



FINAL ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR)

For

PROPOSED DEVELOPMENT OF LOW-IMPACT, SELF-CATERING CAMPING NODES WITH SHARED AMENITIES FACILITIES FOR THE LOVEMORE FAMILY - PORTION 104 OF FARM 216, UITZICHT, KNYSNA, WESTERN CAPE



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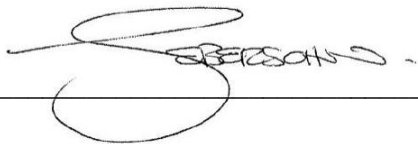
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STATEMENT OF INDEPENDENCE

I, **Janet Ebersohn**, of Eco Route Environmental Consultancy, in terms of Regulation 13 of the Environmental Impact Assessment Regulations, 2014 (as amended), hereby declare that I provide services as an independent Environmental Assessment Practitioner (**EAPASA Reg: 2019/1286**) and receive remuneration for services rendered for undertaking tasks required in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment Regulations, 2014 (as amended). I have no financial or other vested interest in the project.

EAP SIGNATURE: _____



ENVIRONMENTAL MANAGEMENT PROGRAMME REQUIREMENTS:

Appendix 4 of Regulation 982 of the 2014 EIA Regulations contains the required contents of an Environmental Management Programme (EMP). The table below serves as a summary of how these requirements were incorporated into this EMPR:

(1) An EMP must comply with section 24N of the Act and include:-

Requirement	Description
(a) Details of – (i) The EAP who prepared the EMP; and (ii) The expertise of the EAP to prepare an EMP, including a curriculum Vitae;	
(b) A detailed description of the aspects of the activity that are covered by the EMP as identified by the project description;	Section 2
(c) A map at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffers;	Appendix 4
(d) A description of the impact management outcomes, including management statements, identifying the impacts and risks that need to be avoided, managed and mitigated as identified through the environmental impact assessment process for all phases of the development including – (i) planning and design; (ii) pre-construction activities; (iii) construction activities; (iv) rehabilitation of the environment after construction and where applicable post closure; and (v) where relevant, operation activities;	Section 3, 7, 8, 9, and 10
(f) a description of proposed impact management actions, identifying the manner in which the impact management outcomes contemplated in paragraph (d) will be achieved, and must, where applicable, include actions to – (i) avoid, modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation; (ii) comply with any prescribed environmental management standards or practises; (iii) comply with any applicable provisions of the Act regarding closure, where applicable; and	Section 3, 7, 8, 9, and 10

(iv) comply with any provisions of the Act regarding financial provision for rehabilitation, where applicable;	
(g) the method of monitoring the implementation of the impact management actions contemplated in paragraph (f);	Section 6
(h) the frequency of monitoring the implementation of the impact management actions contemplated in paragraph (f);	Section 6
(i) an indication of the persons who will be responsible for the implementation of the impact management actions;	Section 6
(j) the time periods within which the impact management actions contemplated in paragraph (f) must be implemented;	Section 6
(k) the mechanism for monitoring compliance with the impact management actions contemplated in paragraph (f);	Section 6
(l) a program for reporting on compliance, taking into account the requirements as prescribed by Regulations;	The entire report serves as a programme for reporting on compliance
(m) an environmental awareness plan describing the manner in which – (i) the applicant intends to inform his or her employees of any environmental risk which may result from their work; and (ii) risks must be dealt with in order to avoid pollution or the degradation of the environment; and	Section 6
(n) any specific information that may be required by the competent authority.	N/A

Glossary of Terms

BAR	Basic Assessment Report – A tool used by the EAP to submit to the competent authority if listed activities is triggered in Regulations GNR 327 and GNR 324 as per NEMA to make a decision regarding a proposed development.
DFFE	Department Forestry Fisheries and Environment – the national authority for sustainable environmental management and integrated development planning.
DFFE&DP	Department of Environmental Affairs and Development Planning – the provincial authority for sustainable environmental management and integrated development planning.
CBA	CBA Critical Biodiversity Area – Areas in a natural condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.
EAP	Environmental Assessment Practitioner – An EAP and a specialist, appointed in terms of regulation 12(1) or 12(2) must – (a) be independent. (b) Have expertise in conducting environmental impact assessments or undertaking specialist work as required, including knowledge of the Act, these regulations and any guidelines that have relevance to the proposed activity. (c) Ensure compliance with these Regulations (d) Perform the work relating to the application in an objective manner, even if this results in views and findings that are not favorable to the application. (e) Take into account, to the extent possible, the matters referred to in regulation 18 when preparing the application and any report, plan or document relating to the application; and (f) Disclose to the proponent or applicant, registered and affected parties and the competent authority all material information in the possession of the EAP and, where applicable, the specialist, that reasonably has or may have the potential of influencing – i. Any decision to be taken with respect to the application by the competent authority in terms of these regulations; or ii. The objectivity of any report, plan or document to be prepared by the EAP or specialist, in terms of these Regulations for submission to the competent authority; unless access to that information is protected by law, in which case it must be indicated that such protected information exists and is only provided to the competent authority. (2) In the event where the EAP or specialist does not comply with sub regulation (1)(a), the proponent or applicant must, prior to conducting public participation as contemplated in chapter 5 of these regulations, appoint another EAP or specialist to externally review all work undertaken by the EAP or specialist, at the applicants cost. (3) An EAP or specialist appointed to externally review the work of an EAP or specialist as contemplated in sub regulation (2), must comply with sub regulation (1).
ECO/ESO	Environmental Control Officer – A site agent who needs to ensure that all environmental authorisation and conditions are adhered to during the construction phase of the project

EMPr	Environmental Management Programme – can be defined as “an environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the construction, operation and decommissioning of a project are prevented; and that the positive benefits of the projects are enhanced”.
ESA	Ecological Support Area – 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.
MMP	Maintenance Management Plan – means a maintenance management plan for maintenance purposes defined and adopted by the competent authority
NEMA	National Environmental Management Act (Act 107 of 1998) as amended 2017 – national environmental legislation that provides principles for decision-making on matters that affect the environment.
PA	Protected Area - A protected area is an area of land or sea that is formally protected by law and managed mainly for biodiversity conservation. Protected areas recognised in the National Environmental Management: Protected Areas Act (Act 57 of 2003) (hereafter referred to as the Protected Areas Act) are considered formal protected areas in the NPAES. This is a narrower definition of protected areas than the International Union for Conservation of Nature (IUCN) definition. ¹ The NPAES distinguishes between land-based protected areas, which may protect both terrestrial and freshwater biodiversity features, and marine protected areas.

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1. INTRODUCTION

According to the National Environmental Management Act (Act 107 of 1998) (NEMA), it is specified under Section 24 N that an Environmental Management Programme (EMPr) be prepared and implemented as part of obtaining Environmental Authorisation (EA) for specified activities that may have a significant impact on the environment. It emphasizes that an EMPr must detail the mitigation measures, monitoring, and management actions necessary to ensure that environmental impacts are controlled during all phases of the project.

This EMPr must form an integral part of the contract documents, as it outlines the methodology & duties required so that the project objectives can be achieved in an environmentally sustainable manner; with particular reference to the prevention and mitigation of environmental impacts caused by construction activities associated with this project.

This EMPr is a dynamic document that may need to evolve during its implementation period so that it recognises any new issues that may arise; or changes in the parameters of identified issues and can address these issues with the required/amended mitigation.

1.1. Purpose of the EMPr

The purpose of this EMPr is to ensure that the negative environmental impacts of the proposed activities are managed, mitigated and kept to a minimum during the planning, construction and operation of the proposed development. The EMPr focuses on avoiding damage or loss on ecosystems and the services they provide, and to enhance positive environmental impacts where possible.

The EMPr is a living document that is flexible and responsive to new and changing circumstances, however, should a change be made within the EMPr permission from the competent authority must first be obtained.

Once the EMPr is approved by the competent authority it is seen as a legal binding document on the following affected parties:

- 1 Project Applicant.
- 2 All contractors.
- 3 Sub-contractors and construction staff.
- 4 The appointed ECO monitoring the construction phase.

Copies of this EMPr must be kept on site and all senior personnel are expected to familiarise themselves with the content of this EMPr.

It is suggested that the EMPr be reviewed on a 5 yearly basis if required. Should any amendments need to be made during operational phase, written authorisation should be obtained from DEA&DP.

1.2. The Polluter-Pays Principle

This principle provides for “the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimizing further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment.” The Polluter Pays Principle will be rigorously applied throughout the construction phase of this project.

2. PROJECT DETAILS

2.1. Location Description

Portion 104 of Farm 216, Knysna (hereafter referred to as "the property") the Knysna Estuary on the northern boundary, and Featherbed Private Nature reserve on the western boundary. The property extends **9.96 Ha**(as per the title deed).

SG Region:	KNYSNA
Farm Nr:	104/216
Area (Ha):	9.96
SG Code:	C03900000000021600104

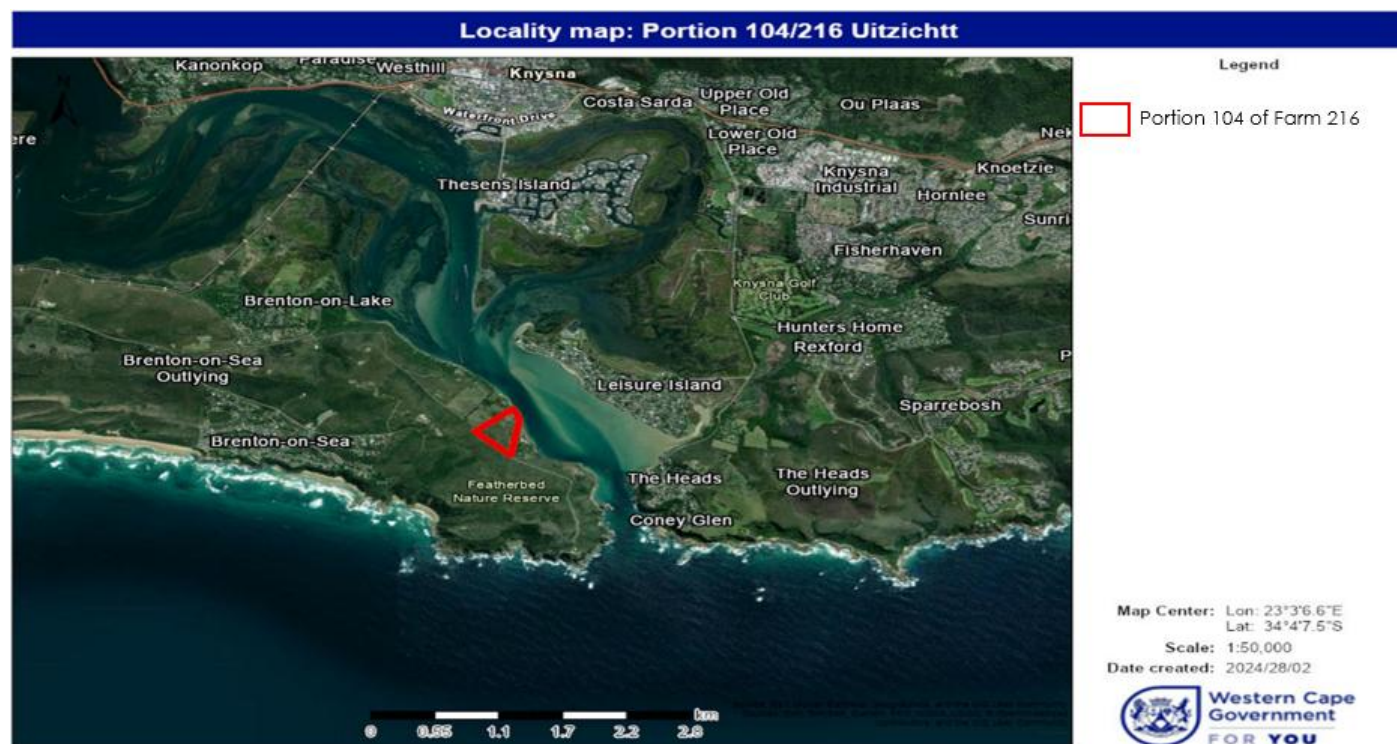


Figure 1: Locality Map of Portion 104 of Farm 216

Access to the site will be via Dolley Raats Street (a tarred road) that transitions into a gravel road, Dominee J.F. du Toit Avenue, which eventually becomes C.J. Langenhoven, leading towards the property. The following coordinates indicate the boundaries of the property (Google Earth, 2024).

FEATURE	LATITUDE (S)			LONGITUDE (E)		
	DEG	MIN	SEC	DEG	MIN	SEC
Northern Boundary	34°	04'	11.13"	23°	02'	54.85"
Eastern Boundary	34°	04'	16.84"	23°	02'	58.28"
Southern Boundary	34°	04'	26.60"	23°	02'	55.97
Western Boundary	34°	04'	17.99	23°	02'	44.04

3. RECEIVING ENVIRONMENT

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

3.1. VEGETATION

According to the National Vegetation Map of South Africa (SANBI, 2018) (Figure 2) the expected vegetation type on the property would be Knysna Sand Fynbos (Critically Endangered).

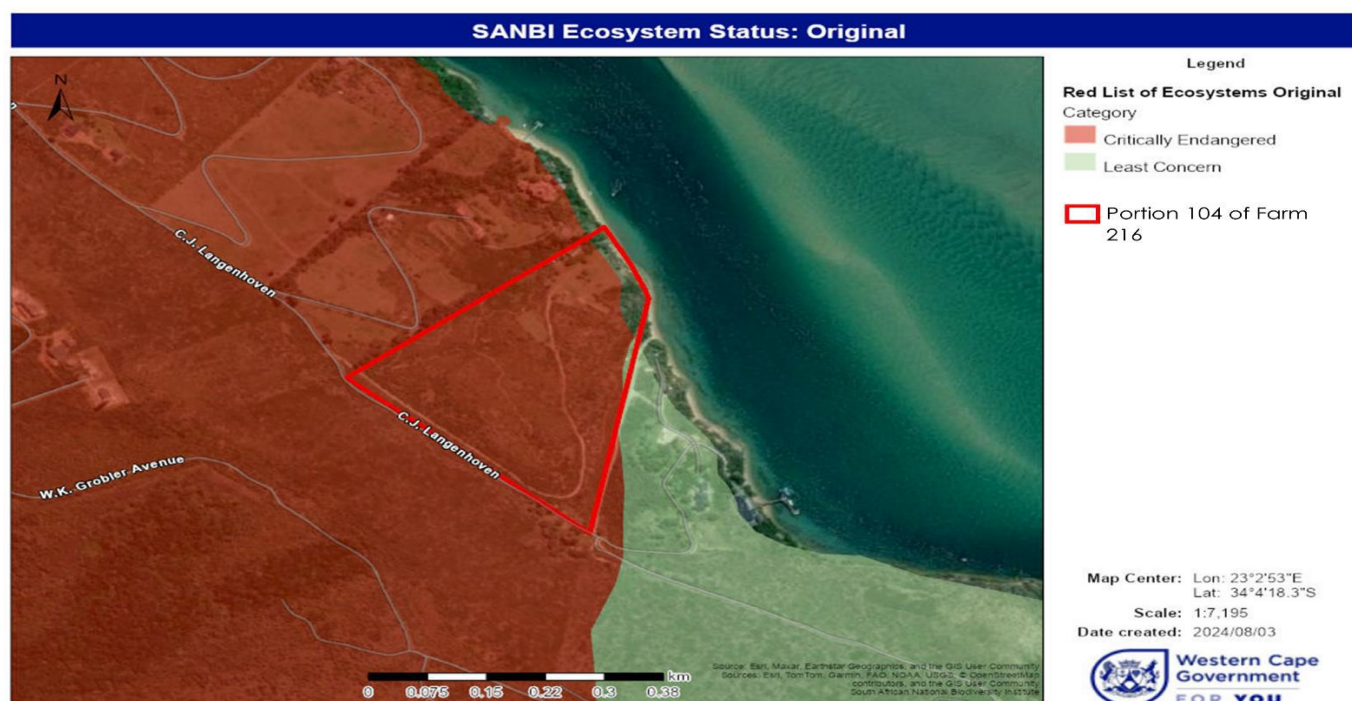


Figure 2: SANBI Original Ecosystem Status including Knysna Sand Fynbos

Some important features of this vegetation type are included in Table 1.

