OF 2003)  REGULATIONS FOR THE PROPER ADMINISTRATION OF THE KNYSNA PROTECTED ENVIRONMENT (R 1175 OF DEC 2009)</p>	<p>Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p>	<p><del>PERMIT / LICENSE/ AUTHORIZATION /</del> <b>COMMENT/ RELEVANT CONSIDERATION</b></p>	<p>(R 1175 OF DEC 2009): 8.(1) No person may, without prior authorisation in writing of the management authority, in the development control area – (a) undertake any development  The site is within the Knysna Lakes Area and will require comment from SANParks.</p>
<p>NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT (ACT 59 OF 2008)</p>	<p>Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.</p>	<p><del>PERMIT / LICENSE/ AUTHORIZATION /</del> <b>COMMENT/ RELEVANT CONSIDERATION</b></p>	<p>The Waste Hierarchy will be adhered too during the construction and operational phase.</p>
	<p>Department of Environmental Affairs,</p>	<p><del>PERMIT / LICENSE/ AUTHORIZATION /</del></p>	<p>N/A</p>

NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT (ACT NO 39 OF 2004)	Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.	<del>COMMENT/ RELEVANT CONSIDERATION</del>	
NATIONAL FORESTS ACT (ACT 84 OF 1998)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.  <u>DFFE Jurisdiction</u>	<del>PERMIT / LICENSE/ AUTHORIZATION /</del> <b>COMMENT/ RELEVANT CONSIDERATION</b>	No protected trees will be cut, destroyed or damaged.
FORESTRY LAWS AMENDMENT ACT (ACT 35 OF 2005)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.  <u>DAFF Jurisdiction</u>	<del>PERMIT / LICENSE/ AUTHORIZATION /</del> <b>COMMENT/ RELEVANT CONSIDERATION</b>	Refer to above
NATIONAL WATER ACT (ACT 36 OF 1998)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.  <u>Dept of Water Affairs Jurisdiction</u>	<del>PERMIT / LICENSE/ AUTHORIZATION /</del> <b>COMMENT/ RELEVANT CONSIDERATION</b>	A Water Use License is not required in terms of Section 21 of the National Water Act, 1998 (Act No. 36 of 1998)(NWA).
WATER SERVICES ACT (ACT 108 OF 1997)	Department of Environmental Affairs, Republic of South Africa.	<del>PERMIT / LICENSE/ AUTHORIZATION /</del> <b>COMMENT/ RELEVANT CONSIDERATION</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 / LICENSE/ AUTHORIZATION / COMMENT/ 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 / LICENSE/ AUTHORIZATION / COMMENT/</del> <b>RELEVANT CONSIDERATION</b></p>	CapeNature will be consulted.
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 / LICENSE/ AUTHORIZATION /</del> <b>COMMENT/ RELEVANT CONSIDERATION</b></p>	The property is located within the urban edge and agricultural practices is not viable on the property as the Knysna SDF has earmarked the property as developable land. The letter from the Department of Agriculture is attached as Appendix E2.
NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)	<p>Department of Environmental Affairs, Republic of South Africa.</p>	<p><del>PERMIT / LICENSE/ AUTHORIZATION /</del> <b>COMMENT/</b></p>	An application was submitted in 2008 and approved by Heritage Western Cape, that no

	All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.	<b>RELEVANT CONSIDERATION</b>	heritage resources are present on site.
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><del>PERMIT / LICENSE/ AUTHORIZATION / COMMENT/</del></p> <p><b>RELEVANT CONSIDERATION</b></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.
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><del>PERMIT / LICENSE/ AUTHORIZATION /</del></p> <p><b>COMMENT/ RELEVANT CONSIDERATION</b></p>	The access road is proposed on an approved servitude.
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><del>PERMIT / LICENSE/ AUTHORIZATION /</del></p> <p><del>COMMENT/ RELEVANT CONSIDERATION</del></p>	The property is within an OSCAE Regulated Area. An OSCAE Permit will be required as issued by the Knysna Municipality.

POLICY/ GUIDELINES	ADMINISTERING AUTHORITY
EIA guideline and information document series. Guideline on transitional arrangements march 2013	Department of Environmental Affairs, Republic of South Africa.  All Provincial Departments that have been identified as Competent Authorities.
EIA guideline and information document series. Guideline on Generic Terms of Reference for EAPS and Project Schedules	Department of Environmental Affairs, Republic of South Africa.  The EAP needs to be independent and submit all required information as per the guideline, this is addressed throughout the BAR.
EIA guideline and information document series. Guideline on Public Participation	Department of Environmental Affairs, Republic of South Africa.  The correct public participation needs to be adhered to Addressed in the BAR
EIA guideline and information document series. Guideline on Alternatives	Department of Environmental Affairs, Republic of South Africa.  Alternatives needs to be reasonable and feasible. This has been addressed in the Alternative section the BAR.
EIA guideline and information document series. Guideline on Need and Desirability	Department of Environmental Affairs, Republic of South Africa.  Need and desirability is addressed in the BAR.
DEA&DP (2010) Guideline on Public Participation, EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning (DEA&DP)	The correct public participation needs to be adhered to Addressed in the BAR.

### 1. Need and Desirability for the proposed development

The need for and the desirability of a proposed development forms a key component of any EIA application. The consideration of proposed developments in context of the various spatial planning tools and policy applicable to the study area forms an integral part of the present environmental processes. The "need and desirability" will be determined by considering the broader community's needs and interests as reflected in a credible IDP, SDF and EMF for the area, and as determined by the EIA. It is essential that national policies and strategies supports growth in the economy. It is also essential and that these policies take cognisance of strategic concerns such as climate change, food security, as well as the sustainability in supply of natural resources and the status of our ecosystem services. In other words, to achieve our Constitutional goal of a better quality of life for all now and in future, through equitable access to resources and shared prosperity, it is essential that society improves on the efficiency and responsibility with which we use resources, and improve on the level of integration of social, economic, ecological and governance systems [DEA (2017), *Guideline on Need and Desirability*, Department of Environmental Affairs (DEA), Pretoria, South Africa ISBN: 978-0-9802694-4-4].

#### **Need:**

Further considerations of need include the need of the community/area of the activity & land use – is the development "a societal priority". The need for a project also relates to the services capacity and consistency with infrastructure planning.

According to the current Knysna SDF, the application area is inside the demarcated urban edge and is therefore suitable for urban development. The property is currently vacant and makes no contribution to the local economy of the town.

The proposed development is in line with the all the provincial, district and local development policies. Allowing the applicant to develop the site will unlock the full potential of the property and it will allow for an increase in local expenditure. The development of the property will create employment opportunities and it will contribute to effective service delivery.

The proposed development will be mainly aimed to create a cohesive society, where people seek a place to stay where they are close to nature and family and in an environment not surrounded by the daily noise and traffic of the urban areas, but close enough to work to avoid a long drive.

The proposal intends to cater for a range of income-groups; first-time-buyer, small families, and retirees.

The MSDP has estimated that new demand for private sector provided units will be 81 units per annum over the next 10 years, 810 units in total. This development aims to contribute to the number of available units, and more importantly it aims to provide a range of housing typologies for the various income groups.

It will be to the benefit of many role-player's if the property is allowed to develop the proposed group housing development. The applicant will be able to develop the property, create employment opportunities, contribute to local expenditure, suitably density within the urban edge and will be able to contribute to the economic growth of the town. It is therefore the considered opinion that the timing is correct for this development proposal.

## Desirability:

The desirability of a proposed development also relies heavily on consistency with policy documentation but has a distinctly spatial focus. The guideline on Need and Desirability specifically poses the question "Would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF as agreed to by the relevant authorities?"

NEMA also links the desirability of development to the concept of the "best practicable environmental option"; this refers to the option that provides the most benefit and causes the least damage to the environment, at a cost acceptable to society, in the long term as well as in the short term. The consideration of alternatives is therefore closely related to this concept.

The proposal is in line with the applicable policy documentation (Western Cape Provincial SDF, Eden SDF, Knysna SDF and the Knysna IDP, meaning that it is in line with the spatial proposal and vision for the area whilst complying to the development guidelines for the current proposal. Therefore, the approval of this application would not compromise the integrity of the applicable policy documents agreed to by the relevant authorities.

It is clear that all the applicable policy documentation encourages densification within urban areas, and it is clear from the statistics that infill development and densification should be encouraged.

Given the existing residential character of the area, it is the considered opinion that the proposed residential development will not impact on the existing land use rights of any property owners in the area.

The proposal will not prevent any surrounding owner to exercise their legal land use rights, in fact, the proposal will rather enhance the amenity of the area. The proposed residential development will also allow for a more sufficient use of municipal services.

The fact that there will be consistent movement in this area, an increase in land value as well as an increase in urban renewal to the property will contribute to the surrounding area.

It can, therefore, be concluded that the proposal is regarded as desirable.

*The above information was obtained from the Specialist Planning Report for Environmental Authorisation purposes prepared by Marike Vreken Urban and Environmental Planners May 2022. Please refer to full report attached as Appendix G1.*

## 2. Identification of plans, guidelines, spatial tools, municipal development frameworks and instruments that are applicable to the proposed activity

The below table identifies all plans, guidelines, spatial tools, municipal development frameworks that are applicable to the proposed activity (*The below information was obtained from Specialist Planning Report for Environmental Authorisation purposes prepared by Marike Vreken Urban and Environmental Planners May 2022*):

<b>Is the activity permitted in terms of the properties existing land use rights?</b>
Portion 12 (a portion of Portion 1) of the Farm Uitzigt No 216 is currently vacant with only ruins on the property, after the Knysna Fires, and is currently zoned "Agriculture Zone I" in terms of the Knysna Municipality: Zoning Scheme By-law, 2020.
The Knysna, Wilderness and Plettenberg Bay Regional Structure Plan earmarked this area for "urban development" purposes, as it was designated as 'Township', hence the application area is exempted from



the provisions of the Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970). A copy of this confirmation is attached as Appendix E2.

The rezoning of Portion 12 of the Farm Uitzigt No 216 from "Agriculture Zone I" to "General Residential Zone I" for group housing in terms of Section 15(2)(a) from the Knysna Municipality By-Law on Municipal Land Use Planning (2021).

A summary of the prescribed development parameters for "General Residential Zone (GRI) ("group housing") and a comparison of the proposed development's parameters are shown in the table 1. From this table, it is clear that the proposed development complies with all prescribed parameters, and that no departure applications are required.

Table 1: Knysna Zoning Scheme Bylaw Prescribed Development Parameters.

Development Parameter	Prescribed	Proposed	Compliance
<b>Primary Use:</b>	group housing	group housing	<b>Comply</b>
<b>Density:</b>	35 u/ha	31 u/ha	<b>Comply</b>
<b>Height</b>	8,5m	double storey	<b>Comply</b>
<b>Open Space Provision</b>	50 m <sup>2</sup> per dwelling unit (i.e. 1500m <sup>2</sup> )	Open Space provided = 5668m <sup>2</sup>	<b>Comply</b>
<b>Street Building Line (external)</b>	5m	No external street	<b>Comply</b>
<b>Perimeter Building Line</b>	3m	3m	<b>Comply</b>
<b>Internal Street Building Lines:</b>	Garage door facing the road be set back at least 5m from the kerb.	Minimum of 5m allowed between road surface and garages	<b>Comply</b>
<b>Parking:</b>	2.25 bays / unit (i.e. 22.5 bays)	Parking Required: 68x bays Parking Provided: 76x bays	<b>Comply</b>
<b>Service Yard</b>	Must be provided	Only applicable during final SDP submission stage	<b>Comply</b>
<b>Refuse Room</b>	Must be provided	Only applicable during final SDP submission stage	<b>Comply</b>

#### Will the activity be in line with the Provincial Spatial Development Framework (PSDF)

The Western Cape Provincial SDF was approved in 2014 by the Western Cape Parliament and serves as a strategic spatial planning tool that "communicates the provinces spatial planning agenda".

The recent shift in legislative and policy frameworks have clearly outlined the roles and responsibility of provincial and municipal spatial planning and should be integrated towards the overall spatial structuring plan for the province to create and preserve the resources of the province more effectively through sustainable urban environments for future generations. This shift in spatial planning meant that provincial inputs are in general limited to provincial scale planning.

The proposed development complements the SDF's spatial goals that aim to take the Western Cape on a path towards:

- ❖ Greater productivity, competitiveness and opportunities within the spatial economy;
- ❖ More inclusive development in the urban areas;
- ❖ Strengthening resilience and sustainable development.

However, it is important to note some of the key policies laid down by the PSDF have a bearing on the application.

**POLICY E3: REVITALISE AND STRENGTHEN URBAN SPACE-ECONOMIES AS THE ENGINE OF GROWTH**

<b>POLICY STATEMENT</b>	<b>DEVELOPMENT'S RESPONSE</b>
5. Existing economic assets (e.g. CBDs, township centres, modal interchanges, vacant and under-utilised strategically located public land parcels, fishing harbours, public squares and markets, etc.) to be targeted to lever the regeneration and revitalisation of urban economies	<ul style="list-style-type: none"> <li>▪ <i>This is a strategically located underdeveloped site that will be developed with an appropriate use, creating additional employment opportunities and provides a different range of housing opportunities in the Knysna area.</i></li> </ul>

**POLICY S1: PROTECT, MANAGE AND ENHANCE SENSE OF PLACE, CULTURAL AND SCENIC LANDSCAPES**

<b>POLICY STATEMENT</b>	<b>DEVELOPMENT'S RESPONSE</b>
2. Promote smart growth ensuring the efficient use of land and infrastructure by containing urban sprawl and prioritising infill, intensification and redevelopment within settlements.	<ul style="list-style-type: none"> <li>▪ <i>This is an infill development, preventing urban sprawl.</i></li> </ul>

**S3: PROMOTE COMPACT, MIXED USE AND INTEGRATED SETTLEMENTS**

<b>POLICY STATEMENT</b>	<b>DEVELOPMENT'S RESPONSE</b>
1. Target existing economic nodes (e.g. CBDs, township centres, modal interchanges, vacant and under-utilised strategically located public land parcels, fishing harbours, public squares and markets, etc.) as levers for the regeneration and revitalisation of settlements.	<ul style="list-style-type: none"> <li>▪ <i>Even though this application area is not within walking distance from business nodes, the proposal constitutes infill development within an existing urban environment.</i></li> </ul>
2. Promote functional integration and mixed use as a key component of achieving improved levels of settlement liveability and counter apartheid spatial patterns and decentralization through densification and infill development	<ul style="list-style-type: none"> <li>▪ <i>The proposal will contribute to the provision of an additional range of housing opportunities in Belvidere.</i></li> </ul>

**POLICY R1: PROTECT BIODIVERSITY AND ECOSYSTEM SERVICES**

<b>POLICY STATEMENT</b>	<b>DEVELOPMENT'S RESPONSE</b>
1. Continue to use CBA mapping to inform spatial planning and land use management decisions in the Province.	<ul style="list-style-type: none"> <li>▪ <i>The entire property is not within any CBA areas.</i></li> </ul>

**POLICY S5: PROMOTE SUSTAINABLE, INTEGRATED AND INCLUSIVE HOUSING IN FORMAL AND INFORMAL MARKETS**

<b>POLICY STATEMENT</b>	<b>DEVELOPMENT'S RESPONSE</b>
5. Achieve a wider range of housing opportunities with regards to diversity of tenure, size, density, height and quality in order to promote a ladder of upward mobility for households to progress as economic circumstances change over time	<ul style="list-style-type: none"> <li>▪ <i>The proposal will contribute to a different range of housing opportunities.</i></li> </ul>
6. Increase densities of settlements and dwelling units in new housing projects	<ul style="list-style-type: none"> <li>▪ <i>The proposed density of 31 units/ha is denser than the existing single residential areas, and less than the allowed density for group housing (35 dwelling units per hectare).</i></li> </ul>

Planning Implication: From the above it is clear that the proposed development is consistent with the Western Cape Provincial SDF.