Table 1: Important Information Regarding Knysna Sand Fynbos (SANBI, 2018)

FFh 10 Knysna Sand Fynbos	VT 4 Knysna Forest (85%) (Acocks 1953). LR 2 Afromontane Forest (72%), LR 4 Dune Thicket (24%) (Low & Rebelo 1996). BHU 100 Knysna Afromontane Forest (72%) (Cowling et al. 1999b, Cowling & Heijnis 2001).
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: <i>Widdringtonia nodiflora</i> . Tall Shrubs: <i>Cliffortia linearifolia</i> , <i>Leucadendron eucalyptifolium</i> , <i>Metalasia densa</i> , <i>Passerina corymbosa</i> . Low Shrubs: <i>Anthospermum aethiopicum</i> , <i>Berzelia intermedia</i> , <i>Cliffortia drepanoides</i> , <i>Clutia rubricaulis</i> , <i>Erica diaphana</i> , <i>E. glandulosa</i> subsp. <i>fourcadei</i> , <i>E. glumiflora</i> , <i>E. sessiliflora</i> , <i>Helichrysum asperum</i> var. <i>asperum</i> , <i>Lachnaea diosmoides</i> , <i>Leucadendron salignum</i> , <i>Leucospermum cuneiforme</i> , <i>Lobelia coronopifolia</i> , <i>Morella quercifolia</i> , <i>Muraltia squarrosa</i> , <i>Oedera imbricata</i> , <i>Protea cynaroides</i> , <i>Stoebe plumosa</i> , <i>Tephrosia capensis</i> . Herbs: <i>Geranium incanum</i> , <i>Helichrysum felinum</i> . Graminoids: <i>Aristida junciformis</i> subsp. <i>galpinii</i> , <i>Brachiaria serrata</i> , <i>Cynodon dactylon</i> , <i>Eragrostis capensis</i> , <i>Ficinia bulbosa</i> , <i>Heteropogon contortus</i> , <i>Ischyrolepis eleocharis</i> , <i>Tetraria cuspidata</i> , <i>Thamnochortus cinereus</i> , <i>Themeda triandra</i> , <i>Tristachya leucothrix</i> .
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 <i>Acacia melanoxylon</i> , <i>A. mearnsii</i> and <i>A. longifolia</i> occur locally at low densities. Erosion very low and moderate.

* Reference - Taylor (1970b), Drews (1980a).

The vegetation within the study area was mapped at a fine scale in the C.A.P.E. Fine-scale Mapping Project by Vlok, Euston-Brown, & Wolf (2008). According to this mapping, two distinct vegetation units are identified within the study area: Groenvlei Coastal Forest (Endangered) and Sedgefield Thicket-Fynbos (Least Threatened). Taking this into consideration, together with ground truthing information (e.g. disturbance caused by alien invasive plant species and the 2017 Knysna veld fires), the proposed vegetation on the property consist of a fynbos thicket mosaic of varying degrees of degradation. This vegetation is closer in structure to Sedgefield Thicket-Fynbos and Goukamma Dune Thicket found on the property directly adjacent to the eastern side (Featherbed Nature Reserve) (Capensis, 2024). The habitat map (Figure 3) distinguishes between dune thicket and thicket-fynbos vegetation, and their corresponding condition. The habitats mapped at the site include (1) Degraded Dune Thicket, (2) Degraded Thicket-Fynbos, and (3) Transformed vegetation.



Figure 3: The habitats identified at the study area, superimposed on an ESRI TM satellite image (Capensis, 2024)

3.1.1. Degraded Dune Thicket

Several portions of the study area can be classified as degraded dune thicket. This habitat is found primarily on the north-western boundary of the site, with smaller areas to the north-east. The vegetation consists primarily of moderately sized thicket shrubs and small trees (2 -2.5m). The dominant species, much like the rest of the site is *Osteospermum moniliferum* however this vegetation type is distinguished from the thicket-fynbos vegetation by its increased diversity of thicket species and its denser structure (Capensis, 2024).

3.1.2. Degraded Fynbos Thicket

The majority of the site is covered in thicket-fynbos vegetation. The composition and structure of the habitat conforms more closely to the Sedgefield Fynbos-Thicket habitat described by Vlok, Euston-Brown, & Wolf (2008) than to Knysna Sand Fynbos (VEGMAP, 2018). The vegetation is dominated by *Osteospermum moniliferum*, with other sclerophyllous shrub species forming a dense mid-canopy layer. These include *Passerina corymbosa* and *Metasia muricata*. Thicket species such as *Pterocelastrus tricuspidatus* and *Searsia lucida* are fairly common and are likely to increase in density should fire continue to be excluded from the site. Two species of conservation concern were found in this habitat. These include *Lebeckia gracilis* (EN), and *Selago villicaulis* (VU). Within the dense fynbos-thicket vegetation there are open gaps, supporting low growing vegetation such as *Helichrysum cymosum*, *Helichrysum foetidum*, *Helichrysum petiolare*, *Selago corymbosa*, and *Ficinia acuminata* (Capensis, 2024).

3.1.3. Transformed Habitat

Transformed habitat contains very little indigenous or naturally occurring vegetation and describes areas of the study area that have been converted to open grassy areas or replaced by roads and other hard infrastructure (buildings, concrete pads etc.). The vegetation is dominated by grasses such as *Cynodon dactylon*, *Stenotaphrum secundatum*, and *Pennisetum clandestinum*, interspersed with common ruderal species (Capensis, 2024).

3.1.4. Sensitivities related to the identified habitats

In the case of the study area, a **Medium sensitivity** applies to the Degraded Fynbos-thicket habitat for the following reasons (Capensis, 2024):

1. The site classified as a CBA 1 and CBA 2 in the WCBSP. The CBA 1 area would be more accurately classified as CBA 2 due to the poor condition of the vegetation.
2. Two SCC were found in this habitat (*Lebeckia gracilis* & *Selago villicaulis*).
3. The ecological functioning of this habitat is moderately modified. The historic medium to high density of IAPs and high intensity fires have depleted the species richness of the vegetation.
4. This habitat occurs on moderate to steep slopes which would be prone to erosion if developed.
5. The restoration potential of this area is moderate with appropriate active management inputs.

A **Low sensitivity** applies to the Degraded Dune Thicket habitat for the following reasons (Capensis, 2024):

1. The vegetation type present is Least Concern, however the vegetation that remains in this habitat is only marginally representative of the original ecosystem in its current condition. However, it does contain "indigenous vegetation" by definition.

2. The site classified as CBA 1 and CBA 2 in the WCBSP. The CBA 1 area would be more accurately classified as CBA 2 due to the poor condition of the vegetation.
3. Two protected tree species were found in this habitat (White Milkwood *Sideroxylon inerme* and Outeniqua yellowwood *Afrocarpus falcatus*). The white milkwood is likely naturally occurring whereas the Outeniqua yellowwood appears to have been planted.
4. The ecological functioning of this habitat is modified in its current state due to the long history of high-density IAPs and significant fire events.
5. The restoration potential of this habitat is low to moderate without active management inputs, but restoration is possible, and recommended for the areas which are not developed.

A **Very Low sensitivity** applies to the Transformed habitat for the following reasons (Capensis, 2024):

1. The indigenous vegetation has been almost completely removed from this habitat, with the dominant vegetation consisting of lawn grasses.
2. One individual of one SCC (*Selago villicaulis*) was found in this habitat however this species is fairly abundant elsewhere on the property.

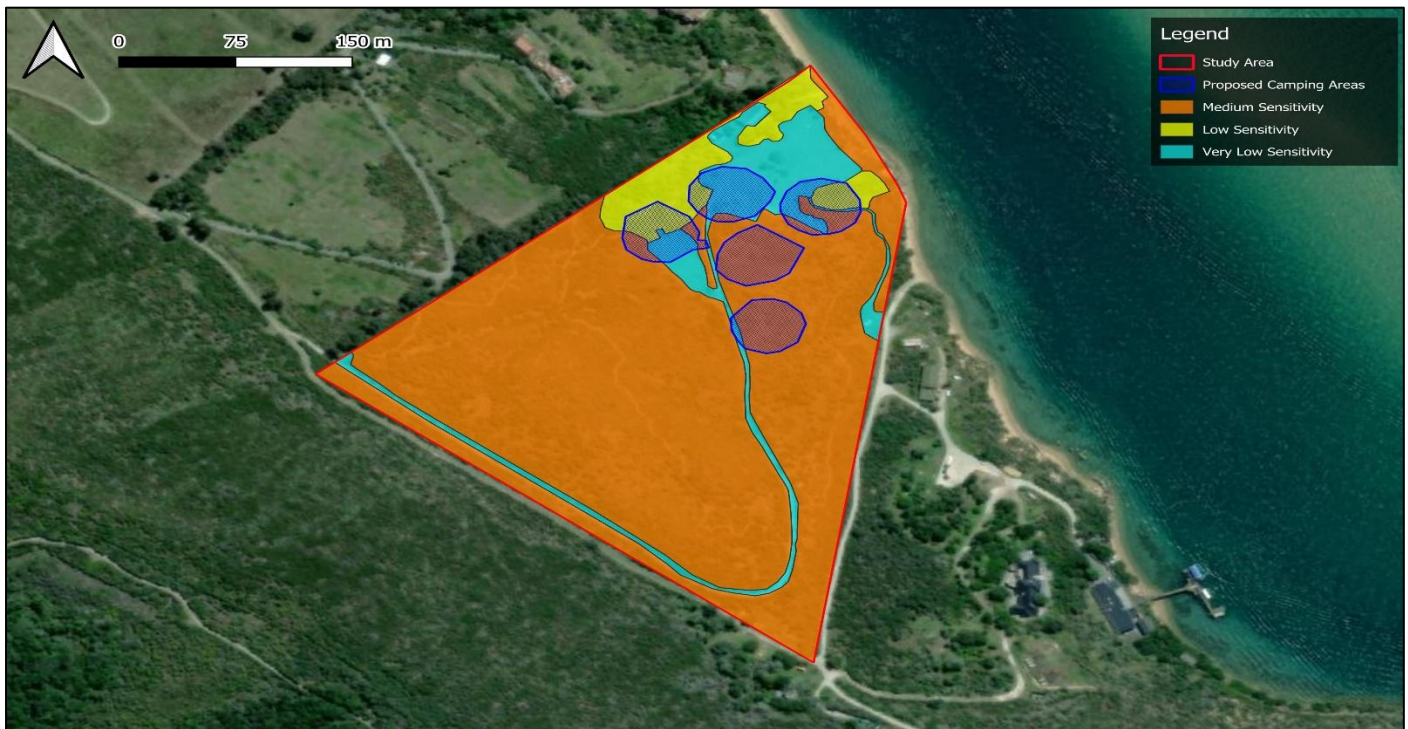


Figure 4: The sensitivities for habitats described in the study area overlaid on an ESRI TM image.

Species of Conservation Concern was identified on the property, whereafter the architect (Tracey Mills Brink, 2025) designed the layout of the preferred alternative to avoid impacting the species. It will be recommended, as part of the mitigation measures and the Environmental Management Programme, that the location of this species be clearly demarcated and remain undisturbed throughout all phases of the development. Furthermore, if it becomes necessary to disturb protected trees identified (i.e. *Sideroxylon inerme* -White Milkwood), the applicable applications for permit in terms of the National Forests Act (Act 84 of 1998) must be considered.

3.2. SENSITIVE AREAS (CBA, ESA, and PA)

The Western Cape Biodiversity Spatial Plan (WCBSP, 2017) designated the property as situated within a Critical Biodiversity Area (CBA:1 – To maintain and CBA:2 – To restore), including terrestrial and aquatic features. An Ecological Support Area (ESA:2 – To restore) is also included on the property.

CBA1: Terrestrial – Terrestrial

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

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

CBA1: Aquatic – Wetland

The definition and objective remain the same.

ESA 2: Restore from other land use

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.

By the 2017 Western Cape Biodiversity Spatial Plan the eastern boundary of the site abuts the Featherbed Nature Reserve whereas the north-eastern boundary borders on the Garden Route National Park, both of which are designated protected areas (Figure 5).



Figure 5: Western Cape Biodiversity Spatial Plan (WCBSP 2017) Sensitive areas

However, the new 2023 Western Cape Biodiversity Spatial Plan designated the entire property as a protected area (Figure 6).



Figure 6: Western Cape Biodiversity Spatial Plan (WCBSP 2023) Sensitive areas

Definition: Areas proclaimed as protected areas in terms of national or provincial legislation.
Objective: Must be kept in a natural state, with a management plan focused on maintaining or improving the state of biodiversity. A benchmark for biodiversity.

It should be noted that that property is not proclaimed as a protected area, but as of the introduction of the 2023 WCBSP, the entire property will be dealt with according to the general guidelines for protected areas.

Table 2: Extract from Western Cape Biodiversity Spatial Plan (2023) regarding protected areas

WCBSP category	Desires management objective	General guidelines
Protected Areas	Must be kept in a natural state, with a management plan focused on maintaining or improving the state of biodiversity. A benchmark for biodiversity.	- All operational aspects of managing these areas must be subject to their main purpose, which is to protect and maintain biodiversity and ecological integrity and should be governed by a formally approved management plan including land-use activities that support the primary function of these areas as sites for biodiversity conservation. - The management plan must identify allowable activities, which should be consistent at least with the CBA 1 category; the location of these allowable activities should be captured in a zonation plan in the management plan.