### The property is situated outside of the Urban Edge

No, the property is within Knysna's urban Edge

### Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).

#### Knysna Municipal SDF (2020)

Knysna Municipality has adopted and implemented a new Spatial Development Framework (June 2020). The purpose of the Knysna SDF is to provide relevant background information regarding the biophysical, economic and social context of Knysna Municipality. The Knysna Municipality Spatial Development Framework serves as a regulatory framework for spatial development within the local municipality. The Spatial Vision of the municipality is to create a long-term, sustainable land use pattern and building on the Knysna Municipality's integrated development vision to be Inclusive, Innovative and Inspired, the complementary spatial planning vision leading the Knysna MSDF is to:

*"...Establish Knysna as an authentic place that works for all of its residents and continues to attract visitors. Build an equitable and inclusive society within a sustainable and resilient ecosystem..."*

According to the Knysna Municipality Spatial Development Framework (SDF):

- ❖ The application area is located inside the urban edge.
- ❖ The application area is identified as 'Urban Development' and 'Forestry'
- ❖ The application area is located close to 'Scenic Routes and Tourism Corridors'.
- ❖ The application area is located close to a 'Coastal Destination'.
- ❖ The application area is located close to a Crossroads (Transit points).



Figure 10: Knysna SDF.

The Knysna SDF (2020)'s Spatial Proposals state the following regarding 'Accommodating Urban Growth':

- ❖ *It is estimated that new demand for private sector provided units will be 81 units per annum over the next 10 years, 810 units in total requiring the equivalent of 32 ha at a density of 25du/ha. It is likely that this demand will primarily be felt in Knysna town, with some demand in Sedgfield. Infill development and densification should be encouraged for this market too. Ideally, land identified for state assisted development in Knysna town must accommodate demand to be met by the private sector to promote integration.*
- ❖ *The urban edges around settlements in the Knysna Municipal Area have been reviewed. There are opportunities for growth within these urban edges, catering to all residential markets.*

The spatial policies and policy guidelines guide decision-making on resource allocation, sector planning, land use management and land development programmes. It is important to note some of the key policies of the SDF have a bearing on this application.

POLICY NO	POLICY		
<b>B</b>	<b>Manage the growth of urban settlement in Knysna to ensure the optimum and efficient use of existing infrastructure and resources and in turn, secure the Municipality's fiscal sustainability and resilience, while preventing further loss of natural and agricultural assets and functional ecosystems services.</b>		
<b>Policy Guidelines</b>			
<b>B1</b>	Hold the urban edge as the development boundary as identified for settlements in the Knysna Municipal Area	iii.	Promote densification and infill on land within the identified urban area for Knysna town.
<b>E</b>	<b>Direct public and private fixed investment to and within existing settlements reinforcing their economic development potential. In this way, the impact of public and private investment is maximised and the majority of residents benefit.</b>		
<b>Policy Guidelines</b>			
<b>E1</b>	Maintain a compact settlement form to achieve efficient, cost effective service delivery and resource use, create thresholds for future public transport provision and enable equitable accessibility	i.	National and provincial government have set municipalities the target of increasing the density of urban areas to an average gross based density of 25 dwelling units / hectare. This should be generally applied to Knysna town, Sedgefield, the specialised coastal centres and villages of Rheenendal and Karatara until local area density plans are in place.
		iii.	Combine the repair and renewal of existing infrastructure in well located areas with enhanced capacity to accommodate densification.
<b>F</b>	<b>Promote inclusive urban development</b>		
<b>Policy Guidelines</b>			
<b>F1</b>	Facilitate convenient and affordable access to social, economic and affordable housing opportunities	v.	In the assessment of land use and building applications and public sector developments, pursue compact and diverse neighbourhoods, offering places to live, work, recreate all within close proximity, served by streets scaled to people so that they are comfortable to walk.

From the spatial policies and policy guidelines in the MSDP, it is clear that densification is encouraged in Knysna. From the above discussion regarding the Knysna MSDP; the following conclusion can be made:

- ❖ The application area is situated inside the urban edge of Knysna and is suitable for urban development.
- ❖ The proposal is to develop a residential development on a vacant land which is situated within the urban edge, it will contribute to infill development and densification.
- ❖ Encourages densification and the aim to support an efficient, convenient and affordable urban structure by developing land that is earmarked for development.
- ❖ Promote and support the optimal development of vacant land parcels within the existing urban structure.
- ❖ The proposed development will assist in the provision of a range of housing typologies for Belvidere.

### **Knysna Integrated Development Plan (2017-2022)**

The IDP is the planning instrument that drives the process to address the socio-economic challenges as well as the service delivery and infrastructure backlogs experienced by communities in the municipality's area of jurisdiction. Knysna Municipality approved the 4th generation IDP during June 2017. According to this IDP, the municipality's vision is to:

- ❖ Encourage all members of society to participate in and support the municipal governance structure and to create opportunities for dialogue.
- ❖ Conserving and managing natural resources.
- ❖ Planning for the growth and development of quality municipal services to support the community.
- ❖ Creating an enabling environment to foster the development of our people and enabling them to contribute.
- ❖ Supporting and encouraging the development of investment, business and tourism and emerging industries.

The Knysna IDP identified Six Strategic Objectives that are aligned to the national strategic focus areas as well as the Provincial Strategic Goals of the Western Cape Government. These objectives applicable to the proposed development are:

OBJECTIVE	INTERVENTIONS
To create an enabling environment for social development and economic growth.	<ul style="list-style-type: none"> <li>▪ <i>Unlocking of strategic land for development</i></li> <li>▪ <i>Facilitate the creation of approximately 500 new job opportunities per annum</i></li> <li>▪ <i>Increase employment opportunities for women, youth and people with a disability annually by 10%</i></li> </ul>
To grow the revenue base of the municipality	<ul style="list-style-type: none"> <li>▪ <i>The proposed amended development will most definitely increase the revenue base of the Knysna Municipality.</i></li> </ul>

The application area is located in Ward 5 of the Knysna Municipality. None of the issues raised in the community for Ward 10 applies to the proposed development.

#### **Approved Structure Plan of the Municipality**

The Knysna, Wilderness and Plettenberg Bay Regional Structure Plan earmarked this area for "urban development" purposes, as it was designated as 'Township'.

#### **An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)**

As per the ISDF Knysna 08/12/2015 page 5 it is proposed that the ISDF be seen as an Environmental Management Framework (EMF) as defined under NEMA and therefore can be promoted as grounded within legislation. Therefore, refer to above.

#### **WESTERN CAPE LAND USE PLANNING ACT, 2014 (ACT 3 OF 2014)**

The purpose of this Provincial legislation is to consolidate legislation in the Province pertaining to provincial planning, regional planning and development, urban and rural development, regulation, support and monitoring of municipal planning and regulation of public places and municipal roads arising from subdivisions; to make provision for provincial spatial development frameworks; to provide for minimum standards for, and the efficient coordination of, spatial development frameworks; to provide for minimum norms and standards for effective municipal development management; to regulate provincial development management; to regulate the effect of land development on agriculture; to provide for land use planning principles; to repeal certain old-order laws, and to provide for matters incidental thereto. Section 59 of this Act prescribe the Land Use Planning Principles that apply to all land development in the province. These are summarised in the tables below:

**Spatial Justice:**

<b>CRITERIA</b>	<b>COMPLIANCE</b>	<b>PLANNING IMPLICATION</b>
Past spatial and other development imbalances must be redressed through improved access to and use of land.	<b>COMPLY</b>	<ul style="list-style-type: none"> <li>▪ <i>The site is currently vacant and will improve the use of land in Knysna.</i></li> <li>▪ <i>Proposed development will result in more integrated housing development as more affordable housing will be provided within the formally exclusive high-income housing area.</i></li> </ul>
Spatial development frameworks and policies at all spheres of government must address the inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements, former homeland areas and areas characterised by widespread poverty and deprivation.	<b>N/A</b>	<ul style="list-style-type: none"> <li>▪ <i>This policy does not apply to the application area.</i></li> <li>▪ <i>Not a Spatial Development Framework or Policy.</i></li> </ul>
Spatial planning mechanisms, including land-use schemes, must incorporate provisions that enable redress in access to land by disadvantaged communities and persons.	<b>N/A</b>	<ul style="list-style-type: none"> <li>▪ <i>This policy does not apply to the application area.</i></li> </ul>
Land use management systems should include all areas of a municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas and informal settlements.	<b>N/A</b>	<ul style="list-style-type: none"> <li>▪ <i>This policy does not apply to the application area.</i></li> </ul>
Land development procedures must include provisions that accommodate access to, and facilitation of, the security of tenure and the incremental upgrading of informal areas.	<b>N/A</b>	<ul style="list-style-type: none"> <li>▪ <i>The municipality should process this application within the prescribed guidelines of the Land Use Planning By-Law for Knysna Municipality, 2021.</i></li> </ul>
A competent authority contemplated in this Act or other relevant authority considering an application before it, may not be impeded or restricted in the exercise of its discretion solely on the ground that the value of land or property will be affected by the outcome of the application.	<b>Applicable to Knysna Municipality</b>	<ul style="list-style-type: none"> <li>▪ <i>The municipality should process this application within the prescribed guidelines of the Land Use Planning By-Law for Knysna Municipality, 2021.</i></li> </ul>
The right of owners to develop land in accordance with current use rights should be recognised.	<b>N/A</b>	<ul style="list-style-type: none"> <li>▪ <i>The applicant does not want to develop the property in accordance with the current agricultural rights.</i></li> </ul>

**Spatial Sustainability:**

<b>CRITERIA</b>	<b>COMPLIANCE</b>	<b>PLANNING IMPLICATION</b>
Promote spatially compact land development, resource-frugal and within the fiscal, institutional and administrative means of the relevant competent authority in terms of this Act or other relevant authority.	<b>COMPLY</b>	<ul style="list-style-type: none"> <li>▪ <i>The proposal will contribute to additional capital income in the form of new development.</i></li> <li>▪ <i>The proposed development can be regarded as infill development, hence spatially compact development for Knysna.</i></li> </ul>
Ensure that special consideration is given to the protection of prime, unique and high potential agricultural land.	<b>COMPLY</b>	<ul style="list-style-type: none"> <li>▪ <i>Low potential agricultural land, earmarked for urban development.</i></li> </ul>
Uphold consistency of land use measures in accordance with environmental management instruments.	<b>COMPLY</b>	<ul style="list-style-type: none"> <li>▪ <i>Currently busy with an environmental authorisation process.</i></li> </ul>
Promote and stimulate the effective and equitable functioning of land markets.	<b>COMPLY</b>	<ul style="list-style-type: none"> <li>▪ <i>The proposal will impact the functioning of the market in the area, by attracting investment to the area and will be beneficial to the area.</i></li> <li>▪ <i>The functioning of the land markets in the area will not be impacted in such a way that any of the surrounding properties landowners will be unfairly impacted and negatively impact the 'functioning of land markets.</i></li> <li>▪ <i>The proposal will provide a range of housing opportunities, supporting the functioning of land markets in the area.</i></li> </ul>
Consider all current and future costs to all parties for the provision of infrastructure and social services in land developments.	<b>COMPLY</b>	<ul style="list-style-type: none"> <li>▪ <i>Any service upgrades at the cost of the applicant.</i></li> <li>▪ <i>Civil and electrical services report is to be provided with the land use application.</i></li> </ul>
Promote land development in locations that are sustainable and limit urban sprawl.	<b>COMPLY</b>	<ul style="list-style-type: none"> <li>▪ <i>The application area is located within the urban edge of Knysna.</i></li> <li>▪ <i>Regarded as infill development.</i></li> </ul>
Result in communities that are viable.	<b>COMPLY</b>	<ul style="list-style-type: none"> <li>▪ <i>The proposal will provide opportunities and amenities that were not available in the area before creating a more viable community, allowing members of the community with new economic and employment opportunities.</i></li> </ul>

CRITERIA	COMPLIANCE	PLANNING IMPLICATION
		<ul style="list-style-type: none"> <li>The proposal will enhance the character of the area and supplement the surrounding land uses.</li> <li>The proposal will result in new, permanent employment opportunities.</li> <li>The proposed development will result in additional rate payers that will support the existing retail businesses in the area.</li> </ul>
Strive to ensure that the basic needs of all citizens are met in an affordable way.	N/A	<ul style="list-style-type: none"> <li>This principle does not apply to the applicant or this development.</li> </ul>
The sustained protection of the environment should be ensured.	COMPLY	<ul style="list-style-type: none"> <li>Currently busy with an environmental authorisation process.</li> </ul>