		- Activities relating to the construction of roads, administrative or tourism infrastructure and services (such as water reticulation systems, power lines, etc.) that are required to support the primary function of the protected area and its allowable activities, are subject to NEMA authorisation and the protected area management plan. - In the case of Protected Environments, a variety of agricultural land-uses may be allowed, such as livestock grazing, plantation forestry and limited cultivation. The location of these land-use activities must be informed by the WC BSP Map and should be specified in the zonation plan in the management plan for the Protected Environment. All areas of natural habitat that are zoned for conservation use, should be subject to implementation of the land-use guidelines for protected areas, CBAs, and ESAs. - Mountain Catchment Areas are also included in this category, however unlike the other types of protected area, there is no requirement for a management plan which would guide allowable land-uses and activities. Therefore, the land-use guideline should be aligned with that of Protected Areas, with the primary intention to ensure the steady supply of good quality water to downstream areas.
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3.3. FRESHWATER SENSITIVITIES

Although the 2017 Western Cape Biodiversity Spatial Plan identifies Critical Biodiversity Areas (CBAs) associated with wetlands on the property, Cape Farm Mapper does not indicate the presence of any wetlands or rivers (perennial or non-perennial) on the site (Figure 7). Furthermore, the aquatic specialist study conducted by Confluent (2024) confirmed that no freshwater features are present on the property.



Figure 7: Map of Freshwater Resources in proximity to Ptn 104 of farm 216

3.4. FAUNA

Faunal Specialist (Confluent, 2024) were consulted to provide feedback on the faunal sensitivities relevant to the proposed development property. The GPS tracking gives indication to the extent of a site visit done on 31 May 2024.



Figure 8: Habitats found on Portion 104/216 Uitzigt Farm and GPS tracks of the site visits (Confluent, 2024)

3.4.1. Avifauna

No SCC was encountered during the site visit. Three bird counts were conducted across the property, in addition to opportunistic sightings noted throughout the meander and searching for nests/roosting sites in suspected habitat. A total of 16 bird species were identified during the site visit.

Table 3: Avifauna species observed during the site visit (Confluent, 2024)

Common name	Species Name
Speckled Mousebird	<i>Colius striatus</i>
Hadada Ibis	<i>Bostrychia hagedash</i>
Kelp Gull	<i>Larus dominicanus</i>
Pied Crow	<i>Corvus albus</i>
Cape White-eye	<i>Zosterops virens</i>
Fork-tailed Drongo	<i>Dicrurus adsimilis</i>
Bar-throated Apalis	<i>Apalis thoracica</i>
Egyptian Goose	<i>Alopochen aegyptiaca</i>
African Fish Eagle	<i>Ichthyophaga vocifer</i>
Cape Bulbul	<i>Pycnonotus capensis</i>
Jackal Buzzard	<i>Buteo rufofuscus</i>
Southern Boubou	<i>Laniarius ferrugineus</i>
Sombre Greenbul	<i>Andropadus importunus</i>
Greater Double-collared Sunbird	<i>Cinnyris afer</i>
Karoo Prinia	<i>Prinia maculosa</i>
Green-backed Camaroptera	<i>Camaroptera brachyura</i>

3.4.2. Mammals

There was evidence of sub-surface tunnelling by golden moles found on site especially in the lawn area. A bushbuck was seen on the site and more individuals are suspected based on tracks and droppings found. Caracal scat was also found at the site. There was substantial evidence of mole rat activity, particularly on the lawn area. Rodent paths were also observed.

Table 4: Mammal species observed during the site visit (Confluent, 2024)

Common name	Species Name
Cape White-eye	<i>Zosterops virens</i>
Grey Heron	<i>Ardea cinerea</i>
Jackal Buzzard	<i>Buteo rufofuscus</i>
Karoo Prinia	<i>Prinia maculosa</i>
Kelp Gull	<i>Larus dominicanus</i>
Malachite Sunbird	<i>Nectarinia famosa</i>
Neddicky	<i>Cisticola fulvicapilla</i>
Olive Thrush	<i>Turdus olivaceus</i>
Red-eyed Dove	<i>Streptopelia semitorquata</i>
Sombre Greenbul	<i>Andropadus importunus</i>
Southern Boubou	<i>Laniarius ferrugineus</i>
Southern Fiscal	<i>Lanius collaris</i>
Western Cattle Egret	<i>Bubulcus ibis</i>

3.4.3. Terrestrial Invertebrates

No SCC were found during the site inspections. Cocktail ants (*Crematogaster* sp.) were found in nests. Spider webs (*Araneae*) were found on site as were zebra agate snails (*Cochlitoma zebra*). Pitfall traps did not attract the dung beetle SCC (*Circellium bacchus*) but many blowflies (*Calliphoridae*) were attracted to the bait. A

pea blue butterfly (*Lampides boeticus*) as well as an unidentified white lepidopteran (suspected Pieridae) were found during a sweep of the site. Butterfly host plants and ant species were not found at the site.

3.4.4. Amphibians

No amphibians were found, which is not surprising given the lack of any waterbodies/watercourses present on site. Consequently, there was no suitable habitat for the SCC Knysna Leaf-folding Frog (*Afrixalus knysnae*).

3.4.5. Reptiles

No reptile SCC were highlighted for this site by the DFFE Screening Tool or any of the public platforms. As such, no targeted sampling took place for this group. However, a puffadder was found on the property during the meander.

3.5. COASTAL ENVIRONMENT

The property slopes down to the northeast towards the Knysna Estuary (coastal environment) which is bordered by a very steep sandy cliff. The sandy cliff shows signs of erosion that is most likely associated with surface water that flows over a large, mowed lawn area immediately adjacent to the cliff. The lawn is located at the base of a relatively steep slope and acts a poor buffer to overland surface water flows which has most likely contributed to the erosion of the cliff face. The soil on the property is very sandy and no hydrogeomorphological landscape features (depressions, confined valleys, channels etc.) indicating the presence of a watercourse (i.e. stream, river or wetland) were observed within the proposed development footprint.

Table 5: Images that show the current state of the coastal environment (Confluent, 2024)



Take note that there are mitigation measures proposed by the aquatic specialist that will be fully considered and incorporated into both the Basic Assessment Report and the Environmental Management Programme (EMPr). Furthermore, it is confirmed that no development activities will be introduced that could negatively affect the coastal environment.

As the property borders the Knysna Estuary, it should be noted that the Regulations for the Proper Administration of the Knysna Protected Environment is applicable. In these regulations there is reference to a "development control area" which is defined as –

"development control area" means the area comprising—

- (a) the biodiversity control area; and**
- (b) land situated within fifty metres inland from the—**
 - (i) water area; and**
 - (ii) highest line to which any water occurring in the water area may rise at any time as a result of the action of the tides or otherwise, during ordinary storms occurring during the most stormy period of the year, excluding exceptional or abnormal floods;**

Following consultation with South African National Parks (SANParks), it was agreed that a stewardship / settlement agreement will be pursued between SANParks and the Lovemore family in relation to the long-term management of Portion 104 of Farm 216. The intention of this agreement is to formalise conservation-oriented land management practices on the property and to ensure that the ecological integrity of the Knysna Protected Environment and surrounding conservation areas is maintained. The proposed development has therefore been considered in consultation with SANParks to ensure that it aligns with the broader conservation objectives applicable to the Knysna Estuary system and adjacent protected areas. The outcomes of this engagement will form part of the ongoing environmental management framework for the property and will be reflected.

3.6. HERITAGE

A Notice of Intent to Develop (NID) in terms of Section 38(1) and (8) of the National Heritage Resources Act (Act 25 of 1999) was submitted to Heritage Western Cape (HWC) for review of the proposed development. The submission was considered by the Heritage Officers Meeting (HOMS), and HWC issued a final comment confirming that no further heritage studies are required, as the proposed development is not expected to impact heritage resources. Heritage Western Cape further requested that the HWC Chance Finds Procedure and Accidental Finds Protocol be incorporated into the Environmental Management Programme (EMPr) and Environmental Authorisation conditions. These requirements will be included in the final Basic Assessment documentation and implemented during the construction phase should any heritage resources be encountered.

4. PROJECT SCOPE

NOTE:

This section has been substantially revised for the Draft BAR following the Pre-Application PPP (29/05/2025 – 30/06/2025). Key revisions include: (1) explicit clarification of the private family-use mandate; (2) detailed EUA descriptions based on the updated SDP (TMBA Architects, 104 of 216 SDP 2026-03-05); (3) a complete disturbance footprint summary; (4) updated services information addressing BOCMA, SANParks, and I&AP concerns; and (5) a formal record of SANParks stewardship engagement. I&APs who raised concerns during the PPP regarding project ambiguity are directed to this revised section.

4.1. CLARIFICATION ON THE NATURE OF THE PROPOSED DEVELOPMENT

Before describing the physical development components, it is necessary to address directly the most persistent concern raised during the Pre-Application PPP: uncertainty about whether the proposed facility is intended for private family use or commercial tourism.

THE PROPOSED DEVELOPMENT IS EXCLUSIVELY FOR PRIVATE USE BY THE LOVEMORE FAMILY.

The facility will only ever be used by members of the Lovemore family and beneficiaries of the Lovemore Children's Secondary Trust. It is not a tourist lodge, camping resort, guesthouse, or short-term rental facility. No members of the public will be accommodated at the facility. No commercial revenue will be generated from the operation of the facility.

The proposed development formalises and upgrades informal camping arrangements that the Lovemore family has practised on the property for many years. As the family has grown across generations, the need to provide each sibling and their immediate family with a dedicated, structured camping node has arisen. This is the sole driver of the application.

The Applicant [Rob Lovemore, acting as Trustee of the Lovemore Children's Secondary Trust] confirms that:

- The Lovemore Children's Secondary Trust is both the registered landowner and the applicant for Environmental Authorisation.
- No subdivision of the property is proposed or intended.
- No commercial tourist accommodation operation is proposed.
- The number of people accessing the property will not increase beyond the historical baseline of family use.
- There will be no staff accommodation, public boat launch access beyond historical family use, reception facilities, or public-facing function venue component.

4.2. PROJECT PROPOSAL (UPDATED – FINAL ALTERNATIVE A)

The preferred alternative provides for the development of five (5) Exclusive Use Areas (EUAs), each comprising six (6) elevated deck platforms. The EUAs are positioned across the middle to upper portions of the property, within existing disturbed areas and away from the highest-sensitivity ecological zones, as informed by the terrestrial biodiversity, faunal, aquatic, and visual specialist assessments. All five EUAs are located outside the 30-metre building line from the Knysna River Estuary high-water mark and outside the aquatic specialist's recommended estuary-buffer zone.

All structures are elevated on stilts, there is no concrete slab or hard surface at ground level beneath the platforms. This design minimises disturbance to soil structure, natural drainage, and the movement of small

fauna. Lightweight timber and prefabricated modular components are used, reducing the need for heavy machinery and limiting the import of construction materials onto the site.

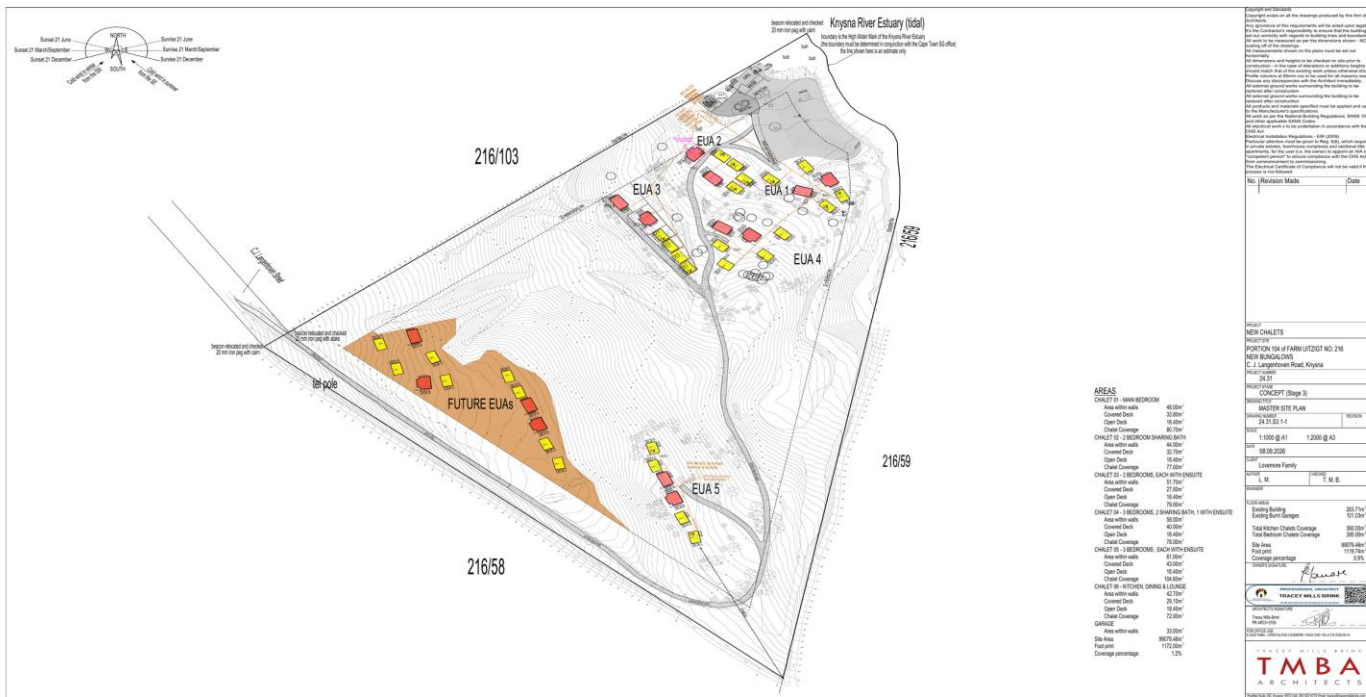


Figure 9: Alternative A (Preferred proposed development – 104 of 216 SDP 2026-09-08)

The Site Development Plan also indicates a “Future EUA” area in the southern portion of the property, shaded and labelled for information purposes only. No development, structure, or activity is proposed or applied for within this area as part of this Basic Assessment. The area is shown at SANParks’ request, to reserve land that may in future support a climate-adaptation or managed-retreat strategy for infrastructure elsewhere on the property, should sea-level rise or estuary dynamics require it. Any future development of this area would be subject to its own separate application and environmental authorisation process in terms of NEMA, and is not authorised, and cannot be relied upon, by virtue of its appearance on this plan or in this report.

4.2.1. Site Coverage and Disturbance Footprint

The following footprint areas are extracted from the TMBA Architects Site Development Plan (104 of 216 SDP 2026-09-08) and are provided in direct response to SANParks' and I&APs' requests for clarity on the total disturbance area:

Table 6: Site Coverage and Disturbance Footprint

Area Component	Area (m ²)	Notes
Existing structures and grassed area	3,754.00	Pre-existing disturbed footprint — no change proposed
Grassed vehicle access road	3,541.00	Existing access — no modification proposed
Proposed disturbance area (new development)	8,631.00	New disturbance for 5 EUAs and associated infrastructure
Future disturbance area (indicative — NOT part of application)	7,733.00	Shown on SDP for planning reference only. Separate application required.
Proposed deck structures (all 5 EUAs)	1,080.00	5 EUAs × 6 decks × approx. 36 m ² per deck average
Total new footprint (structures)	1,119.74	Combined platform coverage — all 5 EUAs
Site coverage percentage	0.9%	Of total site area 99,079.46 m ²
Existing main dwelling	263.71	Pre-existing — no change
Existing burnt garages	101.03	Pre-existing burnt structures — noted on SDP

NOTE:

The 'Future Disturbance Area' of 7,733 m² shown on the SDP is for long-term planning reference only and is NOT part of the current Environmental Authorisation application. It will require a separate application process if the family wishes to activate it in future.

4.2.2. Description of Each Exclusive Use Area (EUA)

Each of the five EUAs follows the same structural layout and design standard as described below. The layout is based on the TMBA Architects Site Development Plan (104 of 216 SDP 2026-03-05), which is included as Appendix B to this Draft BAR.

Table 7: Deck Configuration per EUA (Decks A through F)

Deck	Function	Floor Areas	Key Features
A	Kitchen, Dining & Lounge Unit	Area within walls: 42.70 m ² Covered deck: 29.10 m ² Chalet coverage: 72.00 m ²	Enclosed kitchen (induction, WC, hand basin, fridge, washing machine). Open and covered deck. 3× JoJo tanks (5,250 L) with induction pump and filter. RWDP rainwater harvest. Stilts construction.
B	Bedroom Chalet 1 (2 Bedrooms)	Area within walls: 51.70 m ² Covered deck: 27.00 m ² Chalet coverage: 79.00 m ²	2 bedrooms each with ensuite (WC, hand basin, shower). BIC and shelving. Covered and open decks. 3× JoJo tanks below deck. Stilts construction.
C	Bedroom Chalet 2 (2 Bedrooms)	54.00 m ² deck area	Identical layout to Deck B. 2 bedrooms with ensuites. 3× JoJo tanks. Covered and open deck. Stilts.
D	Tent Camping Platform	54.00 m ² deck area	Open elevated platform for traditional tent camping. No enclosed structures. Stilts only.
E	Tent Camping Platform	54.00 m ² deck area	Open elevated platform for traditional tent camping. No enclosed structures. Stilts only.
F	Tent Camping Platform	54.00 m ² deck area	Open elevated platform for traditional tent camping. No enclosed structures. Stilts only.
Outdoor Facility	Open Shower, Toilet & Store	Ground-level, low-impact structure	Open outdoor shower, toilet and storage. Provided per EUA at EUAs 1–4 per SDP. No hard surfacing at ground level.

A summary of the total floor areas per EUA is provided as follows:

- Kitchen/Dining/Lounge unit (Deck A): Chalet coverage 72.00 m²
- Bedroom chalets (Decks B and C combined): Total coverage 158.00 m² (79.00 m² each)
- Tent camping platforms (Decks D, E and F): 54.00 m² each = 162.00 m² combined
- Total deck area per EUA: 216.00 m² (Decks C through F) + chalets A and B
- Total kitchen chalet coverage (all 5 EUAs): 360.00 m²
- Total bedroom chalet coverage (all 5 EUAs): 395.00 m²

4.2.3. Wastewater and Sewage Treatment

Wastewater and sewage from the five EUAs is treated by three Bio Bloo sewage water treatment systems, shared between neighbouring EUAs where practical: one unit serves EUA 1 and EUA 4 jointly, one unit serves EUA 2 and EUA 3 jointly, and one dedicated unit serves EUA 5. These units receive all black water and grey water from the kitchen and bathroom facilities within the EUA(s) they serve. A 110 mmØ soil pipe connects each EUA's sanitation fixtures to its allocated Bio Bloo unit. The location of each Bio Bloo unit is indicated on the Site Development Plan (Appendix B), maintaining appropriate setback from the 30-metre building line and the aquatic specialist's recommended estuary buffer zone.

Conventional septic tanks with French drain soakaways are explicitly excluded from this design, consistent with the recommendation of the Breede-Olifants Catchment Management Agency (BOCMA), which confirmed that septic tanks and French drains are not appropriate given the proximity to groundwater resources and the Knysna River Estuary. The Bio Bloo system is a packaged, enclosed biological treatment system that does not rely on ground infiltration.

Treated water is fully recycled internally within each EUA: following anaerobic and aerobic biological treatment, secondary clarification, and disinfection via an in-line chlorine (Klorman) dispenser to South African DWS General Standards, the treated water is pumped into a dedicated non-potable reticulation line supplying toilet flushing and outdoor/utility tap points within that EUA. No treated water is discharged to the environment, to any watercourse or groundwater resource, or used for irrigation. When a unit eventually requires desludging, this is undertaken by a licensed private contractor via off-site removal; the manufacturer has confirmed each unit is rated to operate for up to 10 years between such removals under normal use. As no water use activity contemplated in Section 21 of the National Water Act, 1998 (Act No. 36 of 1998) is triggered by this closed-loop design, a Water Use Authorisation in terms of Section 22 of that Act is not required for this aspect of the development.



Figure 10: Evidence of BioBlo Project Proposal and Previous Installations

4.2.4. Water Supply

Each EUA is equipped with three JoJo water tanks (5,250 L × 1,820 mmØ each), providing a stored water capacity of 15,750 L per EUA and a total on-site storage capacity of 78,750 L across all five EUAs. Tanks are positioned below or adjacent to each deck structure and are fed by rainwater downpipe (RWDP) discharge from roof catchment areas on the enclosed structures. An induction pump and filter system is provided at each EUA.

The existing on-site borehole will supplement the rainwater harvest during periods when the family is in residence. During periods of non-use, the borehole will not be operated, allowing the aquifer to recharge naturally.

4.2.5. Access and Traffic

Access to the property is via C.J. Langenhoven Street using the existing grassed vehicle access track that has historically served the Lovemore family. No road widening, upgrading, or new access construction is proposed. The existing access has been adequate for historical family use and will remain so during the operational phase. No increase in vehicle movements is anticipated during the operational phase. The same family members who have historically accessed the property will continue to do so. The C.J. Langenhoven Street/Dolly Raats Road intersection will not experience any increase in traffic frequency as a result of operational use.

During the construction phase, a Traffic Management Method Statement will be prepared by the appointed contractor and submitted for review prior to commencement. This statement will address: scheduling of construction material deliveries; management of the Dolly Raats Road intersection (including the blind corner); and wildlife collision risk mitigation on the access road.

4.2.6. SANParks Stewardship Engagement

SANParks' first-round PPP comments noted that the property falls within SANParks' Land Inclusion Plan for the Garden Route National Park expansion and qualifies as a Contract National Park stewardship property. SANParks indicated it would support tourism accommodation within the currently disturbed footprint subject to a conservation stewardship commitment from the landowner.

In response, the Lovemore Children's Secondary Trust has engaged with SANParks regarding the formalisation of a stewardship arrangement for the property, exploring options including a Contract National Park arrangement with SANParks. This engagement is ongoing and demonstrates the family's genuine commitment to the long-term conservation of the property and to the restoration of the Knysna Sand Fynbos Coastal Corridor. The outcome of the stewardship engagement will be formally reported. SANParks' authorisation for any development within the 50-metre Development Control Area (DCA) of the Knysna Protected Environment will be sought as part of the overall authorisation process, in accordance with Section 8 of the KPE Regulations (GN 1175, 2009).

It should further be noted that it is requested that SANParks' comments be included in all application reports in their entirety and not just in a Comments and Responses report. Please refer to Appendix X for the full comments, and see below:

Point 1: Buffer, Climate Change Adaptation and SDP

SANParks supports the implementation of a 36m buffer from the edge of the estuary proposed in the Aquatic Biodiversity Site Sensitivity Verification and Impact Assessment report, prepared by Confluent, dated 24 July

2024 (Fig. 3). A 10m rehabilitation Zone within this buffer is further supported. Stormwater on site should further be carefully designed and managed so as not to exacerbate any further estuary bank erosion/ destabilisation

It is recommended that the proposed Future Exclusive Use Area situated next to the entrance road on the northern sector of Uitzicht 216 Portion 104 only be developed as a climate change 'retreat' strategy, should EU1 and 2 become compromised from climate change coastal erosion affects in the future. The development of this area would be subject to a separate EIA application and SANParks comments.

The remainder of the SDP is supported by SANParks.

Point 2: Sewerage Infrastructure

SANParks will not support a sewerage product/s which do not:

- 1) Provide/s effluent quality data that demonstrates compliance with regulatory standards and include a clear disposal or reuse plan to prevent contamination of estuarine or wetland environments.
- 2) Have sewage treatment systems located away from areas where they may become damaged by flooding/ coastal erosion or pose a risk to sensitive environmental areas.
- 3) Have operational monitoring protocols for the sewerage system built into the EMPr.
- 4) Include monitoring which focuses on detecting any malfunction of the system/s with appropriate mitigation measures proposed.
- 5) Include actions to be taken for ongoing maintenance and end-of-life replacement of the system stipulated within the EMPr.
- 6) Include placement of structures above ground (not buried), except where this is not possible and structures that are not designed for climate change risks.

A long-term sustainable and compliant sewerage solution must be finalised and presented to SANParks for consideration.

Point 3: Contract National Park Stewardship

As stated in SANParks comment of 30 June 2025, Portion 104 Uitzicht 216 falls within SANParks Land Inclusion Plan (LIP) for the Period 2023/24 - 2025/26 and is included in the revised LIP for the Period 2026/27 – 2028/29 for the Garden Route National Park (GRNP).

The property is within the Western Heads Knysna Sand Fynbos Coastal Corridor, which is the subject of a collaborative conservation initiative being supported by SANParks, CapeNature, the Table Mountain Fund, WWF-SA, the Western Heads Goukamma Conservancy (WHGC), and landowners.

Several biodiversity stewardship categories exist that a landowner can opt into (Fig. 4). Stewardship categories in the top-tier of the table require the greatest commitment level from a landowner, but receive the greatest support from conservation authorities and greater financial incentives

Uitzicht 216 Portion 104 is supported for inclusion by SANParks through a Contract National Park (CNP) agreement (top tier). A CNP is an area of privately owned land that is declared as part of a National Park in terms of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) (NEMPAA). The landowner retains ownership of their property but commits the property to formal conservation and co-manages the property with SANParks. In return, the landowner may derive financial benefits, such as income tax deductions and municipal property rate exclusions.

The landowner has sent a letter of commitment to the process of including its land in the GRNP. The landowner has however not yet given its formal consent for the declaration of its property as part of the Park as contemplated in section 20(3) of NEMPAA.

To ensure that the property is put into conservation, SANParks recommends that the landowner is required to request that its property is declared as part of the GRNP in terms of NEMPAA, alternatively that the landowner requests the declaration of the property as a nature reserve in terms of NEMPAA, and if the Minister of the MEC refuses such declaration, that a conservation servitude in favour of SANParks is registered in respect of the Property (coupled with a request to the Knysna Local Municipality to spot zone the undeveloped parts of the property as Open Space III or IV).

It is further recommended that no construction should be permitted before there is proof of binding status of one of the stewardship options outlined in this paragraph. A "written agreement" referred to in section 20(3) (an agreement in which the landowner consents to the declaration of its property as part of the GRNP would constitute proof of binding status in the event that the landowner opts to include its property in the GRNP.

Summary and Way Forward

SANParks supports Alternative A preferred SDP, Tracey Mills Brink, 5 March 2026.

The following conditions are recommended should the activity be authorised:

1. Achieving conservation outcomes on the property, in a high-value sensitive conservation area would leave a legacy for future generations:

Option 1 (preferred option): Inclusion in the Garden Route National Park: a "written agreement," in terms of which the landowner consents to the declaration of its land as part of the GRNP in perpetuity, with SANParks is signed before construction may commence.

Option 2 (alternative option): Declaration of a nature reserve: a "written agreement," in terms of which the landowner consents to the declaration of its property as a nature reserve in perpetuity, is signed between the landowner and the MEC before construction may commence.

Option 3 (only applicable if the Minister or MEC does not declare the property as part of the Park or as a nature reserve): The registration of a conservation servitude in respect of the property and a request to the Knysna Local Municipality to spot zone the undeveloped area of the property as Open Space III or IV before any construction on the property may commence.

2. A long-term sustainable and compliant sewerage solution must be finalised and presented to SANParks for consideration.
3. SANParks encourages that Section 4 risk management measures applicable for new infrastructure seaward of the CML and existing infrastructure in areas at risk to dynamic coastal process be applied, as per the Coastal Management Line for the Garden Route National Park notice (GNR. No. 3668, 14 July 2023).
4. A 36m 'no-go' development buffer from the estuary edge is supported.
5. Compliance is required with the GRNP Management Plan 2020-2029, and the Knysna Estuary Management Plan 2025-2029.
6. The landowner and guests should not access the estuary directly for boat launching, but via the Brenton on Lake SANParks facilities. No unauthorised moorings are permitted.
7. All other SANParks estuary user licensing requirements, as stipulated within the Regulations for the proper Administration of the Knysna Protected Environment and other associated legislation would need to be complied with
8. Measures to mitigate visual impact as suggested by Mr. P Buchholtz, 5 September 2024 should be implemented.
9. SANParks wishes to comment on the siting of solar panels, to mitigate potential glare visible from sensitive receptor areas, and to avoid the placement of any solar array area/s in sensitive natural environments.
10. SANParks should be consulted for any fencing needs. Fencing should not inhibit wildlife movement.
11. The EMPr, Eco Route, March 2026 should be implemented.
12. A suitably qualified Environmental Control Officer (ECO) should be appointed to monitor the EMPr.

13. The disturbance footprint/no-go areas should be fenced off during the construction phase with a barrier material, such as shade cloth to prevent workers from encroaching into adjacent vegetation, and to ensure that animals are not injured on the building site.
14. Topsoil should be set-aside for reuse.
15. Permeable paving surfaces should be used where possible to limit excess surface runoff. Care should be exercised with stormwater design and management to limit soil erosion and any destabilisation of the embankment that is susceptible to coastal erosion.
16. The landowner's attention is drawn to the National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) (NEMBA) Alien and Invasive Species Regulations, 25 September 2020, where a landowner is legally responsible for the removal of alien vegetation on their property. The owner should formalise an Invasive Alien Vegetation Control Plan as required by the NEMBA. Large areas of Uitzicht 216 Portion 104 are invaded with Alien and Invasive Species, which poses a fire risk.
17. Compliance with the National Veld and Forest Fire Act (Act 101 of 1998) is required. The owner should join the local Fire Protection Association, if not already a member.
18. A permit from the Department of Forestry, Fisheries & the Environment (DFFE) should be attained should any protected tree species be disturbed on the property, as per the National Forests Act, 84 of 1998, as amended.
19. Should any suspected resources of heritage value be uncovered during clearing or construction, all work in the affected area must stop immediately and Heritage Western Cape (HWC) must be contacted without delay. The HWC Chance Finds Procedure and Accidental Finds Protocol, consistent with HWC's Case Decision 389121 (9 February 2026), must be implemented for the duration of construction: the find must be protected from further disturbance, its location recorded, and no further work may resume in that area until HWC has provided instructions.
20. Should coastal erosion stabilisation structures be required to safeguard any buildings/ infrastructure now or in the future, the landowner's attention is drawn to Section 15 of NEMICMA, which states:
 - 1 No person, owner or occupier of land adjacent to the seashore or other coastal public property capable of erosion or accretion may require any organ of state or any other person to take measures to prevent the erosion or accretion of the seashore or such other coastal public property, or of land adjacent to coastal public property, unless the erosion is caused by an intentional act or omission of that organ of state or other person; and
 - 2 No person may construct, maintain, or extend any structure, or take other measures on coastal public property to prevent or promote erosion or accretion of the seashore except as provided for in this Act, the National Environmental Management Act, or any other specific environmental management Act.