#### Spatial Efficiency:

CRITERIA	COMPLIANCE	PLANNING IMPLICATION
Land development should optimise the use of existing resources, infrastructure, agriculture, land, minerals and facilities.	COMPLY	<ul style="list-style-type: none"> <li>Any service upgrades at the cost of the applicant. Civil and electrical services report is to be provided with the land use application.</li> <li>Given the strategic location of the application area, the proposed development will support the existing community uses and business activities in the area.</li> </ul>
Integrated cities and towns should be developed.	COMPLY	<ul style="list-style-type: none"> <li>The development itself has adequate access, services and functionality. The proposal will contribute to a more integrated town as a whole and have a positive impact on the local economy.</li> <li>The proposal will provide a range of housing opportunities for the retired community, first time buyers and small families, resulting in the creation of an integrated village.</li> </ul>
Policy, administrative practice and legislation should promote speedy land development.	N/A	<ul style="list-style-type: none"> <li>The municipality should process this application within the prescribed time frames of the Knysna Municipality By-law on Municipal Land Use Planning, 2021.</li> </ul>



**Spatial Resilience:**

CRITERIA	COMPLIANCE	PLANNING IMPLICATION
<p>Flexibility in spatial plans, policies and land use management systems are accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks.</p>	<p><b>COMPLY</b></p>	<ul style="list-style-type: none"> <li>▪ <i>The proposal is in line with all the various spatial plans, zoning scheme and policies, as motivated by the report.</i></li> <li>▪ <i>It will have no negative impact on the livelihood of the community.</i></li> <li>▪ <i>The proposal will uplift the community.</i></li> <li>▪ <i>The proposed application complies with the requirements of the Knysna Municipality By-Law on Municipal Land Use Planning (2021).</i></li> <li>▪ <i>The Environmental authorisation process is currently ongoing.</i></li> </ul>

**Good Administration:**

CRITERIA	COMPLIANCE	PLANNING IMPLICATION
<p>All spheres of government should ensure an integrated approach to land-use planning.</p>	<p><b>Applicable to Knysna Municipality</b></p>	
<p>All government departments must provide their sector inputs and comply with any other statutory requirements during the preparation or amendment of spatial development frameworks.</p>		
<p>The requirements of any law relating to land development and land use must be met timeously.</p>		
<p>The preparation and amendment of spatial plans, policy, zoning schemes and procedures for land development and land use applications, should include transparent processes of public participation that afford all parties the opportunity to provide inputs on matters affecting them.</p>		
<p>The legislation, procedures and administrative practice relating to land development should be</p>		

CRITERIA	COMPLIANCE	PLANNING IMPLICATION
clear, promote predictability, trust and acceptance in order to inform and empower members of the public.		
A spatial development framework, zoning scheme or policy should be developed in phases and each phase in the development thereof should include consultation with the public and relevant organs of state and should be endorsed by the relevant competent authority.		
Decision-making procedures should be designed to minimise negative financial, social, economic or environmental impacts.		
Development application procedures should be efficient and streamlined and timeframes should be adhered to by all parties.		
Decision-making in all spheres of government should be guided by and give effect to statutory land use planning systems.		

**KNYSNA MUNICIPALITY STANDARD BY-LAW ON MUNICIPAL LAND USE PLANNING, 2016**

Knysna Municipality adopted its new Land Use Planning By-law and it came into effect on 12 February 2016. All land use applications are now being processed and assessed in terms of this by-law. This by-law states that the following aspects will be considered when the decision are made:

- ❖ Desirability of the proposed utilisation of land.
- ❖ The impact of the proposed land development on municipal engineering services.
- ❖ The integrated development plan, including the municipal spatial development framework.
- ❖ Provincial spatial development framework.
- ❖ Policies, principles and the planning and development norms and criteria set by the national and provincial government.
- ❖ The matters referred to in section 42 of the Spatial Planning and Land Use Management Act.
- ❖ Principles referred to in Chapter VI of the Land Use Planning Act.
- ❖ Applicable provisions of the zoning scheme

Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)

The need for and the desirability of a proposed development forms a key component of any EIA application. The consideration of proposed developments in context of the various spatial planning tools and policy applicable to the study area forms an integral part of the present environmental processes. The "need and desirability" will be determined by considering the broader community's needs and interests as reflected in a credible IDP, SDF and EMF for the area, and as determined by the EIA. It is essential that national policies and strategies supports growth in the economy. It is also essential and that these policies take cognisance of strategic concerns such as climate change, food security, as well as the sustainability in supply of natural resources and the status of our ecosystem services. In other words, to achieve our Constitutional goal of a better quality of life for all now and in future, through equitable access to resources and shared prosperity, it is essential that society improves on the efficiency and responsibility with which we use resources, and improve on the level of integration of social, economic, ecological and governance systems [DEA (2017), *Guideline on Need and Desirability*, Department of Environmental Affairs (DEA), Pretoria, South Africa ISBN: 978-0-9802694-4-4].

**Need:**

Further considerations of need include the need of the community/area of the activity & land use – is the development "a societal priority". The need for a project also relates to the services capacity and consistency with infrastructure planning.

According to the current Knysna SDF, the application area is inside the demarcated urban edge and is therefore suitable for urban development. The property is currently vacant and makes no contribution to the local economy of the town.

The proposed development is in line with the all the provincial, district and local development policies. Allowing the applicant to develop the site will unlock the full potential of the property and it will allow for an increase in local expenditure. The development of the property will create employment opportunities and it will contribute to effective service delivery.

The proposed development will be mainly aimed to create a cohesive society, where people seek a place to stay where they are close to nature and family and in an environment not surrounded by the daily noise and traffic of the urban areas, but close enough to work to avoid a long drive.

The proposal intends to cater for a range of income-groups; first-time-buyer, small families, and retirees.

The MSDP has estimated that new demand for private sector provided units will be 81 units per annum over the next 10 years, 810 units in total. This development aims to contribute to the number of available units, and more importantly it aims to provide a range of housing typologies for the various income groups.

It will be to the benefit of many role-player's if the property is allowed to develop the proposed group housing development. The applicant will be able to develop the property, create employment opportunities, contribute to local expenditure, suitably densify within the urban edge and will be able to contribute to the economic growth of the town. It is therefore the considered opinion that the timing is correct for this development proposal.

**Desirability:**

The desirability of a proposed development also relies heavily on consistency with policy documentation but has a distinctly spatial focus. The guideline on Need and Desirability specifically poses the question "Would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF as agreed to by the relevant authorities?"

NEMA also links the desirability of development to the concept of the "best practicable environmental option"; this refers to the option that provides the most benefit and causes the least damage to the environment, at a cost acceptable to society, in the long term as well as in the short term. The consideration of alternatives is therefore closely related to this concept.

The proposal is in line with the applicable policy documentation (Western Cape Provincial SDF, Eden SDF, Knysna SDF and the Knysna IDP, meaning that it is in line with the spatial proposal and vision for the area whilst complying to the development guidelines for the current proposal. Therefore, the approval of this application would not compromise the integrity of the applicable policy documents agreed to by the relevant authorities.

It is clear that all the applicable policy documentation encourages densification within urban areas, and it is clear from the statistics that infill development and densification should be encouraged.

Given the existing residential character of the area, it is the considered opinion that the proposed residential development will not impact on the existing land use rights of any property owners in the area.

The proposal will not prevent any surrounding owner to exercise their legal land use rights, in fact, the proposal will rather enhance the amenity of the area. The proposed residential development will also allow for a more sufficient use of municipal services.

The fact that there will be consistent movement in this area, an increase in land value as well as an increase in urban renewal to the property will contribute to the surrounding area.

It can, therefore, be concluded that the proposal is regarded as desirable.

*The above information was obtained from the Specialist Planning Report for Environmental Authorisation purposes prepared by Marike Vreken Urban and Environmental Planners May 2022. Please refer to full report attached as Appendix G1.*

Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development?

**Water:**

An existing 150Ø water main is located in Upper Duthie Drive. A new water connection and meter will be installed to supply the development with potable water.

**Sewer:**

The existing municipal bulk sewer network in the area will not be utilized. A new sewer pump station will be constructed within the parameters of the development. The internal sewer network will consist of a gravitational pipe system. Sewer from the development will be pumped to the inlet structure of the Municipal Wastewater Treatment Plant, located on erf 328 (Western boundary). Minimum pipe diameter is 160mm for main lines and 110mm for house connections.

**Stormwater:**

An existing stormwater network is located in Upper Duthie Drive. The runoff from the development drains towards the northeast and southeast corners of the property. The stormwater design of the development will make provision for minor and major storms. The minor stormwater system will be underground pipe system that will collect the runoff, to accommodate a 1 in 2 year storm event. The system will release into the exiting municipal storm water system. The major stormwater system will consist of suitably shaped roads with kerbing, to accommodate storm events in excess of 1 in 2 year storm event. Surface runoff will be channelized to the access road.

**Solid Waste:**

A refuse removal storage area will be provided at the entrance gate. Provision will be made for the storage of 30 wheelie bins. The storage area to be constructed with a 100mm thick concrete floor, shaped and drained into a 110mm floor trap fitted with a grease trap. The area to be enclosed to prevent rodent and bird access. The collection and disposal of the solid waste from the storage area, will be done by the Knysna Municipality.

Please refer to Appendix G with approval from Knysna Municipality regarding Bulk Services provision

*The above information was obtained from the Services Report for Roads, Stormwater, Water and Sewer prepared by Tuiniqua Consulting Engineers, May 2022. Please refer to full reports attached as Appendix G1 & G2.*

Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)?

Knysna Spatial Development Framework (2017) The spatial vision for the considered SDF for Knysna Municipality is to establish an authentic place that works for its residents and continues to attract visitors.

Equitable and inclusive access to spatial justice (improving access to opportunities, services and amenities) improving economic opportunities. Improve the financial and economic viability of the town by promoting the intensification of existing urban areas (e.g. mixed use development in the existing industrial area), through infill, densification and redevelopment, which in turn makes more efficient use of existing infrastructure capacity and services. The property is located within the urban edge and is considered suitable for urban development. The following spatial planning policies are encouraged for the area:

Invest in Smart Growth Settlements To achieve the objectives of SPLUMA and align with regional planning policy frameworks, the establishment of a network of "complete towns and villages" is proposed. Each should have a strong and unique identity, retain and enhance the Knysna coast and forest character and feature:

- ❖ Balanced land use
- ❖ Densification
- ❖ Economic opportunity
- ❖ Accessibility
- ❖ A high-quality public environment
- ❖ Effective and sustainable social services

Is this project part of a national programme to address an issue of national concern or importance?

This is a private development.

Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)

Specific location factors that favour the land development application is important when desirability is assessed. The factors include:

- ❖ The application area is located within the urban edge of Knysna.
- ❖ The property is on a vacant erf within a establish township, this will contribute to in fill development.
- ❖ Given the strategic location of the application area, the proposed development will support the existing community uses and business activities in the area.
- ❖ The site is easily accessible.
- ❖ The property is in close proximity to various service connection points.
- ❖ The site has magnificent views of the Knysna Lagoon and Heads, tourist attraction.

Is the development the best practicable environmental option for this land/site?
<p>Yes. The development can be considered as a suitable option for the following reasons:</p> <ul style="list-style-type: none"> <li>❖ The site is not within a Critical Biodiversity Area.</li> <li>❖ Species associated with Knysna Sand Fynbos (status = Endangered) were not found in the development area. It can be assumed that none of the listed plant species of conservation concern are likely to occur on the site given that the entire area has been transformed and is highly infested with Invasive Alien Species.</li> <li>❖ The property is "land locked" by developments, roads, and fences. To the north is the main road (to Brenton on Sea), to the south is the Belvidere Municipal Stores and Offices as well as the Belvidere Park tennis courts, to the east is the Belvidere Park Retirement Village, and to the west is the Belvidere Wastewater Treatment Works. These physical structures, hard surfaces, and barriers have negatively impacted wildlife movement and effectively cut off ecological connectivity. The property therefore does not serve any functional corridor for connectivity across the landscape.</li> <li>❖ There will be no impact on heritage resources.</li> </ul>
Will the benefits of the proposed land use/development outweigh the negative impacts of it?
<p>Yes. The site is situated within the Belvidere neighbourhood, which is predominantly a residential neighbourhood with several tourist accommodation establishments and couple of tourist facilities (restaurants &amp; coffee shops). Belvidere Park Retirement Village and Frail Care Centre is also situated within Belvidere, which is a residential retirement village with assisted living facilities. Belvidere comprises of large family homes, a retirement village and a hotel. The character of the area is considered residential. The proposal to allow group housing units will contribute to the existing residential character of the area.</p>
Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?
<p>No. The property is currently vacant and situated within the urban edge.</p>
Will any person's rights be negatively affected by the proposed activity/ies?
<p>The proposal does not prevent any surrounding landowner to exercise their existing land use rights.</p>
What will the benefits be to society in general and to the local communities?
<p>Employment opportunities will be created for local communities as well as employment opportunities and skills development during the construction phase. The proposal will provide a range of housing opportunities, supporting the functioning of land markets in the area, and will enhance the character of the area and supplement the surrounding land uses. The proposed development will result in additional rate payers that will support the existing retail businesses in the area.</p>
Any other need and desirability considerations related to the proposed activity?
<p>The proposal will provide a range of housing opportunities, supporting the functioning of land markets in the area, and will enhance the character of the area and supplement the surrounding land uses. The proposed development will result in additional rate payers that will support the existing retail businesses in the area. This development aims to contribute to the number of available units, and more importantly it aims to provide a range of housing typologies for the various income groups.</p>
Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.
<p>The general objective of integrated environmental management has been taken into account as follow:-</p> <p>(a) promote the integration of the principles of environmental management set out in section 2 into the making of all decisions which may have a significant effect on the environment;</p>

- (b) identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management set out in section 2;
- (c) ensure that the effects of activities on the environment receive adequate consideration before actions are taken in connection with them;
- (d) ensure adequate and appropriate opportunity for public participation in decisions that may affect the environment;
- (e) ensure the consideration of environmental attributes in management and decision-making which may have a significant effect on the environment; and
- (f) Identify and employ the modes of environmental management best suited to ensuring that a particular activity is pursued in accordance with the principles of environmental management set out in section 2.

Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural, and social interests equitably.