4.3. DETAILS OF DEVELOPMENT ALTERNATIVES

During the early design stages of the project, several layout alternatives were considered to identify a development configuration that responds appropriately to the environmental characteristics of the property, specialist input, and concerns raised during the public participation process.

The initial concept prepared by the project architect proposed a clustered layout of Environmental Use Areas (EUAs) located within the northern portion of the property near the Knysna Estuary (Figure 11). This layout provided the basis for the preliminary environmental assessment and specialist review.

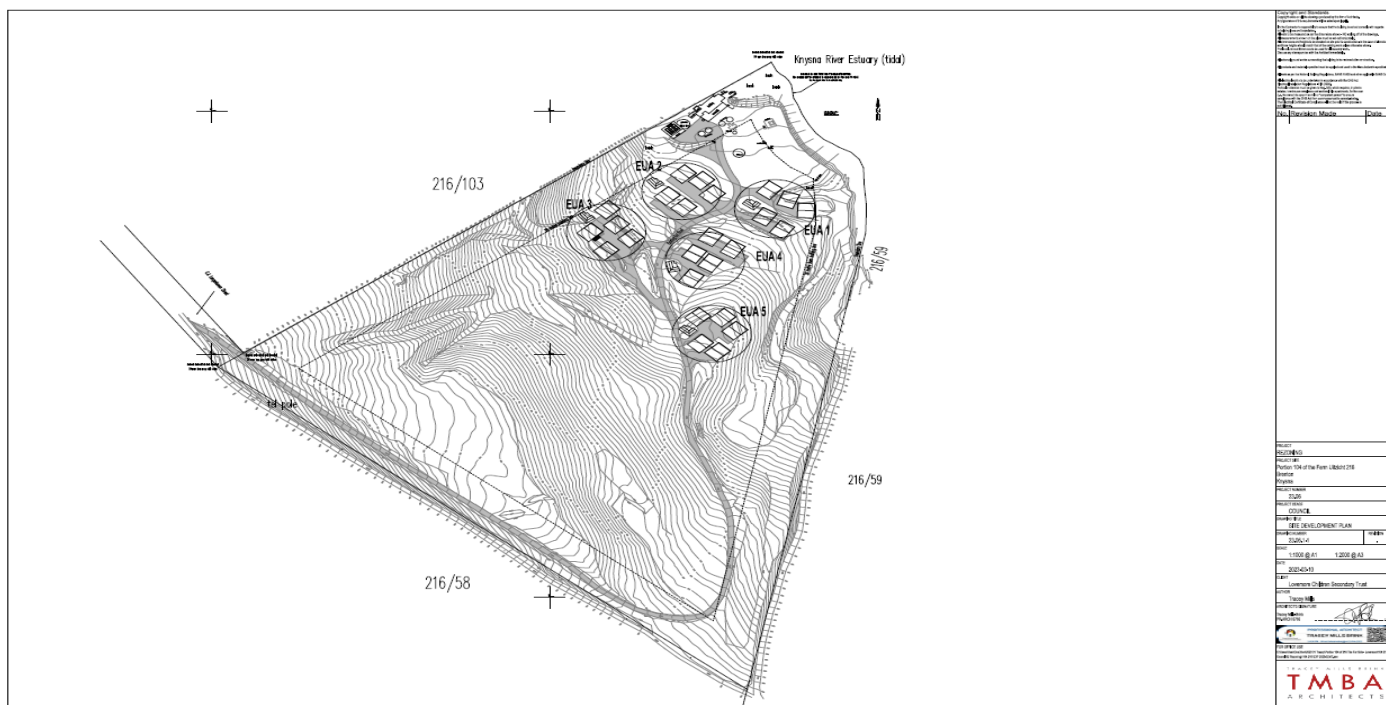


Figure 11: Alternative B - (TMBA architects, 2023)

Following ecological input identifying terrestrial Species of Conservation Concern (SCC), the layout was subsequently revised to shift certain development nodes to areas of lower ecological sensitivity. This adjustment ensured that the positioning of EJAs avoided identified sensitive habitat areas and reduced potential ecological disturbance. During later design discussions, a higher-density concept was briefly explored which considered increasing the number of potential accommodation units.

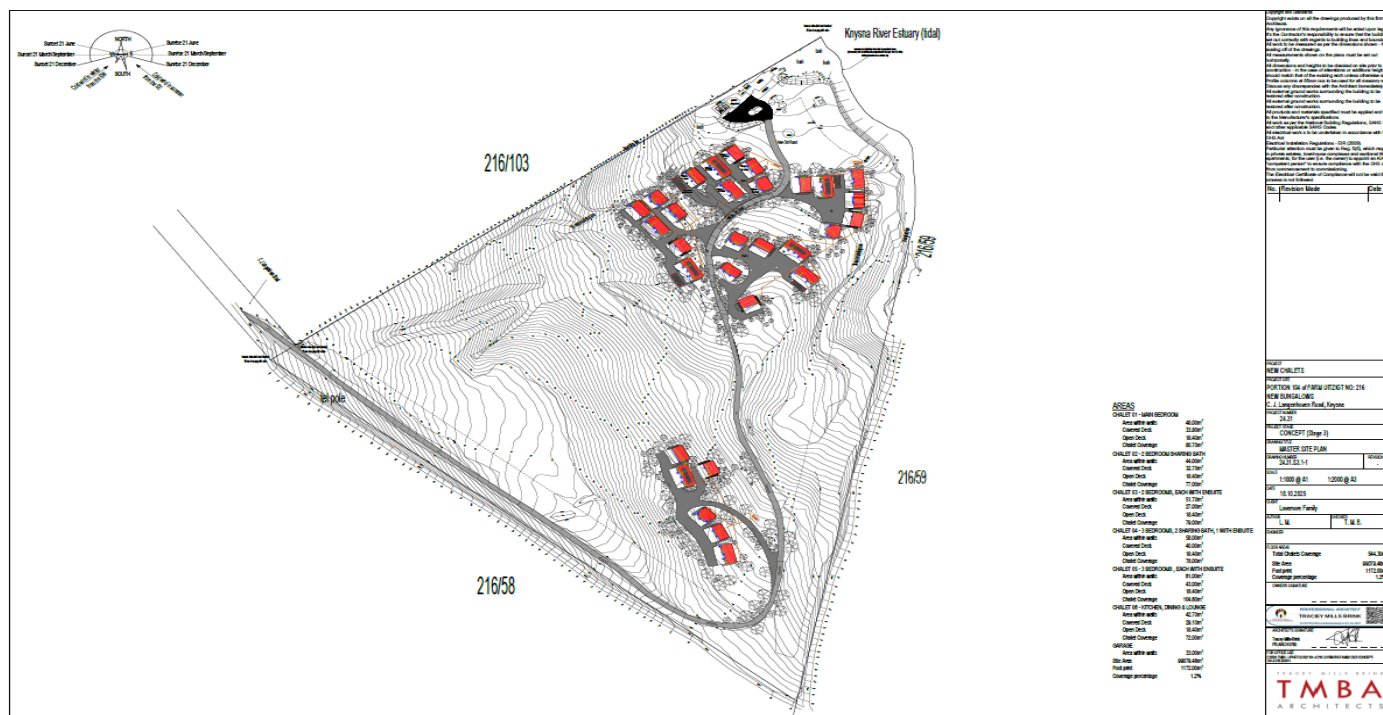


Figure 12: Alternative B 1 – (TMBA, 104 of 215 251014, 2025)

However, following further consultation with interested and affected parties, as well as internal discussions with environmental specialists and the project team, it was agreed that the density of development should remain limited in order to maintain the low-impact character of the property and to address concerns raised during the first round of public participation.

DECKS AREA PER EUA

DECK	AREA (m²)
DECK C	54.00m²
DECK D	54.00m²
DECK E	54.00m²
DECK F	54.00m²
TOTAL DECK AREA	216m²

DECK A - VEHICLE DRIVING & LOADING

Area with walls	Area without walls	Client Coverage
42.70m²	28.10m²	70.80m²

DECK B - VEHICLE DRIVING, BACKWASH DISBURSE

Area with walls	Area without walls	Client Coverage
51.70m²	27.30m²	79.00m²

NEW CHALET

Item	Area (m²)
Existing Building	187.71m²
Client Site Design	17.23m²
Top Kitchen Client Coverage	38.00m²
Top Kitchen Client Coverage	38.00m²
Site Area	1873.00m²
Pool Area	1116.70m²
Client Coverage	0.00m²

Following further review this September — including the relocation of the Bio Bloo sewage treatment units above ground in response to SANParks' recommendation — the preferred layout was further refined. The current Site Development Plan (104 of 216 SDP 2026-09-08), shown at Figure 9 above, reflects this refinement and is the version on which this Environmental Management Programme is based.

The table below provides a structured comparison across the key criteria raised during the PPP and by specialist assessments:

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Water Supply	3× JoJo tanks (5,250 L each) per EUA = 15,750 L per EUA. RWDP rainwater harvest + borehole supplement. Induction pump and filter per unit.	Rainwater collection proposed — detail not specified to this level.
Wastewater	Bio Bloo packaged treatment system — 3 units shared across the 5 EUAs (EUA 1 & 4 share one unit; EUA 2 & 3 share one unit; EUA 5 has a dedicated unit). 110 mmØ soil pipe. No French drains or conventional septic tanks. BOCMA-compliant approach.	Septic tank/French drain proposed — NOT recommended by BOCMA for this location.
Family Use Clarity	PRIVATE FAMILY ONLY — explicitly stated throughout all documentation. Framing corrected from pre-application phase.	Same intent but previous documentation created ambiguity through references to tourist accommodation.

5. ENVIRONMENTAL IMPACTS AND GENERAL MITIGATIONS

Based on the updated environmental considerations and the proposed development, the following impacts have been identified. Recommendations from specialists regarding each of the identified environmental sensitivities are provided, ensuring that the proposed activities align with best environmental practices and minimise any potential negative impacts.

5.1. Impact of Proposed Development

The following table (Table 8) will serve as a summary of the impacts of proposed development during the construction phase of the proposed development. It has been determined that the preferred alternative (Alternative A) development proposal would have a slightly lesser impact on SCC than second alternative (Alternative B).

Table 8: Summary of impacts of proposed development associated with alternative A – Construction Phase

Impact	Without Mitigation	With Mitigation
	Significance of Impact	Significance of Impact
Loss of terrestrial biodiversity	Low – negative (-)	Low – negative (-)
Loss of species of conservation concern	Low – negative (-)	Negligible – negative (-)
Disturbance / loss of faunal habitat	Medium - negative (-)	Low – negative (-)
Loss of Fauna	Low- negative (-)	Negligible – negative (-)
Sedimentation of estuarine habitat	Low- negative (-)	Negligible – negative (-)
Waste Pollution	Low- negative (-)	Negligible – negative (-)
Construction Vehicles Pollution	Low- negative (-)	Negligible – negative (-)
Noise Pollution	Low- negative (-)	Negligible – negative (-)
Visual Impact	Low – negative (-)	Negligible – negative (-)
Employment	Low – negative (-)	Negligible – positive (+)

5.2. Summary of Recommendations from Specialist Input

The specialist recommendations informing this Environmental Management Programme have been finalised for the application phase and are incorporated throughout this document — most directly in the impact and mitigation table above and the project description in Section 4 (Project Scope). These recommendations reflect the specialist inputs current as at the preparation of this Final EMP and the comments received during the Pre-Application and Application Public Participation Processes.

5.3. NO – GO Areas

The proposed development will be constructed using lightweight materials and will not require extensive excavation activities. All construction-related activities, machinery, and materials must remain strictly confined to the designated development footprint as indicated on the Site Development Plan and associated maps. Areas outside the defined working areas are to be treated as NO-GO zones and must remain undisturbed throughout the construction phase, in accordance with the recommendations of the relevant environmental specialists.

It should be noted that the existing internal access road on the property will not be reconstructed or upgraded as part of the proposed development. The road will, however, continue to be used to provide access to the various development nodes during construction and operation. For this reason, the internal road has not been indicated as a NO-GO area on the map, although its use must remain limited to access purposes only and may not be widened, realigned, or otherwise disturbed beyond its current footprint.



Figure 14: No-Go map for areas during construction phase

6. LEGISLATIVE REQUIREMENTS

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

Table 9: Relevant listed activities that require environmental authorisation

Listing Notice 1: GN No. R.327 of 2014 (as amended 2017)		
Activity	Description	Development applicability
17	Development— (i) in the sea; (ii) in an estuary; (iii) within the littoral active zone; (iv) in front of a development setback; - or (v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater; in respect of— (a) fixed or floating jetties and slipways; (b) tidal pools; (c) embankments; (d) rock revetments or stabilising structures including stabilising walls; - or (e) infrastructure or structures with a development footprint of 50 square metres or more — but excluding— (aa) the development of infrastructure and structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;	The proposed development will exceed the minimum threshold for this listed activity and will therefore require environmental authorisation. Applicable.

	(cc) the development of temporary infrastructure or structures where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared; or (dd) where such development occurs within an urban area.	
19A	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from— (i) the seashore; (ii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater; or (iii) the sea; — but excluding where such infilling, depositing, dredging, excavation, removal or moving— (a) will occur behind a development setback; (b) is for maintenance purposes undertaken in accordance with a maintenance management plan; (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies; (d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or i. where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.	Excavation quantities are to exceed the minimum threshold. Applicable.

Listing Notice 3: GN No. R.324 of 2014 (as amended 2017)

Activity	Description	Development Applicability
6	The development of resorts, lodges, hotels, tourism or hospitality facilities that sleeps 15 people or more. Western Cape: i. Inside a protected area identified in terms of NEMPAA; ii. Outside urban areas; (aa) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; or (bb) Within 5km from national parks, world heritage sites, areas identified in terms of NEMPAA or from the core area of a biosphere reserve; - excluding the conversion of existing buildings where the development footprint will not be increased.	The total sleeping capacity exceeds 15 people across the property. Even though it will be for private family use, the physical infrastructure meets the definition of facilities that "sleep 15 or more." Applicable.
12	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. Western Cape: i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; ii. Within critical biodiversity areas identified in bioregional plans; iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; iv. On land, where, at the time of the coming into effect of this Notice or	It is anticipated that more than 300m² Knysna Sand Fynbos (CR) will be cleared within 100 meters of the Knysna Estuary. Applicable.

	thereafter such land was zoned open space, conservation or had an equivalent zoning; or v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.	
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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	DEVELOPMENT APPLICABILITY
		Permit license authorization comment relevant consideration	
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.	PERMIT / LICENSE/ AUTHORIZATION / COMMENT/ RELEVANT CONSIDERATION	As per the identified 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 Authorisation.
NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT (ACT NO 10 OF 2004)	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.	PERMIT / LICENSE/ AUTHORIZATION / COMMENT/ RELEVANT CONSIDERATION	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.
NATIONAL ENVIRONMENTAL MANAGEMENT: INTEGRATED COASTAL MANAGEMENT ACT (ACT NO 24 OF 2008)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that	PERMIT / LICENSE/ AUTHORIZATION / COMMENT/ RELEVANT CONSIDERATION	The ICM Act is a specific environmental management act under the umbrella of NEMA.

	have been identified as relevant Competent Authorities.		
NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT (ACT 59 OF 2008)	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.	PERMIT / LICENSE / AUTHORIZATION / COMMENT / RELEVANT CONSIDERATION	The Waste Hierarchy will be adhered too during the construction and operational phase.
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.	PERMIT / LICENSE / AUTHORIZATION / COMMENT / RELEVANT CONSIDERATION	No protected trees will be cut, destroyed or damaged.
NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)	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.	PERMIT / LICENSE / AUTHORIZATION / COMMENT / RELEVANT CONSIDERATION	A Notice of Intent to Develop (NID) in terms of Section 38(1) and (8) of the National Heritage Resources Act (Act 25 of 1999) was submitted to Heritage Western Cape (HWC) for review of the proposed development. The submission was considered by the Heritage Officers Meeting (HOMS), and HWC issued a final comment confirming that no further heritage studies are required, as the proposed development is not expected to impact heritage resources. Heritage Western Cape further requested that the HWC Chance Finds Procedure and Accidental Finds Protocol be incorporated into the Environmental Management

			Programme (EMPr) and Environmental Authorisation conditions. These requirements will be included in the final Basic Assessment documentation and implemented during the construction phase should any heritage resources be encountered.
NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT (ACT NO 57 OF 2003)	Department of Environmental Affairs, Republic of South Africa.	PERMIT / LICENSE / AUTHORIZATION COMMENT / RELEVANT CONSIDERATION	Under the Regulations for the Proper Administration of the Knysna Protected Environment, SANParks will be consulted.

6.1. KNYSNA PROTECTED ENVIRONMENT AND DEVELOPMENT CONTROL AREA

Portion 104 of Farm Uitzicht 216 falls within the Knysna National Lake Area. The Knysna National Lake Area is a category of protected area recognised under Section 9(a) of NEM:PAA. The management authority responsible for the Proper Administration of the Knysna Protected Environment is South African National Parks (SANParks), acting in terms of Section 8 of the KPE Regulations.

The preferred alternative (Alternative A) has been designed with the development control area (DCA) provisions in mind. Specifically:

- All five Exclusive Use Areas (EUAs) and associated infrastructure have been positioned outside the 30-metre building line from the Knysna Estuary high-water mark, as indicated on the Site Development Plan (TMBA Architects, Appendix B - 104 of 216 SDP 2026-03-05).
- The aquatic specialist has recommended a minimum 10-metre rehabilitation buffer inland from the edge of the cliff, and a 36-metre vegetated buffer from the estuary, to reduce erosion and prevent sedimentation. These buffers are incorporated into the site layout and are given effect in the EMPr. No development is proposed within these buffer zones.
- The existing walkway providing access to the Knysna Estuary shoreline will be retained as-is. No new permanent structures providing access to the estuary are proposed.
- No jetty, mooring, or boat launch infrastructure is proposed on the property. The existing Brenton on Lake slipway will continue to be used by the Lovemore family in the same manner and at the same intensity as it has historically been used, with no increase in estuary users anticipated.

Notwithstanding the above, it is acknowledged that certain components of the proposed development and associated access infrastructure may fall partially within or in proximity to the 50-metre DCA boundary. SANParks' authorisation in terms of Section 8 of the KPE Regulations will be formally sought for any development within the DCA, prior to commencement of any construction activity in that zone. SANParks will be provided with the final Site Development Plan and will be given the opportunity to impose conditions on any activity within the DCA as part of its authorisation process.

6.2. COASTAL PROTECTION ZONE

The property falls within the Coastal Protection Zone (CPZ) as defined in NEM:ICMA. The CPZ extends up to 1 kilometre from the high-water mark, which encompasses the entire property. The following provisions of NEM:ICMA are relevant:

- Section 62 prohibits any activity that would have an adverse effect on the character, integrity, or social value of the coastal environment, unless authorised under the Act or another applicable law. The proposed development, being a low-impact private family facility with a 0.9% site coverage, does not adversely affect the character of the coastal environment. Appropriate setbacks from the estuary edge are maintained.
- Section 63 requires that organs of state take measures to manage and protect the coastal environment. This obligation informs the conditions that DFFE and SANParks may impose on the proposed development.
- Section 15 of NEM:ICMA provides that no person may construct, maintain, or extend any structure on coastal public property to prevent or promote erosion or accretion of the seashore, except as provided for in the Act. The applicant is aware of this provision. The proposed development does not involve any structures on coastal public property. The rehabilitation measures recommended by the aquatic specialist, specifically the re-vegetation of the cliff-edge and estuary buffer areas using appropriate indigenous species, are management measures on private property and do not contravene Section 15.

The applicant further acknowledges the risks associated with coastal erosion and storm surge in this location, as highlighted by SANParks during the PPP. Adequate setbacks from the cliff edge have been applied in the site layout, consistent with CPZ setback requirements, to safeguard both the development and the coastal zone from future climate-change related coastal risks.

6.3. NATIONAL FORESTS ACT — PROTECTED TREES

Two nationally protected tree species were identified on the property during the terrestrial biodiversity specialist assessment:

- *Afrocarpus falcatus* (Outeniqua Yellowwood)
- *Sideroxylon inerme* (White Milkwood)

In terms of the National Forests Act (Act 84 of 1998, as amended), these species may not be damaged, removed, or relocated without a permit issued by DFFE. The preferred alternative has been designed to avoid disturbance to these species. Should it be determined during the pre-construction phase that any protected tree requires disturbance, a separate permit application will be submitted to DFFE prior to commencement of any work in that area.

6.4. ALIEN AND INVASIVE SPECIES

The property supports significant stands of alien and invasive plant species, which pose a fire risk and suppress the recovery of indigenous Knysna Sand Fynbos. In terms of the National Environmental Management: Biodiversity Act (NEM:BA), Act No. 10 of 2004, and the Alien and Invasive Species Regulations (25 September 2020), the landowner is legally responsible for the management and removal of listed invasive species on their property.

An Invasive Alien Species (IAS) Management Plan will be developed for the property and will form part of the Final BAR submission as an integrated component of the EMPr. The applicant further undertakes to become a member of the Southern Cape Fire Protection Agency, consistent with the requirements of the National Veld and Forest Fire Act (Act 101 of 1998), to ensure that fire management obligations are properly discharged.

The landowner is a current member of the Southern Cape Fire Protection Agency; proof of membership will be obtained and formally recorded in the Final BAR. A dedicated Fire Management Plan will be included in the Final BAR as a further integrated component of the EMPr, cross-referenced with the IAS Management

Plan above. All fire-related mitigation, prevention and response actions for the property will be developed and undertaken in consultation with the Southern Cape Fire Protection Agency, given the highly flammable, fire-dependent nature of the surrounding Knysna landscape.

6.5. HERITAGE RESOURCES

A Notice of Intent to Develop (NID) in terms of Section 38(1) and (8) of the National Heritage Resources Act (Act 25 of 1999) was submitted to Heritage Western Cape (HWC) for review of the proposed development. The submission was considered by the Heritage Officers Meeting (HOMS), and HWC issued a final comment confirming that no further heritage studies are required, as the proposed development is not expected to impact heritage resources. Heritage Western Cape further requested that the HWC Chance Finds Procedure and Accidental Finds Protocol be incorporated into the Environmental Management Programme (EMPr) and Environmental Authorisation conditions. These requirements will be included in the final Basic Assessment documentation and implemented during the construction phase should any heritage resources be encountered.

7. CONDITIONS OF APPROVAL

All conditions of the Environmental Authorisation will be added into this section. If it is not included in this document, then it should be noted that this is not the final approved EMPr.

Recommended Conditions of Authorisation (in addition to those issued by the competent authority):

8. ADMINISTRATION OF THE EMPR

The following section outlines the guidelines that will remain in effect until all components of the proposed development are fully completed, including site rehabilitation and the fulfilment of all contractor responsibilities. As the operational phase of the development has been assessed to have a low environmental impact, the EMPr will conclude once the final operational phase audit report confirms that all requirements have been satisfactorily met.

8.1. Phasing of the EMPr

The following provides clear distinction for the different phases of the proposed development –

Pre – construction phase:

This phase refers to all actions that need to proceed prior to the first physical implementation of activities related to the proposed development. Examples include (but are not limited to) the demarcation of recommended NO-GO areas. During this part of the pre-construction phase, all necessary mitigations must be in place before the physical execution of construction activities.

Construction phase:

This phase involves the physical construction and related activities necessary for development as described in the final environmental authorisation.

“The preferred alternative provides for the development of five (5) Exclusive Use Areas (EUAs), each comprising six (6) elevated deck platforms. The EUAs are positioned across the middle to upper portions of the property, within existing disturbed areas and away from the highest-sensitivity ecological zones, as informed by the terrestrial biodiversity, faunal, aquatic, and visual specialist assessments. All five EUAs are located outside the 30-metre building line from the Knysna River Estuary high-water mark and outside the aquatic specialist's recommended estuary-buffer zone.

All structures are elevated on stilts, there is no concrete slab or hard surface at ground level beneath the platforms. This design minimises disturbance to soil structure, natural drainage, and the movement of small fauna. Lightweight timber and prefabricated modular components are used, reducing the need for heavy machinery and limiting the import of construction materials onto the site.”

Operational phase:

This phase refers to the period when the constructed facilities are available for use. Confirmation of the operational phase marks the end of all construction related to all the proposed development structures.

Rehabilitation and Maintenance phase:

Rehabilitation and maintenance should be conducted during all phases of the development to minimize environmental impact and ensure that the post-construction rehabilitation workload does not become a burden on the applicant and contractor. Essentially the idea is to keep the surrounding environment intact. To have the environment represent a better state than before the proposed development of as near as originally assessed.

Decommission phase:

It is not expected that the proposed development will be decommissioned. However, once the operational phase reaches its end, decommissioning will involve removing the operating assets of the development.

8.2. Revisions of the EMPr

The EMPr is an integral part of the environmental application documentation and cannot be significantly amended without applying to the competent authority and undergoing public participation.

It is also recommended that the EMPr be reviewed during external audits, which will serve as the primary mechanism for suggesting amendments. The secondary mechanism will originate from such recommendations from the appointed Environmental Control Officer (ECO).

Any deficiencies identified within the EMPr should be addressed through the preparation of detailed method statements, outlining how tasks will be executed and how environmental impacts will be mitigated.

Clarification on method statements:

The Contractor may be required to provide Method Statements for approval by the ECO to work commencing on aspects of the project which are deemed to be, or identified as being, of greater risk to the environment, and/or which may not be covered in sufficient detail in the EMPr, when called upon to do so by the ECO.

A Method Statement is a "living document" in that modifications are negotiated between the Contractor, the ECO, and the project management team, as dictated by circumstances. All Method Statements will form part of the EMPr documentation and are subject to all terms and conditions contained within the EMPr. Note that a Method Statement is a 'starting point' for understanding the nature of the intended actions to be carried out and allows for all parties to review and understand the procedures to be followed in order to minimise risk of harm to the environment.

Changes to, and adaptations of Method Statements can be implemented with the prior consent of all parties. A Method Statement describes the scope of the intended work in a step-by-step description in order for the ECO and the Principal Agent to understand the Contractor's intentions. This will enable them to assist in devising any mitigation measures, which would minimise environmental impact during these tasks. For each instance where it is requested that the Contractor submit a Method Statement to the satisfaction of the PA and ECO, the format should clearly indicate the following:

The format of method statements should clearly indicate the following:

What	A Brief description of the work to be undertaken
How	A detailed description of the process of work, methods, and materials
Where	A description / sketch map of the locality of work
When	The dates which are due for commencement and completion dates estimates
Who	The person responsible for undertaking the works described in the method statement

Examples of method statements that the ECO may require include (but are not limited to) dust management, storage of hazardous materials (if applicable).

8.3. Monitoring and Compliance

It is clearly defined in the EMPr what is expected in terms of implementation of mitigation recommendations. The effectiveness of implementation of proposed mitigation recommendations and compliance therewith must be monitored.

8.3.1. Frequency

- It is recommended that the appointed Environmental Control Officer (ECO) visit the proposed development site at least once during the pre-construction phase, unless otherwise determined at the discretion of the ECO, to establish a baseline of site conditions and confirm the implementation of pre-construction recommendations. During the construction phase, the ECO should conduct two (2) site visits per month, and once (1) per month during the operational phase, continuing until the final external audit is completed to monitor and report on rehabilitation compliance.
- The ultimate authority is hereby given to the ECO to establish the necessity of frequency of site visits. This document only highlights the recommended frequency and must therefore be arranged by the ECO.

8.3.2. Reporting procedure of monitoring and compliance

- It is stipulated (under roles and responsibilities) that an ECO must be appointed, and that it is the responsibility of the ECO to do regular site inspections to gather evidence of compliance against the EMPr.
- The ECO should then compile a site inspection report that highlights the findings and serves as documented evidence of compliance with the recommendations and requirements outlined in this report. This report will form part of the ongoing monitoring process, ensuring that all environmental guidelines and best practices are adhered to throughout the development phases.

Reporting procedure of non-compliance:

The non-compliance is defined as, and will be issued for:

- Any deviation by the Applicant from the environmental conditions and requirements as set out in the EMPr, or;
- Any contravention by the Applicant of environmental legislation, or;
- Any unforeseen environmental impact resulting from direct or indirect actions or activities on site that would be considered as a significant impact. Significance will be determined by the ECO but will be informed by geographic extent, duration, lasting effects of the impact and extent of remediation to the impact.

Types of non-compliances issued:

Two types of non-compliances may be issued:

A. Stop Works Non-Compliance

Stop Works Non-Compliance will require that all works as described in the non-compliance will stop immediately and may only continue on a formal written permission from the ECO.

Stop Works Non-Compliance will be issued under the following conditions:

- Total disregard by the Applicant to the environmental conditions and requirements listed in the EMPr;
- An activity that if left unattended will escalate the degree, severity or extent of the environmental impact.

B. General Non-Compliance

A general non-compliance will allow work and activity by the receiving party to continue while the corrective action takes place.