Portion 12 (a Portion of Portion 1) of the Farm Uitzigt No 216 is in a very strategic, centrally located piece of land in Belvedere (Knysna). It is within the urban edge and is currently vacant with only ruins on the property. The site has been earmarked for development and is regarded as infill development, preventing urban sprawl. The site is densely infested with invasive alien vegetation and there is no representation of Endangered Knysna Sand Fynbos remaining on the property. The site cannot significantly contribute to ecological connectivity as it is "land locked" by developments.

the proposed development has been designed to achieve a sensitive balance between the natural environment, the built environment, and the social-economic environment, that is imperative to ensure sustainable development.

## SECTION F

### 1. A motivation for the preferred site, activity and technology alternative

“**Alternatives**”, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity which may include alternatives to –

(a) The property on which, or location where, it is proposed to undertake the activity	There is only one site.
(b) The type of activity to be undertaken	A group housing development.
(c) The design or layout of the activity	<p><b>Alternative 1 (Preferred Alternative):</b> Development of a group housing development. The preferred layout consists of thirty (30) freehold title group housing erven, and one (1) private open space / private street property.</p> <p><b>Alternative 2:</b> Development of a group housing development. Alternative 2 have a different layout of units, that consists of 26 group housing units, and one (1) private open space / private street property.</p> <p><b>Alternative 3:</b> No go Alternative.</p>
(d) The Technology to be used in the activity	N/A
(e) The operation aspect of the activity	N/A
(f) The option of not implementing the activity	This option must always be assessed and is addressed below.
(g) A motivation for the preferred site, activity and technology alternative.	There is only one site.
(h) A full description of the process followed to reach the proposed preferred alternative	During 2004, the Competent Authority (DFFE) issued an Environmental Authorisation (EA) for 18 residential units. The authorised activities did not commence lawfully before the lapsing date, and therefore the Environmental Authorisation lapsed. No Land Development Application was ever lodged. The Applicant wishes to apply for development rights on the property, in order to allow a group housing development, consisting of 30 freehold title group housing units. An alternative that consists of 26 group housing units, and 1 private open space / private street property was also considered. However, the preferred layout is considered to be a more efficient, viable and desirable layout, and therefore the Alternative 2 layout option is not the preferred development proposal.



## 2. Details of the Alternatives Considered

Section 24(O) (1) (b) (iv) of the National Environmental Management Act, 1998 (Act 107 of 1998) as amended states that:

*"...where appropriate, any feasible and reasonable alternatives to the activity which is the subject of the application and any feasible and reasonable modifications or changes to the activity that may minimise harm to the environment..."*

The following development alternatives were investigated for the application area:

- ❖ Alternative 1 (Preferred Alternative): Development of a group housing development. The preferred layout consists of 30 freehold title group housing erven, and 1 private open space / private street property.
- ❖ Alternative 2: Development of a group housing development. Alternative 2 has a different layout of units, that consists of 26 group housing units, and 1 private open space / private street property.
- ❖ Alternative 3: No go Alternative.

### 2.1. The Preferred Alternative 1:

The proposed group housing development will consist of 30 freehold title group housing erven, and 1 private open space / private street property, as indicated on the Site Development Plan (SDP). The proposed development will have access control. Erf sizes of the proposed group housing development will vary between 195m<sup>2</sup> and 300m<sup>2</sup>. The density of the proposed development calculates to 31 units/ha.

The units will be semi-detached and double storey, consisting of 2 or 3 bedrooms each. The floor area of the units will be ±175m<sup>2</sup> each.

The proposed layout is specifically planned and designed in accordance with the topography (contours) of the site and to allow a larger buffer between the proposed development and the Belvidere Wastewater Treatment Works, situated to the west of the application area, on Erf 328.

The site slopes down towards the eastern boundary of the property, making it much more cost effective and ensure less earthworks to construct the units on the same contour levels – allowing them to step down towards the eastern parts of the site.

Also, given that the internal road is proposed along the western boundary, it ensures a space of ±8.5m between the boundary of Erf 328 (the Belvidere Sewage Treatment Plant) and the actual units.



Figure 11: Preferred Layout.

## 2.2. Alternative 2:

This alternative entails a different layout of units, that consists of 26 group housing units, and 1 private open space / private street property. The layout of Alternative 2 is not considered desirable for the following reasons:

- I. Less units are proposed = less selling opportunities = more expensive per unit to provide services, and less rates & taxes income for the local authority.
- II. Units are close to the Belvidere Wastewater Treatment Plant (on Erf 328), which could result in undesirable smell and noise.
- III. Units are orientated towards the Belvidere Wastewater Treatment Plant (on Erf 328), less aesthetically pleasing for potential buyers.
- IV. Layout of the units causes that there is no manoeuvring space between the garages and the road.
- V. Less effective traffic flow within the development compared to the Preferred Alternative.
- VI. More earthworks and levelling required, as it is required to cut into contours = increases building costs and earthworks.
- VII. No private outdoor areas for homeowners, only communal areas in this layout = less privacy.

From the above it is clear that the preferred alternative is a more efficient, viable and desirable layout, and therefore this option is not the preferred development proposal.

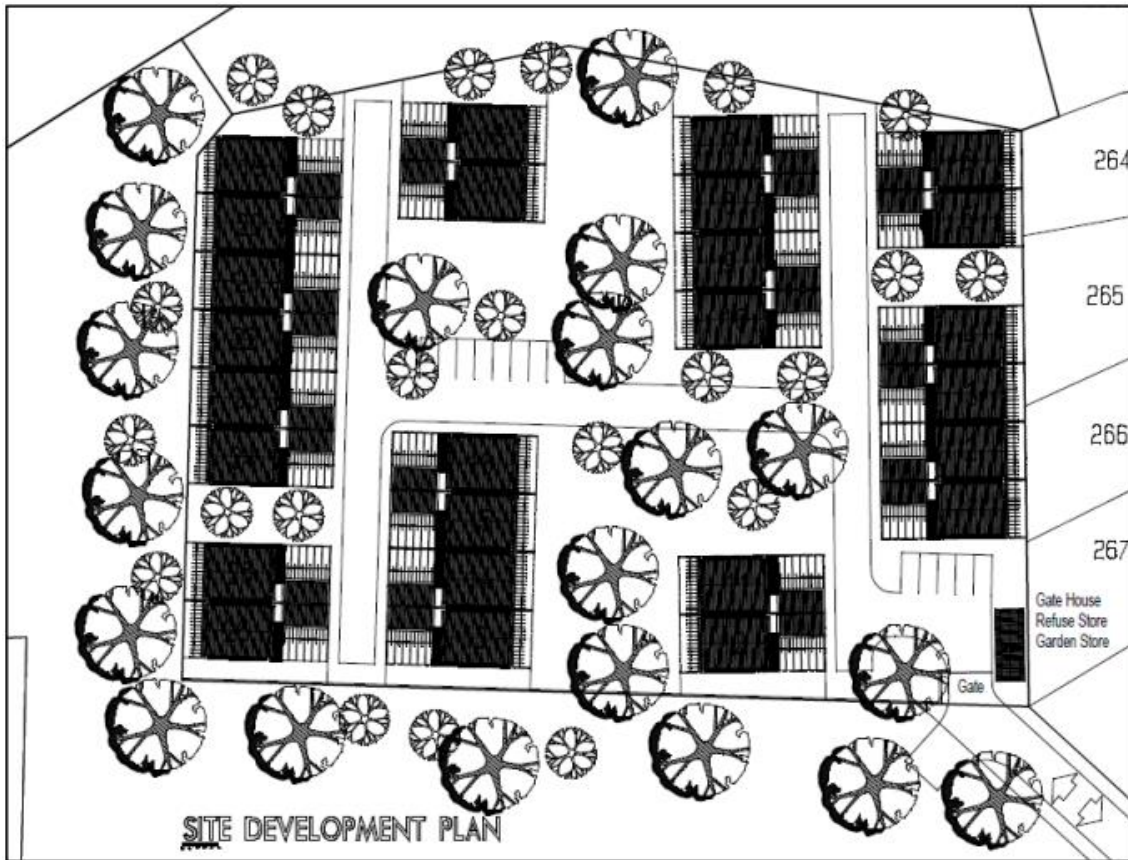


Figure 12: Layout of Alternative 2.

### 2.3. The No Go Alternative

The site will remain as is. This alternative is not to do any development on Portion 12 (a portion of Portion 1) of the Farm Uitzigt No 216. The no-go alternative is not desirable, as it means that a very strategic, centrally located piece of land in Belvedere (Knysna) will stay vacant, and undeveloped. The implication being that there will be more pressure for urban sprawl on other land parcels.

## SECTION G

### 1. Details of the public participation process undertaken in terms of regulation 41 of the regulations, including copies and supporting documents and inputs.

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 is indicated 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	The proponent (applicant) is the landowner and therefore consent is not required.
<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 – (i) The site where the activity to which the application or proposed application relates or is to be undertaken; (ii) Any alternative site	(i) A site notice was placed on site. (ii) There is no alternative site.
(b) Giving written notice, in any of the manners provided for in section 47D of the Act, to – (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. (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. (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	(i) The applicant is the owner of the site and is in control of the site. The site is vacant and there is only one site.  (ii) The owners of the land adjacent to the site have been notified via registered mail. There is only one site.  (iii) The ward Councillor (Knysna Municipality) has been notified. The ratepayers association has been notified.

<p>community.</p> <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>(iv) Knysna Municipality has been notified.</p> <p>(v) Please refer to Table 2 showing a list of organs of state notified.</p> <p>(vi) Please refer to Table 2 showing a list of all organisation, NGO's and public notified.</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>	<p>(i) Knysna Plett Herald Newspaper a local free newspaper was advertised in on 25/05/2023.</p>
<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>	<p>This is not applicable to this proposed activity as there is no impact (i.e air emissions) that extends beyond the boundaries of the district municipality.</p>
<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>	<p>N/A at this stage. But if required will comply.</p>
<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>Yes.</p>

<ul style="list-style-type: none"> <li>(iii) Where further information on the application or proposed application can be obtained; and</li> <li>(iv) The manner in which and the person to whom representations in respect of the application or proposed application may be made.</li> </ul>	
<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>	Yes.
<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) 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.</li> </ul> </li> </ul>	This is the pre-application phase, an additional 30-day PPP will be undertaken to include all revisions for the Draft BAR.
<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</li> </ul>	Yes.

<p>proposed application is made available to potential interested and affected parties; and</p> <p>(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.</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>No other permit or licenses are required at this stage.</p>

## 2. Registration of Key Stake Holders

A list of key stakeholders for this process is included in the table below, this will be updated in the Draft BAR. Please note that due to the POPI Act all contact information pertaining to private individuals has been excluded:

Table 2: Database of Interested and Affected Parties (I&APs).

STATE DEPARTMENTS			
Name	Contact Person	Contact Details	Email
Department of Forestry, Fisheries and the Environment (DFFE) Integrated Environmental Authorisations	Bathandwa Ncube Lydia Kutu	012 399 9368 (T) (012) 399 9370 (T)	<a href="mailto:BNcube@dffe.gov.za">BNcube@dffe.gov.za</a> <a href="mailto:LKutu@dffe.gov.za">LKutu@dffe.gov.za</a>
Department of Environmental Affairs and Development Planning (DEA & DP)	Danie Swanepoel	Private Bag x 6509, George, 6530 <a href="tel:0448142013">044 814 2013 (T)</a>	<a href="mailto:Danie.Swanepoel@westerncape.gov.za">Danie.Swanepoel@westerncape.gov.za</a>
Department of Environmental Affairs: Oceans and Coasts	Tabisile Mhlana	Private Bag X4390, Cape Town, 8000	<a href="mailto:OCEIA@dffe.gov.za">OCEIA@dffe.gov.za</a> <a href="mailto:tmhlana@dffe.gov.za">tmhlana@dffe.gov.za</a>

Department of Health	Nathan Jacobs	Private Bag x6592, George, 6530 044-803 2727 (T) 044-873 5929 (F)	<a href="mailto:Nathan.Jacobs@westerncape.gov.za">Nathan.Jacobs@westerncape.gov.za</a>
Heritage Western Cape	Noluvo Toto Stephanie Barnardt	Private Bag x9067, Cape Town, 8000 021-483 9729 (T) 021-483 9845 (F)	<a href="mailto:Noluvo.Toto@westerncape.gov.za">Noluvo.Toto@westerncape.gov.za</a> <a href="mailto:Stephanie.barnardt@westerncape.gov.za">Stephanie.barnardt@westerncape.gov.za</a>
Provincial Roads Dept	Azni November Dirk Prinsloo	Private Bag x617, Oudtshoorn, 6620 044 272 6071 (T) 044 272 7243 (F)	<a href="mailto:Azni.November@westerncape.gov.za">Azni.November@westerncape.gov.za</a> <a href="mailto:Dirk.Prinsloo@westerncape.gov.za">Dirk.Prinsloo@westerncape.gov.za</a>
Transport & Public Works / Department of Infrastructure	Vanessa Stoffels	24 <sup>th</sup> Floor, 9 Lower Burg Street, Cape Town 021 483 4669 (T)	<a href="mailto:Vanessa.Stoffels@westerncape.gov.za">Vanessa.Stoffels@westerncape.gov.za</a>
Department of Water & Sanitation	John Roberts	Private Bag x16, Sanlamhof, 7532 021 941 6179 (T) 021 941 6082 (F)	<a href="mailto:RobertsJ@dwa.gov.za">RobertsJ@dwa.gov.za</a>
Dept of Agriculture Land Use Management	Cor van der Walt	Private Bag x1, Elsenburg, 7601 021 808 5099 (T) 021 808 5092 (F)	<a href="mailto:corvdw@elsenburg.com">corvdw@elsenburg.com</a>
Department of Forestry, Fisheries and the Environment (DFFE): Forestry Management	Melanie Koen	Private Bag x12, Knysna, 6570 044 302 6902 (T) 044 382 5461 (F)	<a href="mailto:MKoen@dffe.gov.za">MKoen@dffe.gov.za</a>
DFFE Directorate: Biodiversity Conservation	Kamogelo Mathetja MMatlala Rabothata		<a href="mailto:BCAdmin@environment.gov.za">BCAdmin@environment.gov.za</a> (documents) ATT: Mr Seoka Lekota <a href="mailto:KMathetja@dffe.gov.za">KMathetja@dffe.gov.za</a> <a href="mailto:MRabothata@dffe.gov.za">MRabothata@dffe.gov.za</a>
<b>ORGANS OF STATE</b>			
<b>Name</b>	<b>Contact Person</b>	<b>Contact Details</b>	<b>Email</b>
Breede-Gouritz Catchment Management Agency	Andiswa Sam R Mphahlele	PO Box 1205, George, 6530 <a href="tel:0233468000">023 346 8000 (T)</a> <a href="tel:0233472012">023 347 2012 (F)</a>	<a href="mailto:asam@bgcma.co.za">asam@bgcma.co.za</a> <a href="mailto:rmphahlele@bgcma.co.za">rmphahlele@bgcma.co.za</a> <a href="mailto:pntanzi@bgcma.co.za">pntanzi@bgcma.co.za</a>
Cape Nature Land Use Advice	Megan Simons Keith Spencer	Private Bag x6546, George, 6530 044 802 5328 (T) 044 802 5313 (F)	<a href="mailto:msimons@capenature.co.za">msimons@capenature.co.za</a> <a href="mailto:kspencer@capenature.co.za">kspencer@capenature.co.za</a>
SANRAL	Nicole Abrahams  Rene de Kock	Private Bag x19, Bellville, 7530 021 957 4602 (T)	<a href="mailto:AbrahamsN@nra.co.za">AbrahamsN@nra.co.za</a> <a href="mailto:Dekockr@nra.co.za">Dekockr@nra.co.za</a>



Southern Cape Fire Protection Agency	Dirk Smit	Private Bag x12, Knysna, 6570 044 302 6912 (T) 086 616 1682 (F)	<a href="mailto:managerfpa@gmail.com">managerfpa@gmail.com</a>
SANPARKS	Maretha Alant	PO Box 3542, Knysna, 6570 044 302 5600 (T) 044 382 4539 (F)	<a href="mailto:Maretha.alant@sanparks.org">Maretha.alant@sanparks.org</a>
South African Civil Aviation Authority	Lizell Stroh	011 545 1232 (T)	<a href="mailto:Strohl@caa.co.za">Strohl@caa.co.za</a>
<b>MUNICIPALITIES</b>			
<b>Name</b>	<b>Contact Person</b>	<b>Contact Details</b>	<b>Email</b>
Knysna Municipality – Environmental Management	Pamela Booth Kate Southey	PO Box 21 Knysna 6570	<a href="mailto:pbooth@knysna.gov.za">pbooth@knysna.gov.za</a> <a href="mailto:katesouthey@gmail.com">katesouthey@gmail.com</a>
Ward 5 Councillor Knysna Municipality	Hilton Stroebel	PO Box 21 Knysna 6570	<a href="mailto:hstroebel@knysna.gov.za">hstroebel@knysna.gov.za</a>
Manager Land Use Management	Hennie Smit	PO Box 21, Knysna, 6530 0443026319 (T)	<a href="mailto:hsmit@knysna.gov.za">hsmit@knysna.gov.za</a>
Garden Route District Municipality	Dr. Nina Viljoen	PO Box 12 George, 6530 044-8031300 (T) 0865556303 (F)	<a href="mailto:nina@gardenroute.gov.za">nina@gardenroute.gov.za</a>
Garden Route District Municipality	Mr. Lusanda Menze	PO Box 12 George, 6530 044-8031300 (T) 0865556303 (F)	<a href="mailto:info@gardenroute.gov.za">info@gardenroute.gov.za</a>
<b>PUBLIC</b>			
<b>Portion No.</b>	<b>Contact Person</b>	<b>Contact Details</b>	<b>Email</b>
Erf 328	Knysna Municipality		
Erf 289 / Belvidere Park Retirement Village	General Manager		
Belvidere Homeowners Association			
Western Heads Goukamma Conservancy	Dr Dave Edge		
Brenton Ratepayers Association (BRA)	Christa Le Roux		

### 3. Availability of the Draft Basic Assessment Report

Registered I&AP's including all identified I&AP's were notified to the availability of the report. The registered I&AP's as well as the notice in the newspaper advertised that the digital copy could be obtained at [www.ecoroute.co.za](http://www.ecoroute.co.za).

The Draft Basic Assessment report was made available for a 30-day commenting period from 25/05/2023 to 26/06/2023.

Proof of notifications and availability of the report will be included in the Final BAR.

## 4. Site Description and Environmental Attributes

### 4.1. Vegetation

**Vegetation Type:** Garden Route Shale Fynbos (FFd 10)

**Distribution** Western Cape Province: Garden Route coastal flats from Wilderness, generally to the north of the system of lakes, several patches around the Knysna Lagoon, with more isolated patches eastwards to the Robberg peninsula near Plettenberg Bay. Altitude 40–300 m.

**Vegetation & Landscape Features** Undulating hills and moderately undulating plains covered with a dense, moderately tall, microphyllous shrubland, dominated by species more typical of sandstone fynbos.

**Geology & Soils** Deep, acid Tertiary sand inland of coastal dunes forming regic sands and soils of Lamotte form. Land types mainly Hb and Ga.

**Climate** MAP 670–1 090 mm (mean: 850 mm), with a slight peak in autumn and spring. Mean daily maximum and minimum temperatures 27.3°C and 7.3°C for February and July, respectively. Frost incidence 2 or 3 days per year. See also climate diagram for FFd 10 Knysna Sand Fynbos (Figure 4.57).

**Important Taxa** Small Tree: *Widdringtonia nodiflora*. Tall Shrubs: *Cliffortia linearifolia*, *Leucadendron eucalyptifolium*, *Metalasia densa*, *Passerina corymbosa*. Low Shrubs: *Anthospermum aethiopicum*, *Berzelia intermedia*, *Cliffortia drepanoides*, *Clutia rubricaulis*, *Erica diaphana*, *E. glandulosa* subsp. *fourcadei*, *E. glumiflora*, *E. sessiliflora*, *Helichrysum asperum* var. *asperum*, *Lachnaea diosmoides*, *Leucadendron salignum*, *Leucospermum cuneiforme*, *Lobelia coronopifolia*, *Morella quercifolia*, *Muraltia squarrosa*, *Oedera imbricata*, *Protea cynaroides*, *Stoebe plumosa*, *Tephrosia capensis*. Herbs: *Geranium incanum*, *Helichrysum felinum*. Graminoids: *Aristida junciformis* subsp. *galpinii*, *Brachiaria serrata*, *Cynodon dactylon*, *Eragrostis capensis*, *Ficinia bulbosa*, *Heteropogon contortus*, *Ischyrolepis eleocharis*, *Tetraria cuspidata*, *Thamnochortus cinereus*, *Themeda triandra*, *Tristachya leucothrix*.

**Conservation** Endangered. Target 23%. Patches are statutorily conserved in the proposed Garden Route National Park (about 3%) as well as 2% in several private nature reserves. Almost 70% already transformed (pine and gum plantations, cultivation, Knysna urban sprawl, building of roads). Alien *Acacia melanoxylon*, *A. mearnsii* and *A. longifolia* occur locally at low densities. Erosion very low and moderate.

**Remark** This is a very poorly researched vegetation unit.

**References** Taylor (1970b), Drews (1980a).



Figure 13: Vegetation Type (SA VegMap 2018).

## 4.2. Ecosystem Threat Status

The property is within a Critically Endangered Ecosystem Threat Status. The Ecosystem Threat Status, as per the Western Cape Biodiversity Spatial Plan 2017, reflects the current threat status of ecosystems in the Western Cape Province, especially in terms of habitat loss. Ecosystems are based on the SA Vegetation Map (2012 version) and relevant indigenous forest types (DAFF, 2010), as per the national approach to assessing ecosystem threat.

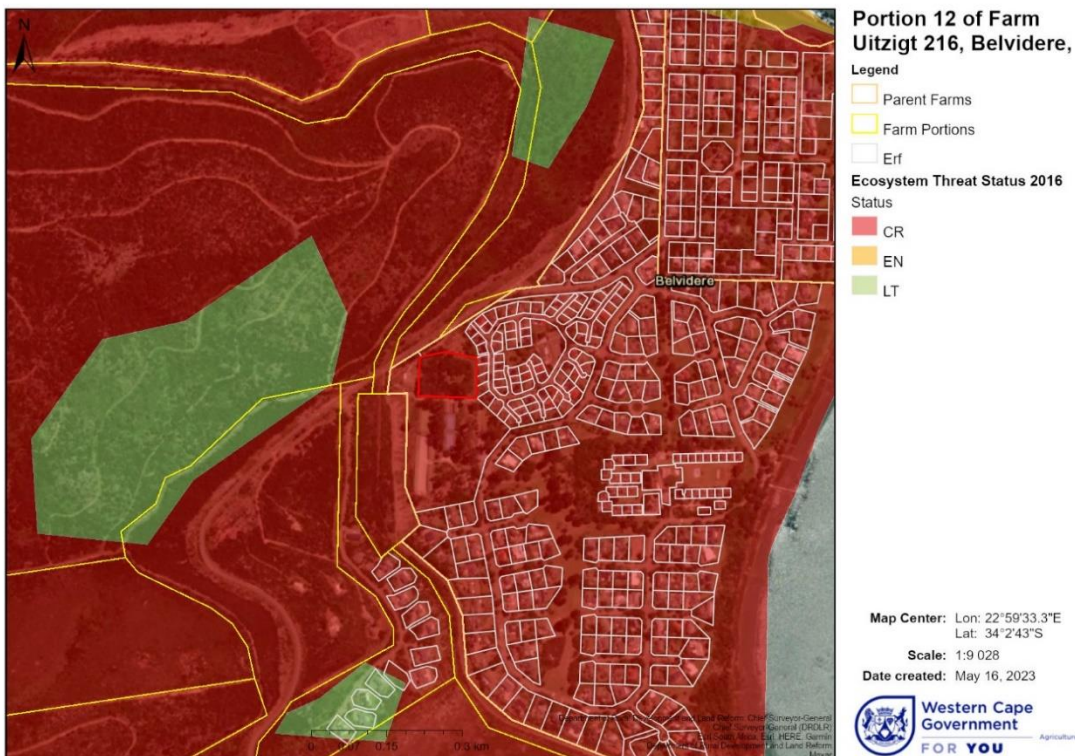


Figure 14: Ecosystem Threat Status.

### 4.3. Critical Biodiversity Areas

The site is not within a Critical Biodiversity Area (CBA), but a small portion on the western boundary is within a ESA2 (restore from plantation or high-density IAP) (figure 15). The objective of the ESA2 is to restore and/or manage to minimize impact on ecological processes and ecological infrastructure functioning, especially soil and water-related services, and to allow for faunal movement. The small portion of ESA2 will be incorporated into a narrow buffer between the western boundary and the development. However, this will not realistically contribute to objectives of the ESA2 given its small area within the property, and the impacts on faunal movement that already exist in the landscape due to surrounding developments.

#### Ecological Support Areas (Res)

Feature: River

Category 1: ESA2: Restore from plantation or high density IAP

Definition: Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs, and are often vital for delivering ecosystem services.

Objective: Restore and/or manage to minimize impact on ecological processes and ecological infrastructure functioning, especially soil and water-related services, and to allow for faunal movement.

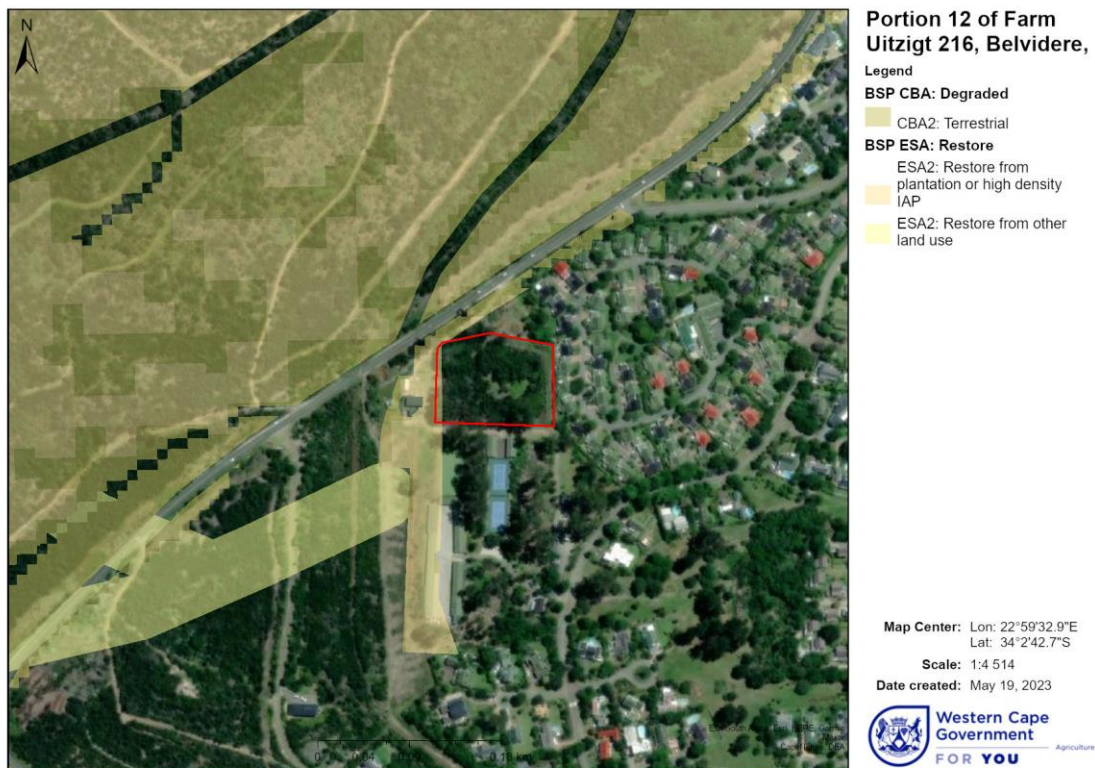


Figure 15: Ecological Support Area (Res).

### 4.4. Protected Areas

As per Cape Farm Mapper ver 2.1.3 the property falls within the Knysna National Lakes area.



Figure 16: Knysna National Lakes Area.

#### 4.5. Freshwater Priority Areas

There are no aquatic features on the site.

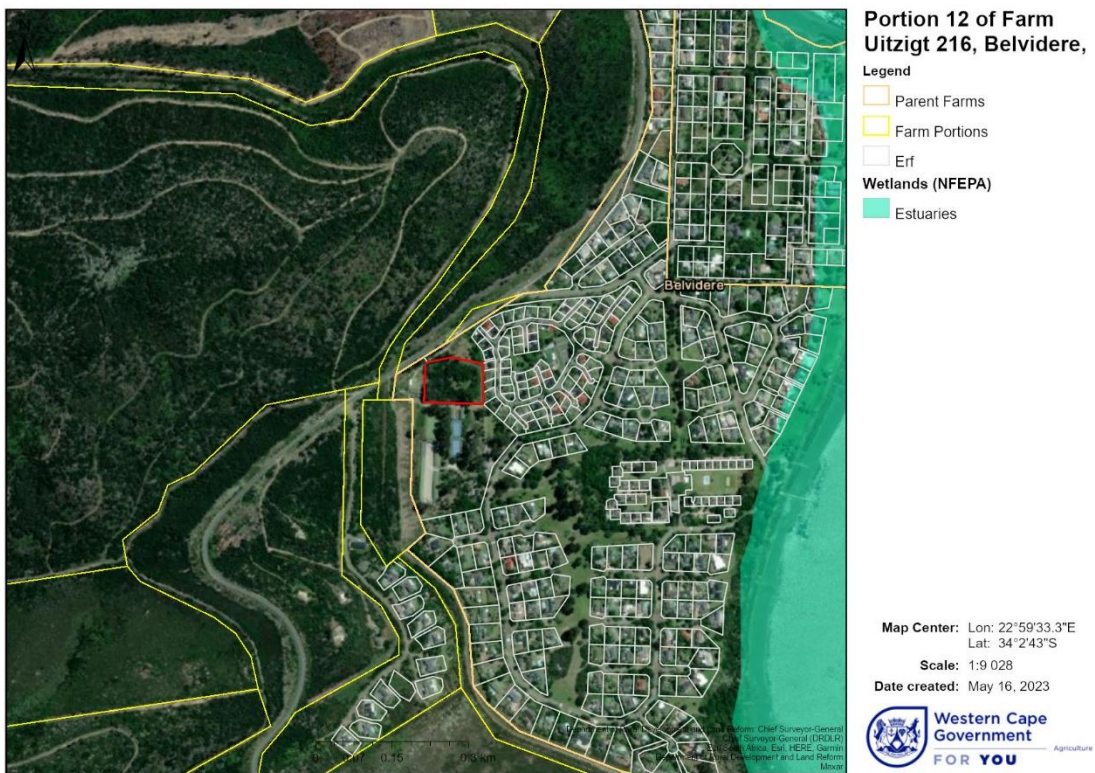


Figure 17: Freshwater Priority Areas.

## 5. Social Economic Value of the Activity

What is the expected capital value of the activity on completion?

What is the expected yearly income that will be generated by or as a result of the activity?

Will the activity contribute to service infrastructure?

Is the activity a public amenity?

How many new employment opportunities will be created in the development and construction phase of the activity/ies?

What is the expected value of the employment opportunities during the development and construction phase?

What percentage of this will accrue to previously disadvantaged individuals?

How many permanent new employment opportunities will be created during the operational phase of the activity?

What is the expected current value of the employment opportunities during the first 10 years?

What percentage of this will accrue to previously disadvantaged individuals?


The vision of the Knysna Municipality as stated in the IDP (2012-2017) (p. 16) is to develop an economy that creates more jobs. In order to achieve this vision, economic growth is required that will transform the economy and provide decent work to the residents of Knysna. The IDP therefore acknowledges that significant action is required to regenerate the economy of the municipal area, address the increasing levels of unemployment and declining skills levels. In order to achieve the long-term vision, a requirement exists to understand the economy and context of different sectors that generate economic income and employment.

The Knysna economy contributed approximately 15.53% to the economy of the Eden District Municipality in 2009. In terms of absolute numbers, the economy of Knysna generated R2 174 million of Gross Value Added (GVA8), when compared to R13 998 million recorded in the Eden District. The GVA contribution of the Knysna economy to the Eden District decreased slightly from 15.77% in 2001 to 15.53% in 2009. Notwithstanding, the Knysna economy grew in nominal terms by 6.12% 9 per annum from 2001 to 2009 or 60.89% over the period.

## 6. Heritage

A Notice of Intent to Develop (NID) under Section 38(1) and (8) of the NHR Act was submitted to Heritage Western Cape. It was determined by Heritage Western Cape in their meeting held 7 March 2022 that there is no reason to believe that the proposed residential development on portion 12 of 216, Knysna will impact on heritage resources. No further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required (Appendix E1).

## 7. Impact Assessment

According to the DFFE Screening Tool and the required specialist studies, the impacts of the proposed development on the identified area are indicated in the table below:

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Archaeological & Cultural Heritage	X			
Civil Aviation			X	
Defence				X
Palaeontology			X	
Plant Species			X	
Terrestrial Biodiversity	X			

The Site Sensitivity Verification Report and Environmental Screening Tool Report can be found as Appendix I.

### 7.1. Methodology for Assessment of Impacts

There are mainly three categories of environmental impacts:

**Direct Impacts:** These impacts are caused by the development itself for example the clearing of vegetation for a development.

**Indirect Impacts:** These impacts are usually linked closely with the project and may have more profound results than the direct impacts for example the degradation of surface water due to soil erosion emanating from the site where vegetation clearance has taken place.

**Cumulative Impacts:** These impacts can be defined as the ability of natural and social environments to incorporate cumulative stresses placed on them and the likelihood of negative synergistic effects. Cumulative impacts also arise when existing future development rights set a precedent in an area. The process of cumulative impacts may arise from any of the following four events:

- A single larger event
- Multiple interrelated events
- Sudden or catastrophic events
- Incremental change

#### Definition of key terminology:

**Nature of the Impact** – A description of positive or negative impacts of the project on the affected environment. This description should include who or what would be affected and how.

**Extent** – the impact could:

- Be-site specific
- Be limited to the site and its immediate surroundings

- Have an impact on the region
- Have an impact on a national scale
- Have an impact across international borders

**Duration** – It is important to indicate whether or not the lifetime of the impact will be:

- Short term (e.g. during construction)
- Medium term (e.g. during part or all of the operational phase)
- Long term (e.g. beyond the operational phase, but not permanently)
- Permanent (where the impact is for all intents and purposes irreversible. An irreversible negative impact may also result in irreplaceable loss of natural capital or biodiversity, if it were to result in extinction or loss of species or ecosystem); or

**Intensity or Magnitude** - The size of the impact (if positive) or its severity (if negative):

- Low, where biodiversity is negligibly affected or where the impact is so low that remedial action is not required.
- Medium, where biodiversity pattern, process and/or ecosystem services are altered, but not severely affected, and the impact can be remedied successfully; and
- High, where, pattern, process and/or ecosystem services would be substantially be affected. If a negative impact, could lead to irreplaceable loss of biodiversity and/or unacceptable consequences for human wellbeing.

**Probability** –Should describe the likelihood of the impact actually occurring indicated as:

- Improbable, where the possibility of the impact is very low either because of design or historic experience
- Probable, where there is a distinct possibility that the impact will occur.
- Highly probable, where it is most likely that the impact will occur, or
- Definite, where the impact will occur regardless of any prevention measures.

**Significance** – The significance of impacts can be determined through a synthesis of the assessment criteria. Significance can be described as:

- Low, where it would have negligible effect on biodiversity, and on the decision.
- Medium, where it would have a moderate effect on biodiversity, and should influence the decision.
- High, where it would have, or there would be a high risk of, a large effect on biodiversity. These impacts should have a major influence on the decision.
- Very high, where it would have, or there would be a high risk of, an irreversible negative impact on biodiversity and irreplaceable loss of natural capital or a major positive effect. Impacts of very high significance should be a central factor in decision making.

**Confidence** – The level of confidence in predicting the impact can be described as:

- Low, where there is little confidence in the prediction, due to inherent uncertainty about the likely specialists. However co-operation between these specialists and the biodiversity specialist is recommended, as biodiversity values are often overlooked by specialists in these other disciplines.
- Medium, where there is a moderate level of confidence in the prediction; or
- High, where the impact can be predicted with a high level of confidence.



## 7.2. Impacts foreseen during the Construction Phase for the Preferred Alternative ( 30 Group Housing Units):

Impacts that may result from the planning, design and construction phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the planning, design and construction phase.

Project Phase	Construction			
Impact	<b>Clearance of vegetation for the construction of the dwelling and associated infrastructure</b>			
Description of impact	Loss of sensitive vegetation, habitat loss for terrestrial wildlife, mortalities to various species unable to evade the disturbance, loss of viable propagules, fragmentation of ecological infrastructure			
Mitigable	High	Mitigation exists and will notably reduce significance of impacts		
Potential mitigation	<ul style="list-style-type: none"> <li>The removal and translocation of protected plants if found should be undertaken prior to construction clearing activities. A permit is required prior to removal.</li> <li>Laydown areas for construction materials must be contained within the clearing footprint of the proposed development.</li> <li>Rehabilitation of disturbed areas, as well as previously invaded areas, should promote establishment of site-appropriate indigenous species.</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	Limited	Limited to the site and its immediate surroundings	Very 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	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	Medium	The affected environment will only recover from the impact with significant intervention
Resource irreplaceability	Low	Marginal loss - the resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	<b>Minor - negative</b>		<b>Negligible - negative</b>	
Comment on significance	No loss of natural resources is expected.			
Cumulative impacts	The impact would result in insignificant cumulative effects			

<b>Project Phase</b>	<b>Construction</b>			
<b>Impact</b>	<b>Disturbance / removal of topsoil</b>			
<b>Description of impact</b>	Disturbance of topsoil, potential soil erosion and the loss of topsoil			
<b>Mitigable</b>	High	Mitigation exists and will considerably reduce the significance of impacts		
<b>Potential mitigation</b>	<ul style="list-style-type: none"> <li>• Areas that are disturbed through building activities (such as the excavations for pipelines) should be suitably rehabilitated without delay. Failure to do so may result in erosion, soil exposure and a loss of the soil micro-organisms that are essential for plant growth.</li> <li>• Organic matter, such as roots and humus/topsoil should be removed from the footprint of structures and stockpiled separately for landscaping purposes.</li> <li>• The stockpiling of topsoil for use in rehabilitation is required.</li> <li>• Stockpiles must not exceed 1.5m in height, must be covered with shade cloth or similar, to prevent erosion and any invasive alien species that begin to grow within it must be removed.</li> <li>• Soil disturbance during the removal of alien invasive plants must be minimised as much as possible.</li> <li>• The site must be stabilised where necessary using available materials, where possible. It is recommended that exposed soils are covered with wood chips, and tree branches used to create berms on steeper areas. Any cut alien vegetation on site can be utilised for this purpose if it is without seed.</li> </ul>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Low Negative	
<b>Duration</b>	Short term	Impact will last between 1 and 5 years	Brief	Impact will not last longer than 1 year
<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>	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	Likely	The impact may occur
<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>Negligible - negative</b>		<b>Minor - negative</b>	
<b>Comment on significance</b>	Clearing areas of the site in preparation for construction will expose bare soil which may lead to the potential loss of topsoil through runoff and incorrect storage. This is not envisaged to be a significant impact with mitigation measures in place. Topsoil can be reused on site for rehabilitation purposes.			
<b>Cumulative impacts</b>	Without mitigation this impact could result in potential erosion downhill of the site caused by stormwater flow.			

<b>Project Phase</b>	<b>Construction</b>			
<b>Impact</b>	<b>Stormwater runoff and erosion</b>			
<b>Description of impact</b>	Erosion from exposed surfaces / earthworks for installation of services, roadways, and foundations.			
<b>Mitigable</b>	High	Mitigation exists and will considerably reduce the significance of impacts		
<b>Potential mitigation</b>	<ul style="list-style-type: none"> <li>• Adequate drainage and erosion protection must be provided around the site and where necessary.</li> </ul>			

	<ul style="list-style-type: none"> <li>Erosion prevention and control measures must be implemented. This may be by the use of mulch bags or silt fences.</li> <li>Pipelines to be placed in consultation with and to recommendations of the ECO.</li> <li>Install a series of berms across the internal access road to retard flow from higher areas.</li> <li>Wind erosion should be limited by using mesh netting set up around any cleared footprints as soon as clearing has taken place.</li> <li>Install permeable paving (e.g. grass blocks) in parking areas / driveways as this encourages water infiltration instead of surface runoff.</li> <li>Revegetate all bare areas of soil post-construction with indigenous vegetation.</li> </ul>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Low Negative	
<b>Duration</b>	Short term	Impact will last between 1 and 5 years	Brief	Impact will not last longer than 1 year
<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>	Medium	Natural and/or social functions and/or processes are notably altered	Low	Natural and/or social functions and/or processes are somewhat altered
<b>Probability</b>	Almost certain	It is most likely that the impact will occur	Likely	The impact may occur
<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 environment 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>Negligible - negative</b>		<b>Minor - negative</b>	
<b>Comment on significance</b>	The layout of the units has been designed to be terraced with the slope in order to minimise unnecessary earth works and excavations.			
<b>Cumulative impacts</b>	Without mitigation this impact could result in potential erosion downhill of the site caused by stormwater flow.			

<b>Project Phase</b>	<b>Construction</b>			
<b>Impact</b>	<b>Waste Pollution</b>			
<b>Description of impact</b>	Pollution caused by waste generated by the construction process.			
<b>Mitigable</b>	High	Mitigation exists and will considerably reduce significance of impacts		
<b>Potential mitigation</b>	<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>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Low negative	
<b>Duration</b>	Short term	Impact will last between 1 and 5 years	Brief	Impact will not last longer than 1 year

<b>Extent</b>	Very limited	Limited to the site and its immediate surroundings	Very limited	Limited to the site and its immediate surroundings
<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>	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
<b>Confidence</b>	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
<b>Reversibility</b>	High	The affected environmental will be able to recover from the impact	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>Negligible - negative</b>		<b>Negligible - negative</b>	
<b>Comment on significance</b>	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.			
<b>Cumulative impacts</b>	The impact would result in insignificant cumulative effects.			

<b>Project Phase</b>	<b>Construction</b>			
<b>Impact</b>	<b>Construction Vehicles</b>			
<b>Description of impact</b>	Pollution caused by the operation of vehicles and heavy machinery.			
<b>Mitigable</b>	High	Mitigation exists and will considerably reduce significance of impacts		
<b>Potential mitigation</b>	<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>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Low negative	
<b>Duration</b>	Short term	Impact will last between 1 and 5 years	Brief	Impact will not last longer than 1 year
<b>Extent</b>	Very limited	Limited to the site and its immediate surroundings	Very limited	Limited to the site and its immediate surroundings
<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>	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

<b>Confidence</b>	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
<b>Reversibility</b>	High	The affected environmental will be able to recover from the impact	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>Negligible - negative</b>		<b>Negligible - negative</b>	
<b>Comment on significance</b>	Operation of vehicles could result in spillages or leaks of hydrocarbons (fuel and oil) and could lead to unnecessary disturbance of natural areas.			
<b>Cumulative impacts</b>	The impact would result in insignificant cumulative effects.			

<b>Project Phase</b>	<b>Construction</b>			
<b>Impact</b>	<b>Noise pollution</b>			
<b>Description of impact</b>	Noise caused by machinery and staff			
<b>Mitigable</b>	Low	Mitigation does not exist; or mitigation will slightly reduce the significance of impacts		
<b>Potential mitigation</b>	<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>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Negative	
<b>Duration</b>	Brief	Impact will not last longer than 1 year	Brief	Impact will not last longer than 1 year
<b>Extent</b>	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
<b>Intensity</b>	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
<b>Probability</b>	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
<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>	High	The affected environmental will be able to recover from the impact	High	The affected environmental will be able to recover from the impact
<b>Resource irreplaceability</b>	Not relevant		Not relevant	
<b>Significance</b>	<b>Minor - negative</b>		<b>Negligible - negative</b>	
<b>Comment on significance</b>	Some extent of noise pollution during construction is expected; however, with mitigation the impact will be reduced.			
<b>Cumulative impacts</b>	No cumulative impacts exist.			

<b>Project Phase</b>	<b>Construction</b>			
<b>Impact</b>	<b>Visual impact</b>			
<b>Description of impact</b>	Visual & aesthetic consequences of the proposed project			
<b>Mitigable</b>	Medium	Mitigation exists and will notably reduce significance of impacts		
<b>Potential mitigation</b>	<ul style="list-style-type: none"> <li>Architectural Design Guidelines must be followed to mitigate visual impact on the landscape such as colours, heights, disturbance areas, maximum footprint, vegetation, etc.</li> <li>The necessary measures be implemented during the construction phase to control the noise, dust and visual intrusion.</li> <li>Implement external lighting restrictions and guidelines.</li> </ul>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Negative	
<b>Duration</b>	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
<b>Extent</b>	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
<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>	Certain / Definite	There are sound scientific reasons to expect that the impact will definitely occur	Likely	The impact may occur
<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 environment will be able to recover from the impact
<b>Resource irreplaceability</b>	Not relevant		Not relevant	
<b>Significance</b>	<b>Minor - negative</b>		<b>Negligible - negative</b>	
<b>Comment on significance</b>	The proposal will complement the existing residential character of the area.			
<b>Cumulative impacts</b>	No cumulative impacts exist.			

<b>Project Phase</b>	<b>Construction</b>			
<b>Impact</b>	<b>Employment</b>			
<b>Description of impact</b>	Empowerment of the local community members living in the area relating to temporary employment opportunities			
<b>Mitigable</b>	Medium	Mitigation only exists to ensure that the positive impact is followed through.		
<b>Potential mitigation</b>	<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>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Positive	
<b>Duration</b>	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
<b>Extent</b>	Local	Extending across the site and to nearby settlements	Local	Extending across the site and to nearby settlements

<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>Negligible - negative</b>		<b>Negligible - positive</b>	
<b>Comment on significance</b>	Due to the proposed development being on a small-scale, there is a low difference in impacts between without mitigation and with mitigation. However, as the impact would be positive for the local community to be employed during construction, mitigation is recommended to ensure this occurs.			
<b>Cumulative impacts</b>	Minor upliftment for the local community.			

### 7.3. Impacts foreseen during the Operational Phase for the Preferred Alternative (30 Group Housing Units):

Project Phase	Operation			
<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			
<b>Mitigable</b>	Medium	Mitigation exists and will notably reduce significance of impacts		
<b>Potential mitigation</b>	<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>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Negative Low	
<b>Duration</b>	Permanent	Impact may be permanent, or in excess of 20 years	Brief	Impact will not last longer than 1 year
<b>Extent</b>	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
<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>	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
<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	High	The affected environment will be able to recover from the impact
<b>Resource irreplaceability</b>	Not relevant		Not relevant	
<b>Significance</b>	<b>Minor - negative</b>		<b>Negligible - negative</b>	
<b>Comment on significance</b>	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.  Open spaces and a wide private road are incorporated into the design to enhance the quality of the neighbourhood.			
<b>Cumulative impacts</b>	Without mitigation the development would not be meeting design guidelines enforced by the municipality. Specifically design guidelines for the local area.			

<b>Project Phase</b>	<b>Operation</b>			
<b>Impact</b>	<b>Stormwater Management</b>			
<b>Description of impact</b>	Accelerated erosion / pollution into sub-surface water.			
<b>Mitigable</b>	High	Mitigation exists and will considerably reduce the significance of impacts		
<b>Potential mitigation</b>	<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 be constructed from grass blocks to allow for effective retarding of surface flow and facilitate percolation.</li> <li>Stormwater management should encourage infiltration of water into the soil profile and other on-site attenuation (i.e. using grass pavers etc.).</li> </ul>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Low Negative	
<b>Duration</b>	Short term	Impact will last between 1 and 5 years	Brief	Impact will not last longer than 1 year
<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>	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 environment 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>Negligible - negative</b>		<b>Minor - negative</b>	
<b>Comment on significance</b>	An existing stormwater network is located in Upper Duthie Drive. The stormwater design of the development will make provision for minor and major storms.			
<b>Cumulative impacts</b>	Without mitigation this impact could result in potential erosion on the site caused by stormwater flow.			

<b>Project Phase</b>	<b>Operation</b>			
<b>Impact</b>	<b>Eradication of Alien Vegetation</b>			
<b>Description of impact</b>	Impacts on biodiversity / natural habitats / increased fire risk			
<b>Mitigable</b>	High	Mitigation exists and will considerably reduce significance of impacts		
<b>Potential mitigation</b>	<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>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Positive	
<b>Duration</b>	Permanent	Impact may be permanent, or in excess of 20 years	Brief	Impact will not last longer than 1 year
<b>Extent</b>	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
<b>Intensity</b>	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
<b>Probability</b>	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
<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>	High	The affected environmental will be able to recover from the impact	High	The affected environmental will be able to recover from the impact
<b>Resource irreplaceability</b>	Not relevant		Not relevant	
<b>Significance</b>	<b>Minor - negative</b>		<b>Minor - positive</b>	
<b>Comment on significance</b>	With mitigation the impact is likely to have more beneficial impact on natural biodiversity.			
<b>Cumulative impacts</b>	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			
Mitigable	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	<b>Negligible - negative</b>		<b>Minor - positive</b>	
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.			

#### 7.4. Impacts foreseen during the Construction Phase for Alternative 2 (26 Group Housing Units):

Impacts that may result from the planning, design and construction phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the planning, design and construction phase.

Project Phase	Construction			
Impact	<b>Clearance of vegetation for the construction of the dwelling and associated infrastructure</b>			
Description of impact	Loss of sensitive vegetation, habitat loss for terrestrial wildlife, mortalities to various species unable to evade the disturbance, loss of viable propagules, fragmentation of ecological infrastructure			
Mitigable	High	Mitigation exists and will notably reduce significance of impacts		
Potential mitigation	<ul style="list-style-type: none"> <li>The removal and translocation of protected plants if found should be undertaken prior to construction clearing activities. A permit is required prior to removal.</li> <li>Laydown areas for construction materials must be contained within the clearing footprint of the proposed development.</li> <li>Rehabilitation of disturbed areas, as well as previously invaded areas, should promote establishment of site-appropriate indigenous species.</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	Limited	Limited to the site and its immediate surroundings	Very 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	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	Medium	The affected environment will only recover from the impact with significant intervention
Resource irreplaceability	Low	Marginal loss - the resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	<b>Minor - negative</b>		<b>Negligible - negative</b>	
Comment on significance	No loss of natural resources is expected.			
Cumulative impacts	The impact would result in insignificant cumulative effects			

Project Phase	Construction			
Impact	Disturbance / removal of topsoil			
Description of impact	Disturbance of topsoil, potential soil erosion and the loss of topsoil			
Mitigable	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	<ul style="list-style-type: none"> <li>• Areas that are disturbed through building activities (such as the excavations for pipelines) should be suitably rehabilitated without delay. Failure to do so may result in erosion, soil exposure and a loss of the soil micro-organisms that are essential for plant growth.</li> <li>• Organic matter, such as roots and humus/topsoil should be removed from the footprint of structures and stockpiled separately for landscaping purposes.</li> <li>• The stockpiling of topsoil for use in rehabilitation is required.</li> <li>• Stockpiles must not exceed 1.5m in height, must be covered with shade cloth or similar, to prevent erosion and any invasive alien species that begin to grow within it must be removed.</li> <li>• Soil disturbance during the removal of alien invasive plants must be minimised as much as possible.</li> <li>• The site must be stabilised where necessary using available materials, where possible. It is recommended that exposed soils are covered with wood chips, and tree branches used to create berms on steeper areas. Any cut alien vegetation on site can be utilised for this purpose if it is without seed.</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	Medium	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	It is most likely that the impact will occur	Likely	The impact may 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 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	Minor - negative		Negligible - negative	
Comment on significance	Clearing areas of the site in preparation for construction will expose bare soil which may lead to the potential loss of topsoil through runoff and incorrect storage. This is not envisaged to be a significant impact with mitigation measures in place. Topsoil can be reused on site for rehabilitation purposes.			
Cumulative impacts	Without mitigation this impact could result in potential erosion downhill of the site caused by stormwater flow.			

Project Phase	Construction			
Impact	Stormwater runoff and erosion			
Description of impact	Erosion from exposed surfaces / earthworks for installation of services, roadways, and foundations.			
Mitigable	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	<ul style="list-style-type: none"> <li>• Adequate drainage and erosion protection must be provided around the site and where necessary.</li> </ul>			

	<ul style="list-style-type: none"> <li>Erosion prevention and control measures must be implemented. This may be by the use of mulch bags or silt fences.</li> <li>Pipelines to be placed in consultation with and to recommendations of the ECO.</li> <li>Install a series of berms across the internal access road to retard flow from higher areas.</li> <li>Wind erosion should be limited by using mesh netting set up around any cleared footprints as soon as clearing has taken place.</li> <li>Install permeable paving (e.g. grass blocks) in parking areas / driveways as this encourages water infiltration instead of surface runoff.</li> <li>Revegetate all bare areas of soil post-construction with indigenous vegetation.</li> </ul>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Low Negative	
<b>Duration</b>	Short term	Impact will last between 1 and 5 years	Brief	Impact will not last longer than 1 year
<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>	High	Natural and/ or social functions and/ or processes are significantly altered	Medium	Natural and/or social functions and/or processes are notably altered
<b>Probability</b>	Almost certain	It is most likely that the impact will occur	Likely	The impact may occur
<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 environment 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>Minor - negative</b>		<b>Negligible - negative</b>	
<b>Comment on significance</b>	This layout requires more earthworks and levelling, as it is required to cut into contours increases building costs and earthwork.			
<b>Cumulative impacts</b>	Without mitigation this impact could result in potential erosion downhill of the site caused by stormwater flow.			

<b>Project Phase</b>	<b>Construction</b>			
<b>Impact</b>	<b>Waste Pollution</b>			
<b>Description of impact</b>	Pollution caused by waste generated by the construction process.			
<b>Mitigable</b>	High	Mitigation exists and will considerably reduce significance of impacts		
<b>Potential mitigation</b>	<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>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Low negative	
<b>Duration</b>	Short term	Impact will last between 1 and 5 years	Brief	Impact will not last longer than 1 year

<b>Extent</b>	Very limited	Limited to the site and its immediate surroundings	Very limited	Limited to the site and its immediate surroundings
<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>	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
<b>Confidence</b>	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
<b>Reversibility</b>	High	The affected environmental will be able to recover from the impact	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>Negligible - negative</b>		<b>Negligible - negative</b>	
<b>Comment on significance</b>	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.			
<b>Cumulative impacts</b>	The impact would result in insignificant cumulative effects.			

<b>Project Phase</b>	<b>Construction</b>			
<b>Impact</b>	<b>Construction Vehicles</b>			
<b>Description of impact</b>	Pollution caused by the operation of vehicles and heavy machinery.			
<b>Mitigable</b>	High	Mitigation exists and will considerably reduce significance of impacts		
<b>Potential mitigation</b>	<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>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Low negative	
<b>Duration</b>	Short term	Impact will last between 1 and 5 years	Brief	Impact will not last longer than 1 year
<b>Extent</b>	Very limited	Limited to the site and its immediate surroundings	Very limited	Limited to the site and its immediate surroundings
<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>	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

<b>Confidence</b>	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
<b>Reversibility</b>	High	The affected environmental will be able to recover from the impact	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>Negligible - negative</b>		<b>Negligible - negative</b>	
<b>Comment on significance</b>	Operation of vehicles could result in spillages or leaks of hydrocarbons (fuel and oil) and could lead to unnecessary disturbance of natural areas.			
<b>Cumulative impacts</b>	The impact would result in insignificant cumulative effects.			

<b>Project Phase</b>	<b>Construction</b>			
<b>Impact</b>	<b>Noise pollution</b>			
<b>Description of impact</b>	Noise caused by machinery and staff			
<b>Mitigable</b>	Low	Mitigation does not exist; or mitigation will slightly reduce the significance of impacts		
<b>Potential mitigation</b>	<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>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Negative	
<b>Duration</b>	Brief	Impact will not last longer than 1 year	Brief	Impact will not last longer than 1 year
<b>Extent</b>	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
<b>Intensity</b>	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
<b>Probability</b>	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
<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>	High	The affected environmental will be able to recover from the impact	High	The affected environmental will be able to recover from the impact
<b>Resource irreplaceability</b>	Not relevant		Not relevant	
<b>Significance</b>	<b>Minor - negative</b>		<b>Negligible - negative</b>	
<b>Comment on significance</b>	Some extent of noise pollution during construction is expected; however, with mitigation the impact will be reduced.			
<b>Cumulative impacts</b>	No cumulative impacts exist.			

<b>Project Phase</b>	<b>Construction</b>			
<b>Impact</b>	<b>Visual impact</b>			
<b>Description of impact</b>	Visual & aesthetic consequences of the proposed project			
<b>Mitigable</b>	Medium	Mitigation exists and will notably reduce significance of impacts		
<b>Potential mitigation</b>	<ul style="list-style-type: none"> <li>Architectural Design Guidelines must be followed to mitigate visual impact on the landscape such as colours, heights, disturbance areas, maximum footprint, vegetation, etc.</li> <li>The necessary measures be implemented during the construction phase to control the noise, dust and visual intrusion.</li> <li>Implement external lighting restrictions and guidelines.</li> </ul>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Negative	
<b>Duration</b>	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
<b>Extent</b>	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
<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>	Certain / Definite	There are sound scientific reasons to expect that the impact will definitely occur	Likely	The impact may occur
<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>	Not relevant		Not relevant	
<b>Significance</b>	<b>Minor - negative</b>		<b>Negligible - negative</b>	
<b>Comment on significance</b>	The proposal will complement the existing residential character of the area.			
<b>Cumulative impacts</b>	No cumulative impacts exist.			

<b>Project Phase</b>	<b>Construction</b>			
<b>Impact</b>	<b>Employment</b>			
<b>Description of impact</b>	Empowerment of the local community members living in the area relating to temporary employment opportunities			
<b>Mitigable</b>	Medium	Mitigation only exists to ensure that the positive impact is followed through.		
<b>Potential mitigation</b>	<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>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Positive	
<b>Duration</b>	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
<b>Extent</b>	Local	Extending across the site and to nearby settlements	Local	Extending across the site and to nearby settlements



<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>Negligible - negative</b>		<b>Negligible - positive</b>	
<b>Comment on significance</b>	Due to the proposed development being on a small-scale, there is a low difference in impacts between without mitigation and with mitigation. However, as the impact would be positive for the local community to be employed during construction, mitigation is recommended to ensure this occurs.			
<b>Cumulative impacts</b>	Minor upliftment for the local community.			

### 7.5. Impacts foreseen during the Operational Phase for Alternative 1 (26 Group Housing Units):

Project Phase	Operation			
<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			
<b>Mitigable</b>	Medium	Mitigation exists and will notably reduce significance of impacts		
<b>Potential mitigation</b>	<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>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Negative Low	
<b>Duration</b>	Permanent	Impact may be permanent, or in excess of 20 years	Brief	Impact will not last longer than 1 year
<b>Extent</b>	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
<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>	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

<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	High	The affected environment will be able to recover from the impact
<b>Resource irreplaceability</b>	Not relevant		Not relevant	
<b>Significance</b>	<b>Minor - negative</b>		<b>Negligible - negative</b>	
<b>Comment on significance</b>	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.  The units are orientated towards the Belvidere Wastewater Treatment Plant making them less aesthetically pleasing for potential buyers.			
<b>Cumulative impacts</b>	Without mitigation the development would not be meeting design guidelines enforced by the municipality. Specifically design guidelines for the local area.			

<b>Project Phase</b>	<b>Operation</b>			
<b>Impact</b>	<b>Stormwater Management</b>			
<b>Description of impact</b>	Accelerated erosion / pollution into sub-surface water.			
<b>Mitigable</b>	High	Mitigation exists and will considerably reduce the significance of impacts		
<b>Potential mitigation</b>	<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 be constructed from grass blocks to allow for effective retarding of surface flow and facilitate percolation.</li> <li>Stormwater management should encourage infiltration of water into the soil profile and other on-site attenuation (i.e. using grass pavers etc.).</li> </ul>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Low Negative	
<b>Duration</b>	Short term	Impact will last between 1 and 5 years	Brief	Impact will not last longer than 1 year
<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>	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 environment 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>Negligible - negative</b>		<b>Minor - negative</b>	
<b>Comment on significance</b>	An existing stormwater network is located in Upper Duthie Drive. The stormwater design of the development will make provision for minor and major storms.			
<b>Cumulative impacts</b>	Without mitigation this impact could result in potential erosion on the site caused by stormwater flow.			

<b>Project Phase</b>	<b>Operation</b>			
<b>Impact</b>	<b>Eradication of Alien Vegetation</b>			
<b>Description of impact</b>	Impacts on biodiversity / natural habitats / increased fire risk			
<b>Mitigable</b>	High	Mitigation exists and will considerably reduce significance of impacts		
<b>Potential mitigation</b>	<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>			
<b>Assessment</b>	<b>Without mitigation</b>		<b>With mitigation</b>	
<b>Nature</b>	Negative		Positive	
<b>Duration</b>	Permanent	Impact may be permanent, or in excess of 20 years	Brief	Impact will not last longer than 1 year
<b>Extent</b>	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
<b>Intensity</b>	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
<b>Probability</b>	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
<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>	High	The affected environmental will be able to recover from the impact	High	The affected environmental will be able to recover from the impact
<b>Resource irreplaceability</b>	Not relevant		Not relevant	
<b>Significance</b>	<b>Minor - negative</b>		<b>Minor - positive</b>	
<b>Comment on significance</b>	With mitigation the impact is likely to have more beneficial impact on natural biodiversity.			
<b>Cumulative impacts</b>	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			
Mitigable	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	Negligible - 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.			

## 7.6. No-Go Alternative Impact Summary

The site will remain as is. This alternative is not to do any development on Portion 12 (a portion of Portion 1) of the Farm Uitzigt No 216. The no-go alternative is not desirable, as it means that a very strategic, centrally located piece of land in Belvedere (Knysna) will stay vacant, and undeveloped. The implication being that there will be more pressure for urban sprawl on other land parcels.

## SECTION I

### 1. Conclusion and Recommendations

Portion 12 (a Portion of Portion 1) of the Farm Uitzigt No 216 is within the urban edge and is currently vacant with only ruins on the property. The site has been earmarked for development and is regarded as infill development, preventing urban sprawl. The site is densely infested with invasive alien vegetation and there is no representation of Endangered Knysna Sand Fynbos remaining on the property. The site cannot significantly contribute to ecological connectivity as it is "land locked" by developments.

Eco Route Environmental Consultancy as the appointed **independent** Environmental Consultants is of the opinion that the Preferred Alternative Layout will have the least impact on the receiving environment and should be authorised in terms of the NEMA EIA regulations, subject to conditions.

#### **Conclusion and recommendations made by Marike Vreken Urban and Environmental Planners:**

In summary, the proposed development as envisaged:

1. The application area is located inside the urban edge and therefore suitable for development.
2. The proposal encourages densification within urban areas.
3. No impact on heritage resources.
4. This development aims to contribute to the number of available units, and more importantly it aims to provide a range of housing typologies for the various income groups.
5. Adequate access to the application area is obtained via the servitude road.
6. The proposal will have no impact on the character of the area, it will complement the existing residential character of the area.
7. Is consistent with the various applicable spatial planning policies and land use management legislation.
8. There is a great need for a proposal; it is highly desirable and suitable for the area.

It is the considered opinion that the proposed development will achieve a sensitive balance between the natural environment, the built environment, and the social-economic environment, that is imperative to ensure sustainable development.

# ANNEXURE A

Joclyn Joe Marshall

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Email: [joclynjoe@gmail.com](mailto:joclynjoe@gmail.com)

## CAREER HISTORY

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**July 2022 – current**

**Eco Route Environmental Consultancy  
Environmental Assessment Practitioner**

- Environmental screening for new projects.
- Compile Basic Assessment Report and EIA's (NOI, Application, DBAR, EMP, FBAR, etc);
- Compile EMP's, MMP's, screening reports, rehabilitation plans, AIS Control Plans, and any other reports required.
- Liaise with clients, specialists, and competent authorities.
- Complete EIA Checklists.
- OSCAER permit and EMMS compilations and submission.
- Environmental audits.
- S24G applications.
- Prepare Public Participation documents and registers.
- Completed Projects:
  - BAR for beachfront security estate on Portion 66 & 67 of Farm 443 Plettenberg Bay.
  - BAR for a single residential dwelling on ERF 8 Konkiebaai, Eersterivier.
  - Part 1 Amendment for Erf 1262 Wilderness and application for adoption of MMP.
  - Rehabilitation Plan for Remainder Erf 2 of farm 189 Boven Lange Valley.
  - Screening Report for Remainder Erf 444 Granse Vallei\_August 2022.
  - EIA Checklist for Portion No 33 Farm 440 Roodefontein.
  - EIA Checklist for Portion 7 of the Farm Wittedrift No. 306, Bitou Municipality.
  - Various OSCAER Permits with EMMS in the Knysna and Plettenberg Bay areas.

**August 2020 – August 2022**

**Moira Cloete Environmental Assessment Practitioner  
Sub-Consultant**

- Perform tasks and functions as set out in the EIA Regulations 2014, as amended, specifically in line with Appendices 1-4 thereof.
- Complete environmental screening tool reports.
- Complete EIA/BAR application forms.
- Draft Scoping Reports.
- Draft EIAs/BARs.
- Prepare Public Participation documents, EMPs and BID documents.
- Completed Projects:
  - EIA for proposed construction of a water storage dam on Argyll Farm 218 for irrigation of 80ha of lucerne.
  - EIA for proposed construction of a water storage dam on Coldstream Farm 970 for irrigation of 80ha of lucerne.
  - BAR for proposed development of a poultry facility for egg production on Confluence Farm 143.
  - EMP for operating an organic composting facility for Meat Traders Abattoir.

**February 2012 – April 2019**

**Knysna Municipality  
Senior Environmental Officer**

- Preparation of EMP's, MEMP's, EMM's for municipality and clients.
- Carrying out ECO work on municipal projects and other construction sites.
- Commenting on Land Use applications, EIA applications and issuing of OSCAER permit.
- Conducting various site inspections and audits including taking water samples for analysis.
- Applying environmental legislation and regulations to applications and other environmental matters.
- Liaising with other Governmental Departments, NGO's, Forums, Committees and Conservancies.
- Campaigning in environmental education and development of educational programmes.
- Report writing, research and project development.
- Advising and assisting public on environmental matters and various related tasks.

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February 2011 – January 2012

Allanson Associates cc.

**Research assistant at the Knysna Basin Project**

- Field work that included water sample collection and analysis, critical observations of environmental health, monitoring of Waste Water Treatment Works outflow;
- Lab work that included water quality analysis (including chemical methodology), fluorometry, microscopy and scientific report writing and publication.

June - July 2010

Department of Environmental Science, Rhodes University

**Field assistant**

- Harvesting, transporting, shredding and drying spekboom material.

2009 – 2010

Department of Environmental Science, Rhodes University

**Graduate Assistance**

- Assisted in second year practicals and field trips, and data input.

2007

Departments of Zoology and Botany, Rhodes University

**Demonstrator**

- Assisted in first year practicals and field trips, and marking practical reports.

## ACADEMIC QUALIFICATIONS

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2009 – 2010

**Masters in Environmental Science** by research dissertation

Rhodes University

Thesis: Population assessments of priority plant species used by local communities in and around four Wild Coast Reserves, Eastern Cape, South Africa

2008

**Honours in Biodiversity and Conservation** (*Joint Botany and Environmental Science*)

Rhodes University

2005 -2007

**Bachelor of Science** with Majors in Botany and Zoology

Rhodes University

1998 – 2004

**Heatherhill College (Cambridge University International Examination)**

HIGCSE: Art and Design (2), First Language English (3), Biology (1), Mathematics (2), Physical Science (2), Afrikaans as a Second Language (3). IGCSE: Information Technology (B)

## PUBLICATIONS

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- B.R. Allanson & J.J. Fearon (2012): Growth rate of juvenile *Siphonaria compressa* (Gastropoda: Pulmonata), *Invertebrate Reproduction & Development*, DOI:10.1080/07924259.2011.646447

## OTHER SKILLS AND TRAINING

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- Registered with the Environmental Assessment Practitioners Association of South Africa (EAPASA) – Registration number 2022/5006
- Registered as a Candidate Natural Scientist in Environmental Science. Registration number: 100121/11
- SAGIC Invasive Species Training, 15-18 May 2018. Stellenbosch, Western Cape.
- Certificate of competence in Herbicide Applicator – Noxious Weeds, 18 May 2018. Invader Plant Specialists (Pty) Ltd. Stellenbosch, Western Cape.
- Certificate attained for Management of Estuaries in South Africa short learning programme. NMMU, Stellenbosch, Western Cape.
- Certificate attained for Urban Interface Fire Management Short Course, 10-12 November 2015. NMMU Saasveld.
- Certificate of attendance attained for ArGIS Basic Training, 4 May – 8 May 2015. ESRI South Africa.
- Certificate attained for Basic Training Course for Environmental Management Inspector, 17 November 2014 - 15 December 2014. Western Cape Department of Environmental Affairs and Development Planning.
- Certificate attained for Fire Ecology and Conservation Short Course, 14-18 July 2014. NMMU Saasveld.

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- Certificate attained for EIA Short Course, 13-17 May 2013. Rhodes University.
- Computer literacy: Microsoft Office including Word, Excel, Powerpoint, Access and photodraw V2, Statistica, StatPlus, FISAT II, ArcView GIS 3.2, ArcMap GIS, Coral Draw.
- Drivers license code 08.

#### **REFERENCES ARE AVAILABLE ON REQUEST**

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Janet Ebersohn  
Lead EAP: Eco Route Environmental Consultancy  
Email: [janet@ecoroute.co.za](mailto:janet@ecoroute.co.za)

Moira Cloete  
Lead EAP: Moira Cloete Environmental Consultancy (MCEC)  
Email: [moira@mcec.co.za](mailto:moira@mcec.co.za)

Pamela Booth  
Manager: Environmental Management Department, Knysna Municipality  
Email: [pbooth@knysna.gov.za](mailto:pbooth@knysna.gov.za) / Cell: 060 998 6967