A Non-Conformance Report (NCR) will be issued to the Applicant as a final step towards rectifying a failure in complying with a requirement of the EMPr. This will be issued by the ECO to the Applicant in writing.

Preceding the issuing of a NCR, the Applicant must be given an opportunity to rectify the issue.

Should the ECO assess an incident or issue and find it to be significant (e.g. non-repairable damage to the environment), it will be reported to the relevant authorities and immediately escalated to the level of an NCR.

The following information should be recorded in the NCR:

- Details of non-conformance;
- Any plant or equipment involved;
- Any chemicals or hazardous substances involved;
- Work procedures not followed;
- Any other physical aspects;
- Nature of the risk;
- Actions agreed to by all parties following consultation to adequately address the non-conformance in terms of specific control measures and should take the hierarchy of controls into account;
- Agreed timeframe by which the actions documented in the NCR must be carried out; and
- ECO should verify that the agreed actions have taken place by the agreed completion date, when completed satisfactorily; the ECO and Applicant should sign the Close-Out portion of the Non-Conformance Form and file it with the contract documentation.

If no remediation occurs for the reported non-compliances, the non-compliances will be communicated to the appropriate municipality and competent authority whereby financial implications will be determined.

8.4. Audits

Two construction audits are required prior to handover to the applicant. The first must commence within a year of the start of construction phase. Followed by a second within 30 days of the final construction phase completion activity.

Audits must be completed by an independent party (who is not the ECO or the appointed EAP) and must comply with the requirements of regulation 34 of the EIA regulations, 2014 (as amended). The contents of the environmental audit report must comply with Appendix 7 of the EIA regulations.

8.5. Clarified Roles and Responsibilities

The following section outlines roles and responsibilities to clarify the position of parties relevant to the proposed development. These roles remain fixed, unless otherwise mutually agreed upon by the relevant parties.

8.5.1. The Applicant / Holder of the EA

The holder of the EA / property owner is the overseeing entity responsible for ensuring that all activities undertaken on the property comply with the Environmental Authorisation (EA) and associated Environmental Management Programme (EMPr) (& any other approval / licence / permit).

Actions relate (but are not limited to) –

- Ensure that that all tender documentation include reference to, and the need for compliance with, the EA and EMPr as well as any other legally binding documentation.
- Ensure that all employed Contractors and Engineers are aware of and understand the conditions of the EMPr (Include the EMPr in all tender documents)

- The right to remove any person or appointed contractors or personnel from site if they contravene with the EMPr.
- Appoint an Environmental Control Officer.
- The project Applicant (holder of the Environmental Authorisation of the EMPr) must notify the competent authority of the commencement of maintenance management activities 14 days prior to such commencement taking place.

8.5.2. The ECO

The ECO's duties, inter alia, must be to ensure compliance with the EMPr through monitoring, and through proactive and open communication with the project/

The ECO's responsibility should include (but are not limited to) the following:

- Monitoring and verifying that the EMPr is adhered to at all times and taking action if the specifications are not followed.
- To environmentally educate and raise the awareness of the Contractor and his staff as to the environmental requirements relating to the Site and to facilitate the spread of the correct attitude during works on Site.
- To take immediate action on Site where clearly defined and agreed no-go areas are violated or are in danger of being violated.
- Monitoring and verifying that environmental impacts are kept to a minimum.
- Reviewing and approving construction method statements together with the PA.
- Assisting the Contractor in finding environmentally responsible solutions to problems.
- Keeping records of all activities/ incidents on Site in a Site Diary concerning the environment.
- Inspecting the Site and surrounding areas regularly (minimum monthly) with regard to compliance with the EMP (note that this could be reduced further in consultation with the environmental officer at SPM in the case of low activity on Site but would need to be increased to weekly inspections during high risk/high activity work).
- Keeping a register of complaints and report these first to the PA for action and follow-up.
- Requesting the removal of person(s) and/or equipment not complying with the specifications (done via the PA).
- Recommending the issuing of penalties for transgressions of environmental Site specifications to the PA.
- Completing start-up, monthly, and Site closure checklists and reports.
- Keeping a photographic record of progress on Site from an environmental perspective.
- Undertaking a continual internal review of the EMPr and making recommendations to the PA.

Site Visit Frequency:

- It is recommended that the appointed Environmental Control Officer (ECO) visit the proposed development site at least once during the pre-construction phase, unless otherwise determined at the discretion of the ECO, to establish a baseline of site conditions and confirm the implementation of pre-construction recommendations. During the construction phase, the ECO should conduct two (2) site visits per month, and once (1) per month during the operational phase, continuing until the final external audit is completed to monitor and report on rehabilitation compliance.

Environmental induction and training

- It will be the responsibility of the ECO to provide adequate environmental awareness training of senior site personnel takes place and that all construction workers receive an induction presentation on the importance and implications of the EA and EMPr.

- Where staff turnover is high and with additional appointment of Sub-contractors, it may be necessary to undertake additional induction training sessions. The Contractor must keep records of all environmental training sessions, including names, dates and the information presented.

8.5.3. The Engineers and Contractors

The responsibilities indicated here are also relevant to Sub-Contractors. The responsibilities of the Engineers and Contractors include but are not limited to the following:

- Adhere with the conditions and recommendations of the EMPr or any other legally binding documentation.
- Prevent actions that may cause harm to the environment.
- Be responsible for any remedial activities in response to an environmental incident within their scope of influence.
- Ensure compliance of all site personnel and / or visitors to the EMPr and any other authorisations.

9. PRE - CONSTRUCTION PHASE ENVIRONMENTAL MANAGEMENT PROGRAMME

Activity	Management / Mitigation	Responsibility	Frequency / Timing
9.1. Stormwater Management	Apply the principles of Low Impact Development (LID) in the design of the drainage systems. Final design of the stormwater system must take place prior to construction to ensure timeous implementation.	Applicant / Architect	Once off
9.2. Water Resource Protection	Rainwater harvesting		
	Rainwater harvesting must be incorporated into the designs. All rainwater tanks must be shown on building plans	Applicant / Architect	Once off
	Efficient water use		
	- Water efficiency must be incorporated into the design of the units (e.g.,) - - Dual flush toilets - Low flow shower head - Low flow taps - Waterwise landscaping - Reuse greywater	Applicant / Architect	Once off
9.3. Development preparation	Site demarcation / NO-GO areas and site setup		
	- Clearly identify and demarcate the development area, area of works and spoiling areas. (all areas outside the demarcated workspace will be considered NO-GO areas). - To ensure that the ecological integrity of the surrounding environment is maintained and preserved, the Applicant and contractor must ensure that the construction footprint is limited to the construction area. The extent of the construction must be marked out to satisfaction of the engineer and ECO. - Set up the site camp in a designated, level area away from sensitive environments, ensuring it includes secure storage for materials, sanitary facilities, and clear boundaries. - Install temporary utilities, safety signage, and waste management systems in compliance with environmental and safety regulations.	Applicant / Contractor	Once off (the frequency may be ongoing, depending on the state of demarcation)
	Method statements		
	Method Statements must be submitted by the Applicant/ Contractor to the ECO and must be adhered to by the Applicant/ Contractor. These relate to:	Applicant/ Contractor	Prior to commencement of construction and during construction (if necessary)

	- water and stormwater management requirements, - dust management - solid waste management requirements, - the storage of hazardous materials (if applicable), and - standard emergency procedures.		
	Appointment of Environmental Control Officer (ECO)		
	• An Independent ECO must be appointed at the Applicant's cost to monitor the implementation of the EMPr. • It will be the responsibility of the ECO to provide adequate environmental awareness training of senior site personnel takes place and that all construction workers receive an induction presentation on the importance and implications of the EA and EMPr. • All contractors, sub-contractors and casual labourers must acknowledge their understanding of the EMPr and environmental responsibilities by signing an induction attendance record.	Applicant / ECO	Once off
9.4. Fauna and Flora Pre-Construction Search-and-Rescue	Species of Conservation Concern (SCC) search-and-rescue		
	• Before construction commences in each demarcated construction phase footprint, a Fauna Specialist and the ECO must conduct a walk-through of that footprint to confirm that all fauna with limited mobility and/or of conservation concern have been successfully removed or have vacated, per the faunal specialist report's ECO checklist (Appendix 7). • Construction may not commence in that footprint until this is confirmed. • A Botanical Specialist must separately assess each demarcated footprint for the presence of butterfly larval host plants (<i>Aspalathus</i> spp., <i>Chrysanthemoides incana</i>, <i>C. monilifera</i>, <i>Indigofera erecta</i>, <i>Lebeckia plukenetiana</i>, <i>Osteospermum polygaloides</i>, <i>Thesium</i> spp., <i>Zygophyllum</i> spp.) and for host ant colonies (including but not limited to <i>Crematogaster peringueyi</i>, <i>Camponotus baynei</i>, <i>Anoplolepis custodiens</i>, <i>Lepisiota capensis</i>). • Where a host plant is found, it must be transplanted under the Botanical Specialist's supervision to an appropriate natural area as close as possible to its original location, marked, and monitored until established.	Applicant / Fauna Specialist / Botanical Specialist / ECO	Prior to the start of each construction phase

	Where an active host-ant colony is found, construction must be halted in that specific area and the ECO must notify Eco Route and the relevant specialist before work proceeds in that location.		
9.5. Golden Mole Mitigation	Golden mole tunnelling areas		
	- Evidence of golden mole sub-surface tunnelling has been recorded on the property, particularly in the lawn area. - As part of the pre-construction fauna walk-through above, the ECO must specifically identify and demarcate any areas of active golden mole tunnelling within the construction footprint. - Construction staff must receive awareness training, as part of the standard site induction, on recognising golden mole tunnelling and avoiding unnecessary disturbance to demarcated tunnelling areas. - Should previously unidentified active tunnelling be exposed during construction, the chance-find procedure applies: work must stop in the immediate area, the ECO must be notified, and work may only resume in that area once the ECO has assessed the find and advised on any further avoidance or mitigation measures required.	Contractor / ECO	Prior to and during construction

10. CONSTRUCTION PHASE ENVIRONMENTAL MANAGEMENT PROGRAMME

Activity	Management / Mitigation	Responsibility	Timing / Frequency
10.1. Soil Erosion and Stormwater Management	- Stringent mitigation measures must be imposed during construction to minimise runoff, possible silt run-off and contamination of water leaving the site (especially into the adjacent 'natural' areas), with the use of silt-fencing, rows of onion bags, mulch, brushwood, sandbags, and deflection berms (the choice depending on the situation). - Exposure of bare surfaces must be kept to a minimum to restrict stormwater runoff towards the Knysna Estuary. - Any erosion channels developed during construction causing surface runoff must be backfilled, compacted and restored to an acceptable condition. - Ensure that stormwater and runoff generated by hardened surfaces is discharged in retention areas (i.e. swales or retention ponds), to avoid concentrated runoff and associated erosion. - Implement the use of sedimentation traps if and when determined necessary by the ECO. - In areas where construction activities have been completed and where no further disturbance would take place, rehabilitation and re-vegetation should commence as soon as possible. A suitable rehabilitation method statement must be submitted to the ECO for approval. - Use the stormwater management plan for in depth management of the stormwater during construction phase. * Take note of all recommendations made by specialist to minimize stormwater runoff towards the Knysna Estuary.	Applicant / Contractor	Ongoing
10.2. Dust Control	- Implement a dust prevention strategy as presented by method statement. - This strategy must include - Speed control to minimise dust on site. - During dry, dusty periods haul roads should be kept dampened to prevent excess dust. No potable water or seawater may be used for damping haul roads. - Exposed stockpile materials must be adequately protected against wind (covered) and should be sited taking into consideration the prevailing wind conditions.	Contractor	Ongoing

	- Trucks bringing in materials must be covered to prevent dust and small particles escaping and potentially causing damage to people and property.		
10.3. Noise Control	• Construction activities must only take place during normal working times between 07:00-17:00 on weekdays. • Machinery may be fitted with silences to dampen noise upon receiving complaints • Staff must be reminded that they are working within a residential area and noise levels must be kept low.	Contractor	Ongoing
10.4. Traffic Control	• No vehicles may drive onto the adjacent properties and any other NO-GO areas. • No vehicles are to park or operate within "no-go" areas	Contractor	Ongoing
10.5. Waste Management	• Provide refuse bins around site designated for the different types of generated waste (e.g., general waste, refuse, construction material). • Refuse bins will be responsibly emptied and secured. • Temporary storage of domestic waste shall be in covered and secured waste skips. • Dangerous waste such as metal wires and glass must be safely stored before being moved off site as soon as possible. • <u>Under no circumstances</u> may domestic waste <u>be burned</u> on site or buried on open pits. • Separation and recycling of different waste materials should be supported. • Littering on the site is forbidden and the site shall be cleared of litter at the end of each working day.	Contractor	Ongoing
10.6. Stockpile Management	• Keep stockpiles on site to a minimum. • Keep topsoil and underburned stockpiles separate. • Locate stockpiles away from drainage lines, at least 10 metres away from natural waterways and where they will be least susceptible to wind erosion. • Ensure that stockpiles and batters are designed with slopes no greater than 2:1 (horizontal/vertical). • Stabilise stockpiles and batters that will remain bare for more than 28 days by covering with mulch or anchored fabrics or seeding with sterile grass.	Contractor	Ongoing

10.7. Storing fuels and chemicals	- Though unavoidable, fuels and chemicals stored on site must be kept to a minimum. - 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. These areas must not be located within any natural drainage areas or preferential flow paths and must be located outside of buffer zones.	Contractor	Ongoing
10.8. Cement Batching	- The mixing of cement must be done on Rhino board. - All concrete batching must take place on an area that is to be hard surfaced as part of the development. - Concrete mixing areas must have bund walls or a settling pond in order to prevent cement run off. Once the settling ponds dry out, the concrete must be removed and dispatched to a suitable disposal site. - When using Readymix concrete, care must be taken to prevent spills from the trucks while offloading. This form of batching is preferable for large constructions as no on-site batching is required and there is a lesser likelihood of accidental spills and run off. Trucks may not be washed out on site.	Contractor	Ongoing
10.9. Fauna and Flora management	- Mark off the areas that are not going to be developed prior to undertaking any works and ensure that no unnecessary loss of adjacent vegetation occurs. - In situations fauna species are located at the site and need to be removed, the relevant specialists must be contacted to advise on how the species can be relocated. - No trapping, killing, or poisoning of any wildlife is to be allowed and Signs must be put up to enforce this. Monitoring must take place in this regard.	Contractor / ECO	Ongoing
10.10. Human-Wildlife Conflict Mitigation	- All construction waste and food-related materials must be stored in wildlife-secure, fully enclosed containers at all times. - Construction lighting must be directed and shielded to minimise disturbance to nocturnal fauna. - Construction staff must be briefed on avoiding contact with, feeding, or attracting wildlife on site.	Contractor / ECO	Ongoing

10.11. Ablution facilities	• Toilets at the recommended Health and Safety standards must be provided. Portable toilets must be emptied regularly to prevent overflow. Once no longer required, they must be pumped dry to prevent leakage into the surrounding environment and removed from site. • Toilets facilities must comply with local authority regulations, shall be maintained in a clean and hygienic condition. Their use shall be strictly enforced. They must be positioned in an appropriate place, also taking into consideration, gradient of the land. • The Contractor must ensure that toilets are cleaned weekly or more regularly, if found to be necessary. • Unauthorised spilling of waste from the septic tank into the environment and burying of waste are strictly prohibited. • Ablution facilities must not cause any pollution to any water resource, and it must not be a health hazard to the general public.	Contractor	Ongoing
10.12. Social Requirements	• It is strongly recommended that the Contractor make use of local labour as far as possible for the construction phase of the project. • Theft and other crime associated with construction site are not allowed • A complaints register must be kept of all received complaints and delt with immediately.	Contractor	Ongoing
10.13. Heritage Requirements	• If any archaeological sites/materials are exposed, mitigation regarding the finds must be conducted with the Heritage Western Cape regarding the destiny of the material. Examples of heritage resources are as follow: - Human remains - Coins/Gold/Silver - Fossils - Fossils shell middens/ marine shell heaps - Pottery/ceramics	Applicant / Contractor	

10.14. Road-Specific Construction Measures	• Where construction traffic uses or affects the existing access road, the footprint of works associated with the road must be clearly demarcated and confined to the existing, disclosed disturbed footprint of that road (BAR Section 2.4, Access and Traffic). • No stockpiling of materials, spoil, or equipment is permitted on the road or its verges outside the demarcated footprint. • No passing bays, turning areas, or other ancillary construction activity may be established outside the existing disturbed footprint of the road. • Any additional turning or laydown area required for construction vehicles must be sited within the footprint of planned hard surfaces (e.g., the camping platform) as already provided for under Development preparation, above, and not by widening or expanding the road itself.	Contractor / ECO	Ongoing
	• If Heritage Western Cape agrees to the removal of the material, an archaeologist must apply for a permit to scientifically excavate/collect the material.		
10.15. Visual Mitigation	• Minimise exposure of working area by limiting the visibility of construction sites from sensitive receptors by using temporary barriers or screens, such as fencing or shade cloth. • Schedule construction activities during times when visual impacts are less critical (e.g., outside of tourist seasons or high-traffic periods) to reduce the visual impact on surrounding areas. • Store and organize construction materials in less visible areas to reduce the clutter and visual disturbance of scattered materials and equipment.		

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11. OPERATIONAL PHASE ENVIRONMENTAL MANAGEMENT PROGRAMME

Activity	Management / Mitigation	Responsibility	Timing / Frequency
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11.1. Stormwater management	- A sustainable stormwater design must be implemented to prevent excessive run-off that will lead to erosion of the surrounding landscape. - Runoff from the roof of the new buildings should be fed into an existing formal stormwater drainage system (if present) or directly infiltrate into soft landscaped areas surrounding the building. - Erosion prevention and control measures must be implemented by use of organic mulch or sandbags to contain all sediment and prevent erosion during rehabilitation. - Use the stormwater management plan for in depth management of the stormwater during operational phase. * Take note of all recommendations made by specialist to minimize stormwater runoff towards the Knysna Estuary.	Applicant / Architect / Contractor	Once off
11.2. Waste Management	- No waste may be disposed of anywhere else if not designated as a waste disposal area (disturbance zone). All waste must be disposed of in appropriate municipal or other authorised dumping sites. - NO Dumping of garden refuse on any part of the property or neighbouring areas is permitted.	Applicant	Ongoing
11.3. Sewage Management	Sewage Treatment - effluent quality & reuse		
	- Treat effluent to the standard general limits set by the Department of Water and Sanitation. - Reuse all treated water internally within the EUA no treated water is to be used for irrigation or otherwise discharged to the environment. - Desludge via licensed private contractor by off-site removal when required.	Applicant	Ongoing
	Sewage System Siting		
	Each sewage system plant must be situated landward of the 36 m buffer from the edge of the Knysna Estuary, above the 1:100 flood line.	Applicant	Ongoing
	Malfunction Detection & Contingency		
	- Each sewage system must have the potential to indicate malfunction by means of indications. - If any of the treatment levels are exceeded it must be reported. - In the case of contamination or treatment malfunction, all processing and internal water recirculation must stop, and the responsible party for restoration must be contacted within 24 hours of detection. SANParks must be notified of any malfunctions.	Applicant	Ongoing

11.4. Confirmed Maximum Occupancy	- The property's binding maximum occupancy is 8 people per Exclusive Use Area (EUA) at any one time, and a maximum of 60 registered Lovemore family members and Lovemore Children's Secondary Trust beneficiaries in total across the property at any one time. - This limit has been cross-checked against the rated treatment capacity of the Bio Bloo sewage systems: each EUA is served by its own BIOBLOO® BUG4 below-ground packaged sewage treatment plant, rated to treat 4 000 litres per day and to cater for 12 to 16 people per day (FLUIDCO (Pty) Ltd Project Proposal, ref. BB BUG4 TMBA LOVEMORE KL15925). - The confirmed limit of 8 people per EUA falls comfortably within this per-unit rating, and the property-wide limit of 60 people falls within the aggregate rated capacity of the five installed units (60-80 people per day). - No change to the treatment process or effluent standard is required as a result of directing treated effluent to a closed-loop, non-potable reticulation system (toilet flush and outdoor taps only, with no discharge to a public watercourse) rather than surface irrigation reuse: the plants are already designed and rated to the South African Department of Water and Sanitation General Limits Standard, which governs this category of reuse.	Applicant	Ongoing
11.5. Desludging / Sewage System Servicing Access	- Each Bio Bloo sewage treatment unit must remain accessible to a licensed private waste contractor for desludging, in accordance with the manufacturer's rated service interval (approximately every 10 years under normal operating conditions). - A defined vehicle access route to each unit must be maintained that does not require any new road, parking area, or disturbance outside the existing, disclosed access footprint, and does not encroach on the 36 m Knysna Estuary buffer or any other no-go area. Desludged material must be removed off-site by the licensed contractor for disposal at an appropriately licensed facility.	Applicant	Approx. every 10 years, or per manufacturer guidance
11.6. Alien Invasive Plants	- 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. - Minimise disturbance to the natural vegetation using low impact manual labour techniques. - Reduce fire hazard on site.	Applicant	Ongoing

11.7. Human-Wildlife Conflict Mitigation	All waste and food-related materials must be stored in wildlife-secure, fully enclosed containers at all times during operation. Outdoor lighting must be directed and shielded to minimise disturbance to nocturnal fauna. Occupants must be briefed on avoiding contact with, feeding, or attracting wildlife.	Applicant	Ongoing
11.8. Fire Management	Fire prevention, vegetation clearing, and fire response measures must be undertaken in consultation with, and in accordance with the requirements of, the Southern Cape Fire Protection Agency, of which the landowner is a current member. Cross-reference the Fire Management Plan and IAS Management Plan.	Applicant	Ongoing
11.9. Visual Mitigation	- Use natural elements to minimise the visual impact. These may include but are not limited to form, colour, texture etc. - Plant and maintain indigenous vegetation around structures and exposed areas to blend the development into the surrounding landscape. - Install low-glare, downward-facing lights to minimize light pollution and visual impact at night.		
11.10. Noise Mitigation	- A maximum allowable noise level (reference the SANS 10103 standard, or align with the GRNP MP Zonation categories SANParks will apply to the property under the CNP arrangement) - Hours of occupation, define quiet hours (e.g. 22:00–07:00) as a binding site rule enforced by the Responsible Person - A prohibition on amplified music, generators, and motorised watercraft beyond specified decibel levels or times.		

Mitigation Measure NM-1: Maximum Allowable Noise Levels

The operation of all activities on Portion 104 of Farm 216 shall comply with the noise limits prescribed in SANS 10103: 2008 (The Measurement and Rating of Environmental Noise with Respect to Annoyance and to Speech Communication). Where a formal stewardship arrangement is concluded with SANParks under the Garden Route National Park Management Plan (GRNP MP), the noise standards applicable to the relevant GRNP MP Zonation category assigned to each sector of the property shall be applied. In the event of conflict between SANS 10103 and the GRNP MP Zonation standards, the more stringent standard shall prevail. The Responsible Person shall obtain confirmation from SANParks of the applicable Zonation category and associated noise standards within 60 days of the date of Environmental Authorisation, and shall ensure these are reflected in the Property Site Rules.

Mitigation Measure NM-2: Quiet Hours and Hours of Occupation

*The Responsible Person shall establish and enforce binding quiet hours for all persons occupying or visiting Portion 104 of Farm 216. Quiet hours shall apply from **22:00 to 07:00 daily**, during which all outdoor noise-generating activities shall cease or be reduced to ambient background*

levels. The quiet hours requirement shall be included in the Property Site Rules document (see NM-4 below), signed by all occupants prior to each visit. Compliance with quiet hours shall be the personal responsibility of the adult trustee or family member accompanying each group of occupants. Persistent non-compliance shall be grounds for suspension of access to the property, at the discretion of the Responsible Person.

Mitigation Measure NM-3: Prohibition on Amplified Sound, Generators and Motorised Watercraft

The following noise-generating equipment and activities are prohibited on Portion 104 of Farm 216 unless explicitly permitted by the Responsible Person in writing and subject to the noise level limits in NM-1:

- Amplified music or sound equipment (including portable speakers and audio systems) shall not be used outdoors between 20:00 and 09:00, and shall at no time exceed 60 dB(A) measured at the nearest property boundary.
- Petrol or diesel generators shall not be operated on the property. All energy supply shall be via the approved renewable or grid-connected systems specified in the Site Development Plan. Emergency use of a generator during a power outage is permitted for a maximum of four consecutive hours and shall not occur between 21:00 and 07:00.
- Motorised watercraft (including jet skis, motorboats and similar craft) shall not be launched from or moored at Portion 104 of Farm 216. Family members' use of the Brenton-on-Lake slipway for non-motorised or low-impact watercraft access to the Knysna Estuary shall continue at historic levels only, consistent with the commitments made in the Draft BAR.

Mitigation Measure NM-4: Property Site Rules — Noise

The Responsible Person shall prepare a Property Site Rules document prior to the commencement of the operational phase. The Site Rules shall incorporate all noise obligations under NM-1, NM-2 and NM-3, expressed in plain language. All persons accessing the property for overnight or day use shall sign the Site Rules document before each visit. The Responsible Person shall retain signed copies for a minimum of three years and shall make these available to the ECO or the competent authority upon request. The Site Rules document shall be reviewed annually and updated to reflect any revised GRNP MP Zonation noise standards confirmed by SANParks.

The following list contains operationalised conditions brought forward by SANParks during the 29 April 2026 comments:

Estuary use: No direct boat launching will be permitted. Access must be via the Brenton-on-Lake SANParks facility, with no unauthorised moorings allowed. Compliance with the Knysna Protected Estuary (KPE) estuary-user licensing requirements is required (Conditions 6, 7).

Construction no-go protection: The disturbance footprint must be fenced off with shade cloth, and all topsoil must be set aside for reuse (Conditions 13, 14).

Stormwater and surfaces: Permeable paving should be used where possible, with erosion and embankment controls implemented. These measures must be cross-referenced with the Stormwater Management Plan (Condition 15).

Visual impacts: The measures proposed by Buchholtz (5 September 2024) must be implemented, and solar panels must be sited to avoid glare and sensitive areas (Conditions 8, 9).

Fencing: Fencing must be wildlife-permeable and undertaken in consultation with SANParks (Condition 10).

Fire management: Alien Invasive Species clearing obligations under NEMBA must be met, and the project must join the local Fire Protection Association in terms of the Veld and Forest Fire Act. These requirements must be cross-referenced with the AIS Plan (Conditions 16, 17).

Chance finds: A DFFE permit must be obtained if any protected trees are disturbed, and Heritage Western Cape must be contacted in the event of heritage finds (Conditions 18, 19).

ECO appointment: A suitably qualified Environmental Control Officer must be confirmed and appointed to monitor implementation of the EMPr (Conditions 11, 12).

CML Section 4 risk measures: Risk-management measures in terms of GNR 3668 (14 July 2023) must be applied for infrastructure relative to the Coastal Management Line (Condition 3).

12. REHABILITATION AND MAINTENANCE PHASE ENVIRONMENTAL MANAGEMENT PROGRAMME

Activity	Management / Mitigation	Responsibility	Frequency / Timing
12.1. Vegetation Rehabilitation	Vegetation		
	- All disturbed areas, or areas which have been disturbed for the purpose of the development, are to be re-vegetated. This will aid in preventing erosion within the site. - A 100% indigenous planting plan must be adhered to in terms of all planting carried out on the site. Consultation must be made with a Botanical Specialist for a site-specific vegetation list.	Applicant	
	Erosion prevention and control measures must be fully implemented (if necessary).	Applicant & ECO	Project completion
	All rehabilitated areas must be maintained through weekly inspections until the 80% success rate has been achieved (if applicable).	Applicant & ECO	On-going site maintenance

Activity	Management / Mitigation	Responsibility	Frequency / Timing
	Encroachment of invasive alien plants in this regard will need to be monitored on a regular basis to prevent re-infestation.		
12.2. Stormwater Management	Stormwater Any negative stormwater effects, related to the operational phase, must be remediated.	Applicant	On-going site maintenance
	On-going monitoring and assessing of stormwater drainage must occur on site during the operational phase of the proposed project.		
12.3. Land Rehabilitation	Land	Applicant / Contractor	Project completion
	Rehabilitation must be executed in such a manner that surface runoff will not cause erosion of disturbed areas during and after rehabilitation.		
	Any rubble is to be removed from site to an appropriate disposal site. Burying of rubble on site is prohibited.		
	The site is to be cleared of all litter.		
	The surface of all disturbed areas must be left rough to facilitate binding of topsoil and vegetation.		
	- Areas that are disturbed through building activities (such as the excavations for sewerage pipelines) should be suitably rehabilitated without delay. Failure to do so will have a knock-on effect on biodiversity in the form of an increase in wind erosion, soil exposure and a loss of the soil micro-organisms that are essential for plant growth. - Use complete cover of locally chipped woody material (for example Acacia cyclops stems and branches but not the seed pods).		

ACKNOWLEDGEMENT FORM

Record of signatures providing acknowledgment of being aware of and committed to complying with the contents of this Environmental Management Programme (EMPr), which relates to the environmental mitigation measures for the project outlined below, and the environmental conditions contained in all other contract documents.

PROJECT NAME:

PROPOSED DEVELOPMENT OF ASSISTED CAMPING FACILITIES FOR THE LOVEMORE FAMILY - PORTION 104 OF FARM 216, UITZICHT, KNYSNA, WESTERN CAPE.

DFFE Reference: TBC

APPLICANT:

Signed: Date:

CONTRACTOR:

Signed: Date:

ENVIRONMENTAL CONTROL OFFICER

Signed: Date: