DRAFT BASIC ASSESSMENT REPORT

for

DIEPWALLE FOREST TENTED CAMP

On

Remainder Farm 218 Deep Wall, Knysna

In terms of the

National Environmental Management Act (Act No. 107 of 1998, as amended) & 2014 Environmental Impact Regulations

Prepared for Applicant: SA Experiences Trading (Pty) Ltd. – Chiefs Tented Camps

Date: 31 January 2024

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Report Reference: KNY650/04

Department Reference: 2023-01-0024 (Pre-Application Reference)

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DOCUMENT HISTORY

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Final Basic Assessment Report	*Pending*	*Siân Holder*
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APPROVAL FOR RELEASE

NAME	TITLE	SIGNATURE
Louise-Mari van Zyl	Principal EAP	

DISTRIBUTION

DISTRIBUTION LIST
Department of Forestry, Fisheries and the Environment (DFFE)
SA Experiences Trading (Pty) Ltd (Applicant)
Stakeholders & Potential Interested and Affected Parties

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Application form Submitted	06 February 2024
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Draft Basic Assessment Report Acknowledged	*Pending*
Comment on Draft Basic Assessment Report	*Pending*
Final Basic Assessment Report Submitted	*Pending*

APPOINTED ENVIRONMENTAL ASSESSMENT PRACTITIONER:
Cape EAPrac Environmental Assessment Practitioners PO Box 2070 George 6530 Tel: 044-874 0365 Fax: 044-874 0432 **Report written & compiled by: Siân Holder** (Ndip & BTech Nature Conservation, MEd Environmental Education), who has over 14 years' experience as an environmental practitioner. **Registrations:** Director **Louise-Mari van Zyl** (MA Geography & Environmental Science [US]; Registered Environmental Assessment Practitioner with the Environmental Assessment Practitioners of South Africa, EAPSA, **Registration Number 2019/1444**. Ms van Zyl has over twenty years' experience as an environmental practitioner.

PURPOSE OF THIS REPORT:
I&AP Review and Comment

APPLICANT:
South African Experiences Trading (Pty) Ltd

CAPE EAPRAC REFERENCE NO:
KNY650/04

DEPARTMENT REFERENCE:
2023-01-0023 (Pre-Application Reference)

SUBMISSION DATE:
06 February 2024

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in terms of the

National Environmental Management Act, 1998 (Act No. 107 of 1998 as amended) & Environmental Impact Regulations2014 (as amended)

DIEPWALLE FOREST TENTED CAMP

Remainder Farm 218 Deep Wall, Knysna

Submitted for:

Stakeholder Review & Comment

Report Issued by:

Cape Environmental Assessment Practitioners

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REPORT DETAILS

Title:	Draft Basic Assessment Report for Diepwalle Forest Tented Camp
Purpose of this report:	This Draft Basic Assessment Report is made available to all registered and potential Interested and Affected Parties (I&APs) for review and comment and all comments received will be incorporated into the Final Basic Assessment Report that will be submitted to the competent authority for decision making. This BAR forms part of a series of reports and information sources that are being provided during the Basic Assessment Process for the proposed Diepwalle Forest Tented Camp in the Garden Route National Park near Knysna in the Western Cape Province. Registered I&APs will be given an opportunity to comment on the following reports as part of this environmental process: - Draft Basic Assessment Report (DBAR), - All Specialist Studies, and - Draft Environmental Management Programme (Draft EMPr). In accordance with the regulations, the objectives of an environmental process are to, through a consultative process: (a) identify the relevant policies and legislation relevant to the activity; (b) motivate the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location; (c) identify and confirm the preferred activity and technology alternative through an impact and risk assessment and ranking process; (d) identify and confirm the preferred site, through a detailed site selection process, which includes an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified alternatives focusing on the geographical, physical, biological, social, economic, and cultural aspects of the environment; (e) identify the key issues to be addressed in the assessment phase; (f) agree on the level of assessment to be undertaken, including the methodology to be applied, the expertise required as well as the extent of further consultation to be undertaken to determine the impacts and risks the activity will impose on the preferred site through the life of the activity, including the nature, significance, consequence, extent, duration and probability of the impacts to inform the location of the development footprint within the preferred site; and (g) identify suitable measures to avoid, manage or mitigate identified impacts and to determine the extent of the residual risks that need to be managed and monitored. The Draft Basic Assessment Report is available to all registered and potential interested and affected parties for a 30-day review and comment period extending from **06 February – 06 March 2024**. All comments received during this comment period will be incorporated into the Final BAR that will be submitted to the DFFE for Decision making.
Prepared for:	SA Experiences Trading (Pty) Ltd.
Published by:	Cape Environmental Assessment Practitioners (Pty) Ltd. (Cape EAPrac)
Authors:	Mrs Siân Holder Ms Louise-Mari van Zyl – Principal EAP
Cape EAPrac Ref:	KNY650/04
DEA Case officer & Ref. No:	Mrs Mmamohale Kabasa - 2021-01-0024 (Pre-application reference number)
Date:	31 January 2024
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TECHNICAL CHECKLIST

The following technical checklist is included as a quick reference roadmap for the proposed project.

Applicant Details		
Applicant Details	Applicant Name:	South African Experiences Trading (Pty) Ltd. SA Experiences Trading (Pty) Ltd. has been awarded authorisation by South African National Parks (SANParks), as concessionaire, in terms of Section 50(5) of the National Environmental Management: Protected Areas Act (NEM:PAA, Act 57 of 2003, as amended) to install & operate a mobile tented camp facility at a pre-determined site the Diepwalle Section of the Garden Route National Park, Farm 218 Knysna. This proposed development is catered for in the Section 9.5.1 and the Tourism Product Development Framework (Appendix 3 in the Plan) of the Park Management Plan, approved by the Minister of Forestry, Fisheries and the Environment. This Section 50(5) approval is subject to the Applicant obtaining Environmental Authorisation (EA) in terms of the National Environmental Management Act (NEMA, Act 107 of 1998, as amended).
	Company Registration No.:	2004/014548/07
	BBBEE Status:	Exempted Micro Enterprise
	Project Name:	Diepwalle Forest Tented Camp
Site Details		
Size of the property	Description and Size in hectares of the affected property.	Remainder Farm 218 Deep Wall, Knysna. Total Property Size: 4129.85 ha
Size of the study area	Size in ha of initial study area.	Approx. 1500m² / 1.5 ha Existing clearing & immediate forest around it.
Development Footprint	This includes the total footprint of all tent platforms / footprints, decks & boardwalks.	Approximately 1508.5m²
Infrastructure / Technology Details		
Built / Fixed Structures	Type of infrastructure	Fixed infrastructure restricted to raised wooden decks: • 15 Guest tent platforms: (on ±8.5m x 6m decks) in gaps between forest trees. Transparent (partial / entire) dome tents (5m / 7m diameter) on deck platforms; • Communal / dining deck partially under stretch tent (±20m x 15m); • Communal toilet (4m x 4m), pool deck (6m x 3m) & hot-tub deck (5m x 5m) attached to dining deck = ± 59m²; • Yoga deck: ±10m x 5m • Raised wooden boardwalks linking decks / raised platforms (± 130m long x ±1.5m wide). • Platforms for 2 x 10 000lt rainwater tanks (2.5m x 2.5m each);
Temporary Structures	Type of infrastructure	Temporary / mobile infrastructure to be placed on ground: • Staff tents (two ±3m x 4m & one ±3m x 6m);

		• Staff toilets: two ±2m x 1m (male & female); • Kitchen & storage tents: (two ±3m x 6m & one ±5m x 9m); • Solar generator on mobile trailer.
Service Provision		
Electricity & Heating	Type of technology	Heating of pre-prepared food on gas. Water heating: gas geysers: Lights by solar generator (panels, invertor & batteries on movable trailer).
Water	Type of technology	Rainwater storage tanks (2 x 10 000lt) to be filled by water tanker and/or gravity pipeline from Diepwalle Forest Station / Camp reservoirs through Forest. To be assisted by pressure pump.
Sewerage	Type of technology / disposal	Chemical toilets (sealed units) – emptied by service provider to Knysna WWTW.
Grey-water	Type of technology / disposal	Water from sinks, basins, pool & hot-tubs to be disposed of via soak-aways – existing slip-paths through the Forest. Sink & basins to be fitted with fat screens to remove all fat, grease & oils). Only biodegradable soaps / detergents permitted.
Access / Auxiliary Support		
Access	Additional Infrastructure	Via 1.6km **existing private forest track** (historic Ysterhoutrug Road) off the R339 Gravel Road (public road 17.3km from N2, under Provincial Roads jurisdiction). R339 provides access to the existing Diepwalle Forest Station / Camp / Offices managed by SANParks.
Auxiliary Support / Infrastructure		Existing Diepwalle Forest Camp / SANParks office will serve as basecamp for the tented camp operations – guests will leave their vehicles in existing parking area & be shuttled to & from tented camp site. All bulk storage & food preparation will take place at Diepwalle Community Kitchen / Tea Garden etc. Intend to partner with Community Teagarden for food preparation etc. All waste, dishes and general crockery / cutlery will be shuttled back up to the Diepwalle kitchen after meals. The disposal of this waste will dovetail with existing operations of the Kitchen.

The Applicant, SA Experiences Trading (Pty) Ltd, is proposing the construction a seasonal, temporary tented camp facility within a designated site within the Diepwalle Forest area of the Garden Route National Park, on Remainder Farm 218 Diep Wall, Knysna, in the Western Cape Province. The proposed facility will be operated as a 'mobile' / temporary camp, within an **existing clearing** in Forest, created / used previously as a sawmill & timber industry site, and later as a film set and elephant boma during the filming of two movies based on the well-known forest novels by South African author Dalene Matthee, namely "Fiela se Kind" (1988) and "Toorbos" (1993). An existing pond / water feature adjacent to site was previously created for the elephants.

The project is situated within the Knysna Local Municipality within the Garden Route District Municipality.

Proposal / Activity – **Tented luxury retreat, temporal & mobile** in nature, in Forest, over the summer months (November to April). TENTS & all mobile equipment to be removed from site after every seasonal operation. Entire camp infrastructure to be decommissioned and removed at end of concession period/s.

A development site being assessed as part of this Basic Assessment Report (BAR) is approximately 1.5 ha in size.

LOCATION OF PREFFERED ALTERNATIVE

The co-ordinates of the preferred alternative are reflected in the table below.

Layout Alternative 1 (Preferred)	**Latitude**	**Longitude**
Approx. centre point of site	33°57'24.85"S	23°10'18.97"E
Existing Access Road off R339	**Latitude**	**Longitude**
Start – off R339	33°57'41.36"S	23°09'33.44"E
Middle	33°57'30.02"S	23°09'55.68"E
End – at guest / staff drop-off	33°57'24.57"S	23°10'21.20"E

CONTENTS OF A BASIC ASSESSMENT REPORT.

Appendix 1 of Regulation 326 of the 2014 EIA Regulations (as amended) contains the required contents of a Basic Assessment Report. The checklist below serves as a summary of how these requirements were incorporated into this Basic Assessment Report.

Requirement	**Details**
(1) A basic assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include -	
(a) Details of - The EAP who prepared the report; and The expertise of the EAP, including, a curriculum vitae.	The report was compiled by Siân Holder of *Cape EAPrac*. The author has 15 years' experience as an EAP and holds MEd Environmental Education, BTech & Nat.Dipl. Nature Conservation qualifications. The report has been reviewed & verified for release by Louise-Mari van Zyl, as the principle EAP: EAPSA, **Registration Number 2019/1444**. Ms van Zyl has over twenty years' experience as an environmental practitioner. The CV of the EAP included as Annexure G2 of this report.
(b) The location of the activity, including – The 21-digit Surveyor General code of each cadastral land parcel; Where available, the physical address and farm name; Where the required information in items (i) and (ii) is not available, the coordinates of the boundary of the property or properties.	C03900000000021800000 Remainder of Farm 218 Deep Wall, Knysna. Site access via historic 'Ysterhoutrug' Forest Track off the R339 Provincial Road.
(c) a plan which locates the proposed activity or activities applied for as well as the associated structures and infrastructure at an appropriate scale, or, if it is A linear activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or On land where the property has not been defined, the coordinates within which the activity is to be undertaken.	Refer to Appendix A and B of this report. Site approx. 1.5ha in size. Centre co-ordinates: 33°57'24.85"S 23°10'18.97"E
(d) a description of the scope of the proposed activity, including - All listed and specified activities triggered and being applied for; and A description of the activities to be undertaken including associated structures and infrastructure.	The relevant listed activities are captured in Section 4.2. The description of the activity is provided in Section 2 of this report with graphic representation provided in Appendix D.
(e) A description of the policy and legislative context within which the development is proposed, including – An identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks, and	Please refer to Section 4 of this document.

Requirement	Details
instruments that are applicable to this activity and have been considered in the preparation of the report; and How the proposed activity complies with and responds to the legislation and policy context, plans, guidelines, tools frameworks and instruments.	
(f) A motivation for the need and desirability for the proposed development, including the need and desirability of the activity in the context of the preferred location.	Please refer to Section 3 of this document.
(g) A motivation for the preferred site, activity and technology alternative.	The preferred alternative has been identified as the best practicable option and is discussed in detail in Section 2 & 3 of this report.
(h) A full description of the process followed to reach the proposed preferred alternative within the site, including - • Details of all alternatives considered; • Details of the public participation process undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs; • A summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them; • The environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects; • The impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts - (aa) can be reversed; (bb) may cause irreplaceable loss of resources; and (cc) can be avoided, managed or mitigated. • The methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks associated with the alternatives; • Positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects; • The possible mitigation measures that could be applied and level of residual risk; • The outcome of the site selection matrix; • If no alternatives, including alternative locations for the activity were investigated, the motivation for not considering such; and • A concluding statement indicating the preferred alternatives, including preferred location of the activity.	Section 3.2 addresses feasible and reasonable alternatives which were identified for facility. Site, layout and technological alternatives were considered. Details of Public Participation are included in Section 9 of the report. A summary of all issues raised by I&APs as well as the responses – *will be included with FBAR*. The environmental attributes of the study site are included in Section 5 of the report. The identification and assessment of Impacts are included in Section 6 of the report. The summary of proposed mitigation measures is included in Section 7 of the report. The outcome of the site selection matrix is attached in Appendix J and is summarised in Section 3.2 of the report. The concluding statement is contained in Section 10 of the report.
(i) A full description of the process undertaken to identify, assess and rank the impacts the activity will impose on the preferred location through the life of the activity, including - A description of all environmental issues and risks that were identified during the basic assessment process; and An assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures.	Please see Summary and Section 6 of the report and Appendix E for the specialist reports.

Requirement	Details
(j) An assessment of each identified potentially significant impact and risk, including - Cumulative impacts; The nature, significance and consequences of the impact and risk; The extent and duration of the impact and risk; The probability of the impact and risk occurring; The degree to which the impact and risk can be reversed; The degree to which the impact and risk may cause irreplaceable loss of resources; and The degree to which the impact and risk can be mitigated.	Please see Section 6 of the report and Appendix E for the specialist reports.
(k) Where applicable, a summary of the findings and impact management measures identified in any specialist report complying with Appendix 6 to these Regulations and an indication as to how these findings and recommendations have been included in the final assessment report.	Please see Section 6 & 7 of the report and Appendix E for the specialist reports.
(l) An environmental impact statement which contains – • A summary of the key findings of the environmental impact assessment; • A map at an appropriate scale which superimposes the proposed activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers; and • A summary of the positive and negative impacts and risks of the proposed activity and identified alternatives.	Section 6.8, 6.9 and 10 of this report. See Appendix D Section 6.8 of this report.
(m) Based on the assessment, and where applicable, impact management measures from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr.	See Section 7 report.
(n) Any aspects which were conditional to the findings of the assessment either by the EAP or specialist which are to be included as conditions of authorisation.	See Section 7 of this report.
(o) A description of assumptions, uncertainties and gaps in knowledge which relate to the assessment and mitigation measures proposed.	See 1.2 of this report.
(p) A reasoned opinion as to whether the proposed activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation.	See Section 10 of this report.
(q) Where the proposed activity does not include operational aspects, the period for which the environmental authorisation is required, the date on which the activity will be concluded, and the post construction monitoring requirements finalised.	The proposed activity does include operational & decommissioning aspects.
(r) An undertaking under oath or affirmation by the EAP in relation to: The correctness of the information provided in the reports; The inclusion of comments and inputs rom stakeholders and I&APs; The inclusion of inputs and recommendations from the specialist reports where relevant; and Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties.	The declaration of the EAP is attached in Annexure G2.

Requirement	Details
(s) Where applicable, details of any financial provisions for the rehabilitation, closure and ongoing post decommissioning management of negative environmental impacts.	Refer to Section 7 for site decommissioning and rehabilitation details.
(t) Any specific information that may be required by the competent authority.	Currently not applicable but will be included if such a request is made.
(u) Any other matters required in terms of section 24(4)(a) and (b) of the Act.	This section will be updated on receipt of the mandatory comment from the competent authority.

COMPETANT AUTHORITY COMMENT ON DRAFT BASIC ASSESSMENT REPORT

This section will be updated once the DFFE provide comment on the Draft Basic Assessment Report.

ORDER OF REPORT

Report Summary

Draft Basic Assessment Report – Main Report

Appendix A	:	Location & Topographical Plans
Appendix B	:	Biodiversity Plans
Appendix C	:	Site Photographs
Appendix D	:	Preferred Site Development Plan / Layout
Appendix E	:	Specialist Reports
Annexure E1	:	Aquatic Biodiversity Report (Dabrowski, Confluent Environmental, 2023)
Annexure E2	:	Botanical Impact Assessment Report (Fourie, Confluent Environmental, 2023)
Annexure E3	:	Terrestrial Biodiversity Assessment Report (Brookes, Biodiversity Management Services (Pty) Ltd., 2023)
Annexure E4	:	Fauna Assessment Report (Brookes, Biodiversity Management Services (Pty) Ltd., 2023)
Annexure E5	:	Fauna Site Sensitivity Verification Report (SSVR) (Mooiman, SANParks Scientific Services)
Annexure E6	:	Heritage NID (De Kock, Perception Planning, 2023) Correspondence with Heritage Western Cape (HWC)(NID Comment)
Appendix F	:	Public Participation Process
Annexure F1	:	I&AP Register
Annexure F2	:	Comments and Response Report (*to be included with Final BAR*)
Annexure F3	:	Adverts & Site Notices
Annexure F4	:	Draft BAR Notifications
Annexure F5	:	Draft BAR Comments and Responses (*to be included with Final BAR*)
Appendix G	:	Other Information
Annexure G1	:	Landowner Consent
Annexure G2	:	EAP Declaration & CV
Annexure G3	:	Specialist Declarations
Annexure G4	:	Title Deed / Windeed Report
Annexure G5	:	Water Use General Authorisation from Dept.Water & Sanitation & BOCMA
Annexure G6	:	Legal Opinion – SANParks exempt from Building Regulations
Appendix H	:	Environmental Management Programme (EMPr)
Appendix I	:	DFFE Screening Tool & Site Sensitivity Verification Report
Appendix J	:	Site Selection Matrix (SANParks)

TABLE OF CONTENTS

FIGURES

TABLES

EXECUTIVE SUMMARY

I. INTRODUCTION

Cape EAPrac has been appointed by South Africa Experiences Trading (Pty) Ltd. – Chiefs Tented Camps, hereafter referred to as the Applicant, as the independent Environmental Assessment Practitioner (EAP), to facilitate the Basic Assessment process required in terms of the National Environmental Management Act (NEMA, Act 107 of 1998) for the proposed development of the Diepwalle Forest Tented Camp on Remainder Farm 218 Deep Wall near Knysna in the Western Cape Province of South Africa.

Chiefs Tented Camps / SA Experiences Trading (Pty) Ltd. has operations in Kruger and Namaqualand National Parks and core business as corporate camps / events etc. Given the success of seasonal camp in Namaqualand and Kruger – they initiated a non-solicited BID to SANParks for seasonal tented camps in Knysna. Chiefs Tented Camp were selected as the successful Bidder by SANParks in 2019, but covid-lockdown postponed processes. The Concession with SANParks is for a period of 7-years, with the option to renew.

Two potential sites were considered in Knysna: Kranshoek & Diepwalle, however the Kranshoek site was eliminated, due to several location, security, logistical, operational & environmental reasons.

The proposed Diepwalle Forest camp is intended to be a luxury retreat, which is temporal and mobile in nature. During summer (Nov.- April), the camp will be operational, and during winter all moveable items will be removed. The proposed tented camp site is in an existing clearing within Diepwalle Forest on RE/218 in the Knysna section of the Garden Route National Park. The clearing is approximately 13km North-east of the town of Knysna (in a straight line). Access is via a 1.6 km existing forest track (historical Ysterhoutrug road) off the R339 gravel road. The R339 provides current access to the existing Diepwalle Forest Station and offices, managed by SANParks.

The purpose of this **Draft Basic Assessment Report** (DBAR) is to describe the environment to be affected, the proposed project, to present the site constraints identified by the various specialists during their site assessments and identify & assess the impacts of this development on the receiving environment. This information is herewith presented to all registered and potential Interested and Affected Parties (I&AP's), organs of state, state departments and the competent authority for review and comment.

In compliance with Chapter 6 of the 2014 EIA regulations (as amended), Draft BAR is available for a 30-day period extending from **06 February to 06 March 2024.**

All comments received on the Draft BAR will be incorporated into the Final BAR that will be submitted to the competent authority, the National Department of Forestry, Fisheries and the Environment (DFFE), for consideration and decision making. After the department has taken a decision on the application, this decision will be communicated to all registered I&AP's along with details of the appeal process.

II. RECOMMENDATION OF THIS EIA

It is the recommendation *Cape EAPrac* that the development proposal, Preferred Layout Alternative 13 be considered for approval by the competent Authority, subject to the outcome of the public participation process and on condition that all the suggested mitigation measures are implemented, all other legislative approvals be obtained, and that the final EMPr be strictly adhered to.

Please refer to Sections 3, 6 and 7 of this Draft BAR for the justification of this recommendation.

III. NEED AND DESIRABILITY

Need and desirability for this project has been considered in detail in this environmental process. The overall need and desirability in terms of developing this low-impact, seasonal tourism facility within the Garden Route National Park in the Western Cape Province, is in line with the Environmental Management Plan of this National Protected Area. The project specific need and desirability is considered in Section 3 of this report.

IV. ENVIRONMENTAL LEGISLATIVE REQUIREMENTS

The current assessment is being undertaken in terms of the **National Environmental Management Act** (NEMA, Act 107 of 1998). This Act makes provision for the identification and assessment of activities that are potentially detrimental to the environment, and which require authorisation from the competent authority (in this case, the National Department Forestry, Fisheries and the Environment, DFFE) based on the findings of an Environmental Assessment.

The proposed development entails a number of listed activities, which require a Basic Assessment Process, which must be conducted by an independent Environmental Assessment Practitioner (EAP). *Cape EAPrac* has been appointed to undertake this process.

Table 1: NEMA 2014 (As amended) listed activities applicable to the Diepwalle Forest Tented Camp.

Activity No(s):	**Basic Assessment Activity(ies) as set out in Listing Notice 1 of the EIA Regulations, 2014 as amended**	**Portion of the proposed project to which the applicable listed activity relates.**
12	The development of – (ii) infrastructure or structures with a physical footprint of 100 square metres or more; (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse.	The Tented camp with combined physical footprint of approx. 1508m² to be developed within 32m of a small, man-made & unmapped **pond** & **saddle seep wetland** confirmed via an Aquatic study.
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal, or moving of soil, sand, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse.	The Tented camp is to be developed within 32m of a small, man-made & unmapped **pond** & **saddle seep wetland** confirmed via an Aquatic study.
Activity No(s):	**Scoping and EIA Activity(ies) as set out in Listing Notice 2 of the EIA Regulations, 2014 as amended**	**Portion of the proposed project to which the applicable listed activity relates.**
N/A		
Activity No(s):	**Basic Assessment Activity(ies) as set out in Listing Notice 3 of the EIA Regulations, 2014 as amended**	**Portion of the proposed project to which the applicable listed activity relates.**
6	The development of resorts, lodges, hotels, tourism or hospitality facilities that sleep 15 people or more. i. Inside a protected area identified in terms of NEMPAA	Seasonal camp with accommodate more than 15 people when in operation in the summer months.
12	The clearance of an area of 300m² 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. iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning or 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.	Clearance of vegetation more than 300m² within a National Protected Area: Garden Route National Park, for create of deck & tent footprints.
14	The development of - (ii) infrastructure or structures with a physical footprint of 10m² or more; where such development occurs— (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse; i. Outside urban areas:(aa) A protected area identified in terms of NEMPAA, excluding conservancies; (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (gg) Core areas in biosphere reserves.	The Tented camp with combined physical footprint of approx. 1508m² to be developed within 32m of a small, man-made & unmapped **pond** & **saddle seep wetland** confirmed via an Aquatic study.
Activity 15 of Listing Notice 3 was considered, however as there is no re-zoning applicable that relates to residental, retail, commercial, industrial or institutional land uses, this Activity is **not applicable**. The proposed development is considered to be a tourism-based land-use, which aligns with the conservation land use of the National Park.		

NOTE: Basic Assessment (BA) Activities (Listing Notices 1 & 3) are being triggered by the proposed development, hence the EIA Process will follow a Basic Assessment process.

Before any of the above-mentioned listed activities can be undertaken, authorisation must be obtained from the relevant authority, in this case the National Department of Forestry, Fisheries & the Environment (DFFE). Should the Department approve the proposed activity, the Environmental Authorisation (EA) does not exclude the need for obtaining relevant approvals from other Authorities who has a legal mandate in respect of the activity.

V. DEVELOPMENT PROPOSAL

South African Experiences Trading (Pty) Ltd. proposes the development of the Diepwalle Forest Tented Camp, within an existing clearing within the Diepwalle Forest areas of the Garden Route National Park, located on the Remainder Farm 218 Deep Wall, Knysna. The clearing is approximately 13km North-east of the town of Knysna in a straight line. Access is via a 1.6 km existing forest track (historical Ysterhoutrug road) off the R339 gravel road. The R339 provides current access to the existing SANParks Diepwalle Forest Station and offices, which will serve as the base-camp / support centre for all activities related to the tented camp.

The existing clearing in the forest for the proposed camp was historically used as a sawmill site during early timber industry, and then later film set for the filming of two movies based on the well-known forest novels by South African author Dalene Matthee, namely “Fiela se Kind” (1988) and “Toorbos” (1993). A pool that was present during historical woodcutting activity (late 1800s) was further excavated for use by elephants during filming and attempted release of elephants into the Forests.

The proposed camp is described as a luxury retreat, which is temporal and mobile in nature. During summer (Nov.- April), the camp will be operational, and during winter all moveable items will be removed. Guests and materials / supplies will be transported in via an existing track and dropped off in an existing vehicle turn-around area. The Site Development Plan has been created & adjusted to accommodate identified site sensitivities (e.g. protected trees & aquatic features at the site & their associated impact buffer zones).

Fixed infrastructure is described as follows:

- 15 Guest tent platforms: (on ±8.5m x 6m decks) in gaps between trees. Dome tents, fitted with chemical toilet, basin & shower, to be positioned on platforms (to be removed out-of-season);
- Communal / dining deck partially under stretch tent (±20m x 15m);
- Communal toilet, pool deck & hot-tub attached to dining deck: ±59m²;
- Yoga deck (±10m x 5m);
- Raised wooden boardwalks linking decks / raised platforms (±130m long x ±1.5m wide);
- 2 x 10 000lt rainwater tanks (2 x 6.25m² platforms).

Temporary / mobile infrastructure / facilities to be placed on ground:

- Kitchen & storage tents: (two ±3m x 6m & one ±5m x 9m);
- Staff tents (two ±3m x 4m & one ±3m x 6m);
- Staff toilets (two ±2m x 1m (male & female);
- Solar generator on trailer;
- 2 x ‘zen’ spaces (temporary seating is forest gaps),
- 1 x forest library in forest gap.

Services for the camp, the following has been proposed:

- **Water:** for the camp will be supplied by a gravity fed pipeline from the existing Diepwalle Main Forest Camp reservoirs to two 10 000lt storage tanks positioned in the camp.
- **Sewage:** would be handled using sealed chemical toilets which would be swapped for clean replacement containers as required off site. Used containers will be collected and emptied by a service provider at the Knysna Wastewater Treatment Works.
- **Greywater:** directed to soak-aways along existing slip-paths in forest.
- **Heating:** Gas for heating water and food. Meals to be cooked / prepared at SANPark Main Diepwalle Camp & transported to site.
- **Lighting:** Solar panel generator, with batteries on mobile trailer.

The study site area being assessed as part of this Basic Assessment Report (BAR) is approximately 1.5ha in size, while the physical footprint of the abovementioned structures & infrastructure amounts to approximately 1508.5m².

VI. PROFESSIONAL INPUT

The following professionals[1] have provided input into this environmental process:

1. Terrestrial Biodiversity - **Dr. Christopher Brooke**, Biodiversity Management Services (Pty) Ltd.
2. Fauna - **Dr. Christopher Brooke**, Biodiversity Management Services (Pty) Ltd.
   - **Lizette Moolman**, SANParks Scientific Services, Garden Route National Park
   - **Melanie de Morney**, SANParks Scientific Services, GRNational Park
3. Botanical - **Bianke Fouché**, Confluent Environmental
4. Aquatic - **Dr. Jackie Dabrowski**, Confluent Environmental
5. Cultural Heritage, Archaeology & Palaeontology - **Stefan de Kock**, Perception Planning
6. Historical Land-use - **Klaas Havenga**, SANParks Section Ranger: Diepwalle, GRNational Park
7. Camp Details & Operation - **Lysta Stander**, SA Experiences Trading (Pty) Ltd.

VII. ASSESSMENT OF IMPACTS

This section simply lists the potential key impacts that were identified and assessed by the various specialists, as well as the resultant post-mitigation significance (more details on the significance and ratings of these impacts are provided in Sections 6.4 – 6.7 below and in the specialist reports attached in Appendix E).

Table 2: List of impacts & post mitigation impact significance.

Impact	Significance / Status with Mitigation
Construction Phase Terrestrial Biodiversity / Faunal Impacts	
Destruction, fragmentation or degradation of habitats	Low Negative
Spread and/or establishment of alien and/or invasive species	Low Negative
Mortalities and displacements of fauna and flora SCCs.	Low Negative
Operational Phase Terrestrial Biodiversity Impacts	
Continued fragmentation and degradation of habitats and ecosystems	Low Negative
Spread and/or establishment of alien and/or invasive species	Low Negative
Displacement and direct mortalities of faunal species (including SCC) due to disturbance (noise, light, vibration)	Low Negative
Reduced dispersal / movement of fauna	Low Negative
Decommissioning Phase Terrestrial Biodiversity Impacts	
Continued fragmentation and degradation of habitats and ecosystems	Low Negative
Spread and/or establishment of alien and/or invasive species	Low Negative
Construction Phase Botanical Impacts	
Loss of SCC & other delicate species (e.g., mosses) caused by vegetation clearance, site management practices, and disturbance.	Low Negative
Loss of SCC and other delicate species (e.g., mosses) caused by vegetation clearance and disturbance within the footprint of the project.	Negligible
Operation Phase Botanical Impacts	
Potential poaching of SCC seedlings & other plant species (e.g., orchids) from both guests and staff.	Negligible
SCC are negatively affected by maintenance activities: tree trimming & rotting vegetation removal.	Negligible

[1] Note that not all of these professionals are considered specialists as contemplated in chapter 3 of Regulation 326. Input has been received from the Field Ranger and Scientific Services of SANParks, as well as the Applicant and as such, the requirements in appendix 6 of R326 do not apply to all these professionals.

Impact	Significance / Status with Mitigation
Decommissioning Phase Botanical Impacts	
SCC seedlings and other species (e.g., orchids) negatively affected by disassembly of infrastructure before the off season (i.e. Winter).	Negligible
Construction Phase Aquatic Risks	
Movement of vehicles, materials and workers diurbing wetland soils, habitat & species.	Negligible
Handling of fuel and other building materials polluting sensitive wetland habitat.	Negligible
Construction of boardwalks and platforms (decks) distrubing soils, habitat & animal movement.	Low Negative
Operation Phase Aquatic Risks	
Overflow of wastewate or backwashing of pool polluting wetland / buffer with Chlorine & personal care-products.	Negligible
Camp access for deliveries and removals expanding access road footprint into wetland.	Negligible
Camp activities disturbing aquatic biota: disruption of normal behavior, injury or death.	Negligible
Disposal of greywater & wastewater pollution to wetland, pool & buffer	Negligible
Decommissioning Phase Aquatic Risks	
Vehicles or workers removing materials from the site: disturbing wetland, pool & buffer.	Negligible
Heritage Impacts All Phases	
Impacts on Cultural Landscape	Low Negative
Impacts on Archaeology Resources	Low Negative
Impact on Palaeontology Resources	Low Negative
Construction Phase Social Impacts	
Creation of employment and business opportunities	Medium Positive
Impact of construction activities and vehicles	Low Negative
Operational Phase Social Impacts	
Creation of employment and business opportunities	Medium Positive
Generate income & exposure for SANParks & Tourism	Medium Positive
Cumulative Social Impacts	
Cumulative impact on sense of place	Low Negative
Cumulative impact on services	Low Negative
Cumulative impact on local economies	Low Positive
Decommissioning Phase Social Impacts	
Social impact on the local economy associated with decommissioning	Low Negative

VIII. IMPACT STATEMENT

The affected area is considered suitable for development and there are no impacts associated with Diepwalle Forest Tented Camp that cannot be mitigated to an acceptable level. With the enhancement measures intended by the Applicant, positive impacts related to creation of employment and business opportunities, collaboration with local Community Tea Garden & tourism operators, Generation income for SANParks (landowner) and Cumulative impact on local economies associated with Wellness & Healing sector including modalities around the Human-Nature Connection, Forest Immersion and Prescriptions, Forest Retreats etc. can be expected.

As such, there are no fatal flaws or high post-mitigation impacts that should prevent the development from proceeding. Based on the layout provided for the assessment, Diepwalle Forest Tented Camp can be supported from a terrestrial biodiversity, botanical, aquatic biodiversity and heritage (inclusive of cultural landscape, archaeological & palaeontological) perspectives.

All high, very high and critical negative impacts have been avoided by the avoidance of sensitive features or have been mitigated to acceptable levels.

A map showing the proposed activity in relation to the key sensitive features is in attached in **Appendix D**. All sensitive features along with their appropriate buffers are shown in this plan. As required by the EMPr, all areas outside of the proposed development footprint are to be demarcated as no go areas.

IX. CONCLUSIONS & RECOMMENDATIONS

This environmental process is currently being undertaken to present the development proposal to the public, potential Interested & Affected Parties (I&APs) and Stakeholders; and to identify and assess environmental impacts, issues and concerns raised as a result of the proposed development.

Cape EAPrac is of the opinion that the information contained in this Basic Assessment Report and the documentation attached hereto is sufficient to allow the I&APs & Stakeholders to apply their minds to the potential negative and/or positive impacts associated with the development, in respect of the activities applied for.

This environmental process has not identified any fatal flaws with the proposal and as such it is our reasoned view that the project should be considered for authorisation, subject to the outcome of the public participation process and on condition that all the mitigation measures outlined in Section 7 of the report are adopted and implemented. All specialists concur that the development as proposed (Preferred Layout Alternative 13) can be considered for approval subject to the implementation of all mitigation measures. All impacts range from medium positive to low / negligible negative, and all high, very high and critical negative impacts have been avoided by the risk adverse approach or mitigated to acceptable levels.

All stakeholders are requested to review the Draft BAR and the associated appendices, and provide comment, or raise issues of concern, directly to *Cape EAPrac* within the specified 30-day comment period. All comments received during this comment period will be considered, responded and included in the Final BAR that will be submitted to DFFE for decision making.

It is the recommendation Cape EAPrac that the development proposal, Preferred Layout Alternative 13 be considered for approval by the competent Authority, subject to the outcome of the public participation process and on condition that all the suggested mitigation measures are implemented, all other legislative approvals be obtained, and that the final EMPr be strictly adhered to.

DRAFT BASIC ASSESSENT REPORT

1 INTRODUCTION

Cape EAPrac has been appointed by South African Experiences Trading (Pty) Ltd, hereafter referred to as the Applicant, as the independent Environmental Assessment Practitioner (EAP), to facilitate the Basic Assessment process required in terms of the National Environmental Management Act (NEMA, Act 107 of 1998) for the proposed development of the 'Diepwalle Forest Tented Camp' on Remainder of Farm 218 Deepwall, within the Garden Route National Park, near Knysna, in the Western Cape Province of South Africa.

The proposal involves the establishment of a temporary, seasonal tented camp, within an existing clearing and its immediate forest, as identified by the landowner, the South African National Park (SANParks), as part of their Strategic Plan for Commercialisation, Tourism Public-Private Partnership (PPP) Project.

The purpose of this **Draft Basic Assessment Report** (BAR) is to describe the environment to be affected, the proposed project, to present the site constraints identified by the various specialist during their site assessments and identify & assess the impacts of this development on the receiving environment. This information is herewith presented to all registered and potential Interested and Affected Parties (I&AP's), organs of state, state departments and the competent authority for review and comment.

In compliance with Chapter 6 of the 2014 EIA regulations (as amended), the Draft BAR is available for a 30-day period extending from **06 February to 06 March 2024.**

All comments received on the Draft BAR will be incorporated into the Final BAR that will be submitted to the competent authority, the Department of Forestry, Fisheries and the Environment (DFFE), for consideration and decision making. After the department has taken a decision on the application, the decision will be communicated to all registered I&AP's along with details of the appeal process.

1.1 RECOMMENDATION OF THIS EIA

It is the recommendation *Cape EAPrac* that the development proposal, **approximate to Preferred Layout Alternative 1**, be considered for approval by the competent Authority, subject to the outcome of the public participation process and on condition that all the suggested mitigation measures are implemented, all other legislative approvals be obtained, and that the final EMPr be strictly adhered to. Please refer to Sections 3, 6 and 7 of this Draft BAR for the justification of this recommendation.

1.2 ASSUMPTIONS & LIMITATIONS

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

- It is assumed that the information on which this report is based (specialist studies and project information, as well as existing information) is **correct, factual and truthful.**
- The proposed development is **in line** with the statutory planning vision & management priorities for the Protected Areas and of the Garden Route National Park in-particular, as detailed in the Park Management Plan (2020 – 2030) and prescribed by the PPP Agreement for this tourism initiative;
- As a State Department, SANParks is not bound by the requirements of Spatial Planning and National Building Regulations administered by to the Knysna Local Municipality i.e. as such prior written approval of the Municipality is not required (*refer to excerpt of legal opinion attached as Annexure G7).* The provisions of the Municipal Spatial Development Plan (SDP) and associate Integrated Development Plan (IDP) are thus not applicable to the Protected Area nor this development within it. However, this DBAR and all associated Plans will be provided to the Municipality for their review & comment;
- It is assumed that all the relevant **mitigation and management measures** and agreements specified in this report will be implemented in order to ensure minimal negative impacts and maximum environmental benefits.
- It is assumed that due consideration will be given to the **discrepancies in the digital mapping** (tented camp layouts against possible constraints), caused by differing software programs, and that it is understood that the ultimate/final positioning of tented camp infrastructure will only be confirmed on-site with SANParks & the relevant specialist/s.

- The Department of Water and Sanitation / Breede Olifants Catchment Management Agency (BOCMA) **will consider the submission of the General Authorisation (GA) water use application** necessary for allowing the positioning of the camp within the regulated 500m for an identified wetland. The assumption at this stage is made that water provision for construction and operations is to be obtained from the landowner SANParks, and where necessary from rainwater harvesting and trucked in from the local municipality.
- It is assumed that Stakeholders and Interested and Affected Parties notified of the availability of this DBAR will submit all relevant **comments within the designated 30-days** review and comment period, so that these can included in the Final BAR to be timeously submitted to the competent authority, the Department of Forestry, Fisheries and the Environment (DFFE), for consideration and decision making.

The assumptions and limitations of the various specialist studies are included in their respective reports attached in Appendix E.

2. PROPOSED ACTIVITY

South African Experiences Trading (Pty) Ltd., as the Applicant, is proposing the establishment of a transient, seasonal tented camp, within an existing clearing and its immediate forest, located on Remainder of Farm 218 Diepwall, within the Diepwalle section of the Garden Route National Park, in the Western Cape Province. The 'Diepwalle Forest Tented Camp', will accommodate approx. 34 people, and will operate during the summer months (Nov.- April), while all movable infrastructure will be removed during the winter months. The Applicant was awarded as the concessionaire on conclusion of a call for bids as part of the South African National Parks (SANParks) Strategic Plan for Commercialisation, Tourism Public-Private Partnership (PPP) Project. The project is located within the Knysna Local Municipality area, within the Garden Route District Municipality.

The proposed 'Diepwalle Forest Tented Camp' is to consist of both fixed & temporary infrastructure, which can be easily dismantled and removed at the end of each season and at the concession timeframe of 7-years. The components, associated infrastructure / services, and operational details of the camp are clarified in the sections below:

2.1 GUEST TENTS

Guests to the camp will be accommodated in fifteen (15) dome tents (partially/ entirely transparent), approx. 5m / 7m in diameter, to be positioned on raised wooden deck platforms of ±8.5m x 6m in size. These platforms will be positioned within the immediate forest fridge surrounding the existing clearing, within gaps between the large forest trees (see Figure 16 in Section 3.2.3 below). Each dome tent will be fitted with a chemical toilet, basin and shower, and will be dismantled and removed after each summer operation season. The final positioning / orientation of the deck platforms will need to be confirmed with SANParks & the appointed ECO prior to construction. These will remain *in situ* each season to be dismantled and removed at the end of the concession period (decommissioning). The deck structures will be built around trees were possible.

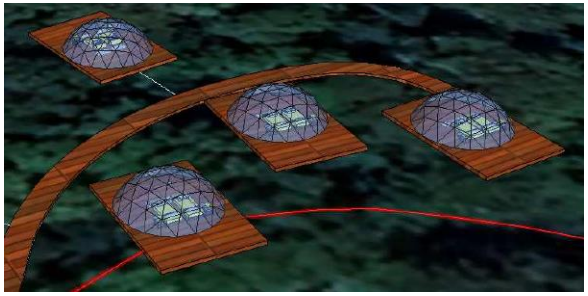


Figure 1: Graphic representation of guest tents.

The positioning of the guest tents is intended to slightly removed (out of sight) from one another and 'hidden' between the Forest trees. Although the appear quite close to one another, the thickness of the surrounding Forest will allow each deck platform to feel completely private. The dome tents may be glass, perspex, polycarbonate or any other material suitable for this purpose. These structures have proven to be very popular in the hospitality industry, especially in forest environments. The exact typology and supplier of the proposed dome tents have not yet confirmed, however the following images provide an indication of some dome tent options:

Figure 2: Guest dome tent design / typology options (as provided by Applicant).

2.2 COMMUNAL / DINING DECK

The largest structure within the Diepwalle camp will be the communal / dining / lounge deck, partially under stretch tent, on which all meals will be served and guests can enjoy recreational activities within the camp. The communal deck will be a raised wooden platform of approx. 20m x 15m in size, and fitted with a small pool deck (± 6m x 3m) and a hot-tub deck (± 5m x 5m) with two tubs. A communal toilet structure (± 4m x 4m) will be positioned adjacent to the main deck. Seating and contained fire places will be placed on the deck.

Hot-tubs will each have an enclosed boiler unit, and will be cleaned / re-filled regularly, along with the pool. The frequency of draining/ filling will be dependent on occupancy patterns & rainfall. Out of season, they will be drained and covered.

Figure 3: Graphic representations of Communal / Dining deck.

2.3 YOGA DECK

A yoga deck, of approx. 10m x 5m in size, will be positioned on the forest edge of the clearing (providing partial shade), and accessed off the main boardwalk. Here guests will be guided through daily yoga sessions as part of the camp activities.

As with the other raised decks in the layout, the deck structure will be constructed around trees were possible, and will remain in place after each season, for removal at end of the concession period (decommissioning phase).

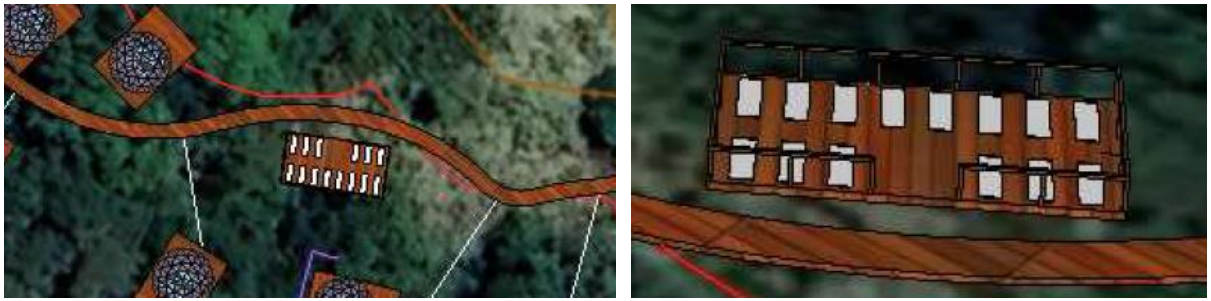


Figure 4: Graphic representation of yoga deck within layout.

2.4 RAISED BOARDWALKS & PATHWAYS

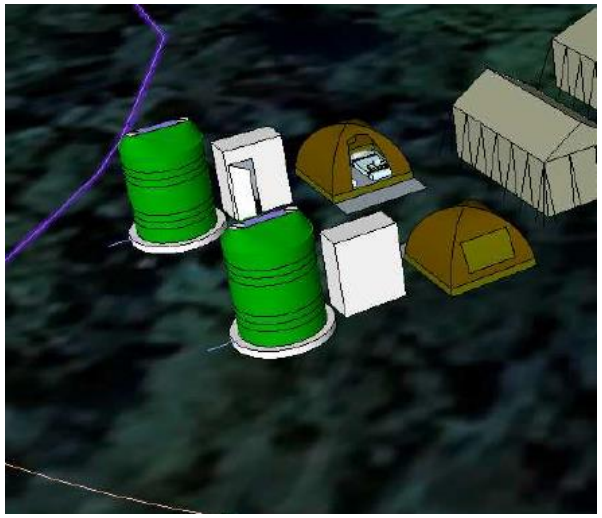
Access to the communal dining deck from the vehicle drop-off area, as well as to the yoga deck and guest tent platforms, will be via a raised wooden boardwalk, of ±130m long and ±1.5m wide. This boardwalk will be aligned along the forest / clearing edge to terminate in the forest at Guest Tent #15, on the western extent of the camp. This boardwalk will be built around / avoid trees as far as possible, and remain *in situ* until the end of the concession period, when it will be dismantled and removed.

Access to the guest tents, kitchen & staff facilities, from this main boardwalk will be via ground-level footpaths between the Forest trees and underbrush.

2.5 KITCHEN / STORAGE TENTS

The 'back-of-house' operations of the camp will take place in three Kitchen / Storage tents (two ±3m x 6m & one ±5m x 9m). These will be canvas tents positioned at ground level, between the trees, behind the main communal deck. Here meals, prepared at the Diepwalle Forest Station, will be heated & dished. Food, beverages and equipment will be stored in scavenger-proof containers, with sufficient stock for at least a two-day back-up.

2.6 STAFF FACILITIES



It is envisioned that 2 to 4 staff members will be accommodated in the camp site in two tents (± 3m x 4m), and about 10 staff will accommodated off-site. One rest / recreation tent (± 3m x 6m) will be positioned adjacent to their sleep-tents, as well as two (1m x 2m) staff toilets (male & female).

The positioning of the staff facilities will be behind the Kitchen / Storage tents and accessed via an existing forest opening / slip-path off the access road on the eastern side of the camp area.

Figure 5: Graphic representations of staff tents & toilets (purple line indicates existing slip-path).

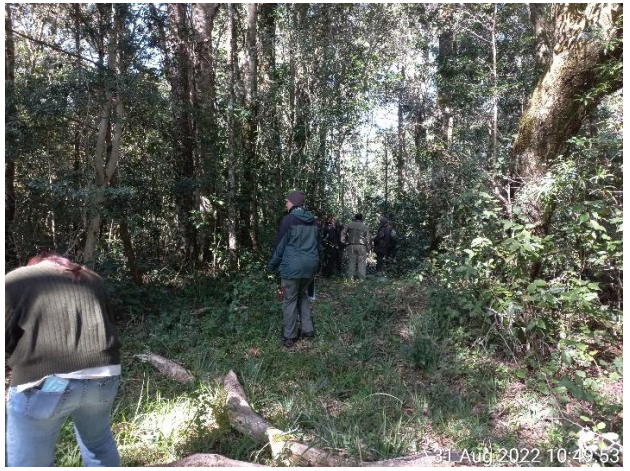


Figure 6: Existing opening on east of camp, providing access to staff facilities & Kitchen.

2.7 SERVICE INFRASTRUCTURE

2.7.1 Water Supply

Water conservation measures will be included in the design and implementation of the camp operations. Water will be supplied by a **gravity fed pipeline** from the existing Diepwalle Forest Station reservoirs and stored in **two 10 000lt water storage tanks,** raised to a height of 2m, and positioned adjacent to the staff facilities and kitchen in the camp. Filling of tanks from the reservoirs will be assisted by solar pressure pump, activated during day-light hours to keep they filled, when necessary. As emergency supply,

these water storage tanks can be filled by water tanker from the Knysna water-work and rainwater harvesting from select roofs, when necessary. Water from these storage tanks will be distributed around the camp via a gravity-fed system.

The estimated water usage for the Diepwalle camp will be approximately 75 litres per person per day. The total usage from all sources inside Garden Route National Park will be limited to the park's water policy.

Water use will be controlled, with guests being advised of any limitations in consumption. Shower heads and taps will be fitted with flow restrictors and automatic shut-off, where necessary. A standard operating procedure will be developed to ensure zero wastage via proper maintenance of the water system at all times. Water use will be monitored and recorded.

2.7.2 Sewerage

During the construction & decommissioning phases, mobile chemical ablution facilities will be utilised by contractors. These toilets will be maintained, serviced and emptied by an appointed service provider / contractor, who will dispose of the effluent at a licensed facility off site, likely the Knysna Waste Water Treatment Works (WWTW). Once construction is complete, the chemical ablution facilities will be removed from the site.

During operation, guests and staff will make use of flushable chemical toilets. All human waste will be captured in sealed chemical units / drums, to be cleaned and emptied by an appointed mobile porter-potty service provider. Toilet drums will be cleaned, serviced and decanted over a secondary catchment tray to capture potential spillages. All sewerage will be transported and disposed of at the Knysna WWTW.

2.7.3 Waste / Grey-water

Water from sinks, basins, the pool and hot-tubs is to be disposed of via soak-aways directed away from the camp and wetland, along existing slip-paths through the Forest. The kitchen sink (for cleaning dishes, pans & utensils) and bathroom basins will be fitted with fat / grease taps / screens to remove all fat, grease & oils. Only biodegradable soaps and detergents will be permitted. The waste-water slip-paths will be monitored monthly for signs of pollution and pooling, and monthly reports provided to SANParks.

No laundry to be undertaken on site. Linen etc. to be laundered off-site.

Figure 7: Existing slip-paths / openings in Forest.

Kitchen staff will be expected to inspect and clean grease traps and interceptors regularly and maintain a log sheet of each trap inspection detailing condition of the trap and any maintenance activity required. Waste recovered from the grease traps will be disposed of at an authorised facility.

2.7.4 Electricity / Heating

Heating: **Gas** will be the primary source of energy for all heating of food, which will be prepared at the Diepwalle Station Tea-Garden / Kitchen, as well as for heating of basin & shower water in the guest and staff tents, and Kitchen sink. The menu will be designed in such a way that lunches and dinners will be primarily focus around Tappas Style food which will minimise the requirements for major cooking and cooling facilities on site. This will further reduce the requirement for a massive power supply.

Lighting: A **Solar panel generator,** with invertor and batteries attached to a mobile trailer, will be used for lighting throughout the camp. The Solar generator mobile unit will be positioned next to the kitchen tents at night and then pulled into position in sunny areas within the camp clearing and/or at the Diepwalle Forest Station during the day, to charge the batteries installed as part of the unit. Fully charged back-up batteries will always be available, as well paraffin lamps & candles.

Stand-alone solar lights will be placed in sunny positions on the communal deck and boardwalk to illuminate these areas at night fall.

2.7.5 Solid Waste

An integrated waste management approach (reduce, re-use & recycle) will be implemented for this camp, in line with the waste management policy and systems of the Garden Route National Park.

Solid waste generated during the construction and decommissioning phases will mainly take the form of construction material, excavated substrate and domestic solid waste. All waste generated will be separated into recyclable components and removed from site by a licenced recycling service provider. All non-recyclable waste will be disposed of in scavenger proof bins or skips and temporarily placed at the vehicle turning area for easy & regular removal by the Contractor, for disposal at registered waste facilities.

During operation, all meals to be served in Camp will be prepared at the Diepwalle Forest Station in conjunction with the community Tea Garden / Kitchen. All waste, dishes and general crockery / cutlery will be shuttled back up to the Diepwalle Kitchen / Tea Garden after meals (three times a day). Kitchen waste in the camp will be contained in sealable containers to prevent odours attracting animals (bush-pig & rodents) and insects.

No disposal and/or incineration of any solid waste will be permitted at the camp site under any circumstances.

All efforts will be made to eliminate the use of single-use plastics or polystyrene during operation i.e. no sachets (for condiments), paper serviettes, butter tubs, plastic straws or cutlery etc. Recyclable waste (e.g. water bottles, glass, tins, paper etc.) will be sorted into separate containers, in accordance with the Park's waste management system and provided to a suitable service provider for recycling outside the Park.

Scavenger-proof / lidded waste bins will be placed in each tent and at the communal deck, to ensure a litter-free environment. Waste will be removed regularly to the Diepwalle Forest Station, where disposal will dovetail into that of the existing operations of the Diepwalle Kitchen / Tea Garden and Station.

2.7.6 Hazardous substances

During the construction phase, the following hazardous substances are anticipated:

- Cement associated with installation of deck / boardwalk support poles; and
- Petrol / diesel associated will delivery vehicles and chainsaw operators (trimming of trees & cutting of deck timber).

All timber to be used for decks & boardwalks is to be pre-treated, to avoid need for use of wooden sealants on site.

During operation, the batteries / invertor associated with the solar generator will be contained within a build-in bund on the mobile trailer. Only the use of environmentally friendly and biodegradable detergents, soaps, lotions and insect-repellents will be permitted.


Temporary storage and disposal of hazardous waste will be done in compliance with relevant legislation (i.e. stored in sealable / covered containers with appropriate bunding).

Refuelling areas (for chainsaws & cutting equipment to be in designated positions, with suitable mitigation to reduce the risk of hydrocarbon spills). In Terms of the EMPr, Spill kits must be available on site to clean up any minor hydro-carbon spillages.

Figure 8: Example of a hydrocarbon Spill Kit to be in place within the site camp.

2.8 ACCESS FOREST TRACK

The proposed project site is accessible via the provincial R339 road and then via an 1.6km existing forest track, historically referred to as the "Ysterhourug Road". This existing gravel track forms the northern boundary of the site. A vehicle turn-around loop / drop-off / pick-up area will be created in an existing clearing, previously cleared of alien invasive plants.

Figure 9: Existing access track to site.

Figure 10: Vehicle in photo positioned on proposed vehicle turn-around loop & drop-off / pick-up area.

During operation, the Diepwalle camp will likely make use of 4 vehicles to the site:

- 1 x 14-Seater Minivan and Trailer for staff transport, grocery / food / goods delivery/collection to & from the site; and
- 3 x Open Safari Vehicles for Guest Transfers.

As the existing access road is gravel, within an undulating, shaded forest environment, the need for high-clearance vehicles is acknowledged. The number and size of vehicles (carrying capacity), as well as number of trips in and out of the camp site may be limited by SANParks, depending on environmental conditions at the time of set-up, operation or removal of the facilities (wet conditions), in terms of a suitable contingency plan to be arranged with SANParks.

The track is a single lane, with sufficient space for one vehicle to travel at a time is each direction. A number of pull-over areas, are however available along the length of the forest track, allowing vehicles to pass one another and for temporary laydown of goods & materials, when necessary.

Figure 11: Existing pull-over areas along access road to camp.

Given that the access track is private (no public access or thoroughfare) and the current use of road is limited to occasional management operations by SANParks (maintenance of the Outeniqua trail etc.), a number of forest tree seedlings and plants have established in the track centre and sides. These plants will need to be rescued prior to construction / operation of the camp and placed in the nearby SANParks nursery.

Figure 12: Tree seedlings along access road to be rescued prior to construction for care in SANParks plant nursery.

The maintenance of this gravel access road will the responsibility of the Applicant / Operator, in line with SANParks' requirements and standards – SANParks Road Classification for Protected Areas.

2.9 TRANSPORT OF COMPONENTS, GUESTS & STAFF

It is envisaged that most materials, water, plant, services and people will be procured within the Garden Route / Knysna area, and transported via the R339.

The seasonal camp will operate on a park-n-ride basis. A designated parking area will be created at the Diepwalle SANParks Station offices from where guests will be shuttled to site. Departure from site back to the Station will be after breakfast in the morning and departures to site will leave the Diepwalle office after check-in time at 14h00.

Operators may only make use of existing access road and turn-around loop to enter and leave the site. No deviation from the road / off-road driving will be permitted.

2.10 ACTIVITIES & SAFETY

Various nature-based activities / experiences will be provided as part of this luxury retreat, with the emphasis on Wellness & Healing, including modalities around the Human-Nature Connection, Forest Immersion and Prescriptions, Forest Retreat activities etc. The rich history of the Diepwalle Forest will be brought to the fore where guests can enjoy talks and walks about the forest ecosystem, the area and its people.

2.10.1 Forest Zen / Meditation Gaps & Library

Two small gaps / openings in the Forest undergrowth will be selected just beyond the Guest tents where mats, hammocks / hanging chairs will be installed, for guests to escape and rest in this scenic and quiet space. A third forest opening will be selected to serve as a 'Forest Library', where interpretative material, books and other reading / information resources will be made available to guests in weather-proof containers and boards. All material will be removed after each season.

2.10.2 Hiking & Excursions

Hiking and mountain-biking excursions (both guided & unguided) are offered around the Diepwalle area. Guests to make use of existing SANParks tracks roads and hiking routes (not deviate off designated routes), which will remain open to the general public. There will be collaboration with third-party tourism operators to make their products available to the camp guests, for example Bhejane Tours, which offers various guided excursions (4x4, hiking, cycling activities etc. in the Diepwalle area and its surrounds).

Hiking along pre-determined routes – guided by trainer community guides. Guests will be advised not to leave the bounds of the campsite, unless in the company of camp staff or trained guides.

2.10.3 Staff & Guest Safety

All raised platforms will be fitted with suitable railings (fall protection) with sufficient lighting to prevent guest / staff injury. Due to the poor cell-phone reception in the camp, a Radio will be available for emergency calls to the Diepwalle Station. A equipped first-aid kit and fire-fighting equipment will be available, while staff will be trained in first-aid and fire-fighting. An auditable Emergency Response Plan will be complied for the Diepwalle camp site, in line with SANParks' requirements and standards.

All activities to be guided by the Park's rules and regulations. The Applicant / Operator is to provide guests with Code of Conduct guideline document, and to distribute a letter from SANParks to guests advising them of relevant Park rules and regulations. The Applicant / Operator should also provide guests with a means to provide feedback (e.g. an evaluation form), the results of which will be reviewed by both SANParks and the Operator.

3. PROJECT NEED AND DESIRABILITY

In keeping with the requirements of an integrated Environmental Impact process, the Western Cape Department of Environmental Affairs & Development Planning (DEA&DP) *Guidelines on Need and Desirability (2010 & 2011)* were referenced to provide the following estimation of the activity in relation to the broader societal needs & environmental context. The concept of need and desirability can be explained in terms of two components, where *need* refers to *time,* and *desirability* refers to *place*. Questions pertaining to these components are answered in the sections below.

The overall need for this tented camp within a National Park, is considered in light of the growing need to boost the Public-Private-Partnership (PPP) sector of the South African tourism economy and make it easier for institutions and the private sector to enter into tourism-related partnerships on state property managed by National and Provincial government institutions, thereby procuring infrastructure and services for these institutions.

This section however considers the need and desirability of this specific project at this point in time.

3.1.1 Feasibility Consideration

The feasibility for the proposed Knysna Tented Camp to be built by a private entity within the Kranshoek or Diepwalle areas of the Garden Route National Park near Knysna, was informed by contextual location, economic, social and environmental impacts and influence, and weighted with the use of a Scoring Tool. The Kranshoek site was found to be unsuitable due to the positioning, exposure to the elements, nearby communities, security and other factors, and eliminated as a site alternative (*see section 3.2 below)*. The Diepwalle Forest Tented Camp project has undergone the rigours of a detailed feasibility and transparent bidding & PPP management agreement processes, with SANParks and the Government Technical Advisory Centre (GTAC), to be selected as a successful bidder and concessionare. During these processes, the information gathered and various studies conducted of the site and the region, has allowed qualified and reliable assumptions to be made on the project's various impacts.

3.1.2 Access to Cliental

Marketing via SANPark tourism websites, other PPP projects, tourism and hospitality networks.

3.1.3 Site Suitability

Among the outstanding characteristics of the existing site and its flat nature, the preferred site layout was able to avoid all areas of high sensitivity. It's accessible location via the R339 provincial road and existing forest track facilitates the delivery of infrastructure, equipment & materials required during the construction and assembly process, as well as for the disassembly (seasonal) and decommissioning phases. These existing transport routes eliminate the need to create new access routes and decreases potential impacts on the roads from the traffic going to and from the site during construction, operations and decommissioning.

The close proximity of the existing Diepwalle Forest Station / Camp allows for the necessary logical, operational and technical support to maintain low impacts and optimise efficiency of construction, operation, maintenance and decommissioning activities.

3.1.4 Social and Economic impact

The intended collaboration with the Diepwalle Community Kitchen / Tea Garden will benefit the local community, while collaboration with existing tourism operators in the area, will serve to boost the exposure of and tourism to the area. The significance of this impact is rated as High Positive. The proposed development intents to make use of local labour and employment and enhance procurement and investment in local community-tourism initiatives.

3.1.5 Employment & Skills Transfer

The benefits of tourism facilities to local regions are not confined to the initial investment in the project. They also provide a reliable and on-going income for SANParks and the municipality, creating direct employment opportunities for locals, as well as flow-on employment for local businesses through provision of products and services to the project and its employees.

The Diepwalle Forest Tented Camp is likely to have a positive impact on local employment. During the estimated 3-month construction phase, the project will employ approximately 30 individuals of various qualifications. The majority will be provided by the local labour market.

During operations, the tented camp is expected to have up to 20 employment opportunities ranging from hospitality, field-guides, administration and artisans. The employment structure will likely consist of local and outside labour in the field of hospitality & tourism. To guarantee successful operations over the lifetime of the investment, SA Experiences Trading / Chiefs Camps will likely train local specialists.

3.1.6 Need (time)

In accordance with the guidelines on need and desirability, a project should be able to answer a series of questions to demonstrate need. These are highlighted in the table below:

Table 3: Project Need Analysis.

Need	Discussion	
Is the land use considered within the timeframe intended by the existing approved Spatial Development Framework (SDF)? (I.e., is the proposed development in line with the projects & programmes identified as priorities within the credible IDP?	Yes N/A	As the proposed Diepwalle Forest Tented Camp is to be located outside the Knysna urban edge, within national Protected Area, is it not included in or subject to the local Municipality's spatial or develop plans. The land-use is consistent with that tourism & conservation objectives of the South African National Parks (SANParks), as detailed in their PPP Agreement and the Park Environmental Management Plan (2020 -2030).
Should the development occur here at this point in time?	Yes	The project is to located on a site identified and selected by SANParks, as part of their PPP project process. It is likely to promote diversification to the local tourism economy, as well as serve as a catalyst for further expansion and development of associated tourism / nature-based opportunities.
Does the community / area need the activity and the associated land use concerned?	Yes	National Treasury and SANParks identified the need and opportunity for PPP tourism-based projects. The Diepwalle site was identified and selected as a site that could benefit operations of the Garden Route National Park and its associated tourist and community-based initiatives. The proposed tented camp development will allow for a diversification of employment, skills and contribute to the potential development of small businesses associated with its construction and operation activities.
Are the necessary services, with adequate, capacity currently available?	Yes	SANParks, as the landowner and manager of the property, has confirmed the availability and provision capacity for the services required by the camp. In fact, the Diepwalle Forest Station is to serve as the base centre for camps construction, operation, dismantling (seasonal) and decommissioning activities. The infrastructure to be developed for the tented camp is to be easily procured and moveable (mobile &/ temporary), thereby having a limited impact on the environment. The cost of installing & dismantling this infrastructure will be covered by the Applicant, and the impacts thereof have been assessed in this environmental process. The water required for the construction and operation of tented camp will be sourced from the existing Diepwalle Station reservoirs (preferred option) and will be supplemented by water tanker and/ rainwater harvesting. Construction waste (general waste) will be disposed of at the existing registered landfill sites, while all disposal of all other wastes will dovetail with the existing waste management system of the Diepwalle Forest Station & Community Kitchen.
Is this development provided for in the infrastructure planning of the municipality?	No	The site falls outside of the infrastructure priority of the Municipality, as it is located in a National Park. It is however, provided for in the infrastructure procurement planning of the SANParks, as the landowner & manager of the property.
Is this project part of a national programme to address an issue of national concern or importance?	Yes	As mentioned above, this project in one of the many Public-Private-Partnership (PPP) initiatives, selected by Treasury and the SANParks, aimed at boosting the South African tourism economy, making it easier for institutions and the private sector to enter into tourism-related partnerships on state property managed by National and Provincial government institutions.

3.1.7 Desirability (place)

In accordance with the guidelines on need and desirability, a project should be able to answer a series of questions to demonstrate desirability. These are highlighted in the table below:

Table 4: Project Desirability Analysis.

Desirability	Discussion	
Is the development the best practicable environmental option for this land / site?	Yes	The target site is within the Garden Route National Park and has been identified and selected by SANParks for the purpose of this tourism venture. This site has a long history of transformation due to use as a saw-mill and film-site. The environmental sensitivities of the site have been identified by the various specialists, with impacts either avoided or mitigated to within acceptable levels. The development layout has been revised multiple times to find the best practicable option, considering the site sensitivities and the operational needs of the developer. Given the fact the site is within a proclaimed Protected Area, designated for the protection of Forest, the potential for agriculture is null.
Would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?	No	As mentioned above, the site falls within a proclaimed Protected Area, and aligns with the tourism / conservation priority of this designated land use. The developmental strategy and priorities of the Municipality are no applicable in this case.
Would the approval of this application compromise the integrity of the existing approved environmental management priorities for the area?	No	According to the national vegetation map (Mucina & Rutherford 2018), the development site lies entirely within a vegetation type that is classified as Least Threatened (ecosystems that cover most of their original extent and which are mostly undamaged, healthy and functioning). Given the historic use of the site, it is considered transformed, with alien invasive and non-invasive species noted. The proposed development is to be environmentally sensitive and transient in nature and in line with the Tourism priorities of SANParks. The activities associated with the construction, operation, seasonal dismantling and decommissioning of the development will be undertaken in terms of an EMMPr, which aligns with EMP of the Garden Route National Park.
Do location factors favour this land use at this place?	Yes	The site was identified & selected as the preferred site for this camp in collaboration with the landowner, SANParks. The site has a history of use and transformation. The site is easily accessible along existing roads and with activities to be supported by close proximity of the nearby Diepwalle Forest Station / SANParks Offices. Given the environmentally-sensitive and transient nature of the development, the impacts will be minimal and reversable. The ecological sensitive areas on and surrounding the camp site have informed the optimal location and layout for the proposed development, with minimal impact to the receiving environment, subject to implementation of mitigation measures.
How will the activity or the land use associated with the activity applied for, impact on sensitive natural and cultural areas?	Yes	The alternatives considered for the seasonal tented camp have been iteratively designed and informed by various investigations and assessments that considered both the natural & heritage aspects of the site and operational requirements of the facility. The natural and culturally sensitive areas have been identified and where possible, avoided to prevent negative impacts on such areas.
How will the development impact on people's health and wellbeing?	Yes	The site is located within secluded site within Diepwalle Forest area of the Garden Route National Park, well away from populated areas. The closest community consists of the approx. 34 families residing at the Diepwalle Forest Station, which are unlikely to be negatively affected by the development. The intended partnership with the Diepwalle Community Kitchen / Tea-Garden, as well as with other tourism-related operators in the area, will have a positive impact on these local businesses / initiatives. To guarantee successful operations over the

Desirability	Discussion	
		lifetime of the investment, SA Experiences Trading / Chiefs Camps will likely train local specialists, to serves as guides, hospitality staff etc. The guests to the camp will benefit from the intended focus on the Wellness & Healing sector including modalities around the Human-Nature Connection, Forest Immersion and Prescriptions, Forest Retreats and more.
Will the proposed activity or the land use associated with the activity applied for, result in unacceptable opportunity costs?	No	The alternative land-use of the site is the NO-GO option, where the site will remain vacant and un-utilised, as it is currently. The economic benefits and opportunities that the proposed tented camps holds for the landowner, community and local tourism economy of the municipal area will not be realised within the NO-GO option.
Will the proposed land use result in unacceptable cumulative impacts?	Unlikely.	The potential for similar, future tented camp developments within Protected Areas, including the Garden Route, cannot be discounted (as many have already been approved or are in progress e.g. in Kruger & Namaqualand). However, these will have synergistic benefits for the tourism & hospitality economy and growth of the area, while the contribution to cumulative habitat loss in the area associated with this and potential future tented camp developments would be relatively small in relation to the land resources available, with low impacts restricted to the local / site area.

3.2 SITE SELECTION & LAYOUT EVOLUTION PROCESS

The 'Diepwalle Forest Tented Camp' is to cater as a 15 tent luxury retreat, accommodating a maximum of 30 guests and 4 staff members at any one time, during the summer months. The preferred development proposal has been informed by an iterative process, where consideration was given to various alternatives and their refinement.

In terms of the guidelines on consideration of alternatives, alternatives can include:

- Site Alternatives (please refer to the site selection process detailed in section 3.2.1 below).
- Technology Alternatives (please refer to section 3.2.4 where technology alternatives are discussed in further detail).
- Layout Alternatives (discussed in section 3.2.2 below).

In compliance with the regulations, as a minimum, the No-Go Alternative must be considered and assessed.

The Site & Layout assessment and development process followed for the project has been a two-stage approach; firstly, to select the best of the two sites identified by SANParks (Kranshoek & Diepwalle) and secondly, to inform the evolution of the development layout within the selected the site / footprint.

3.2.1 Site Alternative Selection

SANParks, as part of its Strategic Plan for Commercialisation, identified the tourism PPP opportunity for a seasonal Mobile Tented Facilities in the Garden Route National Park. The product is to be operated over the summer period, from Nov. to April for a period of 7 years. Potential sites for the product were identified in the Diepwalle and Kranshoek areas of Knysna Section of the Garden Route National Park.

The **Diepwalle site (site Alterative #1)** is located in the primitive zone, in the lush green Diepwalle area, of the Knysna Indigenous Forest. The site is surrounded by pristine indigenous Knysna Forest, within a clearing that was previously disturbed. This clearing is accessed via a 1.6 km forest track off the R339, behind a closed gate (limited access). The R339 is a gravel road that is 17.2 km from the N2. Permissible maximum capacity of Diepwalle camp: 50 guest beds.

The **Kranshoek site (site Alternative #2)** is located in a 'low intensity leisure' zone, in the Harkerville section of the Knysna Indigenous Forest. Located south east of the Kranshoek Picnic Site and View Point, which are current attractions to the area for day visitors. The area overlooks a dramatic, rugged coastline. Accessed via Kranshoek Road, 3km gravel road from the N2 highway. Permissible maximum capacity of Kranshoek camp: 50 guest beds.

Using the criteria listed in a Site Selection Matrix (as used for a similar venture in the Kruger National Park), the suitability of the potential alternative sites for the camp facilities and operations were identified and

assessed by SANParks (as the landowner) and the Applicant. Refer to Appendix J for a copy of the Site Selection Matrix, which provides details of the criteria used during site selection, as well as a description and relevant significance rating for each criterion.

Each criterion was assigned various "scores", from 1 to 4, with 4 being the most sensitive. The lower the score, the more suitable the site was for the proposed campsite. Criteria were grouped into 3 categories: General, Tourism and Bio-physical criteria. The score for each criterion was then multiplied by a weighting factor (1-5) of importance to give the rating. Each category was sub-totalled, and the scoresheet totalled. *The maximum total score obtainable is 440. A site was considered unacceptable should any criterion be scored as a NO-GO, or if the total score for a site exceeded 330 (i.e. the site scored <75%).*

As noted in the scoring sheet below, the Kranshoek site (Site Alternative #2) was not found to be suitable, due to the a number of limited factors related to positioning, logistics, exposure to the elements, proximity to communities, security concerns etc.

Table 5: Site Selection Scoring Sheet (SANParks).

KNYSNA SECTION GARDEN ROUTE NATIONAL PARK					
TITLE:	**ASSESSMENT OF KNYSNA TENTED CAMP SITE ALTERNATIVES**				
Mobile Tented Safari Facilities - PPP Opportunity					
Date	2020/08/27				
Assessment done by:	Lysta Stander – SA Experiences Trading (Pty) Ltd. Allan Johnston – SA Experiences Trading (Pty) Ltd. Klaas Havenga – SANParks, Diepwalle Section Ranger Megan Taplin – SANParks, Park Manager: Knysna				
	Name	**Diepwalle – Site Alt.1**		**Hakerville – Site Alt.2**	
	GPS	33 57"24"S 23 10"19"E		34 05"09"S 23 13"55"E	
Criteria	**Weight**	**Score**	**Rating**	**Score**	**Rating**
1. General					
Surface Water	5	2	10	1	5
Visual Aspects	5	1	5	3	15
Noise	5	1	5	3	15
Water availability	5	1	5	4	20
Provision of Water to the site	4	1	4	4	16
Proximity to facilities	5	1	5	1	5
Proximity from access roads	4	1	4	1	4
Access to the site	4	1	4	2	8
Existing access to the site	5	1	5	0	5
Zoning Plan	5	1	5	1	5
Total Rating			**52**		**98**
2. Tourism Criteria					
Sense of place	5	1	5	2	10
Shade – Winter	4	0	0	0	0
Strong winds	2	1	2	4	8
Cooling breeze	3	2	6	1	3
Lighting susceptibility	4	2	0	2	8
External night lights	5	1	5	1	5
Walking ability from site	5	1	5	1	5
Bad odour	3	1	3	1	3
Seasonal Accessibility	3	3	9	3	9
Total Rating			**35**		**51**
3. Bio-physical criteria					
Geology	3	1	3	1	3
Soils	3	1	3	2	6
Hydrology	3	1	3	1	3
Vegetation	4	3	12	2	8
Topography	4	1	4	1	4
Animal utilization	4	4	16	4	16

Rare species	4	1	4	2	8
Heritage	5	2	10	3	15
Compatibility with existing activities	4	1	4	1	4
Total Rating			**59**		**67**
Sum of Total Ratings			**146**		**216**
Comments	The Diepwalle site (Site Alternative #1) is preferred over the Kranshoek site (Site Alternative #2), primarily due to the access to the site and the limitations and costs associated with obtaining access to site 2.				

3.2.2 Development of Layout Alternatives

The development of Diepwalle Forest Tented Camp layout has undergone several revisions (approx. 13) as part of an iterative process to respond to the sensitivities of the site and recommendations identified by the various specialists, the requirements of SANParks as the landowner, input from the Department of Forestry and the development / operational requirements of the Applicant. This responsive approach reduces the degree of mitigation required in order ensure that potential negative environmental impacts remain within acceptable levels.

3.2.2.1 Initial Assessment Area

During the initial site visit held in May 2021, it was noted that the proposed site was heavily invaded with woody alien invasive tree species, limiting access into and visibility of the assessment site. While the PPP Agreement between the Applicant and SANParks was in the process of being drawn up and refined during the last quarter of 2021, a local alien clearing team from Knysna was appointed to cut down the alien trees (under supervision of SANParks) in preparation for the specialist assessments scheduled for the following year.

The initial, conceptual layout of the Diepwalle site layout, as presented in the Applicant's Development Proposal presentation to SANParks, considered 10 guest tents and staff quarters located on the Forest edge of the existing clearing; with the Communal Lounging Deck and Kitchen within the clearing and three 'Secret Lounging Areas' deeper within the Forest beyond the guest tent. This conceptual layout, as well as the three similar versions that followed, were provided to the SANParks specialists for assessment in Aug.2022.

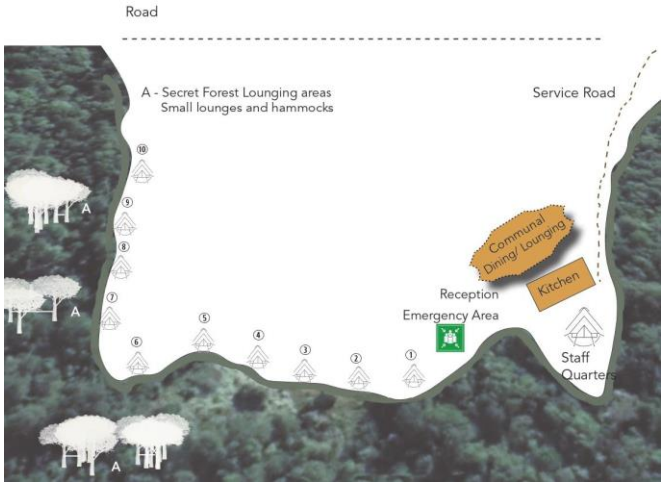
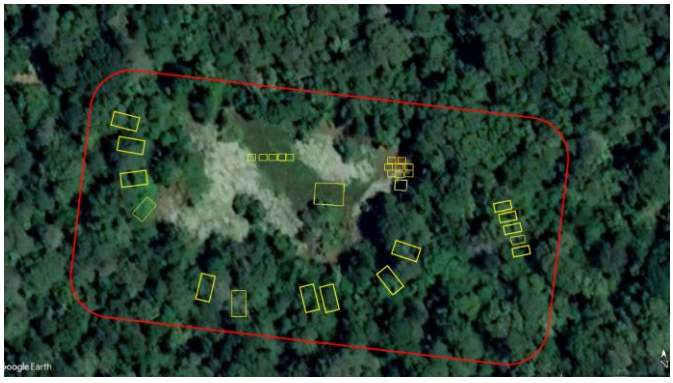
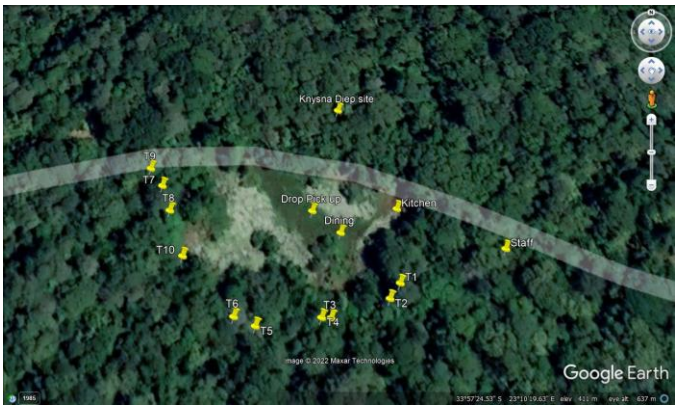


Figure 13: Conceptual initial layout of Diepwalle site, as included in the development BID proposal presented to SANParks by the Applicant (graphic representation only).





The initial layouts for the tented camp intended the use of the centre of the existing clearing for the vehicle turn-around loop, as well as the Communal / Dining deck and Kitchen tents. This clearing, as well as an approximate 50m wide "bubble" into the surrounding Forest, was identified as the initial assessment site of approx. 1.5ha in size.

The SANPark specialists (in 2022), and later the independent specialists (in 2023), assessed these initial layouts as part of their initial site visits.

Figure 14: Initial / Conceptual Study Area & Layouts (SA Experiences Trading (Pty) Ltd, Aug.& Sept.2022).

3.2.2.2 Site Sensitivity Screening & Verification

Following the identification of the initial / conceptual study area, the SANParks specialists were provided with the DFFE Screening Tool Report (*see Appendix I)* and requested to provide Site Sensitivity Verification Reports or Compliance Statements to guide the specialist assessment process going forward. The SANParks specialists confirmed the site sensitivity to be high, and thus various independent specialists (terrestrial biodiversity, faunal, botanical, aquatic & heritage (including archeological & palaeontological)) were appointed to assess the site and assist with the layout development process. Each of the specialists mapped the sensitive areas of the study area, following their respective initial site visits.

During the initial site screening, the Aquatic specialist identified a saddle wetland seep in the centre of the clearing, which in addition to the artificial pond (the "frog pond") and protected trees (identified by the Botanist), were earmarked be to avoided in a proposed 'Mitigated Layout', provided by Confluent Environmental in March 2023.

This 'Mitigated Layout' permitted the positioning of the Communal Deck and vehicle loop within a 10m wetland buffer area on the edge of clearing, with the Communal Deck shifted south of the clearing and centre of the Boardwalk alignment. This layout was deliberated with the Applicant and revised, given that the Kitchen / Storage tents and material drop-off zone, located to the east of the site, was too far removed from the main communal area, making the practical logistics of site operation (i.e. movement of materials & meals between these areas) difficult and cumbersome.

Figure 15: Mitigated Layout based on Aquatic & Botanical sensitivities (Confluent Environmental, March 2023).

3.2.3 Layout Alternatives

The initial study site of approx. 1.5ha (clearing, plus ± 50m of surrounding Forest) was analysed by relevant specialists to determine sensitive features within the site. The layout was then revised and refined several times thereafter, taking into account these sensitivities, as well as input provided by the Applicant, SANParks and the Department of Forestry.

In response to the initial site sensitivities identified by the specialists, the Applicant approached SANParks to request the number of guest tents be increased from ten (10) to fifteen (15), given that the PPP Agreement allowed for a maximum capacity of fifty (50) guest beds / twenty (20) guest tents for the camp. With SANParks' approval for fifteen tents, a revised Layout was presented by the Applicant in June 2023, which avoided the site sensitivities identified, with the main deck and 'back-of-house' infrastructure positioned closer together to enable efficient operations. The positioning of the main infrastructure on the eastern side of the site also coincided with the existing opening into the clearing (for the vehicle drop-off loop) and slip-path into the Forest (for the Kitchen & staff quarters) in this area.

However, as this revised layout proposed additional guest tent footprints (three of which were proposed as double-storey platforms), spread out deeper into the surrounding Forest environment, the specialists were requested to **undertake a second site visit to assess** this new Layout proposal. The three double-storey tent platforms would serve as canopy tents to provide a different experience, with the ablution facility located on lower deck platforms.

Figure 16: Diepwalle Camp Layout Alternative #05 for 15 guest dome-tents, of which 3 were double-storey platforms (SA Experiences Trading (Pty) Ltd., June 2023).

Several revisions of the layout were again made by the Applicant in response to input from the various specialists re-assessment of the site, which included the elimination of the double-storey platform proposal. These layouts were also presented by SANParks to the Department of Forestry in July 2023, which raised a concern that the guest tents positions were too spread out within the Forest environment and recommended that they be again pulled back towards the edge of the clearing. In response, SANParks identified sixteen (16) potential guest tent footprints within the gaps between the forest trees in August 2023, which informed the refinement of the Final Layout (Layout Alternative #13), presented in Appendix D.

3.2.3.1 Layout Alternative 13 (Preferred)

The preferred layout alternative for the Diepwalle Forest Tented Camp (*Final Layout depicted in Figure 17 below & Appendix D attached*) is a product of a lengthy iterative planning and design phase, having undergone multiple stages of refinement, until its current stage that has been accepted by all specialists as being the best practicable environmental option, as it responds to their recommendations & mitigation measures. Other than footprint position shifts, the preferred layout also includes a reduction in size of the kitchen tents.

This extensive upfront consultation with the various specialists, SANParks, the Department of Forestry and the Applicant, has mitigated many of the impacts associated with the initial proposals.

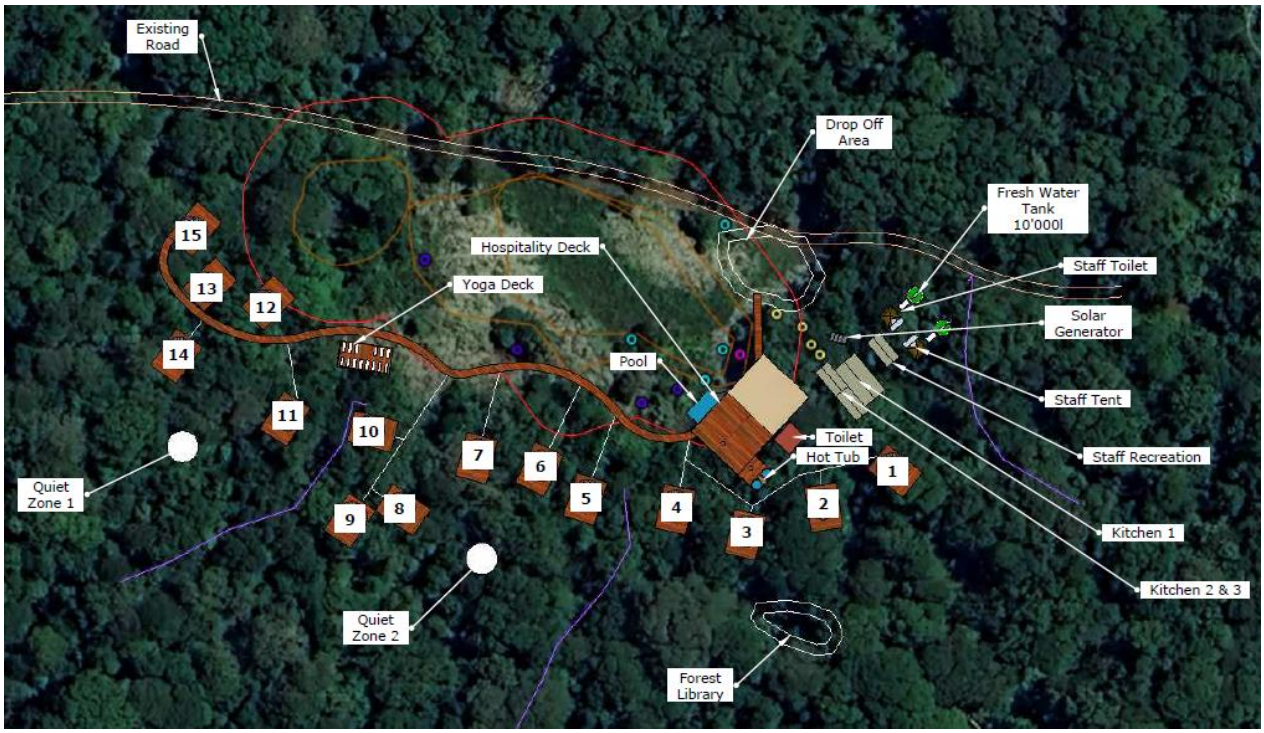


Figure 17: Layout Alternative 13 (preferred) for Diepwalle Forest Tented Camp (SA Experiences Trading (Pty) Ltd., Nov.2023).

3.2.4 Technological Alternatives

The technological alternatives considered and selected as preferred within the mitigated Layout Alternative #13 are clarified below:

3.2.4.1 Water Provision Alternatives

The supply of water to the camp was initially intended to be sourced from a **borehole,** which would to be drilled within or close to site. Given the identification of the wetland, SANParks suggested the alternative of laying of an irrigation-type poly-pipeline through the Forest to gravity feed water from the existing Diepwalle Forest Station reservoirs to the Tent Campsite. Given the elevation drop between the Reservoirs and site is in excess of 100m this **gravity water pipeline** should provide sufficient pressure. This supply can be assisted by the sporadic use of a water pressure pump to feed into **2 x 10 000lt water storage tanks** to be positioned in the camp. Alternative, emergency water supply, can be **trucked in** with mobile water trailer / tanker to fill the water tanks. At full occupancy, it is anticipated that no more than 2000 litres per day will be utilised by the camp. Drinking water will be supplied as bottled water for the guests.

3.2.4.2 Waste- / Grey-water Disposal Alternatives

The initial proposal considered that the kitchen sink and bathroom basins would be plumbed into 200lt storage containers to be emptied every second day for disposal at a designated site prescribed by SANParks or at the Knysna WWTW. Given the frequency and cost associated with implementation and maintenance of this option; and the intended installation of fat-traps and the use of only environmentally friendly / biodegradable detergents; SANParks suggested the disposal of greywater into **soak-aways aligned along three existing slip-paths** into the surrounding forest (*depicted as purple lines in Figure 17 above*). These slip-paths were originally created to pull large trees harvested from the Forest, through the underbrush, for processing in the existing clearing (indicated as a Saw Mill in the 1949 SG Diagram, *see Fig.24 below*), and remain as openings / grooves between the trees. These slip-paths are aligned away from the clearing and will drain greywater into the forest away from the wetland and the camp.

3.2.4.3 Lighting / Electricity Alternatives

The initial option considered for the camp's energy-source was a low-decibel gas / diesel generator. However, due to noise / vibration disturbance concerns raised by particularly the Faunal / Biodiversity specialist, this option was changed to a **mobile solar-panel option**, and selected as the preferred energy technology alternative (*refer to section 2.7.4 above).*

3.2.5 The No-Go Alternative

The no-go Alternative (or status quo) proposes that Diepwalle Forest Tented Camp does not go ahead and that the existing clearing, along the 'Ysterhoutrug Road', in proximity to the Diepwalle Forest Station, remain undeveloped and vacant, as it is currently.

The tourism / hospitality potential of the Knysna Region, particularly in proximity to the Garden Route National Park is significant and will persist should the no-go alternative remain.

The no-go alternative will however not allow the potential associated with the site and Diepwalle area in developing tourism & nature-based wellness facilities, as well as the creation of community collaboration & development, to be realised. Should the no-go alternative be considered, the positive impacts associated with Diepwalle Tented Camp (increased revenue for SANParks, economic investment, local employment etc.) will not be realised.

The no-go alternative is thus **not considered a favourable option** in light of the benefits and low negative impacts associated with the proposed Diepwalle Tented Camp. However, it will be used as a baseline from which to determine the level and significance of potential impacts associated with its development & operation.

3.2.6 Comparison of Alternatives

The table below reflects the key environmental advantages and disadvantages of the various layouts (i.e. the preferred and initial assessment area).

Table 6: Comparison of Advantages and Disadvantages of Layout Alternatives described above.

Alternative	Preference	Reasons (incl. potential issues)
Layout Alternatives		
Layout Alternative #13	Preferred	- Limited to habitat of Medium to Low sensitivity. - Topographically suitable. - Avoids all high and very high ecologically & aquatic sensitive areas. - With mitigation, impacts reduced to low – negligible. - Technological alternatives decrease potential impacts. - Meets operational requirements of the Applicant / Operator and landowner (SANParks). - Considerable positive social, tourism & community-partnership impacts.
Initial Assessment Area / Layout Options	Eliminated from further assessment	- Portions of layout encroach into high and very high ecologically / aquatic sensitive areas (wetland). - Components of initial layout too spread out.
No-go / Status Quo	Not preferrable	- Site remains vacant & unutilised. - Potential positive impacts will not be realised.

Layout Alternative #13 will be assessed against the no-go alternative for the purposes of this Basic Assessment.

3.3 PROJECT PROGRAMME AND TIMELINES

Given the concession with SANParks, and the fact that the operation of the facilities is seasonal (summer months only), the development has definite and stringent timelines that the project needs to meet.

Table 7: Preliminary implementation schedule.

	Description	Timeline
1	General Authorisation from Dept.Water & Sanitation	Received Nov.2023
2	Final comment from Heritage Western Cape (HWC)	Received January 2024
3	Expected Environmental Decision	July 2024
4	Application for Forestry Licence	Aug. 2024
5	Construction	Aug./ September 2024
6	Commissioning / Operational of Season 1	November 2024
7	Extension / Decommissioning of Facility	June 2030

Given that the concession for the facility may be renewed / extended, Department is herewith requested that the validity period of the environmental authorisation (if authorised) be for the full 10 year allowable in terms of the regulations.

4. LEGISLATIVE AND POLICY FRAMEWORK

The legislation that is relevant to this study is briefly outlined below. These environmental requirements are not intended to be definitive or exhaustive, but serve to highlight key environmental legislation and responsibilities only.

4.1 THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA

The Constitution of the Republic of South Africa (Act 108 of 1996) states that everyone has a right to a non-threatening environment and that reasonable measures are applied to protect the environment. This includes preventing pollution and promoting conservation and environmentally sustainable development, while promoting justifiable social and economic development.

The Constitution and Bill of Rights provides that: Everyone has the right:

- to an environment that is not harmful to their health or well-being; and
- to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures:
    - prevent pollution and ecological degradation
    - promote conservation; and
    - secure ecologically sustainable development and the use of natural resources while promoting justifiable economic and social development.

NEMA (discussed below) is the enabling legislation to ensure this primary right is achieved.

4.2 NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NEMA, ACT 107 OF 1998)

The current assessment is being undertaken in terms of the **National Environmental Management Act** (NEMA, Act 107 of 1998, as amended)[2]. This Act makes provision for the identification and assessment of activities that are potentially detrimental to the environment and which require authorisation from the competent authority (in this case, the national Department of Forestry, Fisheries & the Environment, DFFE) based on the findings of an Environmental Impact Assessment (EIA).

The proposed development triggers a number of listed activities, which require assessment and authorisation via a Basic Assessment (BA) Process. Such a process must be conducted by an independent Environmental Assessment Practitioner (EAP). *Cape EAPrac* has been appointed to undertake this process. The figure below depicts a summary of the Basic Assessment process.

[2] The Minister of Water and Environmental Affairs promulgated new regulations in terms of Chapter 5 of the National Environmental Management Act (NEMA, Act 107 of 1998), viz, the Environmental Impact Assessment (EIA) Regulations 2014 (as amended in April 2017). These regulations came into effect on 08 December 2014 (amended on 07 April 2017) and replace the EIA regulations promulgated in 2006 and 2010.

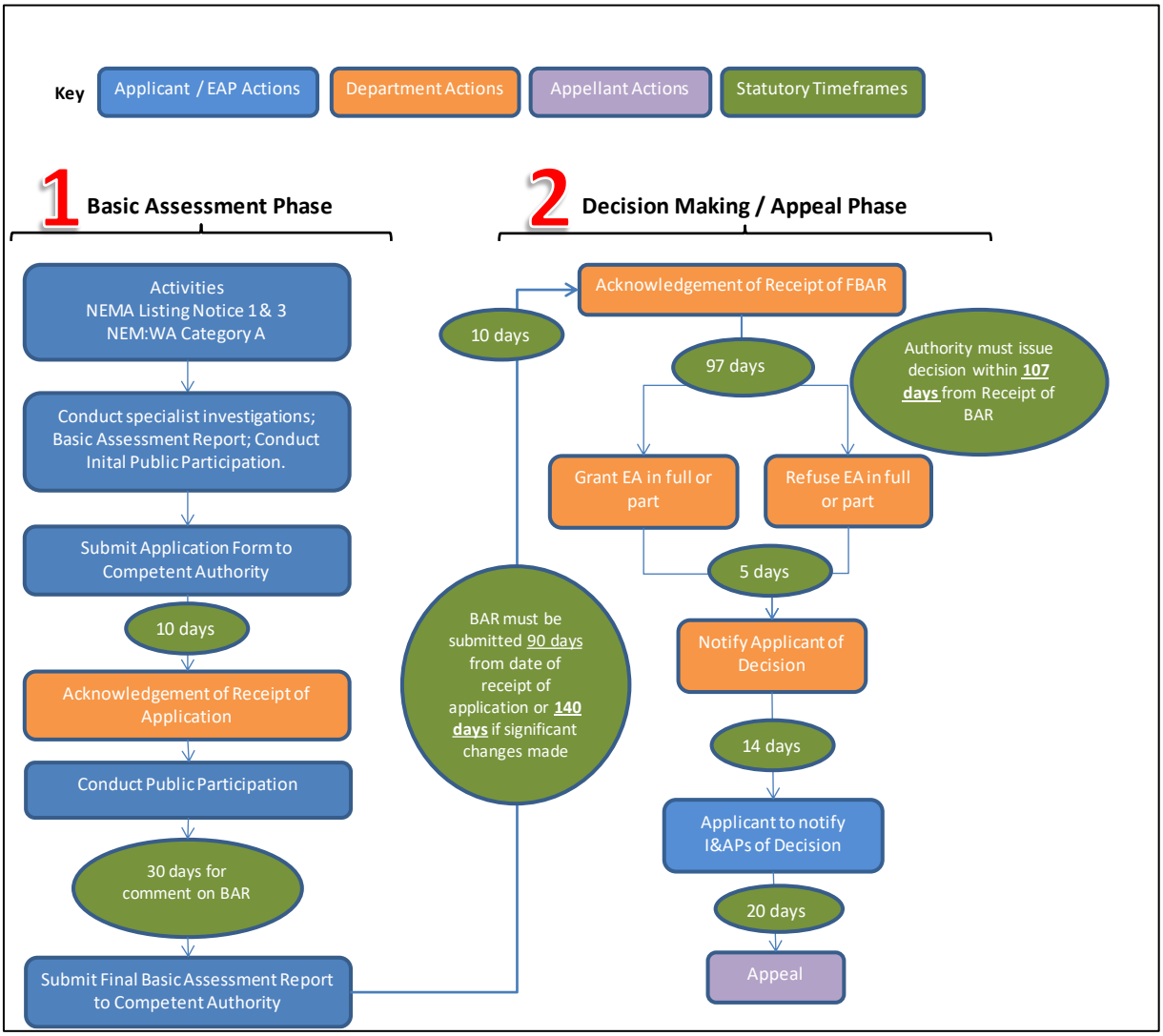


Figure 18: Summary of Basic Assessment Process in terms of the 2014 Regulations (as amended).

The listed activities associated with the proposed development, as stipulation under 2014 Regulations 327, 326 and 324 are as follows:

Table 8: NEMA 2014 (as amended in April 2017) listed activities applicable to Diepwalle Forest Tented Camp.

Activity No(s):	**Basic Assessment Activity(ies) as set out in Listing Notice 1 of the EIA Regulations, 2014 as amended**	**Portion of the proposed project to which the applicable listed activity relates.**
12	The development of – (ii) infrastructure or structures with a physical footprint of 100 square metres or more; (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse.	The Tented camp with combined physical footprint of approx. 1508m² to be developed within 32m of a small, man-made & unmapped **pond** & **saddle seep wetland** confirmed via an Aquatic study.
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal, or moving of soil, sand, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse.	The Tented camp is to be developed within 32m of a small, man-made & unmapped **pond** & **saddle seep wetland** confirmed via an Aquatic study.
Activity No(s):	**Scoping and EIA Activity(ies) as set out in Listing Notice 2 of the EIA Regulations, 2014 as amended**	**Portion of the proposed project to which the applicable listed activity relates.**
N/A		
Activity No(s):	**Basic Assessment Activity(ies) as set out in Listing Notice 3 of the EIA Regulations, 2014 as amended**	**Portion of the proposed project to which the applicable listed activity relates.**
6	The development of resorts, lodges, hotels, tourism or hospitality facilities that sleep 15 people or more.	Seasonal camp with accommodate more than 15 people when in operation in the summer months.

	i. Inside a protected area identified in terms of NEMPAA	
12	The clearance of an area of 300m² 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. iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning or 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.	Clearance of vegetation more than 300m² within a National Protected Area: Garden Route National Park, for create of deck & tent footprints.
14	The development of - (ii) infrastructure or structures with a physical footprint of 10m² or more; where such development occurs— (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse; i. Outside urban areas:(aa) A protected area identified in terms of NEMPAA, excluding conservancies; (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (gg) Core areas in biosphere reserves.	The Tented camp with combined physical footprint of approx. 1508m² to be developed within 32m of a small, man-made & unmapped **pond** & **saddle seep wetland** confirmed via an Aquatic study.
Activity 15 of Listing Notice 3 was considered, however as there is no re-zoning applicable that relates to residental, retail, commercial, industrial or institutional land uses, this Activity is **not applicable**. The proposed development is considered to be a tourism-based land-use, which aligns with the conservation land use of the National Park.		

Before any of the above-mentioned listed activities can be undertaken, authorisation must be obtained from the relevant NEMA competent authority, in this case the DFFE. Should the Department approve the proposed activity, the Environmental Authorisation does not exclude the need for obtaining relevant approvals from other Authorities who have a legal mandate in respect of the activity.

4.3 NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT (NEM:BA, ACT 10 OF 2004)

This Act controls the management and conservation of South African biodiversity within the framework of NEMA. Amongst others, it deals with the protection of species and ecosystems that warrant national protection, as well as the sustainable use of indigenous biological resources. Sections 52 & 53 of this Act specifically make provision for the protection of critically endangered, endangered, vulnerable and protected ecosystems that have undergone, or have a risk of undergoing, significant degradation of ecological structure, function or composition as a result of human intervention through threatening processes.

The development site in located within a proclaimed Protected Area, in which the degradation of the protected environment must be kept to a minimum or avoided as far as possible.

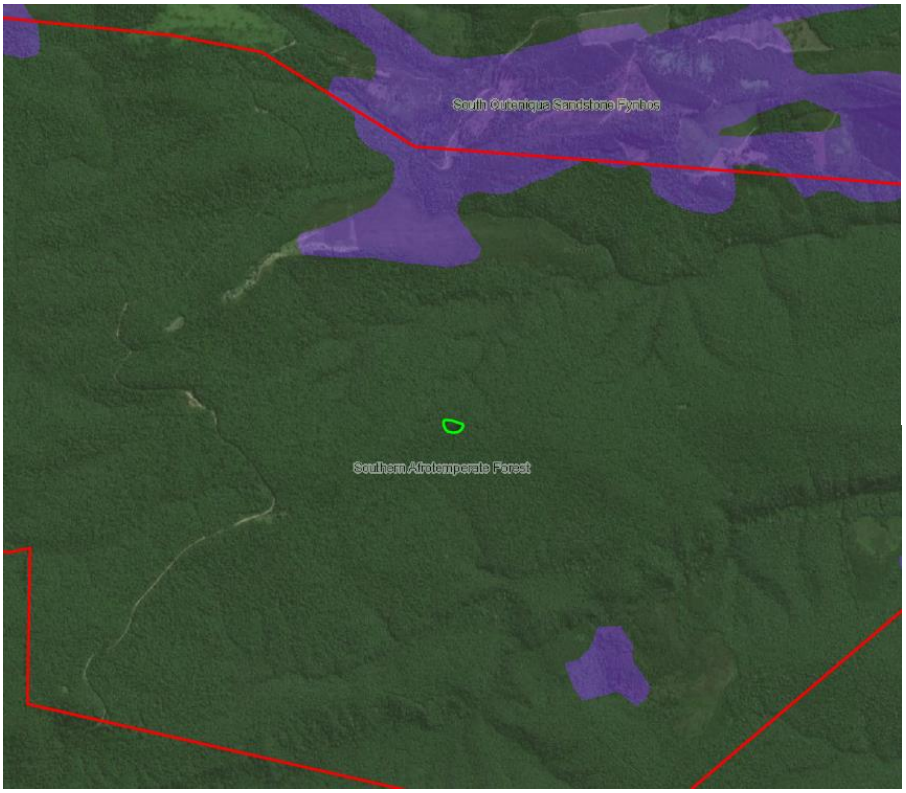
The Revised National List of Threatened Ecosystems were published in Government Gazette 47526 (Notice No.689) on 18 November 2022, in terms of NEM:BA. This list of threatened terrestrial ecosystems supersedes the information regarding terrestrial ecosystem status in the NSBA 2004, 2007, 2011 & 2016.

In terms of the NEMA EIA regulations, a basic assessment report is required for the transformation or removal of indigenous vegetation of more than 300m² within a National Protected Area: regardless of the ecosystem threat status or extent of transformation that will occur.

NEMBA also deals with endangered, threatened and otherwise controlled species. The Act provides for listing of species as threatened or protected, under one of the following categories:

- **Critically Endangered**: any indigenous species facing an extremely high risk of extinction in the wild in the immediate future.
- **Endangered**: any indigenous species facing a high risk of extinction in the wild in the near future, although it is not a critically endangered species.
- **Vulnerable**: any indigenous species facing an extremely high risk of extinction in the wild in the medium-term future; although it is not a critically endangered species or an endangered species.
- **Protected species**: any species which is of such high conservation value or national importance that it requires national protection. Species listed in this category include, among others, species listed in terms of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Certain activities, known as Restricted Activities, are regulated by a set of permit regulations published under the Act. These activities may not proceed without environmental authorization.



The Diepwalle Tented Camp site is located in the Southern Afrotemperate Forest ecosystem / vegetation (Least Threatened), with South Outeniqua Sandstone Fynbos (Vulnerable) mapped on & beyond the Parks northern boundary. The study area is not located in or proximity to any threatened ecosystem.

Figure 19: Vegetation Type for Diepwalle site, indicated as green circle.

According to the Botanical Specialist (Annexure E2), the proposed development is mapped entirely as Southern Afrotemperate Forest (FOz1; a Least Concern vegetation type which is, however, protected in South Africa because it is part of our National Forest Inventory). Two plant species of conservation concern were observed at the site: Stinkwood (*Ocotea bullata)* and Assegaai (*Curtisia dentata);* while two protected Yellowwood tree species were also present: Real Yellowwood (*Afrocarpus latifolius)* (protected tree no. 18 – the most abundant protected tree in the forest) and Outeniqua Yellowwood (*Afrocarpus falcatus)* (protected tree no. 16). Several other noteworthy plant species (orchids & mosses) were also noted.

According to the Biodiversity Specialist (Annexure E3 & E4), this area is a key area for protected and endangered animal, bird & invertebrate species. Although the construction of the proposed tented camp is **unlikely to have any detrimental effects of any of the species** identified by the scoping tool, it will no doubt have an effect on other (non-threatened species) that were not identified as being at risk by the screening tool. It is important that the proposed development does not cause any unnecessary disturbance to species, by implementing the mitigation measures as recommended by the specialists.

4.3.1 Garden Route Biodiversity Spatial Plan (GRBSP)

A Biodiversity Spatial Plan (BSP) provides a way forward in reconciling the conflict between transformation / development and the maintenance of natural systems. The Garden Route BSP forms part of the Western Cape BSP (WCBSP, 2017). Central to the Garden Route BSP is the **Protected Area & Critical Biodiversity Area**

(CBA) Map (*see Appendix B)*, which together with its associated guidelines and GIS maps, have been consulted as background to this DBAR.

The tented camp site falls within the Garden Route National Park which is a Protected Area, which in terms of the Biodiversity Spatial Plan has the objective of: 'Keep in a natural state, with a management plan focused on maintaining or improving biodiversity. A benchmark for biodiversity conservation'. It is thus important that the mitigation measures recommended by the various specialists be implemented to avoid impacts on biodiversity.

4.3.2 Alien Invasive Species Regulations & List, 2020 (GNR. 1020)

Along with the abovementioned Revised National List of Threatened Ecosystems (2018), NEM:BA provides a 'List of Alien and Invasive Plant Species (2016 & 2020)', which require control or management.

Chapter 5 of NEM:BA deals specifically with these species which may pose a threat to biodiversity and aims to – '*to **prevent the unauthorized introduction and spread** of alien species and invasive species to ecosystems and habitats where they do not naturally occur; **to manage and control** alien species and invasive species to prevent or minimize harm to the environment and to biodiversity in particular; **and to eradicate** alien species and invasive species from ecosystems and habitats where they may harm such ecosystems or habitats*'.

Control and management of Alien Invasive Plant Species, within the ambit of the NEM:BA, is guided by the definition of different categories or lists according to their current invasive state and potential to become invasive. These categories are, as per the NEM:BA Regulations (25 September 2020):

Category 1a Listed Invasive Species: **requiring compulsory control**. Remove and destroy. Any specimens of Category 1a listed species need, by law, to be eradicated from the environment. No permits will be issued.

Category 1b Listed Invasive Species: **requiring compulsory control** as part of an invasive species control programme. Remove and destroy. These plants are deemed to have such a high invasive potential that infestations can qualify to be placed under a government sponsored invasive species management programme. No permits will be issued.

Category 2 Listed Invasive Species: regulated by area. A demarcation permit is required to import, possess, grow, breed, move, sell, buy or accept as a gift any plants listed as Category 2 plants. No permits will be issued for Cat. 2 plants that occur in riparian zones or protected areas.

Category 3 Listed Invasive Species: regulated by activity. An individual plant permit is required to undertake any of the following restricted activities (import, possess, grow, breed, move, sell, buy or accept as a gift). No permits will be issued for Cat. 3 plants that occur in riparian zones or protected areas.

Several exotic and invasive species were observed on the Diepwalle site (Table 9), especially within the wetland / clearing area that is dominated by overgrown *Helichrysum spp*. Almost none of the invasive and exotic naturalised species listed were observed outside of the clearing (i.e. in the forest). Invasive species for South Africa is summarised in two pieces of legislation, namely the NEM:BA and the Conservation of Agricultural Resources (CARA, Act 43 of 1983)(*see section 4.4 below).*

Table 9: List of alien plant species noted on site (Fourie, 2023).

Species	Common name	Family	NEMBA	CARA	Area
Acacia stricta	Hop wattle	Fabaceae	1a	NA	Wetland
Centella asiatica	Gotu Cola	Apiaceae	NA	NA	Wetland
Hypochaeris radicata	Common cat's ear, dandelion	Asteraceae	NA	NA	Wetland
Plantago lanceolata	Ribwort plantain	Plantaginaceae	NA	NA	Wetland
Rosa rubiginosa	Sweet brier	Rosaceae	1b	1	Wetland
Rubus spp.	Brambles	Rosaceae	1a or 1b	1 or 2	Wetland

Table 10: Sections of NEM:BA Alien Invasive Species Regulations applicable to the site.

NEM:BA		
Section	**Provision**	**Application to the Facts**
1	"*Restricted activity*" means inter alia as "*having in possession or exercising physical control over any specimen of an alien or listed invasive species;*	Several listed invasive plant species have been noted to occur at the site, and as such, the landowner in seen as

	spreading or allowing to spread of, any specimen of a listed invasive species".	"being in possession of, and exercising physical control, over such species, and the spread thereof".
72	*(1) A person may not carry out a restricted activity involving a specimen of a listed invasive species without a permit issued in terms of Chapter 7.*	To the author's knowledge, no permit has been issued to the landowner, nor has any application been submitted for such a permit. The Landowner &/ Applicant will be required to control & eradicate all listed invasive plant species from the site, as prescribed by the EMPr.
73	*(2) A person who is the owner of land on which a listed invasive species occurs must –* *(a) notify any relevant competent authority, in writing, of the listed invasive species occurring on that land;* *(b) take steps to control and eradicate the listed invasive species and to prevent it from spreading; and* *(c) take all the required steps to prevent or minimise harm to biodiversity.*	The Applicant, via the submission of this DBAR, hereby: - Notifies the DFFE of the listed invasive plant species on the land; - Intends to take the necessary steps to control & eradicate the invasive plant species and prevent them from spreading; and - Intends to take all required steps to prevent harm to biodiversity.
Gov.Notice R1020 (2020) of NEM:BA – Alien & Invasive Species Regulations		
3(2)	*(2) A person in control of a Category 1b Listed Invasive Species must control the listed invasive species in compliance with sections 75(1), (2) and (3) of the Act.*	The landowner / person in control of the land intends to control all Category 1b Listed Invasive Plant Species on the site.
4(2)	*Unless otherwise indicated in the Notice, no person may carry out a restricted activity in respect of a Category 2 Listed Invasive Species without a permit.*	The landowner / person in control of the land intends to control all Category 2 Listed Invasive Plant Species on the site.

In the case of the Diepwalle Tented Camp site, and the high value of biodiversity and ecosystems within which it falls, all alien invasive plants, irrespective of Category, should be eradicated from the project site. This has been included as a requirement in the Environmental Management Programme (EMPr).

4.4 CONSERVATION OF AGRICULTURAL RESOURCES ACT (CARA, ACT 43 OF 1983):

The Conservation of Agricultural Resources Act (CARA) provides for the regulation of control over the utilisation of the natural agricultural resources in order to promote the conservation of soil, water and vegetation and provides for combating weeds and invader plant species. CARA defines different categories of alien plants:

- Category 1 - prohibited and must be controlled;
- Category 2 – must be grown within a demarcated area under permit; and
- Category 3 - ornamental plants that may no longer be planted, but existing plants may remain provided that all reasonable steps are taken to prevent the spreading thereof, except within the flood lines of water courses and wetlands.

As mentioned above, it is intended that all alien plant species that occur within the clearing of the Diepwalle site will be removed and controlled by the Applicant and/or the landowner (SANParks) in accordance with the EMPr.

As the site is located in a proclaimed Protected Area, there is no potential for future cultivation or agricultural land use, and thus the other provisions of CARA applicable to conservation of agricultural resources and Subdivision of Agricultural Land Act (Act 70 of 1970) are not applicable in this case. Mitigation measures to ensure soil and water resources are not polluted or damaged area included in the EMPr to safeguard the natural habitats they support.

4.5 NATIONAL WATER ACT (NWA, ACT 36 OF 1998)

Section 21 c) & i) of the National Water Act (NWA) requires the Applicant to apply for authorisation from the Department of Water and Sanitation (DWS) for any activity in, or in proximity to any watercourse. Two aquatic features were identified by the Aquatic Specialist on the Diepwalle camp site: the **excavated pool / "Frog / Wooded Pond"** and a **seasonal saddle seep wetland**.

While the **excavated pool** is considered artificial and is not classified as a watercourse in terms of the NWA, its historic presence at the site has attracted a range of hydrophytic (water loving) plants and a population of at least two frog species. Given its location in a National Park and priority conservation area these are features which contribute to biodiversity in the area and **warrant protection from disturbance**.

The seep wetland located in the existing clearing of the site, is classified as a watercourse, and showed two distinct zones of wetness, each approximately corresponding with the two zones of dominant vegetation in the

clearing: *Helichrysum petiolare* in the temporary wetland zone and *H. cymosum* in the seasonal wetland zone. Both zones are interspersed throughout with alien invasive bramble (*Rubus* sp.) and bracken fern (*Pteridium aquilinum*).

A **management setback / buffer of 10m** has been recommended by the Aquatic Specialist around the wetland area and excavated pool, within which various activities are either supported or discouraged. The preferred layout alternative has responded to this setback and associated mitigation recommendations.

Given that the entire development site falls within the regulated 500m from this wetland, and that the outcome of the Risk Matrix was determined to be low, an Application for **a General Authorisation (GA) for Section 21 c) and i) water uses in terms of the NWA** is required. This application has already been processed and the General Authorisation, dated 23 Oct.2023, was issued by DWS in Nov.2023 (*see Annexure G6 for a copy of the GA).*

Section 21 a) of the National Water Act relates to the abstraction of water from a water resource (including abstraction of groundwater); with the need for a Water Use Licence Authorisation (WULA) for such abstraction. As the option to drill a borehole as a water supply option has been eliminated from the preferred alternative, this is no longer applicable.

The Department of Water and Sanitation, as well as the Breede Olifants Catchment Management Agency (BOCMA) have been registered as key stakeholders to provide input into in this environmental process.

The assessment of the aquatic biodiversity impacts (in Annexure E1) has been completed in accordance with the requirements of the published General Notice (GN) 509 by the Department of Water and Sanitation (DWS). Such an assessment included a detailed Risk Assessment Matrix. Please refer to the detailed risk matrix in Annexure E1 and the summary of the outcomes of this risk / impact assessment in the table below.

Table 11: Summary of Aquatic Impact Assessment.

Impact Activity	Risk Rating without Mitigation	Risk Rating with mitigation
Construction Phase		
Movement of vehicles, materials and workers around wetland habitat.	Low negative	Very Low negative
Handling of fuel and other building materials	Low negative	Negligible negative
Construction of boardwalks and platforms (decks).	Low negative	Very Low negative
Operation Phase		
Overflow or backwashing of pool & hot-tubs to the wetland / buffer.	Vey low negative	Negligible negative
Camp access for deliveries and removals	Moderate negative	Low negative
Camp activities disturbing aquatic biota (animals).	Moderate negative	Very low negative
Disposal of grey water & wastewater into aquatic habitat & buffer (pollution)	Moderate negative	Very low negative
Decommissioning Phase		
Vehicles or workers removing materials from the site – disturbance of wetland, excavated pool & buffer.	Moderate negative	Very low negative

The risks associated with the proposed development area range from low to moderate negative impacts, associated with disturbance of the wetland, the excavated pool & buffer. With the implementation of recommended mitigation measures these impacts will be reduced to low to negligible. Hence the issuing of the General Authorisation by DWS & BOCMA.

4.5.1 National Freshwater Ecosystem Priority Area (NFEPA) Status

The National Freshwater Ecosystem Priority Areas (NFEPA) database forms part of a comprehensive approach to the sustainable and equitable development of South Africa's scarce water resources. This database guides how many rivers, wetlands and estuaries, and which ones, should remain in a natural or near-natural condition to support the water resource protection goals of the National Water Act (Act 36 of 1998). This directly applies to the National Water Act, which feeds into Catchment Management Strategies, water resource classification, reserve determination, and the setting and monitoring of resource quality objectives

(Nel *et al*., 2011). The NFEPAs are intended to be conservation support tools and envisioned to guide the effective implementation of measures to achieve the NEM:BA's biodiversity goals, informing both the listing of threatened freshwater ecosystems and the process of bioregional planning provided for by this Act (Nel *et al.,* 2011).

According to the National Freshwater Ecosystem Priority Atlas the study area is within area 9092 and is categorised as a Fish FEPA (Nel *et al.,* 2011). This is due to the presence of Endangered or Critically Endangered fish in the quinary catchment of the Bietou River. As the **site is not located near a flowing watercourse** and is not altering the existing land cover in any significant way, the proposed land-use is **very unlikely to impact on any local fish populations.**

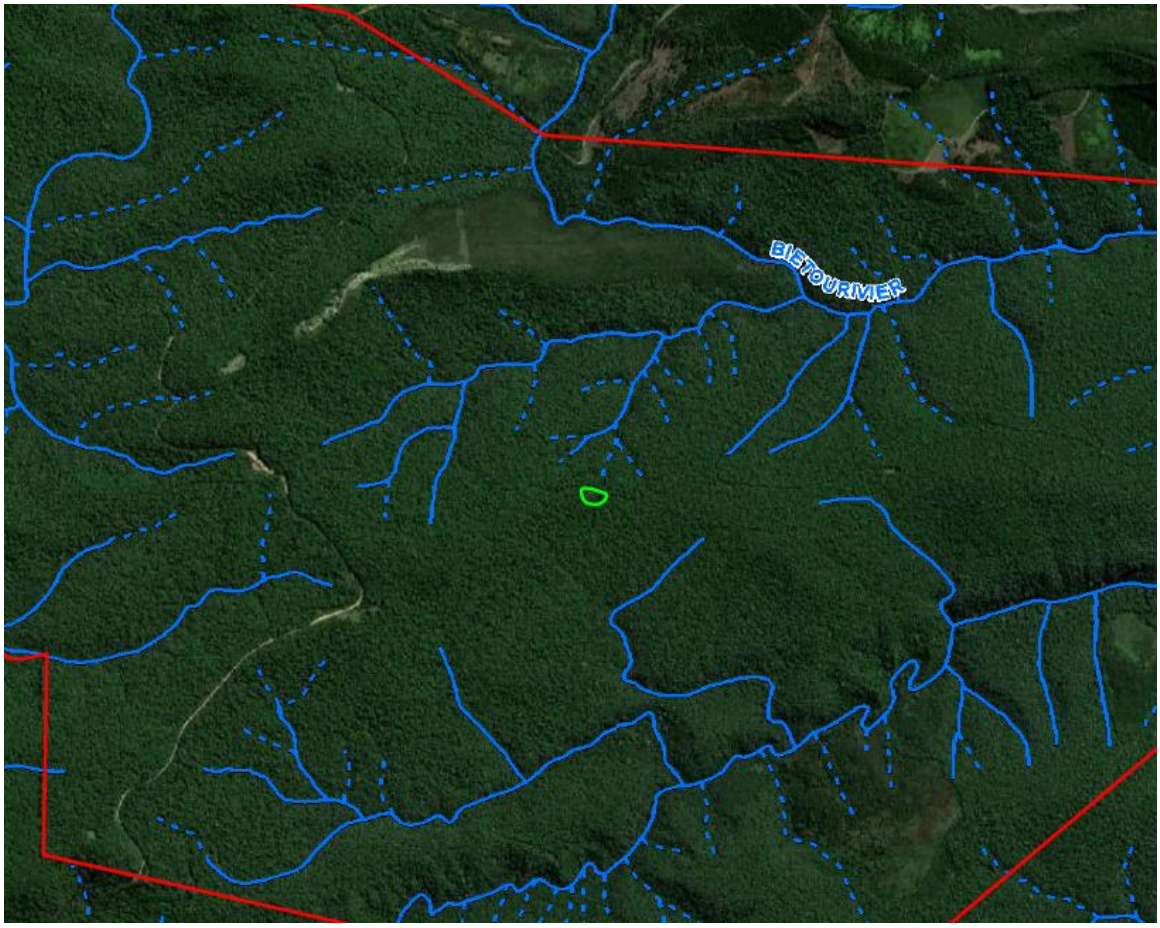


Figure 20: Diepwalle Camp site (green circle) in relation to mapped National Freshwater Ecosystem Priority Areas (CapeFarmMapper, Elsenburg).

As detailed in sections 4.5 above and 5.7 below, a seasonal saddle wetland seep was identified in the site clearing, as well as an excavated pool. As these aquatic features warrant conservation, a 10m management setback line was recommended around them, and has informed the preferred Site Layout.

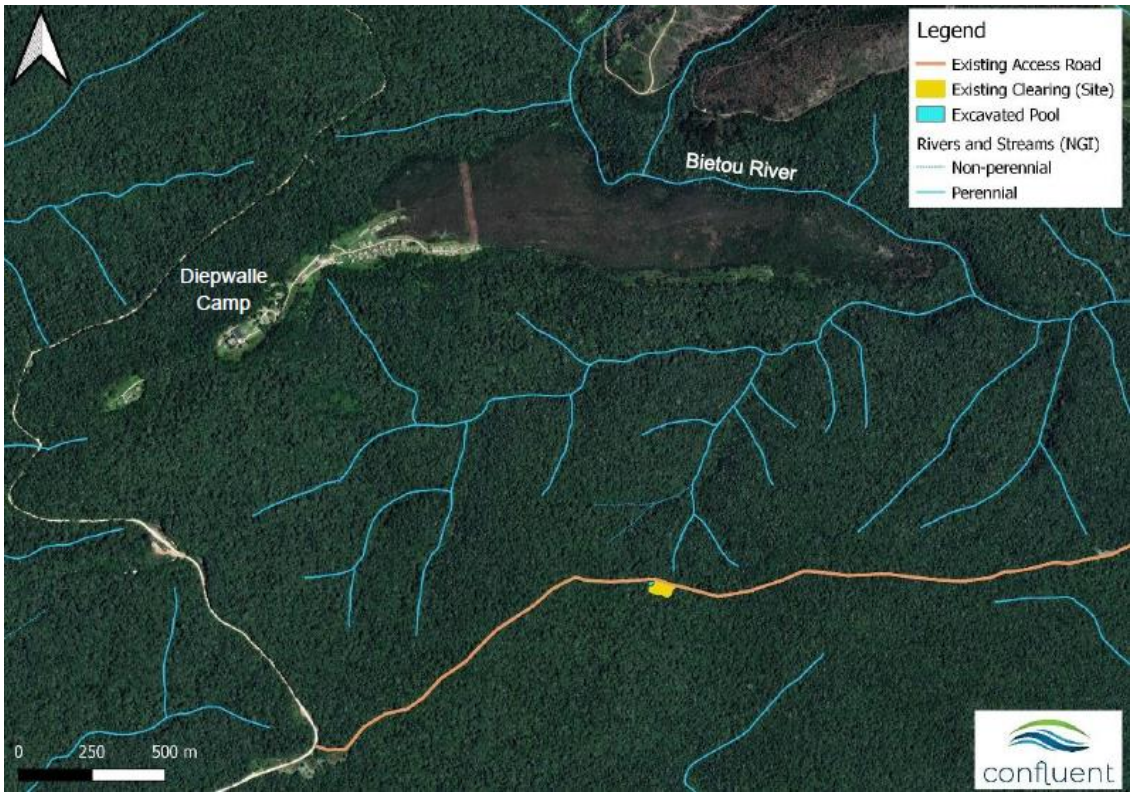


Figure 21: General location of the clearing in relation to mapped watercourses (wetlands, rivers and streams) (Confluent, 2023).

4.6 NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT (NEM:PAA, ACT 57 OF 2003)

This Act provides for the protection and conservation of ecologically viable areas representative of South Africa's biological diversity and its natural landscapes and seascapes; for the establishment of a national register of all national, provincial and local protected areas; for the management of those areas in accordance with national norms and standards; for intergovernmental co-operation and public consultation in matters concerning protected areas; and for matters in connection therewith.

The property is owned by the State and managed by the South African National Parks (SANParks) for the preservation of biodiversity, heritage and ecosystem processes. The Diepwalle Forest Tented Camp is located entirely within the Diepwalle area of the Garden Route National Park (GRNP), proclaimed to conserve the indigenous Knysna Forests, as well as National Freshwater Ecosystem Priority Areas (NFEPA). The GRNP represents one of the few National Parks in South Africa that is not fenced and movement of animal species between the GRNP and surrounding landscape is not inhibited. Although fragmented, the GRNP currently covers 165 899 ha, including cultural areas that have not officially been declared as part of the park. This large protected area provides protection of terrestrial and aquatic habitats and sanctuary for many plant and animal species. The habitats and species identified within and surrounding the development site must be safe-guarded (*refer to recommendations detailed in the specialist Reports attached in Appendix E)*.

4.7 NATIONAL FORESTS ACT (NFA, ACT 84 OF 1998)

The National Forests Act (NFA) provides for the **protection of forests**, as well as **specific tree species**, quoting directly from the Act: "*no person may cut, disturb, damage or destroy any protected tree or possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree or any forest product derived from a protected tree, except under a licence or exemption granted by the Minister to an applicant and subject to such period and conditions as may be stipulated".*

The Forestry Directorate of the Department of Forestry, Fisheries & the Environment (DFFE) is responsible for the implementation and enforcement of the NFA, which includes **prohibition of damage to indigenous trees in any natural forest without a licence** (Section 7 of the NFA), as well as the prohibition of the cutting, disturbing, damaging destroying or removing **protected trees** without a licence (Section 15 of the NFA).

Given that the proposed development of the Diepwalle Forest Tented Camp will require the rescue & transplant, trimming and removal of Forest trees, which include a number of protected tree species, an **Application for a Forestry Licence in terms of both Section 7 & 15 of the NFA will be required.**

The positioning of the structures within the Diepwalle camp have been guided as far as possible by the avoidance of large and protected trees (using gaps / openings in the forest), as well as limiting encroachment deep into the surrounding Forest environment. The accuracy of this positioning in relation to the trees is limited due to GPS mapping constraints etc., and thus the preferred layout must be considered as approximate only. Therefore, the final positioning and orientation of the camp structures, and the associated impact on surrounding trees, will need to be confirmed on site prior to construction, in collaboration with SANParks and under supervision of an appointed Environmental Control Officer (ECO).

4.8 NATIONAL HERITAGE RESOURCES ACT (NHRA, ACT 25 OF 1998)

The protection and management of South Africa's heritage resources are controlled by the National Heritage Resources Act (Act No. 25 of 1999). Heritage Western Cape (HWC) is the enforcing authority in the Western Cape and is registered as a Stakeholder for this environmental process.

The National Heritage Resources Act requires relevant authorities to be notified regarding this proposed development, as the following activities are relevant:

- any development or other activity which will change the character of a *site* exceeding 5 000 m² in extent.

The proposed Diepwalle Tented Camp site is approximately 15 000m² in size.

In terms of Section 34(1), no person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the SAHRA, or the responsible resources authority (in this case, Heritage Western Cape). As no buildings and/or structures were noted on or within the direct proximity of the site, this section of the NHRA is not applicable.

In terms of Section 36 (3), no person may destroy, damage, alter, exhume or remove from its original position, or otherwise disturb, any grave or burial ground older than 60 years, which is situated outside a formal cemetery administered by a local authority, without a permit issued by the SAHRA, or a provincial heritage authority (in this case, Heritage Western Cape). Furthermore, in terms of Section 35 (4), no person may destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object, without a permit issued by the SAHRA, or the responsible resources authority (In this Case, Heritage Western Cape).

Although the site is densely overgrown, the nature and timeframes associated with former land use means that little, if any, tangible evidence of cultural significance are likely to remain. It is however possible that subsurface historic material (e.g. old rubbish dumps) may be unearthed, in which case, the following HWC Standard Clause will apply: *"If during ground clearance or construction, any archaeological material or human graves are uncovered, work in that area should be stopped immediately and the ECO must report this to Heritage Western Cape. The heritage resource may require inspection by the heritage authorities, and it may require further mitigation in the form of excavation and curation in an approved institution."*

According to SAHRIS Palaeontological sensitivity mapping, the study area is highlighted as being of low (blue) palaeontological sensitivity, and thus no further studies are required in this case.

In compliance with the Heritage Western Cape procedural requirements, a detailed Notification of Intent to Develop (NID) was submitted to HWC by the Heritage Practitioner (de Kock, 2023)(*see NID Report attached as Annexure E6*).

In terms of Section 38 of the NHRA, Heritage Western Cape (HWC) provided comment on this NID (Case No.: HWC23112802SB1129, dated 11 January 2024), confirming that as there is no reason to believe that the proposed seasonal tented camp will impact heritage resources, no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required.

4.9 WESTERN CAPE SPATIAL DEVELOPMENT FRAMEWORK (WCSDF, 2020)

The Garden Route District spans 23 331 km² in extent, which is 18% of the Western Cape's land area. It is home to a total of 617 833 persons (as of 2020) that are unevenly situated across 7 local municipalities and 26 dispersed urban nodes – predominantly in the coastal nodes of George, Mossel Bay, Knysna & Plettenburg Bay. The District economy varies greatly across geographical space, and whilst close to 80% of gross value

add is generated in these four coastal municipalities, it is predicted that this region will contain 85% of the population and 90% of the economy of the Garden Route District municipal area by 2040.

There exists a plethora of natural assets in the region whose potential for sustainable economic growth, tourism, contribution to sense of place, and improved human livelihoods is not maximized and is undermined by a lack of marketing and conservation. The economy of the region is intrinsically tied to these natural assets. There is a growing need to develop these attributes in a sustainable way, while protecting the natural environment and resources on which they depend.

Key outcomes and proposals listed in the WCSDF for the Southern Cape and Garden Route region, which are applicable to the Diepwalle Tented Camp proposal, include:

- Improve regional tourism branding, marketing strategy and tourism coordination; and
- Preserve and enhance sense of place and Garden Route aesthetic through appropriate development and design guidelines.

It is argued that given the Diepwalle Forest Tented Camp is a Public-Private-Partnership initiative aimed at boosting tourism within the Garden Route National Park, and its design as a environmentally sensitive, transient facility, it aligns with the abovementioned key outcomes.

4.10 KNYSNA MUNICIPALITY INTEGRATED DEVELOPMENT PLAN (IDP, 2023)

Knysna (estimated at 25.5 per cent in 2021) has the highest unemployment rate in the Garden Route District (21.1per cent), as well as the Western Cape's (25.1 per cent) unemployment rate. Unemployment has been on an upward trend from 2016 (17.4 per cent) to 2021 largely driven by the job losses because of the drought, load shedding and economic recession over this period. In 2021, 56.83 per cent of Knysna's population fell below the UBPL. Ironically, Knysna has the largest proportion of people living in poverty in the Garden Route District Environment - Knysna embodies all the natural features that make the Garden Route one of the most popular destinations in South Africa.

In 2022, Knysna was voted in the top 20 "most loved destinations" in the world (Tourism Sentiment Index). Local and international visitors are drawn to the area to enjoy vast tracts of indigenous forest, pristine mountain fynbos, abundant wildlife, and a coastline that offers many recreational opportunities.

The imperative to keep Knysna ecologically functional and attractive is supported by the fact that it is situated within the boundaries of the Garden Route National Park and has high world bio-diversity value, as part of the Cape Floral Kingdom. This requires that Knysna Municipality work in cooperation with environmental authorities such as SANParks, Cape Nature, DEA&DP, civil society groups and non-profit organisations to ensure that natural resources are protected and enhanced for future generations.

Interventions listed to improve employment opportunities and job creation, include the need for / to:

- Training & skills development for SMME's;
- Establishing effective partnerships with the business sector;
- Foster a culture of entrepreneurship; and
- The development of a Tourism Destination Marketing Plan.

Although small, it is hoped the proposed Diepwalle Forest Tented Camp will contribute to the tourism economy of Knysna, through its intended staff training, partnerships with the Diepwalle Community Tea Garden / Kitchen and other local service providers operating in the area.

4.11 GUIDELINES, POLICIES AND AUTHORITATIVE REPORTS

This section includes relevant Guidelines, Policies and Authoritative reports applicable to the proposed Diepwalle Forest Tented Camp.

4.11.1 Sustainability Imperative

The norm implicit to our environmental law is the notion of sustainable development ("SD"). SD and sustainable use and exploitation of natural resources are at the core of the protection of the environment. SD is generally accepted to mean development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. The evolving elements of the concept of SD *inter alia* include the right to develop; the pursuit of equity in the use and allocation of natural resources (the principle of intra-generational equity) and the need to preserve natural resources for the benefit of present and future generations. Economic development, social development and the protection of the environment are considered the pillars of SD (the triple bottom line).

"Man-land relationships require a holistic perspective, an ability to appreciate the many aspects that make up the real problems. Sustainable planning has to confront the physical, social, environmental and economic challenges and conflicting aspirations of local communities. The imperative of sustainable planning translates into notions of striking a balance between the many competing interests in the ecological, economic and social fields in a planned manner. The 'triple bottom line' objectives of sustainable planning and development should be understood in terms of economic efficiency (employment and economic growth), social equity (human needs) and ecological integrity (ecological capital)."

As was pointed out by the Constitutional Court, SD does not require the cessation of socio-economic development but seeks to regulate the manner in which it takes place. The idea that developmental and environmental protection must be reconciled is central to the concept of SD - it implies the accommodation, reconciliation and (in some instances) integration between economic development, social development and environmental protection. It is regarded as providing a "conceptual bridge" between the right to social and economic development, and the need to protect the environment.

Our Constitutional Court has pointed out that the requirement that environmental authorities must place people and their needs at the forefront of their concern so that environmental management can serve their developmental, cultural and social interests, can be achieved if a development is sustainable. "*The very idea of sustainability implies continuity. It reflects the concern for social and developmental equity between generations, a concern that must logically be extended to equity within each generation. This concern is reflected in the principles of inter-generational and intra-generational equity which are embodied in both section 24 of the Constitution and the principles of environmental management contained in NEMA.*" [Emphasis added.]

In terms of NEMA sustainable development requires the integration of the relevant factors, the purpose of which is *to ensure that development serves present and future generations.*[3]

It is believed that the proposed Diepwalle Forest Tented Camp supports the notion of sustainable development by presenting a reasonable and feasible alternative to the existing vacant land use type.

4.11.2 DFFE Screening Tool and Protocols

A screening tool report was generated for the proposed Diepwalle Forest Tented Camp and is attached in Appendix I. The outcomes of the various environmental theme's sensitivity, as well as the level of study required by the protocols, are summarised in the table below.

Table 12: Sensitivity of the environmental themes and studies to be undertake in terms of these sensitivities.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme			X	
Animal Species Theme		X		

3 Refer to definition of "sustainable development" in section 1 of NEMA.

Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme				X
Civil Aviation Theme				X
Defence Theme				X
Paleontology Theme				X
Plant Species Theme			X	
Terrestrial Biodiversity Theme	X			

According to the Screening Tool, the following themes were identified as sensitive: **Animal Species, Aquatic Biodiversity and Terrestrial Biodiversity.**

The table below reflects the specialist studies recommended in the DFFE Screening tool and whether they have been undertaken to inform this DBAR. Refer to Appendix I for Site Sensitivity Verification Report.

Table 13: Specialist Studies recommended in the DFFE Screening Tool.

Study Recommended	Discussion
Landscape/Visual Impact Assessment	Not undertaken – Given the location of the site within the Forest, on a private road (no public access) & the nature of the infrastructure (wooden decks & tents) beneath trees, the development will not be visual or change the character of the landscape. The cultural landscape context is considered in the Heritage Report – See Annexure E6.
Archaeological and Cultural Heritage Impact Assessment	LOW sensitivity. Not undertaken. Refer to Heritage NID Report - Annexure E6 of this BAR.
Palaeontology Impact Assessment	LOW sensitivity. Not undertaken. According to SAHRIS Palaeontological sensitivity mapping, the study area is highlighted as being of low palaeontological sensitivity & does not warrant further study. See reference to Palaeontological sensitivity in Heritage Report in Annexure E6 of this BAR.
Terrestrial Biodiversity Impact Assessment	Has been undertaken. See Annexure E3 of this BAR
Aquatic Biodiversity Impact Assessment	Has been undertaken. See Annexure E1 of this BAR
Socio-Economic Assessment	Not undertaken. Given the local and small scale of the project this study was not warranted.
Plant Species Assessment	Has been undertaken. See Annexure E2 of this BAR
Animal Species Assessment	Has been undertaken. See Annexure E4 of this BAR

4.11.3 Policy Principles & Guidelines for Control of Development Affecting Natural Forests (DAFF, Undated).

The natural forests of South Africa are the smallest of its seven biomes, covering less than 500 000 hectares (much less than one percent) of its land surface. Yet this biome has the highest diversity of plant species per unit area (418 species per ha compared to 98 species per ha for the Fynbos). Natural forest can therefore make an important contribution towards reaching national biodiversity conservation targets in prioritising areas for protection, and this is recognised in many conservation planning programmes of the Department of Agriculture, Forestry and Fisheries (DAFF) (now incorporated in the DFFE), South African National Biodiversity Institute and other national and provincial conservation agencies.

Twenty six (26) national forest types occur in South Africa, including three azonal types that occur in small or linear locations, like riverine forests and mangrove forest. There are a variety of threats to the forests, causing loss or deterioration of forest habitats and consequently loss of biodiversity as well. Some forest types and forest patches are under greater threat than others. During the past century, the forests near the coast have been under most pressure due to the expansion of farmland and to development. This pressure, both from legal and illegal developments, is cause for great concern from a forest conservation perspective.

At a meeting of the Integrated Environmental Management Steering Committee of the previous Department of Water Affairs and Forestry in July 2007 it was decided that a general version of the guidelines be developed to serve as the basis for decisions and comments made by forestry staff in all regions when dealing with development proposals, land use planning and environmental impact assessments affecting natural forests.

The main aim of this policy is to:

- To ensure the effective protection and sustainability of natural forests through proper control over development and land use change affecting forests in South Africa in a cooperative manner in all regions, and according to the Dept. of Forestry (DFFE) mandates under the National Forests Act of 1998;
- The effective implementation of current environmental legislation pertaining to development affecting natural forests and associated ecosystems in South Africa;
- To serve as the basis for decision-making within Dept. of Forestry (DFFE) and ensure a uniform approach by decision-makers to the control of development affecting forests.

Any decisions on land use or development that will affect natural forests must be taken with the utmost care (precautionary principle) and with due consideration for:

- Keeping the dynamic forest processes intact;
- Preventing disturbance to forest ecosystems, fauna and flora;
- Keeping forest margins and surrounding mosaics of habitats in place as far as possible (inter alia through sufficient buffer zones, corridors and protected areas);
- Not allowing disturbance caused by poor land management to be used as a motivating factor for land use change that transforms forest.

Environmental Impact Assessment procedures must take cognisance of the requirements of all plans and legislation affording protection to natural forests, including the National Forests Act, as well as these principles and guidelines. The impacts of the proposed land use or development on any natural forests must be comprehensively investigated, including impacts on the buffer areas, the forest fauna and flora, and the forest ecosystem and dynamics. Where low-impact eco-tourist facilities (as is the case with the Diepwalle Forest Tented Camp) and activities are proposed, these must be designed to limit number of people or vehicles and the physical footprint/s. Where limited building and infrastructure development of an ecotourist nature is allowed in forest types with ratings below the status of endangered, it must be ensured that these are placed in the least sensitive parts of the forest (preferably disturbed parts that can be rehabilitated). In is argued that the iterative design process of the Diepwalle Tented Camp has met these requirements.

4.11.3.1 Key Development Design & Layout Concepts:

- Where building structures are erected inside a forest, these must be built on stilts and fitted into disturbed areas as far as possible; may not protrude above the canopy (canopy must remain intact), and may not have gardens. In this case the tented camp, with be built on raised boardwalks & decks, within existing gaps / openings in the trees and will not intrude into the canopy (double decks structure were eliminated from the proposal).
- Any paved areas and services must be kept to a minimum and heavily used walkways should be placed on boardwalks to prevent soil compaction - already incorporated in design of camp.
- Where destruction of forest occurs, rehabilitation of such areas must be a prime mitigation consideration. Please search & rescue and post-construction / post decommissioning rehabilitation already included as recommendations in EMPr.
- Avoid placing cables underground or through the canopy, but these can be fixed to small poles about a metre above ground. Services will as far as possible be attached to the boardwalk and deck structures, or aligned directly on the ground, beneath these structures.
- Building structures must be in natural colours that blend with the surrounding environment – the tents will be transparent and canvas i.e. will blend into natural environment.
- Creating clustered layouts, instead of layouts where the structures are spread out, generally offers better opportunities to minimise environmental impacts. In the case of the Diepwalle Forest Tented Camp the tents & associated walkways have been clustered together as far as possible and not spread out into the Forest (as was proposed in previous layout alternatives).

It can be argued that the design of the Diepwalle Forest Tented Camp development has taken all of the abovementioned guiding principles into account to limit impacts on the Forest environment to negligible.

4.11.4 Garden Route National Park (GRNP) Management Plan 2020-2029

The Garden Route is a well-established international brand and destination and is regarded as a paradise for eco-tourists, bird watchers and solitude seekers. The Garden Route is a popular holiday destination during summer and a tranquil hideaway during the winter months. Both seasons are equally beautiful and attractive due to the largely Mediterranean climate.

The park has well-established tourism nodes in Wilderness and Tsitsikamma. It has developed a reputation as an adventure destination and future product development and offerings should endeavour to strengthen this image. It is argued that the Diepwalle Tented Camp, and its proposed use of existing tourism facilities in Diepwalle, and collaboration with existing tourism operators in the area, will meet this need.

There is scope for diversification of tourism products. The park has the potential to set an example through the development of sustainable living practices. It is believed that this Diepwalle Tented Camp PPP project will support and further this potential.

The GRNP is largely open, easily accessible and unfenced Park, with several out-of-car offerings (no dangerous animals). However, the potential of this is limited by inadequately funded mandate (must rely on tourism to generate income, reducing free offerings), poor marketing and communication efforts, high unemployment rate & crime, among others. It is hoped that initiatives such as the Diepwalle Tented Camp may serve to reduce these limitations over the long-term, through marketing of associated tourism-related activities, while local economic development is enhanced by developing and enabling local SMME's to benefit from park-based opportunities. For example: the proposed collaboration with the Diepwalle Community Tea Garden and guided recreational activities. A number of tourist site are noted in the Gouna & Diepwalle area, which will maximise the experience of potential guests of the Tented Camp:

Infrastructure / visitor sites	
Knysna section (Gouna and Diepwalle)	
Gouna picnic site	Petrus-se-brand mountain bike trails
Elephant trails	Spitskop view point
Grootdraai picnic site	Terblans trail
King Edward VII Big Tree	Valley of ferns picnic site
Kom se Pad scenic drive	Velbroeksdraai picnic site
Outeniqua hiking trail: Rondebossie hut	Ysterhoutrug picnic site

In Garden Route National Park, quiet zones were designated to allow visitors access on foot to hiking trails around the higher use low intensity leisure areas and the major access nodes such as Nature's Valley and Storms River. In the forest areas previously managed by DWAF, quiet zones were designated around the access points and development nodes at Goudveld, Gouna, Diepwalle and Harkerville to encourage non-motorised tourist access to these areas. In these areas, low intensity leisure areas were designated along the access routes to Diepwalle (including Kom se Pad), the Diepwalle tourism facilities, Gouna, Goudveld and its access, a section of the Harkerville forest near the N2 identified for potential development, the "Big Tree" boardwalk area, which allows high numbers of visitors easy access to forested areas, as well as the access routes to Krantzkloof. Most of the low intensity leisure areas represent existing development nodes and access routes to the major forest stations. Tourism infrastructure must be placed to limit impact on the environment. It is argued that the selection of the Diepwalle Forest Tented Camp site and its layout design meets this requirement, while maximising the attractiveness of this 'quiet zone' area to tourists.

A number of Public-Private-Partnerships PPPs exist in the park, of which the Diepwalle Forest Tented Camp is one. When PPP periods expire, new PPP agreements will be entered into, in accordance with the SANParks commercialisation strategy and PPP processes.

The PPP projects are listed as a means to achieve the following high-level objectives of the Park:

- to optimise the authentic nature- and culture-based opportunities and experiences while generating revenue without compromising the integrity of the bio-cultural assets, as part of their 'Responsible Tourism Programme'.
- visitor experiences objective: to continually enhance the authentic visitor experience within the park, by effective visitor management, interpretation and quality of facilities offered.
- to sustainably grow income through tourism by optimising the range of authentic nature- and culture based opportunities and experiences, products and services.
- to ensure equitable access to existing and new BEE tourism operators. To identify alternative tourism income generating opportunities.

5. SITE DESCRIPTION AND ATTRIBUTES

The following sections provide a description of the natural environment and built environment context of Remainder Farm 218 Deep Wall, with particular focus on the site location for the proposed Diepwalle Forest Tented Camp.

5.1 LOCATION & BUILT ENVIRONMENT

The subject study area (± 1.5ha in extent) is situated within a forested landscape ±15km northeast of Knysna, ±33km south of Uniondale, ±16km northwest of Wittedrift and ±22km northwest of Plettenberg Bay. Access to the study area from the south (Knysna) is off a narrow, forested track ("Ysterhoutrug Pad") negotiated via the R339 / Prince Alfred Pass, from the east (Wittedrift/ Plettenberg Bay) via the R340 or from the north (Uniondale) via the Prince Alfred Pass.

Existing rural settlements within close proximity to the study area include the hamlets of Diepwalle (also location of Diepwalle Hut forming part of the Outeniqua Hiking Trail) ±1.6km to the northwest, Sonskyn (mainly occupied by former forestry workers) as well as the Buffelsnek Primary School, both located ±7km to the north, and the historic settlement of De Vlugt (once a construction camp for convicts who built the Prince Alfred Pass in 1861), located ±16km to the north.

The Site is accessed via a narrow forest track ± 1,3km east of the Prince Alfred Pass/ R339. This track is not used by the public but provides access to a SANParks research site. While densely overgrown it was evident that the area (essentially a clearing in the forest) had previously been transformed through human activities in the past.

According to the heritage specialist, no buildings, ruins or any other structures were noted on or within the direct proximity of the proposed Diepwalle Forest Tented Camp site.

5.2 SURROUNDING LAND USES

5.2.1 Conservation & Tourism

The site falls within the proclaimed Knysna Forest area of the broader Garden Route National Park (GRNP), which serves to protect & manage unique coastal lake systems, indigenous forests and a rugged coastline, within an extensive network of protected areas (national parks, provincial & private nature reserves), interspersed within pockets of urban development, commercial plantations and agricultural activities, across the Tsitsikamma, Knysna and Wilderness regions. The Garden Route National Park is owned and managed by South African National Parks (SANParks), guided by their Park Management Plan (2020 – 2029).

Given this rich tapestry biophysical and development assets, the area is one of local and international importance, contributing to the GRNP being included as part of the Cape Floristic Region Protected Areas **World Heritage Site** in 2014. An important objective for SANParks is to promote responsible opportunities for visitors to appreciate and value national parks. Additional to the priority of biodiversity conservation, the park is recognised as a unique nature-based tourism destination of choice, thereby constituting an economically and culturally valuable asset to the region. The mission of the GRNP is "An innovative and accessible national park, spanning mountains to marine, conserving the natural and cultural heritage of the Garden Route collaboratively for the benefit of people and the environment" (Garden Route National Park, 2020).

The Diepwalle area of the Knysna Forest is well known and has become an important tourist route, due to the intricate narratives of author Dalene Matthee, captured in beloved books 'Fiela's se Kid', 'Kringe in 'n Bos', 'Moerbeibos' and 'Toorbos', among others. Several tourist service operators offer guided hiking, cycling and 4X4 trails through the area.

5.2.2 Diepwalle Forest Station & Community Tea Garden

Other than serving as a base camp for SANParks management operations, with reception, offices and a small tree Nursery (see Fig.12 above), the Diepwalle Forest Station offers tourist accommodation: the Diepwalle Hut (associated with the Outeniqua Trail – see below) and the 'Diepwalle Tented Decks' (ten camping decks linked by wooden boardwalks). The Forest Station also boasts a small Museum, providing interesting facts and history about the Knysna forest woodcutters and the elephants. Three day-trails (Black, White & Red Elephant Walks) start from the Station.

The Diepwalle Community Tea Garden is operated from an old Forester's house near SANParks reception, and provide meals to visitors, hikers of the Outeniqua Trail and guests to the Tented Decks. This kitchen will serve as the base for preparation of all meals from the proposed Diepwalle Forest Tented Camp.

Figure 22: Diepwalle Community Tea Garden.

5.2.3 Outeniqua Hiking Trail

The Outeniqua Hiking Trail is a seven-day, 108km trail, starting at Beervlei in the Wilderness area of George and ending at the Harkerville Hut east of Knysna. The Diepwalle Hut, located at the Diepwalle Forest Station, serves as the end of Day 5. The trail route itself used to pass through the forest directly below / south of the proposed tented camp site and then followed a section of the Ysterhoutrug access track above the site. In order to avoid any interference between the operations of this trail (hikers) and those of the proposed tented camp, this approx. 1.45km section of the trail has been re-routed by SANParks to align through the Forest more than 300m east of its original path.

5.2.4 King Edward VII Big Tree

The King Edward VII Big Tree site is located approximately 1km from the entrance of the Ysterhoutrug track off the R339 (see Fig. 24 below). This tourist attraction is the largest of several enormous Outeniqua Yellowwoods (*Afrocarpus falcatus*) growing in the Knysna forests. It reaches 40m in height, has a crown spread of over 24m and a circumference of 6m. It is estimated to be 650 years old. It was originally called Templeman's Tree, after the woodcutter who bought it, but the tree was never felled because it was too large to be handled (see reference to Templeman in historic background section below). It was renamed after King Edward VII when a delegation of the British Parliamentary Association was treated to a lunch at the tree in 1924.

5.3 HISTORIC BACKGROUND & SIGNIFICANCE

The following section is drawn from the Heritage Report, compiled by De Kock (2023) of Perception Planning, and attached as **Annexure E6**.

5.3.1 Knysna Timber Industry

Exploitation of the forest around Knysna for timber to serve the demands of the construction industry in the newly established and developing colony at the Cape started during the 18th century. During the late 19th and 20th centuries timber merchants such as Thesen & Co. and Geo. Parkes & Sons Ltd. dominated the timber industry (and to a large degree the Knysna economy). One of the lesser know timber trading companies, Templeman Ltd. Timber and General Merchants and Furniture Manufacturers (later sold to Thesen and Co.) was established by JH Templeman around 1880 (Knysnamuseums.co.za, 2017).

Factors such as topography, dense vegetation, weather, and lack of proper roads proved to be significant challenges complicating the extraction of timber harvested in the forests. This led to developments such as the construction of the Prince Alfred Pass (1862-1865) as well as construction of a narrow-gauge railway line, (1907 - 1949) by the South Western Railway Co. Ltd connecting the Deep Wall Forest and Thesen Island (with

a detour via Bracken Hill). At Deep Walls the locomotive would be turned around on a three-point switch and then return to the town via Brackenhill (Julyan, 2017).

The railway line was nicknamed as the “Coffee Pot Railway” owning to the cone-shaped chimney of the locomotives used. The railway line terminated at the Deep Wall terminal and the Templeman sawmill, set deep within the forest (Duff, 1966) (Figure 4). The railway line was however not very profitable and by the 1930’s was replaced by early transport trucks. The company was however forced to close in 1949 – the tracks were lifted, and the locomotives and wagons sold to a sugar cane company in present day KwaZulu Natal (Knysnamuseums.co.za, 2017).

By the late 19th century several locations / hamlets were dotted across the forests north of Knysna. These not only included woodcutters’ locations but also agricultural allotments / smallholdings, many of which were granted to immigrants at the time. Some of these settlements included Yzernek, Diepwalle, Buffelsnek, Krantzbosch, Dwarsrivier and Kruis River (see Fig.23 below).

5.3.2 Prince Alfred Pass (R339)

As alluded to above, economic growth during the mid-19th century within Knysna town and surrounds increased the need for a more direct route across the Outeniqua mountains into the Langkloof. While routes such as the Duiwelskop Pass and Paardekop Pass provided access these roads were often poorly maintained and dangerous. First surveyed by Andrew Geddes Bain and his son Thomas Bain during 1856, construction works commenced during 1862 with the first convict station established at Yzer Nek, though moved to De Vlugt the following year on recommendation of the then Chief Inspector M.R. Robinson. The topography and densely vegetated forest amongst the southern section of the pass reportedly complicated construction works significantly but was formally opened on 29th September 1866 and named the Prince Alfred Pass (Bell-Cross & Venter, 1991).

5.3.3 Farm Deep Wall 218

The property, as framed during a survey undertaken in 1952 describes it as a portion of Crown Land, measuring 5,415 morgens (±4,139.3614 ha), having been transferred to the Government of the Union of South Africa on 5th June 1952 and held under Crown Title No. 110/1952[2]. Early (c. 1880) SG mapping shows the property (Deep Wall Forestry Reserve) and subject study area in relation to, inter alia, the village of Knysna, the Coffee Pot Railway line, various woodcutter, and immigrant agricultural settlements as well as early farm boundaries. Several clearings are evident within the boundaries of the Deep Wall Forestry Reserve (one named “Petrus Brandt”) where presumably harvesting of timber was underway at the time. The railway line is seen meandering through the forest and ending at Templeton’s terminus just west of the study area.

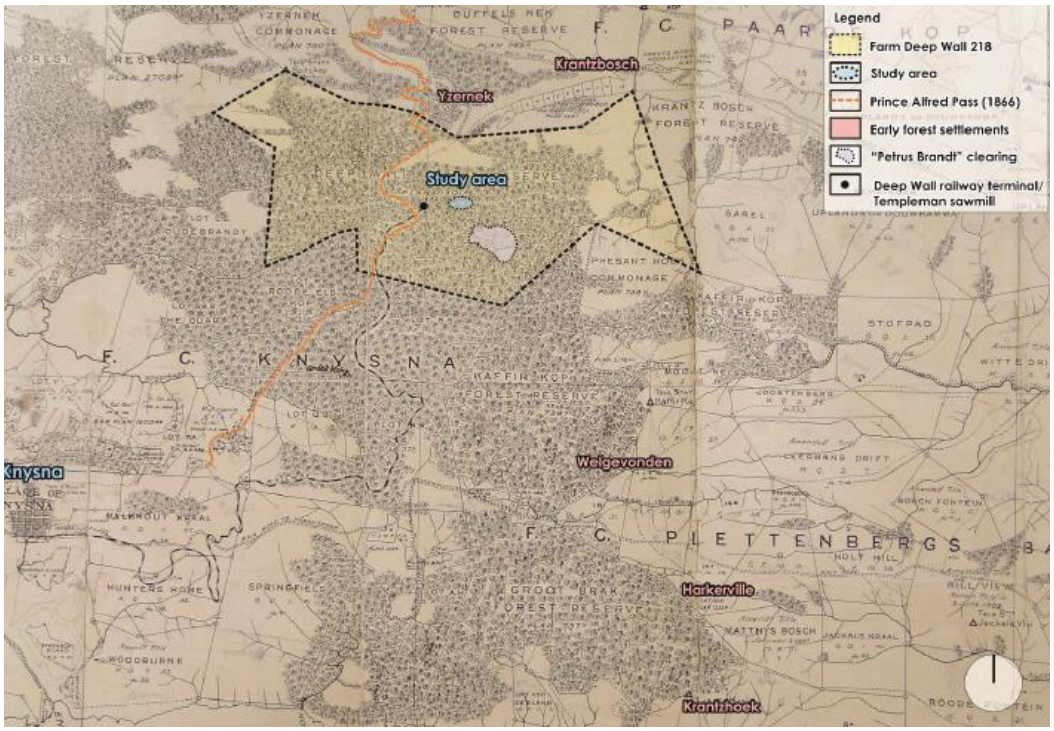


Figure 23: Study area within context of 1880 mapping of Deep Wall Fores Reserve (George Museum Archives, as editted by de Kock, 2023).

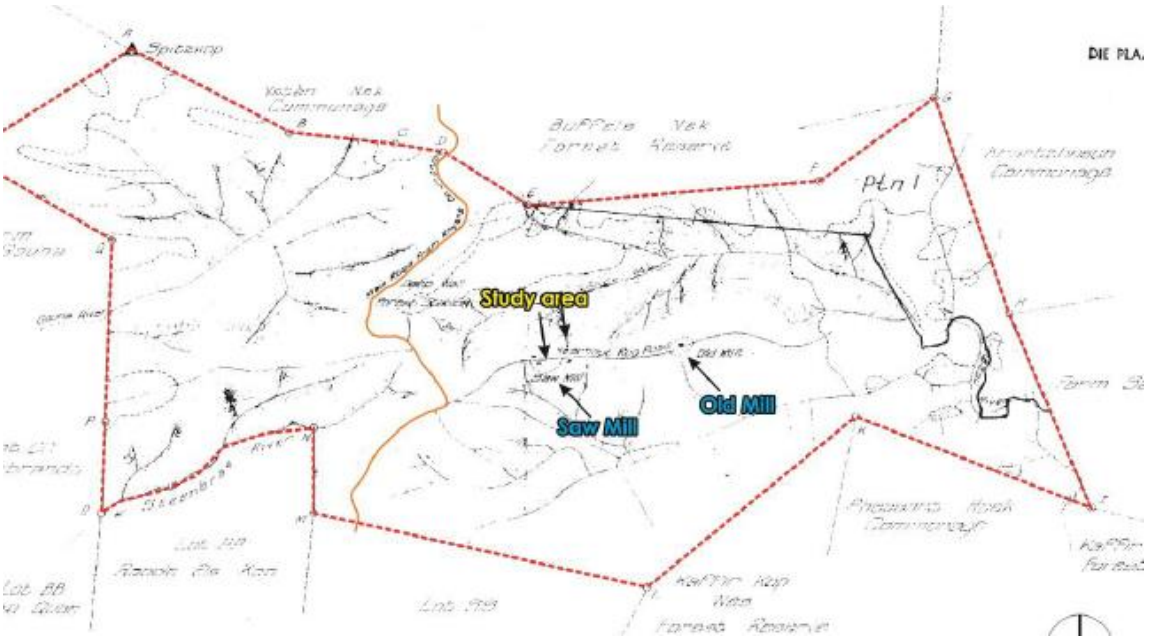


Figure 24: Study area within context of 1949 SG Diagram for Farm Deep Wall 218 (SGO, as edited by De Kock, 2023).

The original 1949 SG diagram denotes the location of a sawmill the position of which coincides with the subject site and refers to the narrow forest track used to access the site as the “Yzerhout Rug Road”. A second “mill”, also located along the same track is denoted just east of the sawmill. Apart from the sawmill and mill at least two other structures are denoted along the Yzerhout Rug Road. The locations of several structures forming part of the Deep Wall Forestry Station, just northwest of the study area are highlighted.

In more recent years, the study area served as a film set for the filming of two movies based on the well-known forest novels by South African author Dalene Matthee, namely “Fiela se Kind” (1988) and “Toorbos” (1993). Photographs of temporary structures used during filming of Toorbos were made available by SANParks staff. During 1993, the study area also served as the base for an elephant boma used in aid of efforts to reintroduce three young Kruger elephants in the Knysna forest.

Figure 25: Temporary structures installed in study site for filming of "Toorbos" (Havenga, 2003).

Figure 26: Elephant boma built at study site in 1993 during attempts to reintroduce three elephants to the Knysna Forest (Mackay, 1996 & Joubert, 2018).

Analysis of earliest available (1936) aerial photography for the area was found useful to broaden our understanding of the study area from a cultural landscape perspective. From said analysis the following traditional (i.e. Pre-Modern) cultural landscape patterns emerge, as summarized below:

- Alignment of the **historic Prince Alfred Pass** traverses the landscape west of the study area.
- **Narrow forest track (Ysterhoutrug Road)** extending eastward from the passing the "Sawmill" and "Old Mill" denoted on the 1949 SG survey drawing (Fig.24 above).
- Alignment of the **narrow gauge ("Coffee Pot") railway track**, as well as the triangular three point switching station clearly still evident within the landscape some distance southwest of the study area.
- According to oral history research undertaken by Duff (1966), the railway tracks ended at Diepwalle Forest Station, which was also the location of the **Templeman Sawmill site** – note clearing evident on imagery.
- An extensive area forming part of the **Deep Wall Forest Station** is noted north / northwest of the study area.

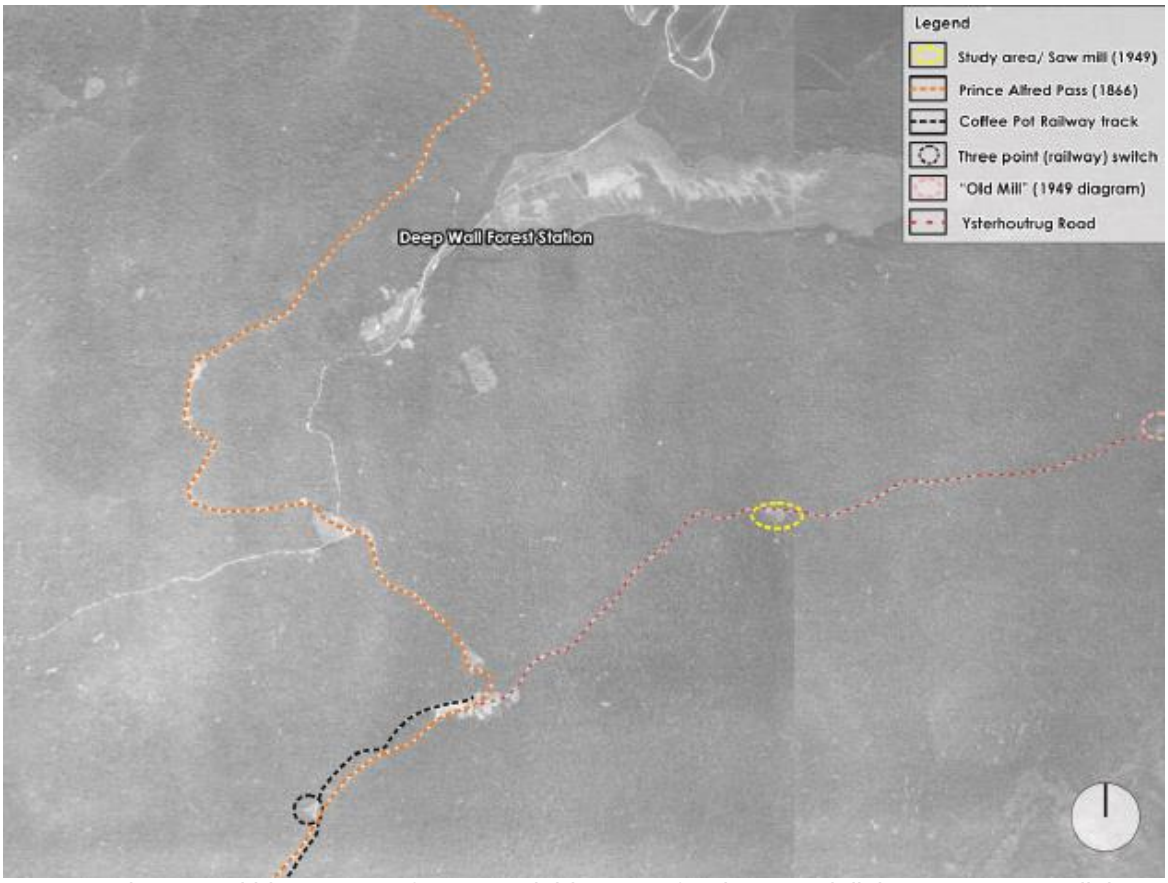


Figure 27: Study area within context of 1936 aerial imagery for the area (Flight Survey 114, Flight Strip 9, Images 19303 & 19304, NGSI, as editted by De Kock, 2023).

From basic historic background research undertaken it is therefore evident that the **subject study area coincides with the location of an early sawmill** (i.e. as per the 1949 SG Diagram), thus being of historic

cultural significance. Subsequently the **site was used during efforts to reintroduce elephants** into the Knysna forests (scientific cultural significance) and **served as filming sets for the production of prominent movies** thus furthering cinematography and the performance arts in South Africa (social and historic cultural significance).

From a broader perspective, the study area is also intrinsically linked to historic themes related to the early development of, and social history relevant to, the broader the Knysna area, which are considered of **high local historic cultural significance**.

5.3.4 Archeological & Palaeontological Significance

No buildings and/or structures were noted on or within the direct proximity of the site during fieldwork. Although the site is densely overgrown, the nature and timeframes associated with former land use means that little if any tangible evidence of cultural significance are likely to remain. It is however possible that subsurface historic material (e.g. old rubbish dumps) may be unearthed in which case the following HWC Standard Clause will apply:

"If during ground clearance or construction, any archaeological material or human graves are uncovered, work in that area should be stopped immediately and the ECO must report this to Heritage Western Cape. The heritage resource may require inspection by the heritage authorities, and it may require further mitigation in the form of excavation and curation in an approved institution."

According to SAHRIS Palaeontological sensitivity mapping, the study area is highlighted as being of low (blue) palaeontological sensitivity. While no further palaeontological studies were recommended.

5.4 Climate, Geology & Topography

Mean annual rainfall is relatively high in the area at 806 mm. Erosion potential of the soils is high, but the topography at the site itself is fairly flat, mostly draining away from the site. Furthermore, the site is densely vegetated with Afrotemperate Forest in the areas surrounding the clearing ensuring that soil is well stabilised.

There are no mapped watercourses on the site itself (wetlands or streams), but the site drains in a north-easterly direction to a network of tributaries of the Bietou River. A small pool is present to the west of the clearing site, which was excavated either during historical woodcutting activities or for the purposes of making the movie filmed at the site.

No permanent wetland areas were found on or near the site. Extensive soil augering along transects in the clearing resulted in a range of seasonal and temporary wetland features. There is no channelled inflow or outflow from the wetland. The site topography and soils mean the soil profile is easily saturated which is due to the B soil horizon demonstrates a distinct textural change, with extreme mottling and wetness below this zone. This is typical of duplex soils in the area.

There is very little topographic variation on the study site, which is characterised by a gentle slope, with the highest point at the western edge. As a result, there are no areas with steep slopes or areas that create unique habitats for specialist animal species. Aside from the artificial pond in the study site there are no nearby watercourses that pose a risk to the site or risk pollution from the site (Brooke, 2023).

Table 14: Summary of relevant catchment features for the site (Confluent, 2023).

Feature	Description
Quaternary catchment	K60F
Mean Annual Runoff	97.50 mm
Mean Annual Precipitation	806 mm
Inherent erosion potential of soils (K-factor)	0.52, High
Rainfall intensity	Very High
Ecoregion Level II	20.02: South Eastern Coastal Belt
Geomorphological Zone	Not applicable
NFEPA area	Sub-quaternary reach 9092, FishFEPA.
Mapped Vegetation Type	Southern Afrotemperate Forest (Least Concern; FOz1)
Conservation	Protected Area (Garden Route National Park) and World Heritage Site

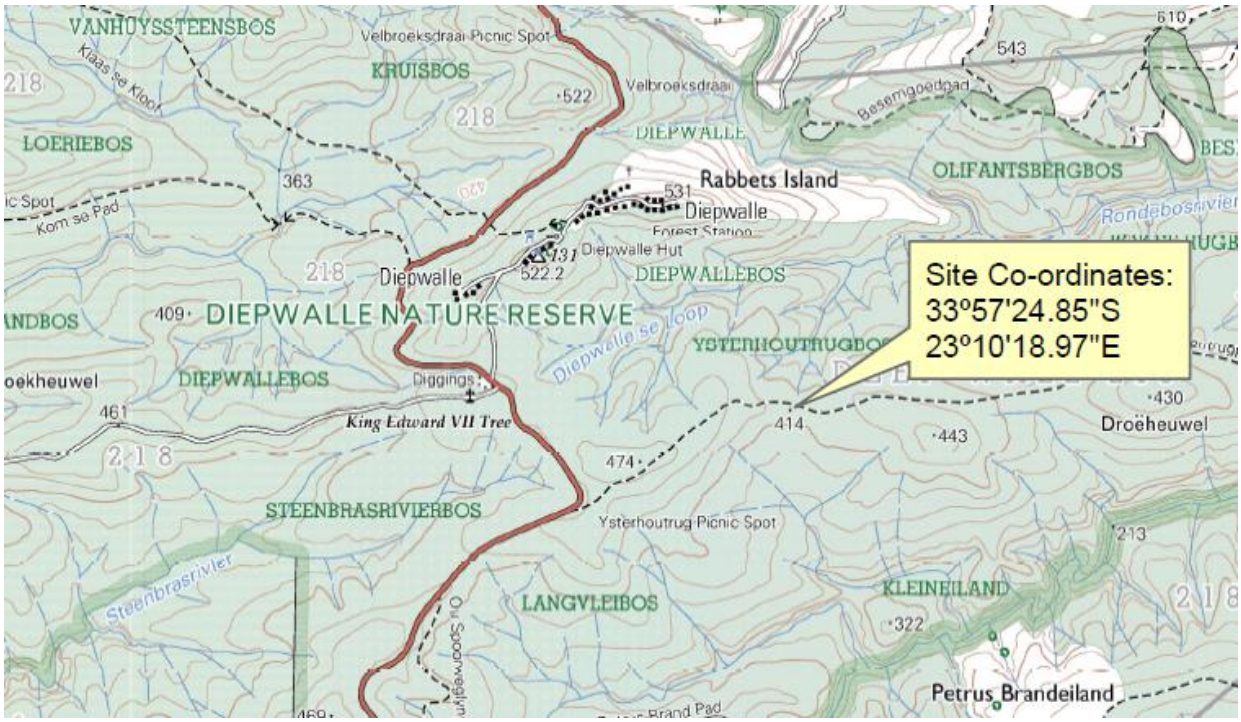


Figure 28: Topographical map indicating location of site.

The topographic location of the site clearing is a 'saddle' (*see Figure 29 below*) which is defined by Ollis *et al.* (2016) as follows:

"Saddles are relatively flat, high-lying areas flanked by down-slopes on two opposite sides in one direction and up-slopes on two opposite sides in an approximately perpendicular direction. The gradient of the surrounding slopes may vary from gentle to steep."

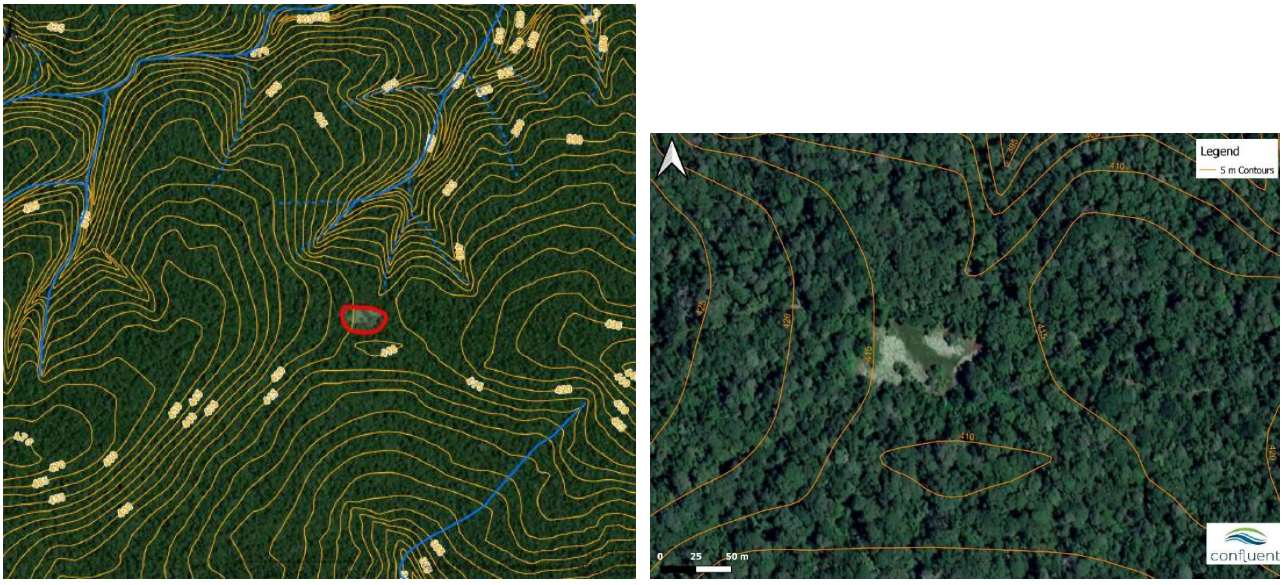


Figure 29: 5m contour lines indicating watercourses surrounding site & showing the site clearing position described as a saddle.

5.5 Botanical Composition Of The Site

The following sections are drawn from the Botanical Impact Assessment, compiled by Fouché (2023) of Confluent Environmental, and attached as **Annexure E2**, as well as the Terrestrial Biodiversity Impact Assessment, compiled by Brooke (2023) of Biodiversity Management Services, and attached as **Annexure E3.**

5.5.1 Broad-Scale Vegetation Patterns

The proposed development is mapped entirely as **Southern Afrotemperate Forest** (FOz1; **a Least Concern vegetation type** which is, however, protected in South Africa because it is part of our National Forest Inventory). The Southern Afrotemperate Forest vegetation type of the forest biome, a biome that covers only

approximately 0.5 % of South Africa's land surface area (Mucina and Geldenhuys, 2006). The site falls within the Garden Route National Park which is a Protected Area (see BOX 1 below). It is also part of a wider World Heritage Site and Freshwater Ecosystem Priority Area (FEPA). Some sections of the Knysna forests are broken up by small pockets of South Outeniqua Sandstone Fynbos, as can be seen on our National Vegetation Map (Dayaram et al., 2019; Mucina & Geldenhuys, 2006). However, the clearing on the proposed site is not an example of this fynbos type as it does not have the right species (it is dominated by two Helichrysum species, namely *Helichrysum petiolare* and *H. cymosum*), and it is confirmed to be wetland habitat (Dabrowski, 2023).

The earliest historical image for the site (Dec.1936) indicates that the wider forest has experienced some long-term disturbance from human activities over the last century, that seem to have remained relatively consistent in extent and intensity. The **clearing where the camp is proposed** seems to have **remained relatively constant in size since the 1930s**. Today the margins of the clearing are less sharp compared to the earlier imagery. The clearing, as many others observed in the surrounding landscape, occurs next to roads that have been made in the landscape. It is very likely that the clearing was first made by logging activities, which would also help to explain its rectangular shape in the earlier images going back to 1936. The excavated pond is not visible on the images and is likely obscured by trees. In the 2002 and 2022 imagery, the clearing is seen to be dominated by two species, *Helichrysum petiolare* (greyish colour "liquorice bushes) and *H. cymosum* (darker green fume everlasting bushes). The pattern that these two species take in the clearing has changed in the past 20 years, but the clearing size has remained constant. Numerous factors may affect the vegetation pattern observed (e.g., the average moisture over the year, dead vegetation buildup, the establishment of trees and other bushes in the clearing).

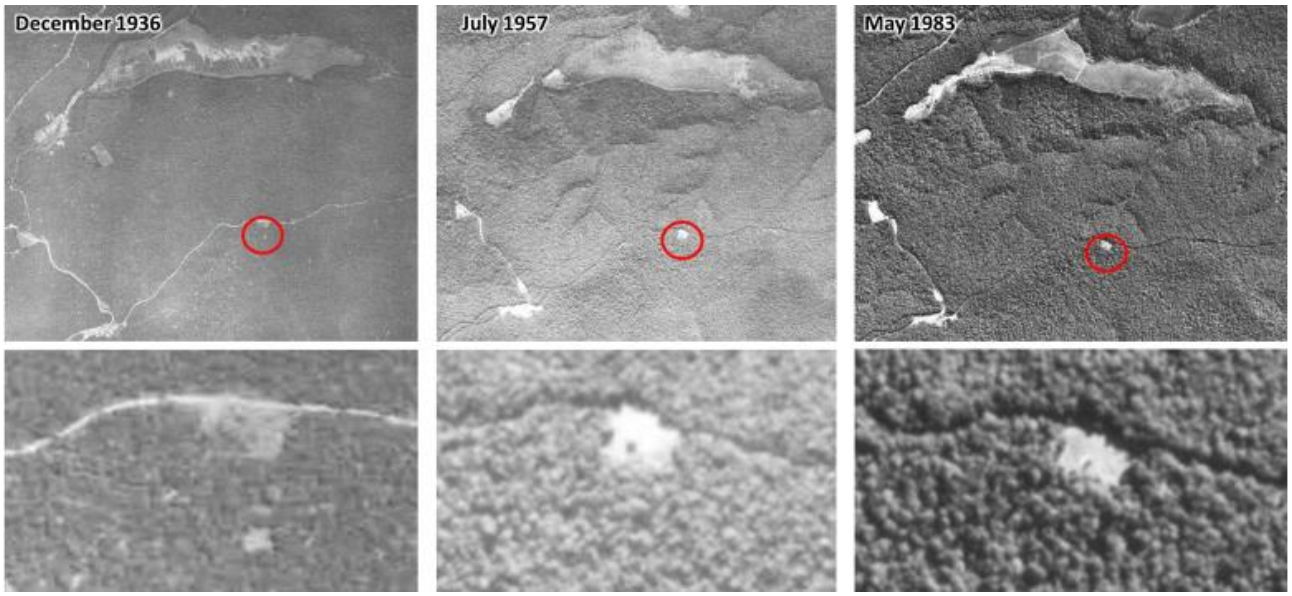


Figure 30: Historical aerial imagery showing camp site in red circle (Confluent, 2023).

5.5.2 Habitats & Plant Communities

For the benefit of understanding animal species habitat requirements, these habitats have been described as Mature Southern Afrotemperate Forest, densely vegetated clearing and woody pond (Table 15 & Figure 30 below). Bordering the Mature Southern Afrotemperate Forest and densely vegetated clearing there is little signs of ecotonal vegetation, however Alien Invasive Plants (AIP's) have been removed historically and may been acting in this regard.

Table 15: Description of habitat types in site.

Habitat type	Transformation	Invaded by IAP
Mature Southern Afrotemperate Forest	Very light transformation around the forest fringe. This includes remains of cut AIP and signs of old infrastructure	Little to none. *Acacia stricta* (hop wattle) seedling were noted on the forest fringe at the location to tent 8 and could signify the potential for reinvasion.
Densely vegetated clearing	Heavily transformed. The clearing is now densely vegetated. Many of the species are associated with disturbed areas (*Helichrysum* sp.)	Several invasive and non-indigenous species were noted at the site. These included garden roses and bramble (*Robus sp.*)
Woody pond	Transformed. Although the pond is man-made it has become a naturalised feature of the landscape and important for many species.	Little to none. No noticeable IAP's in this habitat, however there is evidence that AIP have previously been removed.

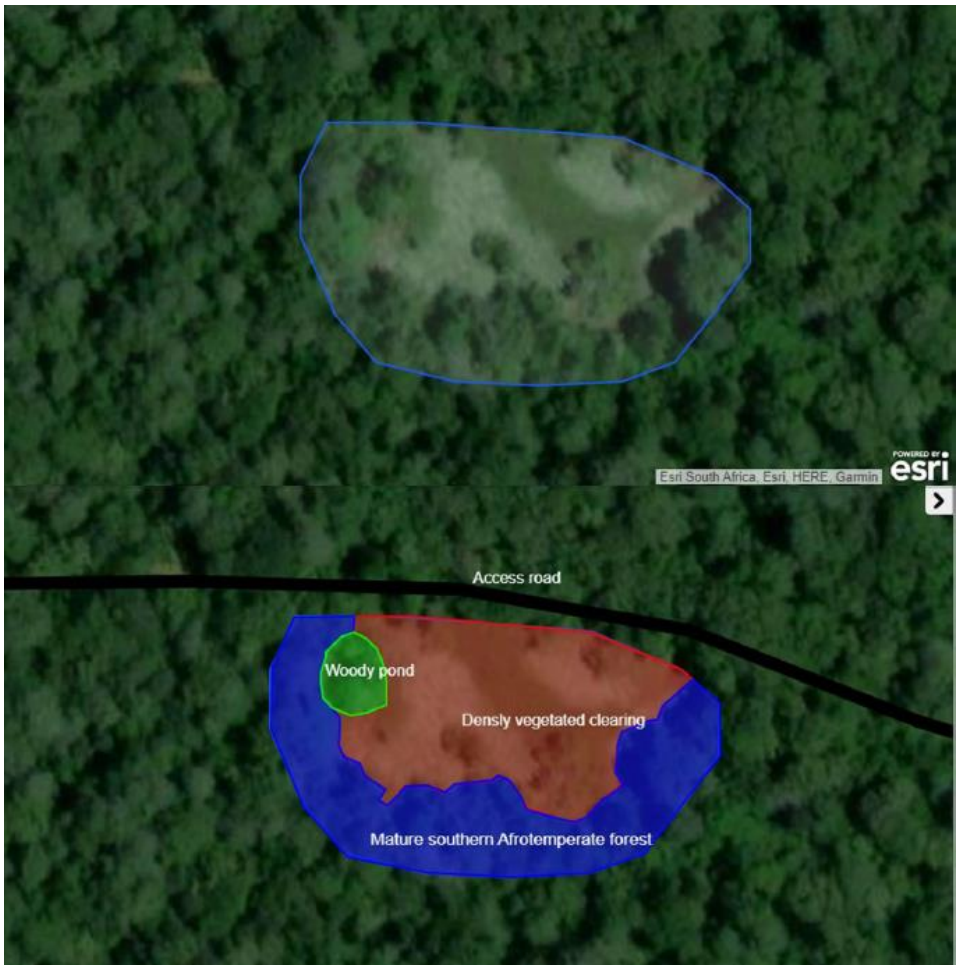


Figure 31: Habitat types within the study site (Brooke, 2023).

Figure 32: View of clearing the proposed camp will be situated around (Brooke, 2023).

Figure 33: Proposed guest tent positions within gaps in Forest fridge surrounding the clearing.

Figure 34: Gap in Forest earmarked for Kitchen tents.

Figure 35: View of artificial pond on west of site.

5.5.3 Plant Species of Conservation Concern (SCC)

The National Web based Environmental Screening Tool indicated the plant species theme sensitivity of Medium, which is dependent on the presence, or likely presence, of several plant species of conservation concern (SCC).

Several SCC have the potential to occur on the site. The SCC that were listed in the screening tool report were:

- *Faurea macnaughtonii* (Terblans beechwood),
- *Ocotea bullata* (Stinkwood)
- *Amauropelta knysnaensis* (Knysna wood fern)
- *Psydrax capensis*
- Sensitive species 763

While the SCC that have been observed nearby on iNaturalist are:

- *Aloe kniphofioides* (Grass aloe)
- *Brunsvigia josephinae* (Josephines candelabra)
- *Curtisia dentata* (Assegai tree).
- *Crinum moorei* (Natal Swamplily)
- *Erica glandulosa* (Glandular heath)
- *Haworthiopsis attenuata* (Zebra haworthia)
- *Pelargonium citronellum* (Lemonbalm storksbill)
- *Podranea ricasoliana* (Pink trumpet vine)

The species of conservation concern that were observed were ***Ocotea bullata* and *Curtisia dentata***. *Faurea macnaughtonii* and *Psydrax capensis* were not observed, but that does not mean that it is a true negative for the site. Tree species that are not on the South African Red List, but that are considered as protected tree species are the two yellowwood tree species ***Podocarpus latifolius*** (protected tree no. 18 – the most abundant protected tree in the forest) and ***Afrocarpus falcatus*** (protected tree no. 16). Some additional species warrant careful attention, especially trees with epiphytic orchids, as these orchids are often poached when more people become aware of their presence in an area (regardless of if the species is Red Listed or not). One such epiphytic orchid was observed on *Podocarpus latifolius* trees was *Angraecum pusillum* (the white dwarf shell orchid). Ground orchids *Disperis lindleyana* were also observed in the forest surrounding the clearing. Both of these orchid species are Least Concern on the South African Red List, but they warrant consideration to prevent a negative change in their Red List status.

Furthermore, the forest is home to some often-overlooked non-vascular plants – mosses. Two of the more spectacular moss species that were observed during the site assessment were *Pyrrhobryum spiniforme* and *Atrichum androgynum*. Many more moss species were seen, but not all of the moss species were documented for this survey. The species mentioned may warrant careful replanting elsewhere in the forest where clumps of them may fall under platforms on the site.

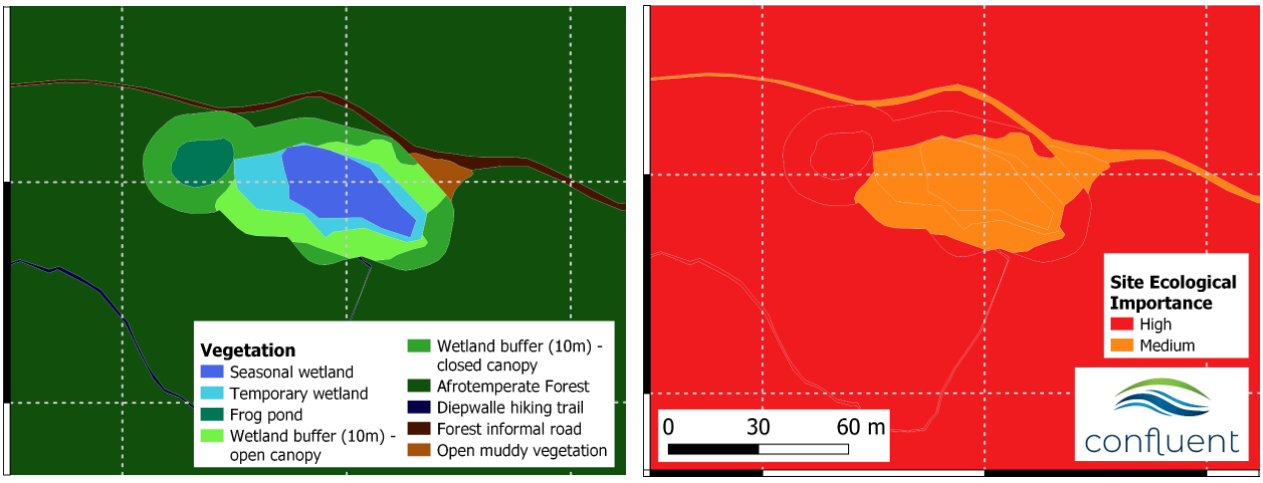


Figure 36: Refined vegetation map (left) with site ecological importance (right) (Fouche, 2023).

5.6 TERRESTRIAL BIODIVERSITY

Biodiversity Management Services undertook an Animal Species Assessment which formed part of larger Terrestrial Ecosystems Impact Assessment. Please refer to the Terrestrial Ecological Impact Assessment attached in **Annexure E2** and the Faunal Species Impact Assessment in **Annexure E4,** from which the following has been drawn.

5.6.1 Biodiversity Sensitivity

The relevant terrestrial biodiversity sensitivity theme was identified as 'very high sensitivity' for the proposed site of the tented camp, noting **four features of 'very high' concern**: Freshwater Ecosystem Priority Area (FEPA) sub-catchments; National Forest Inventory; Strategic water source areas and the Garden Route National Park (GRNP). The National FEPA sub-catchments (NFEPA) provides strategic spatial priorities for conserving South Africa's freshwater ecosystems and supporting the sustainable use of water resources. The National Forest Inventory assists in monitoring changes in forest areas across South Africa. Understanding and maintaining natural forests is important both for the environment and rural livelihoods. Strategic water resource areas are areas that either (a) supply a disproportionate amount of mean annual surface water runoff in relation to their size and are considered nationally important; or (b) have high groundwater recharge or where the groundwater forms a nationally important resource or both; or (c) areas that meet both criteria (a) and (b). Finally the South African National Parks, Garden Route National Park aims to conserve biodiversity and cultural heritage; contribute to the economy, providing socio-economic benefits, access, ecotourism experiences to the people of SA and the world. *Refer to Biodiversity Report for table providing justification for the state of naturalness of these features & classification of the site in terms of conservation importance, functional integrity & site ecological importance (SEI).*

5.6.1.1 Freshwater Ecosystem Priority Area (FEPA)

The proposed development will have **little impact** on the FEPA sub-catchments in the area. The development footprint is small and the area relatively flat. This will ensure that there is **no risk of excessive runoff** from the proposed site into any catchment. It is highly unlikely that any water from the site will pose a threat to flowing water courses due to its geographical location. Greywater will be released into already disturbed slip roads where it is deemed safe by SANParks. Based on this the revised **SEI for the proposed site is considered low.**

5.6.1.2 National Forest Inventory

The forest where the development is situated is one of the largest unfragmented patches of Southern Afrotemperate Forest. Furthermore, the area remains relatively undisturbed and there is little influence from humans. The area contains several species of both plants and animals listed as near threatened or higher by the IUCN, and some of these protected plants were noted at the site. As there has been previous disturbance in the area and there are several Alien Invasive Plants present the revised **SEI rating has been listed as High**. Due to the environmentally conscious nature of the proposed development it is **unlikely it will have largescale negative effects on the forest environment**.

5.6.1.3 Strategy Water Source Area

As there is unlikely to be any excessive runoff from the proposed site it is not necessary that this be listed as a strategic water source area. However, seeping resulting in constant water in the woody pond and the presence of a wetland in the clearing ensured this is a functionally important area and key for biodiversity in the area. Through the removal of *Helichrysum sp*. from the clearing, biodiversity in the area may in fact benefit from the proposed development in the area directly surrounding the wetland. Based on this the **revised SEI for the proposed area has been listed as moderate**.

5.6.1.4 Garden Route National Park (GRNP)

The GRNP forms a key conservation area in the southern Cape and represents a well conserved functionally intact environment. Care by the proposed development needs to be taken not to negatively affect the naturalness of the area. The proposed project will impact the GRNP through increased human presence in the forest and associated disturbance to the area (including light pollution etc). However, due to the small size of the development footprint and the recommendations to limit negative impacts the overall impact of the proposed development will likely be small. Based on these findings **the revised SEI for the area is high**.

5.6.2 Landscape & Habitat Connectivity

The proposed study area covers a relatively small footprint (0.5 ha) and as such will have **little to no impact on landscape connectivity**. It is surrounded on all sides by Southern Afrotemperate Forest, and the fauna and flora communities remain relatively intact and in a natural state.

When considering the development of unfragmented areas, habitat fragmentation from linear infrastructure is one of the most important aspects to consider. Habitat fragmentation occurs when an area is divided into more numerous smaller sections through the construction of roads or other barriers and which hinders movement or dispersal of species (Saunders et al., 1991). The construction of walkways in the proposed camp and leading between the tents poses a potential risk in this regard. Although raised walkways are preferred in this regard, they are not without their negative impacts. They may act as direct barriers to large mammals in and around the proposed camp, and may further prevent mammals from gaining direct access to the wooded pond for water. A concern existing regarding the fixed infrastructure to remain at the end of each season when the camp is dismantled. The remaining walkways and deck platforms may create linear barriers even when the camp is inactive. It is recommended that portions of the walkways are removable to allow movement of large species through the removed sections when the camp is deconstructed seasonally.

The access road, a jeep track (twee-spoor road), leading to the proposed tented camp poses little risk to landscape connectivity and habitat fragmentation if it is not developed further. Currently the access road should be sufficient without a large increase in traffic (which there should not be if guests are expected to park at the Diepwalle Forest Camp). Road maintenance will however be required to prevent further degradation and the need for any major intervention that could impact landscape connectivity. Maintenance should be focussed on drainage and diverting water off the road surface and into the natural vegetation in areas where it will not cause further damage.

5.6.3 Likely Fauna Occurrence

Dr Lizette Moolman of the SANParks Scientific Services provided a Site Sensitivity Verification Report (SSVR) (attached as Annexure E5), which confirmed that of the seven (7) faunal species identified by the DFFE Screening Tool Report; three (3) do occur, two (2) potentially occur and two (2) do not occur. The site sensitivity classification indicated in the Tool was therefore confirmed to be High. It was on the basis of this confirmation that an independent Faunal specialist, Dr. Brooke of Biodiversity Management Services was appointed to compile a Faunal Impact Report.

The study area is situated within one of the largest unfragmented piece of Southern Afrotemperate Forest in South Africa. GRNP represents one of the few National Parks in South Africa that is not fenced and movement of species between the GRNP and surrounding landscape is not inhibited. Although fragmented the GRNP currently covers 165 899 ha, including cultural areas that have not officially been declared as part of the park. This large area provides habitat and sanctuary for many species, however research is ongoing to better understand the species and biodiversity within the GRNP. None the animal species that likely occurred historically in the GRNP (Black Rhino, Hippo, Lion, Cape Buffalo etc.) would have occurred at the study site. Of the approximately 1000 elephants thought to have occurred in the area, only one known female remains (SANParks, 2020). Although historically disturbed, it is thought the area still contains a near complete suite of fauna and is thus crucial for species protection.

The DFFE Screening Tool identified the animal sensitivity theme as ‘high sensitivity’, noting seven species of concern and forest invertebrates. Of these species only one (*Bradypterus sylvaticus*) was listed as high sensitivity, while all the other key species were listed as ‘Medium Sensitivity’. Important characteristics of each species and their likely occurrence in the study area are highlighted below.

The likely presence of species is determined through the species strong associations with particular habitats i.e. likely presence or absence of species was based on the suitability and availability of its habitat.

Table 16: The seven species of concern listed by the screening tool, the scoping report sensitivity score, SANBI red list category following the IUCN guidelines (SANBI, 2023) and Appendix 7, predicted occurrence at the site and basic habitat requirements (Brooke, 2023).

Species	Taxonomic family	Common name	Scoping report sensitivity score	IUCN Red list category	Predicted occurrence in the study site	Habitat requirements	Justification for predicted occurrence
Bradypterus sylvaticus	Locustellidae	Knysna warbler	High	Vulnerable	High	Afromontane forest fringes	Well suited to habitat and known to occur
Circus maurus	Accipitridae	Black harrier	Medium	Endangered	Low	Fynbos and mountain fynbos, high altitude grasslands and into the semi-desert of the karoo	Unsuitable habitat
Afrixalus knysnae	Hyperoliidae	Knysna leaf-folding frog	Medium	Endangered	Medium/low	Wetlands and dams including suitable artificial habitat	Could potentially occur, however has not been previously recorded and habitat not optimal
Stephanoaetus coronatus	Accipitridae	Crowned eagle	Medium	Vulnerable	High	Mature Forest	Habitat suitable and known to occur
Chlorotapla duthieae	Chrysochloridae	Duthie's golden mole	Medium	Vulnerable	Medium	Coastal forest, suburban gardens and pasture lands on alluvial sands and sandy loams	Habitat suitable and signs of moles found. However, these cannot be attributed to *C duthieae* with certainty
Sensitive species 8	N/A	N/A	Medium	Vulnerable	Medium	Mature Forest/Dense vegetation	Known to occur in the area, however recent anthropogenic pressure appears to be affecting the species
Aneuryphymus montanus	Acrididae	Yellow-winged agile grasshopper	Medium	Vulnerable	Low	Montane fynbos in rocky hillsides	Habitat unsuitable and not found within the study area

The suitability of the site to support habitat of the abovementioned creatures, as well as the likely influence / impact that the development may have on each species, is detailed in the Faunal Report (Appendix E4).

5.6.3.1 Forest Invertebrates

Melanie de Morney, Biotechnician of Terrestrial Fauna for SANParks Scientific Services, indicated that four species of Peripatopsis (Velvet Worm) were likely to occur and are all listed by the IUCN as being threatened or higher. Although it is possible that all of these species could occur at the study site, none were found during the survey. Invertebrate families that were found, include earthworms, millipede, harvestman, centipedes, spiders, scorpions, butterflies, carpenter bees, damsel flies, cicadas and mosquitos. As a result of the high invertebrate diversity known for the area it is likely that development will impact a number of invertebrate species. However and importantly, as the development is to consist of raised decks and walkways, which will minimise the footprint traversed by people and minimise disturbance to the forest floor and leaf litter layer, **impacts are likely to be low.**

5.6.3.2 Other Species of Concern

Several other species were recorded during the site survey and these included *Potamochoerus larvatus* (bushpig), *Hadogenes capensis* (cape rock scorpion), *Lycodonomorphus inornatus* (olive ground snake), *Strongylopus grayii* (clicking stream frog), *Amietia fuscigula* (cape river frog) and *Cassionympha cassius* (rainforest brown butterfly). However, none of these species identified at the site are of environmental concern.

Species that were identified by ADU virtual museum records of having an IUCN red list rating of Near Threatened or higher but were not considered by the screening tool are also important to consider for the proposed development. The records are listed below (Table 17), however only the species considered important for the proposed tented camp footprint were discussed any further. *Myosorex longicaudatus* (long-tailed forest shrew), *Amblysomus corriae* (Fynbos golden mole) and *Panthera pardus* (Leopard) are listed as near-threatened or higher by the IUCN and likely to be found at the study site.

Table 17: Potential vertebrate species of conservation concern identified as occurring in the region (QDS) of the study site. Species are listed with their IUCN category and habitat requirements.

Species	Common name	IUCN red list category	Habitat requirements	Predicted occurrence in the study site
Amblysomus corriae	Fynbos golden mole	Near threatened	Sandy and sandy loam soils in fynbos and forest (particularly forest fringes).	Medium
Dasymys capensis	Water rat	Vulnerable	Intact rivers and wetland ecosystems	Low
Dasymys incomtus	Common dasymys	Near threatened	Intact rivers and wetland ecosystems	Low
Myosorex longicaudatus	Long-tailed Forest Shrew	Endangered	Primary forest, forest ecotones, fynbos and boggy grasslands	High
Miniopterus schreibersii	Schreibers's Long-fingered Bat	Near threatened	Does not appear to be from southern Africa, ADU distribution records in question. ADU could be referring to *Miniopterus natelensis*	Low
Panthera pardus	Leopard	Vulnerable	Wide variety of habitat including forest, fynbos, coastal shrubland an savanna	high

Although several of the species identified by the screening tool may occur at the study site, none were found during our field visit and sensitive species 8 was seen nearby the following week. The specialist have indicated that this area is a key area for protected and endangered animal species and any proposed developments in the area need to be cognisant of this. Although the **construction of the proposed tented camp is unlikely to have any detrimental effects of any of the species identified by the scoping tool, it will no doubt have an effect on other (non-threatened species)** that were not identified as being at risk by the screening tool. It is important that the proposed development does not cause any unnecessary disturbance to species. Areas of disturbance should **avoid the woody pond** where species rely on permanent water for habitat (invertebrates, amphibians etc.) and water sources (mammals). It is crucial that the woody pond not be closed off and made inaccessible by the boardwalks.

A complete list of mammals, reptiles, amphibians, invertebrates and birds for the study site are appended to the Faunal Report, in Annexure E4.

5.7 AQUATIC FEATURES OF THE STUDY SITE

Dr J. Dabrowski, of Confluent Environmental undertook an Aquatic Ecosystems Assessment of the site. Please refer to the Aquatic Impact Assessment Report attached in **Annexure E1** from which the following has been drawn.

According to the Department of Environment, Forestry and Fisheries (DFFE) screening tool, aquatic biodiversity at the site has a **Very High** sensitivity. Two broad sensitivity features were identified as the Strategic Water Source Area (SWSA-sw) and the Freshwater Ecosystem Priority Area (FEPA) quinary catchment.

Erosion potential of the soils is high, but the topography at the site itself is fairly flat, mostly draining away from the site. Furthermore, the site is densely vegetated with Afrotemperate Forest in the areas surrounding the clearing ensuring that soil is well stabilised. There are **no mapped watercourses** on the site itself (wetlands or streams), but the site drains in a north-easterly direction to a network of tributaries of the Bietou River (*see Figure 20 & 21 above*). A small pool is present to the west of the clearing site which was excavated during historical activities at the site.

5.7.1 Fish Conservation

According to the National Freshwater Ecosystem Priority Atlas the study area is within area 9092 and is categorised as a Fish FEPA (Nel *et al.,* 2011). This is due to the presence of Endangered or Critically Endangered fish in the quinary catchment of the Bietou River. Fish recorded in the system include the extremely range restricted *Pseudobarbus* sp. nov. 'Keurbooms' (previously *Pseudobarbus tenuis*), *Pseudobarbus afer* (Endangered, Eastern Cape Redfin), and *Sandelia capensis* (Data Deficient, Cape Kurper).

Generally, *Pseudobarbus tenuis* occurs in the headwater streams while *Psuedobarbus afer* occurs in the forested peat-stained water. The main threats to these fishes is through the introduction of predatory alien fish species of bass and trout. Impacts related to forestry and agriculture are also known to affect populations. **As the site is not located near a flowing watercourse and is not altering the existing land cover in any significant way, the proposed land-use is very unlikely to impact on any local fish populations.**

5.7.2 Excavated Pool

The pool has been excavated and is therefore considered artificial and is not classified as a watercourse in terms of the NWA. However, as it has been present at the site for many decades, possibly over a century, and has attracted a range of hydrophytic (water loving) plants and a population of at least two frog species. These are Cape River Frogs (*Amieta fuscigula*) and Clicking Stream Frogs (*Strongylopus grayii*). Given its location in a National Park and priority conservation area these are features which contribute to biodiversity in the area and warrant protection from disturbance.

Figure 37: The excavated pool (left) and a Cape River Frog (Amietia fuscigula) found in the pool (Dabrowski, 2023).

5.7.3 Seasonal Saddle Seep Wetland

Extensive soil augering along transects in the clearing resulted in a range of seasonal and temporary wetland features, with two distinct zones of wetness, being temporary and seasonal (*Figure 37*). These approximately corresponded with two zones of dominant vegetation being *H. petiolare* in the temporary zone and *H. cymosum* in the seasonal zone (*Figure 38*). However, these plants were interspersed throughout with alien invasive bramble (*Rubus* sp.) and bracken fern (*Pteridium aquilinum*). While these plants are not obligate or facultative wetland plant species, *H. cymosum* often grows in damp areas and is common in seasonal wetlands of the Southern Cape. Most plant species present in the clearing are considered pioneer species which grow rapidly following disturbance.

Figure 38: Delineated seasonal and temporary wetland areas, and excavated pool in the clearing area (Confluent, 2023).

Figure 39: Two aspects of the clearing showing dominant Helichrysum petiolare (left) and Helichrysum cymosum (right) (Confluent, 2023).

Plants in the clearing have grown to such a high density that the process of succession appears to have been halted. In places the growth of *H. petiolare* is > 2 m high. Plants growing along the wetland's edge adjacent to the road are more diverse and typical of obligate wetland plants consisting of species such as *Juncus lomatophyllus*, *Persicaria decipiens*, and various *Cyperus* spp.

Soils in the wetland area had a thin layer of organic matter on the surface but were predominantly mineral, while soils in the temporary zone showed few high chroma mottles within the brown soil matrix. The temporary zone is defined by short periods of saturation for a duration of less than 3 months per year. The seasonal zone of the wetland showed grey-brown soil with many high chroma mottles and gleyed areas. The seasonal zone typically has a significant wet period for at least 3 months per year.

5.7.4 Present Ecological State (PES) of Seep Wetland

The WET-Health assessment classified the PES of the seep wetland overall as **B, Largely Natural**. While the hydrology and geomorphology are relatively unimpacted, the vegetation is in the poorest condition, scoring a C (Moderately Modified).

Table 18: Summary of inputs used to determine the PES (Confluent, 2023).

1. HYDROLOGY
Road creates a preferential flow path from the wetland area but is not eroding significantly.
The excavated pool may act to draw down the soil water level on a localised basis
Surface runoff is not as important as interflow or groundwater
Some earth-moving (excavation and soil piling) may have occurred historically, but cannot be visualised due to dense vegetation cover
No impeding features present that could further impact hydrology
Hydrology PES: A/B (Unmodified to Largely Natural)
2. GEOMORPHOLOGY
No dams are present which would alter flows or sediment transport in surface water in any way
No surface flow present that could result in stream diversion or shortening
No erosion or deposition present
Small areas possibly infilled where soil piling may have occurred historically.
Geomorphology PES: A (Unmodified)
3. VEGETATION
Minor loss due to shallow inundation and excavation for the pool
No historical agriculture at the site (old or new)
Alien vegetation (*Rubus* sp.) throughout *Helichrysum* spp. growth
Helichrysum spp. indicative of historical disturbance and clearing
Vegetation PES: C (Moderately Modified)
OVERALL PES: B LARGELY NATURAL

5.7.5 Knysna Leaf-folding Frog Habitat

The water quality and habitat of the excavated pool was assessed by the aquatic specialist in terms of suitability as habitat for *Afrixalus knysnae* (Knysna leaf-folding frog). Active searching for frogs and tadpoles was carried out, calls were recorded with the use of a song meter, and abiotic measurements of water quality were undertaken.

As indicated by the Freshwater Biodiversity Information System (FBIS) and iNaturalist records within 5 km of the site, the presence of Strongylopus *grayii* (Clicking Stream-frog) and Amietia *fuscigula* (Cape River Frog) was confirmed by tadpoles of both species being numerous in the pool. The calls of only *S. grayii* were recorded.

Although the water clarity at the site was markedly more turbid than that observed at locations where *A. knysnae* are known to occur, remaining physico-chemical parameters indicated relatively good water quality in the pool.

Knysna leaf-folding frogs from other locations have been observed using the leaves of *Persicaria decipiens* (Slender Knotweed) for their nests. This plant is common around the excavated pool, as well as other soft linear-leaved plants which would be suitable for nest formation. It should be noted however, that *P. decipiens* is a widespread and commonly encountered wetland plant, and that *A. knysnae* are even able to use exotic vegetation such as kikuyu grass for their leaf-folding nests.

5.7.6 Ecological Importance & Sensitivity (EIS)

The wetland seep has a Moderate EIS, with no unique or Red Data species were observed or are expected to occur within the habitat specifically. As an island of vegetation distinct from the surrounding forest, the wetland offers a heterogenous habitat within the largely uniform forest vegetation. From this perspective the importance of the habitat is increased, however, the actual vegetation in the wetland is not very sensitive.

5.7.7 Wetland Buffer

A buffer of **10m** is recommended around the wetland area and excavated pool. This buffer is considered a **management setback line** within which various activities are either supported or discouraged. The proposed tented camp represents a very low risk to the wetland area and the access road already runs through the buffer area of the wetland. It is therefore **not considered a complete no-go area**.

The purpose of aquatic buffer zones can be broadly categorised as protective measures against diffuse sources of water pollution, and protection of adjacent habitat for biodiversity support. The buffer in this case has no diffuse water pollution sources to mitigate. These are usually associated with irrigated agriculture or feedlots for instance, where runoff containing fertilisers or pesticides can be mitigated by a buffer. In terms of biodiversity, the open clearing and pool may attract wildlife to the area due to the alternative habitat provided at the site and drinking water availability. The buffer therefore has a more important function for maintaining access to the site and a corridor for movement of wildlife making use of this habitat.

The following general management recommendations were incorporated into mitigation measures for the proposed development, and met by the Preferred Layout Alternative:

- No new infrastructure (platforms, walkways, roads or paths) in the wetland area;
- Vehicle traffic restricted to the existing road;
- The buffer may include the communal platforms and boardwalks;
- Staff tents should be located outside of the buffer area;

As the proposed development site is located proximal to a seasonal wetland and has the potential to negatively impact water quality and / or associated biota the site sensitivity was confirmed as **Very High**.

6. IMPACT ASSESSMENT

This section of the report was completed with input from the following specialists:

- Aquatic Biodiversity - **Dr. Jackie Dabrowski**, Confluent Environmental
- Botanical - **Bianke Fouché**, Confluent Environmental
- Terrestrial Biodiversity - **Dr. Chris Brooke**, Biodiversity Management Services (Pty) Ltd.
- Animal Species - **Dr. Chris Brooke**, Biodiversity Management Services (Pty) Ltd.
  - **Lizette Moolman**, SANParks Scientific Services, Garden Route National Park
  - **Melanie de Morney**, SANParks Scientific Services, Garden Route National Park
- Cultural Heritage, Archaeology & Palaeontology - **Stefan de Kock**, Perception Planning

The impacts will firstly be discussed per specialist discipline and then summarised in the impact summary and statement below.

6.1 ASSESSMENT METHODOLOGY

All possible impacts need to the assessed – the **direct, in-direct as well as cumulative impacts**. The following general assessment methodology has been applied:

- **Nature of the impact:** impacts associated with the proposed Diepwalle Forest Tented Camp have been described in terms of whether they are negative or positive and to what extent.
- **Duration of impacts**: Impact were assessed in terms of their anticipated duration:
  - Short term (e.g., during the construction phase)
  - Medium term (e.g., during part or all of the operational phase)
  - Permanent (e.g., where the impact is for all intents and purposes irreversible)
  - Discontinuous or intermittent (e.g., where the impact may only occur during specific climatic conditions or during a particular season of the year).
- **Intensity or magnitude**: The size of the impact (if positive) or its severity (if negative):
  - Low, where the receiving environment (biophysical, cultural etc) is negligibly affected or where the impact is so low that the remedial action is not required;
  - Medium, where the receiving environment (biophysical, cultural etc) is altered, but not severely affected, and the impact can be remedied successfully; and
  - High, where the receiving environment (biophysical etc) would be substantially (i.e., to a very large degree) affected. If a negative impact, could lead to irreplaceable loss of a resource and/or unacceptable consequences for human wellbeing.
- **Probability**: Should describe the likelihood of the impact actually occurring indicated as:
  - Improbable, where the possibility of the impact is very low either because of design or historic experience;
  - Probable, where there is a distinct possibility that the impact will occur;
  - Highly probable, where it is most likely that the impact will occur; or
  - Definite, where the impact will occur regardless of any prevention measures.
- **Significance:** The significance of impacts can be determined through a synthesis of the assessment criteria. Significance can be described as:
  - Low, where it would have negligible effect on the receiving environment (biophysical, social, economic, cultural etc), and on the decision;
  - Medium, where it would have a moderate effect on the receiving environment (biophysical, social, economic, cultural etc), and should influence the decision;
  - High, where it would have, or there would be a high risk of, a large effect on the receiving environment (biophysical, cultural etc). These impacts should have a major influence on the decision;
  - Very high, where it would have, or there would be a high risk of, an irreversible negative impact on the receiving environment (biophysical, cultural etc) and irreplaceable loss of natural capital/resources or a major positive effect on human well-being. Impacts of very high significance should be a central factor in decision-making.
  - Provision should be made for with and without mitigation scenarios.
- **Confidence**: The level of confidence in predicting the impact can be described as:
  - Low, where there is little confidence in the prediction, due to inherent uncertainty about the likely response of the receiving ecosystem, or inadequate information;

- Medium, where there is a moderate level of confidence in the prediction, or
- High, where the impact can be predicted with a high level of confidence.

- **Consequence**: What will happen if the impact occurs
  - Insignificant, where the potential consequence of an identified impact will not cause detrimental impact to the receiving environment;
  - Significant, where the potential consequence of an identified impact will cause detrimental impact to the receiving environment.
  - Provision must be made for with and without mitigation scenarios.

The impacts should also be assessed in terms of the following aspects:

- **Status of the impact**

The specialist should determine whether the impacts are negative, positive or neutral ("cost – benefit" analysis). The impacts are to be assessed in terms of their effect on the project and the environment. For example, an impact that is positive for the proposed development may be negative for the environment. It is important that this distinction is made in the analysis.

- **Cumulative impact**

Consideration must be given to the extent of any accumulative impact that may occur due to the proposed development. Such impacts must be evaluated with an assessment of similar developments planned and already in the environment. Such impacts will be either positive or negative, and will be graded as being of negligible, low, medium or high impact.

Care must be taken to ensure that where cumulative impacts can occur that these impacts are considered and categorised as **additive** (incremental or accumulative); **interactive**, **sequential** or **synergistic**.

Based on a synthesis of the information contained in the above-described procedure, the specialists assessed the potential impacts in terms of the following significance criteria:

- **No significance**: The impacts do not influence the proposed development and/or environment in any way.
- **Low significance**: The impacts will have a minor / unlikely influence on the proposed development and/or environment. These impacts require some attention to modification of the project design where possible, or alternative mitigation.
- **Moderate significance**: The impacts will have a moderate influence on the proposed development and/or environment. The impact can be ameliorated by a modification in the project design or implementation of effective mitigation measures.
- **High significance**: The impacts will have a major influence on the proposed development and/or environment.

Where relevant, all specialists have assessed the preferred footprint (Layout Alternative #13) and the No-Go Alternative using the abovementioned general methodology as a basis. Please note that each specialist utilises rating and weighting criteria specific to their discipline in order to determine the significance of specific impacts.

6.2 IDENTIFICATION OF IMPACTS ASSESSED

This section simply lists the potential key impacts identified and assessed by the various specialists (more details on the significance and ratings of these impacts are provided in Section 6.4 – 6.7 below and in the specialist reports attached in Appendix E).

6.2.1 Aquatic Biodiversity Impacts Assessed

6.2.1.1 Construction Phase Aquatic Biodiversity Impacts

- Movement of vehicles, materials and workers around wetland habitat.
- Handling of fuel and other building materials;
- Construction of boardwalks and platforms (decks).

6.2.1.2 Operational Phase Aquatic Biodiversity Impacts

- Overflow or backwashing of pool & hot-tubs to the wetland / buffer.
- Camp access for deliveries and removals.
- Camp activities disturbing aquatic biota (animals).
- Disposal of grey water & wastewater into aquatic habitat & buffer (pollution)

6.2.1.3 Decommissioning Phase Aquatic Biodiversity Impacts

- Vehicles or workers removing materials from the site – disturbance of wetland, excavated pool & buffer.

6.2.2 Botanical Biodiversity Impacts Assessed

6.2.2.1 Construction Phase Impacts

- Loss of Species of Conservation Concern (SCC) & other delicate species (e.g., mosses) caused by vegetation clearance, site management practices and disturbance.

6.2.2.2 Operational Phase Impacts

- Potential poaching of SCC seedlings & other plant species (e.g., orchids) from both guests and staff.
- SCC are negatively affected by maintenance activities: tree trimming & rotting vegetation removal.

6.2.2.3 Decommissioning Phase Impacts

- SCC seedlings and other species (e.g., orchids) negatively affected by disassembly of infrastructure before the off season (i.e. Winter).

6.2.3 Terrestrial Biodiversity & Faunal Impacts Assessed

6.2.3.1 Construction Phase Impacts

- Destruction, fragmentation and degradation of habitats
- Spread and/or establishment of alien and/or invasive species;
- Mortalities and displacements of fauna and flora SCCs; and

6.2.3.2 Operational Phase Impacts

- Continued fragmentation and degradation of habitats;
- Spread of alien and/or invasive species;
- Displacement, direct mortalities and reduced dispersal/migration of faunal community (including SCC) due to disturbance (road collisions, noise, light, vibration); and
- Reduced dispersal / movement of fauna.

6.2.3.3 Decommissioning Phase Impacts

- Continued fragmentation and degradation of habitats and ecosystems; and
- Spread of alien and/or invasive species.

6.2.4 Heritage Impacts Considered

- Impacts on Cultural Landscape
- Impacts on Archaeology Resources
- Impact on Palaeontology Resources

6.3 SITE SENSITIVITY CONSTRAINTS AND POTENTIAL RISKS & IMPACTS

The following spatial site-specific constraints were identified by various specialists, SANParks and the EAP during the initial stage of the environmental process.

Table 19: Summary of potential site constraints identified during the initial phase of the BAR Process, and which are assessed in the section below.

Specialist Discipline	Site Constraints
Aquatic Biodiversity	Excavated pool & seep wetland
Plant / Botanical Species	Protected trees, large trees & tree clumps. Plants species of conservation concern.
Terrestrial Biodiversity	Excavated pool & wetland in clearing
Animal Species	Sensitive habitat associated with pool & clearing. Plants species of conservation concern.
Heritage	No specific site spatial constraints identified.

The preferred layout alternative was developed to avoid the artificial pond and seep wetland and associated buffers determined by the Aquatic Specialist, as well as the Protected Trees and sensitive areas identified by the Botanical & Terrestrial Biodiversity specialists.

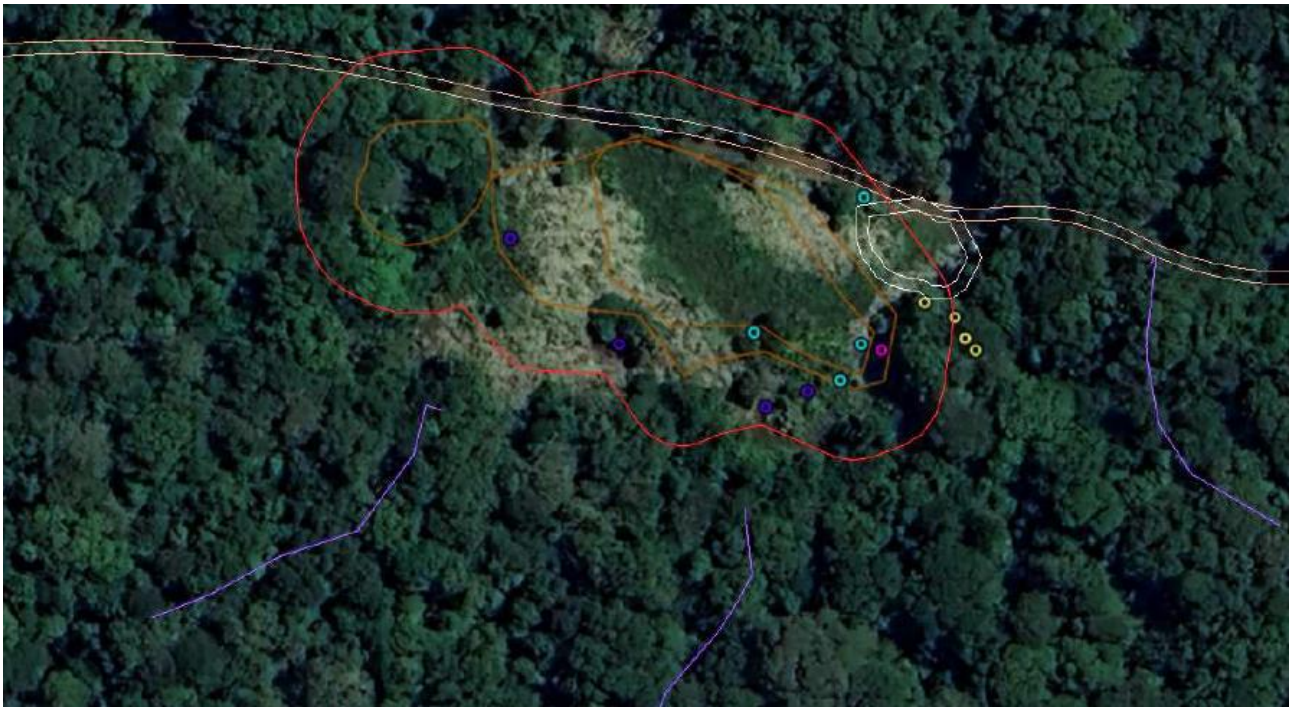


Figure 40: Site sensitivities / constraints identified by the specialists. Coloured dots indicate trees to be avoided, while orange lines indicated pool & wetland with associated 10m (red).

Figure 41: Preferred layout overlaid to avoid site sensitivities.

As seen in the images above, the pool, seep wetland and specific trees were considered to have a very High Site Ecological Importance. The remainder of the site is deemed to have a high importance due to confirmed or speculated presence of species conservation interest or concern.

Kindly refer to sections 2 & 3.2 above and the Layout Plan in Appendix D for details as to how the preferred alternative incorporated these sensitive features.

All high sensitivity features were avoided / excluded from the preferred footprint tented camp. Due to this avoidance approach, it was possible for impacts to be effectively mitigated to an extent that no Critical, Very-High or High Impacts remain after mitigation.

The various impact assessments considered the Design & Layout, Construction, Operational and Decommissioning Phases of the proposed camp. The latter is important because the camp will be partially dismantled each year in winter and may be entirely removed when the concession with SANParks concludes.

6.4 IMPACT ON AQUATIC BIODIVERSITY

An Aquatic Biodiversity Impact Assessment was undertaken by Dr Dabrowski of Confluent Environmental and is attached in Annexure E1.

The specialist undertook the assessment in accordance with the requirements of the published General Notice (GN) 509 by the Department of Water and Sanitation (DWS). This notice was published in the Government Gazette (no. 40229) under Section 39 of the National Water Act (Act no. 36 of 1998) in August 2016, for a Water Use Licence (WUL) in terms of Section 21(c) & (i) water uses. The GN 509 process provides an allowance to apply for a WUL for Section 21(c) & (i) under a General Authorisation (GA), as opposed to a full Water Use Licence Application (WULA). A water use (or potential) qualifies for a GA under GN 509 when the proposed water use/activity is subjected to analysis using the DWS Risk Assessment Matrix (RAM). A copy of the full Risk Assessment Matrix is included in Table 15 of the Aquatic Biodiversity Assessment (Appendix E1) The following assessment on the impacts on Aquatic Biodiversity has been adapted from this Risk Assessment Matrix.

6.4.1 Construction Phase Aquatic Biodiversity Impacts

The main disturbance during the construction phase will be from access, by higher frequency and heavier than usual, vehicles using the access road and turnaround area for offloading materials, facilities and workers to the site. Anticipated impacts and recommended mitigation measures are explained below.

Transporting workers and materials to and from the site several times a day during the initial construction phase of the camp's development has the potential to negatively impact vegetation and soils associated with the wetland. This impact would be exacerbated under heavy rainfall conditions. As the access road is partially

located in the wetland area it is possible this road could get very muddy. If/when this occurs, drivers tend to move their vehicles to the sides of the road area, which have more stable vegetation. The vegetation adjacent to the road is considered wetland area and had a lot more diverse wetland vegetation.

Provided all the recommended mitigation measures are fully implemented, the anticipated impact can be **reduced from a Minor Negative to a Negligible Negative level.**

Table 20: Construction Phase Aquatic Impact 1: Movement of vehicles, materials and workers around wetland habitat.

Project phase	**Construction**			
Impact	**Movement of vehicles, materials and workers around wetland habitat**			
Description of impact	**Disturbance of vegetation, habitat and soils**			
Mitigatability	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	**• Check weather forecasts daily, and cease work during and immediately following rainfall. • Pre-construction the wetland and pool buffer must be surveyed and marked out wth temporary wooden survey poles and danger tape. On the existing road the delineated edge must align with the present road edge to ensure vehicles do not make the road any bigger. • All drivers and workers must be informed that the buffer and wetland beyond the danger tape is a 'No-go' area unless specifically working on construction of the communal platforms in the buffer or boardwalks along the buffer edge. • The vehicle parking area must be clearly indicated with danger tape and laminated signs. This should be limited to the turnaround / drop off point indicated in the SDP. • Areas for waste disposal including all litter and toilet facilities must be provided to accommodate workers, and no waste product of any sort may be disposed of at the site. • IF the road becomes very muddy and navigation becomes difficult, a combination some / all of the following methods can be implemented: Improve drainage with cutoff drains, low berms across the road, and shaping the crows to drain downstream; compact the base layer and add a binding agent such as cement if necessary; Add a surface layer of fractured stone, sand and fines and compact to a smooth surface. During construction, no cement must be mixed anywhere except on the road, and work must be undertaken during dry weather.**			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
Extent	Limited	Limited to the site and its immediate surroundings	Very limited	Limited to specific isolated parts of the site
Intensity	Low	Natural and/ or social functions and/ or processes are somewhat altered	Very low	Natural and/ or social functions and/ or processes are slightly altered
Probability	Likely	The impact may occur	Likely	The impact may occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	High	The affected environment will be able to recover from the impact	High	The affected environment will be able to recover from the impact
Resource irreplaceability	Medium	The resource is damaged irreparably but is represented elsewhere	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - negative**		**Negligible - negative**	
Comment on significance	.			
Cumulative impacts	The assessment of this impact considers the fact that the impact is repetitive by nature in that the camp is dismantled on an annual basis			

Transporting vehicles and materials to and from the site, as well as construction of platforms and boardwalks, present the possibility of fuel leaks or spills. Disorganised storage of materials such as wood for the boardwalks can increase the footprint of disturbance into wetland or buffer areas. These impacts are easily mitigated as indicated in table below. Provided control measures are fully implemented, the impacts can be **reduced from a Minor Negative to a Negligible Negative level.**

Table 21: Construction Phase Aquatic Impact 2: Handling of fuel and other building materials.

Project phase	**Construction**			
Impact	**Handling of fuel and other building materials**			
Description of impact	**Potential pollution of sensitive aquatic habitats**			
Mitigatability	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	**• All refuelling of vehicles must be done at the Diepwalle camp, and no fuel or oil for vehicles may be stored at the proposed camp site. • Vehicles entering the site must be checked for leaks of oil or fuel at the Diepwalle camp before being permitted to enter the development site. Any vehicle with leaks must be immediately removed from the site until repaired. • As far as possible, all wood cutting and preparation for decking and boardwalks must be done at the Diepwalle campsite so assembly is all that's required on site. • If tools like electric drills are required on site, a generator will be necessary. This shoudl be filled with fuel at the Diepwalle camp, and 2 x 5 L cans of fuel may be retained on site to refill the generator if required. Refilling must be undertaken with care outside of the wetland buffer at the site of the staff camp indicated on the SDP. • Wood for decking should be stockpiled in the staff quarters area, taking care to minimise the footprint of disturbance and not spread materials over an unnecessarily large area.**			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Short term	Impact will last between 1 and 5 years	Immediate	Impact will self-remedy immediately
Extent	Limited	Limited to the site and its immediate surroundings	Very limited	Limited to specific isolated parts of the site
Intensity	Low	Natural and/ or social functions and/ or processes are somewhat altered	Negligible	Natural and/ or social functions and/ or processes are negligibly altered
Probability	Unlikely	Has not happened yet but could happen once in the lifetime of the	Rare / improbable	Conceivable, but only in extreme circumstances, and/or might occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Medium	The affected environment will only recover from the impact with significant intervention	High	The affected environment will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Negligible - negative**		**Negligible - negative**	
Comment on significance				
Cumulative impacts	These conditions must apply for each time the camp is dismantled or rebuilt.			

The boardwalks and decks are located along and slightly encroaching into the wetland buffer. Therefore, care must be taken when undertaking their construction to ensure unnecessary disturbance to vegetation and soil is avoided. The impacts and proposed mitigation measures are provided in Table below and the **impact in its mitigated state is a Negligible Negative.**

Table 22: Construction Phase Aquatic Impact 3: Construction of boardwalks and platforms (decks).

Project phase	**Construction**			
Impact	**Construction of boardwalks and platforms (decks)**			
Description of impact	**Degradation of habitat in the buffer**			
Mitigatability	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	**• Holes for pole supports for boardwalks and platforms must preferably be dug using an auger or by hand to minimise the footprint of disturbance. • Small gaps (15 - 20m) should be left between planks on the boardwalks to allow filtered light through so plants can still grow under the boardwalk. • Boardwalk sides should be left open to allow small animals to move in and out of the buffer area during quieter times. • Plants surrounding the work area will inevitably become trampled. Therefore, a maximum disturbance area of 2m either side of the deck and boardwalk is acceptable. However, wherever feasible steps should be taken to reduce the area disturbed. • All waste materials (screws, wood cuts etc) must be collected as work progresses for disposal off site.**			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Short term	Impact will last between 1 and 5 years	Brief	Impact will not last longer than 1 year
Extent	Limited	Limited to the site and its immediate surroundings	Very limited	Limited to specific isolated parts of the site
Intensity	Low	Natural and/ or social functions and/ or processes are somewhat altered	Very low	Natural and/ or social functions and/ or processes are slightly altered
Probability	Likely	The impact may occur	Probable	The impact has occurred here or elsewhere and could therefore occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	High	The affected environment will be able to recover from the impact	High	The affected environment will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - negative**		**Negligible - negative**	
Comment on significance				
Cumulative impacts	Not applicable			

6.4.2 Operational Phase Aquatic Biodiversity Impacts

The operational phase considers the day to day running of the camp and anticipates impacts which could result in degradation of the wetland, artificial pool, or buffer area.

The selection of the glass pod-style of accommodation over more traditional canvas tents would add to the requirement for cleaning and disposal of grey water. Likewise, the pool and hot tubs will require additional transporting of water and removal of backwashed water. These additions to the camp increase the logistics in terms of transporting clean water in and dirty water out, which may have guest benefits, but will increase the impact to the access track and the burden of cleaning and maintenance.

The first impact concerns the operation of the pool and hot tubs. The worst-case scenario is that these pools are frequently backwashed into the wetland area discharging poor water quality and impacting aquatic biota and plants, and require frequent filling with heavy tanks of water. However, these impacts are easily mitigated, in which case the impact is determined as a **negligible negative.**

Table 23: Operational Phase Aquatic Impact 1: Overflow or backwashing of pool to the wetland / buffer.

Project phase	**Operation**			
Impact	**Overflow or backwashing of pool / hot tub water to the wetland / buffer**			
Description of impact	**Contamination due to chlorine and personal care products (eg. Sunblock)**			
Mitigatability	Medium	Mitigation exists and will notably reduce significance of impacts		
Potential mitigation	**• Cover the pools when not in use to reduce the risk of them filling up and overflowing during rain. Covering will also reduce cleaning requirements and algal growth. It will also reduce the relatively low risk of small animals getting into the pool and drowning. • Backwashed water must be discharged to the wastewater tank for disposal at the Diepwalle camp site. • No pool / hot tub water may be discharged into the wetland or buffer area.**			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Brief	Impact will not last longer than 1 year	Immediate	Impact will self-remedy immediately
Extent	Very limited	Limited to specific isolated parts of the site	Very limited	Limited to specific isolated parts of the site
Intensity	Very low	Natural and/ or social functions and/ or processes are slightly altered	Negligible	Natural and/ or social functions and/ or processes are negligibly altered
Probability	Probable	The impact has occurred here or elsewhere and could therefore occur	Rare / improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere
Confidence	High	Substantive supportive data exists to verify the assessment	Medium	Determination is based on common sense and general knowledge
Reversibility	High	The affected environment will be able to recover from the impact	High	The affected environment will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Negligible - negative**		**Negligible - negative**	
Comment on significance				
Cumulative impacts				

Table 24: Operational Phase Aquatic Impact 2: Camp access for deliveries and removals.

Project phase	**Operation**			
Impact	**Access to camp for delivery of supplies and removal of waste**			
Description of impact	**Expanded road footprint into wetland area**			
Mitigatability	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	**• All camp staff and guests must be made aware that the wetland and artificial pool are sensitive site features with restricted access • When any water is brought into or out of the camp , a maximum of 5 000 L of water may be transported on one vehicle, as the weight may cause damage to the access road. Should damage to the road begin to occur (deep rutting) then a lighter weight tank will need to be used. • All vehicles must stick to the existing access track and turnaround point indicated on the SDP. No new tracks can be made, and no vehicles may enter the buffer or wetland.**			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Medium term	Impact will last between 5 and 10 years	Brief	Impact will not last longer than 1 year
Extent	Limited	Limited to the site and its immediate surroundings	Very limited	Limited to specific isolated parts of the site
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	Low	Natural and/ or social functions and/ or processes are somewhat altered
Probability	Unlikely	Has not happened yet but could happen once in the lifetime of the project, therefore there is a possibility that the impact will occur	Rare / improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere
Confidence	Medium	Determination is based on common sense and general knowledge	High	Substantive supportive data exists to verify the assessment
Reversibility	High	The affected environment will be able to recover from the impact	High	The affected environment will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Negligible - negative**		**Negligible - negative**	
Comment on significance				
Cumulative impacts	Not applicable			

Table 25: Operational Phase Aquatic Impact 3: Camp activities disturbing aquatic biota.

Project phase	**Operation**			
Impact	**Camp activities disturbing aquatic biota (animals)**			
Description of impact	**Disruption of normal behaviour, injury or death**			
Mitigatability	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	**• Lighting along all boardwalks and decks in / adjacent to the buffer must be 'warm' in colour, solar powered, and motion triggered. This is to minimise the attraction of insects which in turn influences the behaviour or frogs and other animals that feed on them. • At a reasonable time, all lights must be switched off so they don't continue to switch on with the motion trigger after 10pm. • A single bench can be placed at the artificial pool so guests can enjoy the frog calls and appreciate a different outlook. This can be reached from a small footpath from the access road provided this does not conflict with guidance from the faunal specialist in terms of animal access for drinking. • No driving after dark as far as possible. The aim is avoid driving over frogs or toads which may move onto the road at night. • No insect zappers are permitted in any part of the camp. The excavated pool and wetland provide habitat for many insects which in turn are prey for other animals. • No insect killer sprays (e.g. Doom) are permitted in camp. If mosquitoes cause annoyance then people can apply deterrant lotions or sprays, and wear long sleeves / trousers. • Emergency supplies or materials suitable for rapid response to spillage of waste (e.g. sewage) or diesel for the generator must be kept along with other safetey equipment like a fire extinguisher in the staff area. An example would be lime for spreading on spilt sewage, and spades for removing contaminated soil.**			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Short term	Impact will last between 1 and 5 years	Brief	Impact will not last longer than 1 year
Extent	Limited	Limited to the site and its immediate surroundings	Very limited	Limited to specific isolated parts of the site
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	Very low	Natural and/ or social functions and/ or processes are slightly altered
Probability	Likely	The impact may occur	Rare / improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project although this has
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	High	The affected environment will be able to recover from the impact	High	The affected environment will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - negative**		**Negligible - negative**	
Comment on significance				
Cumulative impacts	Not applicable			

Table 26: Operational Phase Aquatic Impact 4: Disposal of greywater & wastewater.

Project phase	Operation			
Impact	Disposal of grey water and waste water			
Description of impact	Pollution of aquatic habitat and surrounding buffer			
Mitigatability	Medium	Mitigation exists and will notably reduce significance of impacts		
Potential mitigation	• All staff MUST be trained that all grey water must be disposed of in the wastewater container on site. This includes buckets of dirty water used for washing glass pod windows (if selected as an accommodation option), dishes, cleaning tents, cleaning the pool etc. • Biodegradable, eco-friendly detergents must be sourced and used throughout the camp. • Washing of linen, towels and clothing must be done off site. • No buckets of dirty water may be thrown into the surrounding environment. • Clear instructions must be provided for guests and staff for the use and management of chemical toilets.			
Assessment	Without mitigation		With mitigation	
Nature	Negative		Negative	
Duration	Medium term	Impact will last between 5 and 10 years	Brief	Impact will not last longer than 1 year
Extent	Limited	Limited to the site and its immediate surroundings	Very limited	Limited to specific isolated parts of the site
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	Very low	Natural and/ or social functions and/ or processes are slightly altered
Probability	Probable	The impact has occurred here or elsewhere and could therefore occur	Rare / improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	High	The affected environment will be able to recover from the impact	High	The affected environment will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	Minor - negative		Negligible - negative	
Comment on significance				
Cumulative impacts	Not applicable			

6.4.3 Decommissioning and Closure Phase Aquatic Biodiversity Impacts

The camp will be partially packed up / dismantled on an annual basis when closed during winter. It is understood that all moveable items will be removed from the site, but built structures such as the boardwalk, decks and pools would be left in place. The pools are the main concern as they must be secured against wildlife falling into them and becoming trapped, and against filling up with water. Mitigation measures are recommended in Table 27 below. When the site is reconstructed for the tourist season, all construction phase impact mitigation measures are once again applicable.

Table 27: Decommissioning Phase Impact: Vehicles or workers removing materials from the site.

Project phase	**Decommissioning**			
Impact	**Vehicles or workers removing materials and structures from the site**			
Description of impact	**Disturbance to the wetland, excavated pool or buffer area**			
Mitigatability	High	Mitigation exists and will considerably reduce the significance of impacts		
Potential mitigation	**• Work to remove items from the site must be undertaken in a similar manner recommended for the camp construction in that vehicles must stick to the road and not be overloaded, work may not be undertaken during rainfall, and the wetland and buffer are No-go areas. • From the perspective of aquatic sensitivities, the boardwalks and platforms may be left on site when the camp closes during the winter months. It is envisaged that the accommodation would be removed (e.g. glass pods / tents), along with water and wastewater storage tanks and pumps. • Pools must be completely emptied and covered securely. They should preferably have covers made from decking underlain by irrigation plastic so they don't blow off in the wind and so that animals cannot fall into them, and they cannot be filled by rain. • The site must be completely cleared of all waste or litter. • When boardwalks and decking are removed completely (end of concession with SANParks) all wood must be stockpiled for removal at a site already disturbed (ie. the staff camp), and every hole in the ground must be completely refilled with soil from the area (SANParks to provide a suitable source)**			
Assessment	**Without mitigation**		**With mitigation**	
Nature	Negative		Negative	
Duration	Short term	Impact will last between 1 and 5 years	Short term	Impact will last between 1 and 5 years
Extent	Limited	Limited to the site and its immediate surroundings	Very limited	Limited to specific isolated parts of the site
Intensity	Moderate	Natural and/ or social functions and/ or processes are moderately altered	Very low	Natural and/ or social functions and/ or processes are slightly altered
Probability	Likely	The impact may occur	Probable	The impact has occurred here or elsewhere and could therefore occur
Confidence	Medium	Determination is based on common sense and general knowledge	Medium	Determination is based on common sense and general knowledge
Reversibility	Medium	The affected environment will only recover from the impact with significant intervention	High	The affected environment will be able to recover from the impact
Resource irreplaceability	Low	The resource is not damaged irreparably or is not scarce	Low	The resource is not damaged irreparably or is not scarce
Significance	**Minor - negative**		**Negligible - negative**	
Comment on significance				
Cumulative impacts	Provided all mitigation measures are followed for the construction phase and decommissioning phase each time de-camping and reconstruction occurs, the impacts should be minimised.			

6.4.4 Aquatic Biodiversity Concluding Statement

Aquatic features at the site were identified as a small, excavated pool and a seasonal wetland at the site of historical clearing for woodcutting. The wetland area was delineated using soil and vegetation features, and a buffer of 10 m was recommended around the pool and wetland. The PES of the wetland was measured as B, Largely Natural, and the EIS was Moderate. Frogs were surveyed in the excavated pool and 2 species were confirmed present (*S. grayii* and *A. fuscigula*), with no *A. knysae* recorded. The wetland delineation and buffer were supplied to the developer and the Site Development Plan was adjusted to permit limited structures including the boardwalk, communal deck areas and 3 to 4 camp decks around the edge and as minor encroachments into the buffer area respectively.

Development of the camp is **supported from the perspective of aquatic ecosystems**, as most **impacts can be effectively mitigated to a negligible level**, provided mitigation measures are fully implemented. The **outcome of the Risk Matrix was determined to be Low**, with the resulting recommendation that a General Authorisation is applicable for Section 21 c) and i) water uses defined in the National Water Act.

6.5 IMPACTS ON BOTANICAL / PLANT SPECIES

An Botanical Impact Assessment was undertaken by Bianke Fouché of Confluent Environmental and is attached in Annexure E2.

A summary of the current botanical impacts on the site are as follows:

- The overgrown *Helichrysum spp*. in the clearing is limiting the ecological function of the vegetation there, and also prevents large animal movement through the clearing. However, smaller vertebrates may enjoy the cover (e.g., rodents, snakes, frogs, mongoose). Despite this, the Helichrysum is overgrown and in a modified secondary state. The clearing would benefit from more native wetland plant species and thinning of the *Helichrysum spp*. in some areas.
- Invasive species in the clearing are established in some places. The invasive species found in the clearing were not present in the forest, and this should continue to be monitored.
- Hiking paths in the forest have a small (likely negligible) negative impact of the forest habitat.

6.5.1 Construction Phase Botanical Impacts

An Environmental Control Officer (ECO) must be appointed for the duration of the construction phase. A botanist (e.g. author of this report) must be present on the site when the final, detailed positioning / layout of the tented camp is done. This will ensure that sensitive trees and seedlings are marked and labelled within the development footprint and that stakeholders are aware of the plants that will require avoidance, should be incorporated in decks or rescued.

The proposed tented camp construction and preparation will inevitably result in some vegetation loss and disturbance, especially within the forest habitat. Transport of materials and staff will negatively affect the vegetation and soil of the clearing and forest. Understory trees and other smaller species like mosses are especially vulnerable. This impact will be exacerbated during rainfall periods. Furthermore, the removal of rotting material in the forest environment may also affect vegetation growth during the construction phase. The forest is a refuge for several SCC and protected tree species, and planning around some of the larger trees will happen. The significance of this impact **without mitigation is Moderate – negative and Minor – negative with mitigation**, as illustrated in Table below.

Table 28: Construction phase impact 1: A loss of SCC & other delicate species (e.g., mosses) caused by vegetation clearance, site management practices, and disturbance during the construction phase.

Assessment	Without mitigation	With mitigation
Nature	Negative	Negative
Intensity	Very High	Moderate
Duration	Short term	Brief
Extent	Limited	Very Limited
Probability	Certain	Certain
Confidence	High	High
Reversibility	Low	Low
Resource irreplaceability	High	High
Significance	**Moderate negative Score: -77**	**Minor negative Score: -49**

Consequences that may occur due to this impact if mitigation is poor:

- A loss of forest and wetland habitat.
- Fragmentation of SCC sub-populations.
- Reduction in the extent of occurrence (EOO) of SCC.
- A general loss of suitable habitat for SCC and other species present on the site.
- A loss of genetic variation within remaining SCC and other plant species stands.
- A shift towards a negative change in the conservation status of the SCC and other indigenous species affected by the development.
- An increased risk of invasion of the site by invasive species, and the consequent permanent loss of SCC some areas.
- Potential health and safety hazards on the site and in the surrounding environment.

Mitigation Measures

1. A **plant search and rescue** must be conducted.

- The construction area of influence must be clearly delineated, and a botanist must be present during this initial construction plan to point out and mark important trees and plants within the forest environment.
- All new staff must be briefed about the layout of the construction site and must be made aware of the no-go areas and fact that the surrounding environment is sensitive and must not be disturbed.
- Rescued seedlings and smaller plants must be kept in a nursery on Diepwalle for the duration of the construction phase, where the plants will be cared for the nursery staff that already have long-term experience working with forest species in Knysna.
- Any additional SCC plants that are observed later of during construction within the development footprint must be rescued and added to the rescued plants in the nursery.
- Plants that were rescued and that can't be re-used in the development footprint after construction must be donated to an indigenous nursery or must be used by Diepwalle and SANParks in other forest restoration projects in the Knysna forest.

2. **Construction materials** must be sourced, transported & stockpiled responsibly to minimise the risk of contamination and pollution of the site.

- No waste dumping or burning is to be allowed on the site or in the surrounding environment. All material waste is to be collected in designated bins and must be transported to a waste disposal facility.
- Stockpiles and soil must all be covered by a geotextile or plastic covering, which must also be bunded (e.g., sandbags) when the piles are not in use on the site (Fig 11). This will prevent the material from washing away and contaminating the substrate of the site which likely still contains useful seeds and soil organisms.
- Where vegetation will be cleared to make way for construction, a temporary ground net / cover should be placed to prevent potential erosion. The ground cover must be sterilised and washed prior to bringing it to the sites, as there is a serious risk to the vegetation here from invasive plant species.
- Material preparation (e.g., woodcutting and drilling etc.) must not be done on the proposed camp site.

3. **Stripping / grubbing of topsoil** must be kept to a minimum. Where topsoil is disturbed (for installation of poles, water-tank platforms, staff & kitchen tents), this should be stockpiled & protected for re-use on site i.e. may not be removed from site.

4. The **construction of boardwalks** – as per Aquatic mitigation measures above (Dabrowski, 2023):

5. **Adequate ablution facilities** must be provided for every construction & re-assembly peroid.

- Toilets must be placed on a level platform before construction starts.
- Ablution facilities must be regularly maintained and cleaned.
- At least one toilet per ten to fifteen construction staff should be available.

Ornamental plants, geophytes and epiphytic orchids are at a large risk of poaching. Some LC species, especially geophytes, can also be targeted by plant poachers, like the species that were observed within the development footprint. Human activity can also lead to an increased likelihood and risk of invasive plant spread and establishment in a natural ecosystem. The significance of this impact (see Table below) **without mitigation Minor – negative and with mitigation it should be Negligible - negative.**

Table 29: Construction phase impact 2: A loss of SCC and other delicate species (e.g., mosses) caused by vegetation clearance and disturbance within the footprint of the project.

Assessment	Without mitigation	With mitigation
Nature	Negative	Negative
Intensity	High	Very Low
Duration	Short term	Immediate
Extent	Limited	Very Limited
Probability	Likely	Rare
Confidence	High	High
Reversibility	Low	Low
Resource irreplaceability	High	High
Significance	Minor negative Score: -50	Negligible negative Score: -8

The following consequences may occur due to this impact:

- The creation of novel habitat that indigenous species cannot survive in, but where exotics and invasive plants thrive in.
- A loss of SCC and other indigenous plant stands leading to a loss of population resilience or local extinction.
- Abuse of natural assets for material gain.

Mitigation measures:

Staff must be told that the environment is sensitive, but care must be taken **not** to point out individual potentially ornamental plant species, such as the EN tree seedlings, tree orchids and mosses. Instead, staff must be aware of no-go areas and must be informed that no biological material may be removed from the site unless it is part of management of the site.

Ongoing monitoring and clearing of invasive plants on the site should occur. This is a requirement by law.

No kikuyu grass (*Cenchrus clandestinus*) will be allowed anywhere, as this is a listed invasive species. This invasive species was not observed on the site.

6.5.2 Operation Phase Botanical Impacts

As mentioned, numerous plant species in South Africa, across a wide range of habitat types, are prone to poaching and abuse. Plant poaching includes both SCC and non-SCC plants. This problem is well known, and SANBI has tried to protect the identity of some Threatened species by obscuring their true identities (i.e., all the "Sensitive Species" listed by SANBI). Without mitigation, the impact of poaching will be cumulative over time, making the impact worse as more plants are poached from the environment. This is an impact that, if it happens, can have potentially cumulative negative effects for the biodiversity of the site. Without mitigation poaching during the operational phase of the project is likely to have a Minor - negative impact (which can become a greater impact if the problem persists for long enough), and with **appropriate mitigation the problem is a Negligible – negative impact** (Table below).

Table 30: Operation botanical impact 1: Potential poaching of SCC seedlings & other plant species (e.g., orchids) from both guests and staff.

Assessment	Without mitigation	With mitigation
Nature	Negative	Negative
Intensity	Moderate	Very low
Duration	Permanent	Immediate
Extent	Limited	Very limited
Probability	Likely	Rare
Confidence	High	High
Reversibility	Low	Low
Resource irreplaceability	High	High
Significance	Minor negative Score: -65	Negligible negative Score: -8

The following consequences may occur due to this impact:

- Increased problem with illegal sale of indigenous plants that have been poached.
- A loss of species diversity and overall health in the surrounding environment.
- A negative shift towards a degradation of portions of the surrounding sensitive landscape where some places become dominated by graminoids and essentially become dominated by "non-native vegetation cover" over enough time.

Mitigation measures:

- The access road to the proposed Camp site must be kept locked at all times when guests and staff are not making use of it.
- Diepwalle management can strategically monitor the plants within and nearby the camp to ensure that any loss of plants are due to natural causes and not poaching or bark stripping. Camera traps can be setup in the forest around the campsite. This can help to catch potential poachers and also help to monitor wildlife around the campsite during the year.

- Guests to the camp must be informed that no plant material may be removed from the site, but guests do not need to know exactly which species are vulnerable to poaching. Diepwalle can include information in the camp information folders stating the legal implications of plant poaching.
- Guests may not enter the camp with flower presses.
- All staff and guests must be made aware that the wetland area and forest are sensitive habitats and that they are not allowed to access any areas that are not clearly marked as paths or boardwalks.

The proposed camp is positioned predominantly in the forest fringe, in close proximity to Red Listed plant species that are vulnerable due to threats and habitat loss. The species in the camp area will be subject to an altered disturbance regime. Long-term vegetation should be ecologically friendly, allowing native plant diversity to return in the wetland area. Appropriate site management could **Negligible – positive impact** (Table below).

Table 31: Operational phase botanical impact 2: SCC are negatively affected by maintenance activities: tree trimming & rotting vegetation removal.

Assessment	Without mitigation	With mitigation
Nature	Negative	Positive
Intensity	Low	Low
Duration	Brief	Immediate
Extent	Limited	Very limited
Probability	Certain	Certain
Confidence	High	High
Reversibility	Low	Low
Resource irreplaceability	High	High
Significance	Minor – negative Score: -49	Negligible – positive Score: 28

The following consequences may occur due to this impact:

- A general loss of habitat for plants, pollinators, and other important taxa.
- Altered soil characteristics which causes unnecessary harm to forest vegetation dynamics.
- Pollution of the environment.
- The creation of a landscape of fear where some animals and insects that are able to access the site do not do so because of excessive and potentially destructive anthropogenic activity.

Mitigation measures:

- As is required by law, monitoring & removal of alien invasive plants should be undertaken.
- Emergency & cleaning supplies for incidents of waste spillage, or fires accidentally spreading should be kept on the camp (e.g. keep lime, spades, first aid etc. avaliable). Fire extinguishers etc. must be kept on the camp as per fire safety regulations. Staff on the site must be properly trained to handle incidences of pollution and fire. Guests must be well aware of activities that are not allowed on the site.
- Grey water disposal must be via soak aways along existing slip paths directed into the forest away from the camp and away from the wetland. The kitchen must be fitted with fat traps & only biodegradable soaps used. Greasy dishes can be washed on the existing Diepwalle tea garden (i.e. off-site).
- Guests & staff must remain on designated walkways.
- Instructions for the proper use of chemical toilets must be provided and must be clearly visible in all restrooms.
- No plants may be brought to the site from elsewhere, other than those rescued from the site during construction. However, wetland plants may be sourced from elsewhere to help restore some additional diversity within the wetland area. Wetland plants that may be considered include: *Carex aethiopica, Carex uhligii, Cyperus congestus , C. polystachyos , Juncus dregeanus, J. effusus,* and *J. lomatophyllus,* which are species were found at the site & can be rescued from the roadsides and cultivated for later maintenance activities).

6.5.3 Decommissioning Phase Botanical Impacts

The camp will be partially packed away / dismantled at the end of each summer season. Plant species may be damaged during disassembly & removal / re-assembly of infrastructure each season. When the site is reconstructed for each tourist season, all construction phase impact mitigation measures are applicable. **Before mitigation this impact is Minor - Negative and after it is Negligible – Negative** (Table below).

Table 32: Decommissioning phase botanical impact 1: SCC seedlings and other species (e.g., orchids) negatively affected by disassembly of infrastructure before the off season (i.e. Winter).

Assessment	Without mitigation	With mitigation
Nature	Negative	Negative
Intensity	Moderate	Very low
Duration	Immediate	Immediate
Extent	Limited	Very limited
Probability	Certain	Certain
Confidence	High	High
Reversibility	Low	Low
Resource irreplaceability	High	High
Significance	Minor negative Score: -49	Negligible negative Score: -28

The following consequences may occur due to this impact:

- An unnecessary loss of general diversity, especially plants, including SCC.
- Pollution of the environment.
- A shift to a negative conservation status pf SCC and LC species.
- A loss of habitat and the creation of fragmented & novel habitats within the forest and wetland.

Mitigation measures:

- Follow construction mitigation measures during disassembly & reassembly activities each season.

Most of the boardwalks must be left on the site to minimise disturbance to the vegetation and sensitive aquatic features of the site. However, strategic sections of the boardwalk should be removed to allow for animal movement between the forest and clearing.

Figure 42: Example of modular lightweight boardwalk design allowing sections to be removed.

6.5.4 Botanical Concluding Statement

Two protected national tree species are the main species of conservation concern: *Curtisia dentata* (NT), and *Ocotea bullata* (EN). Additionally, two Red List species: *Afrocarpus falcatus* (the Outeniqua yellowwood) and *Podocarpus latifolius* (the real yellowwood). *P. latifolius* are the most common of all of the protected trees on the site. Two orchid species (both LC) were also recorded in the forest habitat (one epiphytic tree orchid & one geophyte ground orchid). Several special moss species were also seen forming mush mats in the forest.

The forest environment has a high botanical sensitivity and ecological importance. All of these plants are essential for the forest micro-environment, and thus care must be taken to avoid enlarging the construction footprint beyond the 2m disturbance envelope / strip around the camp features that need to be installed. **From a botanical perspective, the development of the camp is acceptable** should the mitigation measures be implemented. The development of a camp has been positioned into the forest fridge in order to avoid the sensitive wetland in the clearing.

6.6 IMPACTS ON TERRESTRIAL BIODIVERSITY & FAUNA

Terrestrial Biodiversity and Animal Species Assessments were undertaken by the Dr Brooke of Biodiversity Management Services (Pty) Ltd. and are attached in Annexures E3 & E4 respectively**.** The following has been summarised from these assessments.

6.6.1 Impacts on Likely Animal Species

The likely impact of the proposed development on fauna species considered to occur at the site (high or moderate likelihood of occurrence), as indicated in the Screening Tool, are noted in the table below.

Table 33: Impacts & mitigatory measures for fauna species likely to occur on site.

Species	Level of Impact	Description of Impact	Mitigation
Bradypterus sylvaticus	Medium	Species will be impacted by clearing vegetation in the densely vegetated clearing and forest fringe as they require this dense vegetation as habitat for foraging.	Areas that are targets for clearing or AIP removal be done so strategically over time. This will limit the effects on the species as only small portions of habitat will be disturbed at one time.
Afrixalus knysnae	Low	The species is unlikely to occur at the site due to habitat suitability, but should it occur the impact will be low as there will be minimal disturbance surrounding the woody pond.	As the pond is not going to be disturbed by the proposed development and it is unlikely the species will occur, no mitigation measures are necessary.
Stephanoaetus coronatus	Low	Although the species is known in the area, the habitat around the proposed development is not suitable and will likely not be used frequently	As an avian species favouring tall canopy forest there are no mitigation measures necessary for the protection of this species at the proposed site.
Chlorotapla duthieae	Medium	Impact to these species will be most severe during the original commission and final decommission of the proposed camp. During this period the ground will be disturbed to plant poles for the walkways and there will be heavy human traffic moving equipment and construction materials.	An ECO be present during the layout stages to advise on the best placement for poles and walkways in relation to mole excavations and activity. Demarcate excavation and activity sites and ensure they are not disturbed by human traffic during setup and deconstruction.
Sensitive species 8	Medium	The species will be impacted by the overall disturbance around the site. They are sensitive to disturbance from humans and will likely move away from the site when the proposed camp is active. They will also be impacted by the boardwalk as the boardwalk will act as a barrier to their movement around the clearing.	It will be incredibly difficult to mitigate the effects of humans, however, measures such as not using a generator, turning lights off after a certain time and minimizing noise (no loud music etc) will likely lessen the effect on sensitive species 8. Additionally creating boardwalks with removable sections, or sections raised 1 meter or more above the ground will allow the species to move freely though the area and limit the negative effects of linear infrastructure.

Table 34: Description of impacts and mitigatory measures for each of the habitat types that are likely to occur at the study site.

Habitat Type	Level of Impact	Description of Impact	Mitigation
Mature Southern Afrotemperate Forest	Low	Tents will be placed on raised platforms with boardwalks. As a result of this very few trees will need to be removed. Tents are also to be positioned in natural openings within the forest to minimize the negative effects on vegetation	Where vegetation needs to be removed in order to place platforms, only small/immature trees should be rescue for replant elsewhere, and ideally in a restoration site or where they can be beneficial to biodiversity.
Densely vegetated clearing	Low	A walkway will be built around the periphery of the clearing along with a platform for a dining tent and viewing deck. As much of the clearing is within a wetland there will be very little disturbance to the area.	The walkway will be raised above the ground and thus allow for the movement of small animals underneath. It will also cause minimal disturbance to the soil/litter surface once constructed. Mitigation for larger species may involve building in removable sections of walkway to enable species to move through easily when the camp is not running.

Woody Pond	Low	The walkway will skirt part of the woody pond, but there will be no development in the direct vicinity of the woody pond.	No mitigation is necessary as there will be very limited activities near the woody pond.

Although several sensitivity features were identified by the screening tool in the area of the study site, the specialist surveys revealed that **none were at any great or irreparable risk from the proposed development**. Our findings have indicated that this area is a key area for protected and endangered animal species, plant species and sensitive environments and any proposed developments in the area need to be cognisant of this. Although the construction of the proposed tented camp is unlikely to have any detrimental effects on any of the species or sensitivity features identified by the scoping tool, it will no doubt have an effect on other (non-threatened species) that were not identified as being at risk by the scoping tool. It is important that the proposed development does not cause any unnecessary disturbance to species in the proposed area. Disturbance that needs to be avoided includes the area of the woody pond where species rely on permanent water for habitat (invertebrates, amphibians etc.), water sources (mammals) and across the core wetland area in the clearing and the core wetland area.

6.6.2 Terrestrial Biodiversity Mitigation Measures for Construction

Raised boardwalks – Boardwalks should be constructed with divisions that can be removed when the camp is not in use. Raised boardwalks may have a negative impact on large mammals trying to pass through the camp, however the negative impacts are far outweighed by the fact that they there is no continual disturbance on the forest floor. Leaf litter will build up underneath the walkways providing habitat and food for many invertebrates and small mammals. Furthermore, raised walkways will not negatively affect the movement of smaller species on the forest floor. Additionally, species such as *C duthideae* highlighted by the screening tool will only be negatively affected during the initial construction of walkways. However, in order for this to be realised, once walkways have been constructed no person should walk next to or through the natural vegetation where they can disturb these species.

Minimizing the environmental footprint – minimize any unnatural disturbance outside of the demarcated areas for infrastructure and boardwalks. This includes the area surrounding the woody pond. Although the pond is not a natural feature, it has over time become naturalised in the landscape and provides crucial habitat and resources for a variety of species. In this regard it is recommended that boardwalks obscure the pond as little as possible. It is recommended that boardwalks skirt only the western edge of the woody pond taking guests through the forest to access their tents rather than through the clearing.

Appoint an environmental control officer (ECO) to ensure minimal disturbance is caused. This can include having the ECO making minor changes to the camp layout and positioning of any infrastructure where deemed necessary. Importantly, the ECO should ensure the smallest footprint is disturbed as possible and only clearly demarcated / marked paths are used where areas of low impact have been identified. Additionally, the ECO needs to be cognisant of the sensitive species in the area (especially those living on or under the soil surface) and special attention needs to be given not to disturb these species wherever possible.

Clearing of old vegetation – The dense natural vegetation in the clearing will provide habitat for *Bradypterus sylvaticus* and the tangled vegetation will provide important habitat for them to feed close to the ground. As a result, the disturbance to this vegetation needs to be minimized. Some clearing may be possible and necessary, especially around the kitchen and dining areas, however clearing should only be carried out with the approval of the ECO in demarcated areas. It is recommended that small sections of dense *Helichrysum* be cleared at any one time to prevent drastic loss of species and change of ecosystem functioning in the clearing. Areas that should be prioritised are those where sense stands of Alien Invasive Plants are present as clearing vegetation will almost certainly be necessary to access some AIP stands. Clearing areas directly surrounding the kitchen, dining and parking areas may also be prioritised as this will improve aesthetics and assist in preventing insects in these communal areas. Other areas can then be cleared over time to improve aesthetics, however I do not recommend that any more than 25 % of the clearing is cleared in any one season. To improve biodiversity in the area I suggest introducing indigenous species (possible wetland adapted species) into recently cleared area. By rehabilitating areas with indigenous species one can improve biodiversity, aesthetics and ecosystem functioning in a small area surrounding the camp. Furthermore, protected plants and wetland adapted plants that require removal (i.e. from tent sites and road verges) make ideal candidates for this initial reintroduction of indigenous species.

Drainage along road – roadside drainage along the side of the clearing poses a potential problem, especially during times of heavy rainfall. For the immediate construction of the proposed development a precautionary approach is taken and no major alterations are made to the access road. However, severe damage and degradation of the road may negatively affect diversity features and species in the area. Should this be the case and the road becomes impassable either a gravel surface can be used to enable drainage and prevent mud. Alternatively, a small culvert can be placed along the up side of the road. This can be used to divert water to an area where suitable under-road drainage can be constructed.

The wetland should remain a restricted feature of the site both during construction and operation of the camp. Although, it is not natural in nature it has become a naturalised feature over time. Disturbance to the wetland can result in disturbance to several species that use the area as either an important resource or habitat. This being said, situating a small bench close to the wetland can add a beneficial feature, whereby guests can sit quietly and observe the species using the habitat.

Removal of trees – where possible, the position of tents should be built around trees rather than removing them. Where trees need to be removed for the construction of platforms for tents and other infrastructure the following guidelines should be adhered to: The National Forests Act of 1998 (as amended) provides the strongest and most comprehensive legislation and mandate for the protection of all natural forests: "…natural forests may not be destroyed save in exceptional circumstances where, in the opinion of the Minister, a proposed new land use is preferable in terms of its economic, social or environmental benefits". Bearing this legislation and knowledge of the benefits of the proposed development only areas that are demarcated for development should be developed. All other areas of forest should be protected around the proposed area.

Search & Rescue of Protected trees *Afrocarpus falcatus, Curtisia dentata, Ocotea bullata* and *Podocarpus latifoluis* that were identified at possible tent locations and need to be removed should be transplanted elsewhere. Either these trees can be planted elsewhere in the clearing for aesthetical value, in areas nearby where rehabilitation is taking place or they can be moved to a nursery where they can generate extra income for the GRNP. Importantly, it is essential that if these species are removed they are not discarded.

6.6.3 Terrestrial Biodiversity Mitigation Measures for Operation

Down lighting – Lights should only be placed in areas where they are essential (light walkways & inside tents/enclosed areas). No artificial lighting should be used for aesthetic purposes such as to light the clearing or artificial dam. Unnecessary lighting will negatively affect wildlife, can disorientate species and cause considerable invertebrate mortalities (insects get disorientated & attracted to lights where they eventually die). Some solutions to this is to use downlighting and motion activated lights. Downlights should be fitted as low as feasibly possible and should produce light on the areas needed. This includes shielding the light so that no light is emitted at an angle greater than 90˚ (or as near to that is safely possible). Additionally, the lowest lumen lights possible for the desired effect are advised.

Use of lighting – Ideally there should be a threshold after which all external lighting is switched off. Lighting inside the individual tents, cooking area (when in use) and dining area (when in use) should pose little problem. However, outdoor lighting that can interfere with and disorientate species should be switched off after a certain time or when the specific area is not in use.

Eliminate the need for a generator – using solar as an alternative. If cooking is done at the Diepwalle camp there should be no huge demand for electricity. The use of a generator will cause disturbance to both guests and the environment. Furthermore, placing the generator away from guests in an area where it is thought to cause little disturbance in highly discouraged. Vibrations from the engine negatively affect organisms on or in the ground and noise disturbs numerous species that use auditory ques for feeding and communicating. Important species to consider in this regard are amphibians (frogs), Chiroptera (bats) and many invertebrates. Engine vibrations are well known as a deterrent for moles and other burrowing mammals. Importantly, vibrations and noise from generators can inhibit communication, predator prey interactions and habitat use in many invertebrate species. Specific to this study will be the effect of the generator on the communication of *A knysnae*, habitat use and disturbance to *C duthideae* and all round disturbance to forest invertebrates. As an additional measure, in the event there is not enough solar, batteries could be charged and brought into the camp with the multitude of vehicles bringing food, guests and resources into the camp. A proposed mobile generator (mounted on a trailer) as suggested by the developer is a suitable workaround and back-up power source. In a situation where a generator is needed to charge batteries (i.e. in overcast conditions where solar is not feasible), the trailer can be moved to the Diepwalle SANParks camps and batteries can be charged where there will be little disturbance.

Road maintenance – To minimize disturbance along the road, the road should not be graded (as mentioned by SANParks staff it should be). Rather **manual repairs be done where needed and the 'two-track road' is maintained**. Keeping the road in as natural state as possible is important as it limits the effects of linear infrastructure on animal species in the area, and although only a small road it may form a near impenetrable barrier for small species who are unable to cross safely. There will be a risk of vehicle collisions to species (especially smaller species drivers do not see). Additionally, species may also put themselves at risk by traversing onto the road fragmented patches of forest. Risks include vehicle collisions, predation where there is little or no cover and desiccation in the event species are forced into direct sunlight for long periods. Much of this maintenance and alterations that need to be conducted on the existing road will be incorporating drainage into the road to divert water into areas that is safe to do so. This will limit the formation of dongas and gullies in the road surface considerably, while limiting the disturbance to animals in the area. Roadside drainage needs to consider where the water is being released from the road as to prevent further damage in natural areas. Advice would be to make small bolster humps and associated drains on the downward slope of the road verge wherever deemed necessary. Furthermore, it is important to make sure these drains flow into well vegetated and stable areas where water will easily be able to infiltrate the ground and there is little risk of further runoff.

Animal proof refuse facilities – both baboons and vervet monkeys are known to be in the area and can easily become a pest if they identify the camp as an easy food source. Care needs to be taken to ensure that all refuse facilities are animal proof and rubbish bins have lockable lids. Caution also needs to be taken around the kitchen and dining areas to ensure that no food or food waste is left lying around as this can become an easy meal for animals (especially primates). Unfortunately, once behaviours are learnt (i.e. raiding and stealing food) it becomes very difficult to stop these behaviours and it is often to the detriment of the animal species.

Control of Alien Invasive Plants – AIP's should be removed as soon as possible to prevent infestations becoming worse. The area is relatively pristine and there are no high densities of AIP's and as such this should not be a difficult task. As you are not dealing with dense infestations, I would not recommend the use of herbicides. Herbicides may affect other non-target species. The most prominent AIP in the clearing are brambles *Rubus sp*. These should be removed by exposing the roots and manually removing as much of the plant (including root system) as possible. This is essential as brambles are capable of regrowing from the roots. Furthermore, it is imperative that follow-up clearing be done on a yearly basis to prevent reinfestation of AIP in the area.

6.6.4 Terrestrial Biodiversity Mitigation Measures for Decommissioning

After the initial construction of the camp, there should be no need for an ECO to be onsite during the seasonal dismantling and final decommissioning of the camp. However, it is advised that SANParks provide a final sign off and site inspection at the end of each seasonal disassembly and at final decommissioning to ensure the site is left in as natural state as possible.

Removable sections of raised deck walkways. The raised boardwalks are preferrable as they will impact fewer species at the proposed study site. Small animals and invertebrates will be able to pass underneath uninhibited. However, when the site is decommissioned outside of season these walkways will still form a barrier to the movement of larger species in the area, some of which are listed as sensitive. It is thus suggested that the boardwalks be constructed with sections that are easy to remove (**possible a two-meter section every 10 meters of boardwalk**). This will limit the negative impacts of linear infrastructure on species and lessen the environmental footprint of the proposed site outside of the tourist season and ensures the boardwalks will not inhibit the movement of large species when the camp is decommissioned.

- All tents and equipment to be removed from the site - during each seasonal deconstruction, movement and disturbance must be restricted to the use the walkways and existing footprints / envelopes.
- Final sweeps should be carried out to ensure that there is no litter remaining on the site. This includes anything that may have fallen through cracks in the decks or walkways. Litter and plastic debris can be fatal to wildlife.
- All materials that can harm wildlife should be removed from the site. This includes liquids such as fuels and oils, wires and lighting.
- If water tanks are left on the site, it is imperative that they are sealed or closed properly, to avoid wildlife getting trapped. Should animals and vegetation get trapped in water tanks, they would need to be cleaned and sanitized prior to opening the camp again.
- Any damage caused to the environment that could affect animal species should be rehabilitated before the camp is closed. This includes repairs to road verges and parking areas where there is heavy vehicle

traffic as well as any necessary repairs to the access roads to ensure there is no further degradation when the camp is closed.

6.6.5 Concluding Statement – Terrestrial Biodiversity Impacts

Overall, the site is suitable for the proposed development and the **development will cause minimal disturbance to the habitat & animal species within the area**. It is unlikely that the risks associated with this development will cause the loss of any irreplaceable resources. To make this feasible the development should be undertaken responsibly and incorporate the findings of this study there will be very few long-term negative impacts.

The construction, operation & decommissioning of the proposed tented camp will not negatively affect the biodiversity of the area or the habitats identified by the screening tool. The only area deemed not suitable for development is within the permanent wetland within the densely vegetated clearing as discussed in the aquatic report.

6.7 HERITAGE IMPACTS

A Heritage Background Information Document (BID) was compiled by Stefan de Kock of Perception Planning in support of a Notice of Intent to Develop (NID) in terms of Section 38(8) of the National Heritage Resources Act, 1999 (Act 25 of 1999), and attached as Annexure E6. This BID considered the historical context and cultural significance of the site, with mention of likely archaeological and palaeontological occurrences.

6.7.1 Impacts on Cultural Landscape

From the basic historical research undertaken, it is evident that the site has scientific cultural significance (attempted reintroduce elephants into the Knysna forests) and social and historical cultural significance (served as filming sets for the production of prominent movies thus furthering cinematography and the performance arts in South Africa). From a broader perspective, the study area is also intrinsically linked to historic themes related to the early development of, and social history relevant to, the broader the Knysna area, which are considered of high local historic cultural significance.

However, this study confirmed that given the current densely vegetated state of the site, as well as the nature and timeframes associated with former land use, little, if any, tangible evidence of cultural significance are likely to remain on the site.

6.7.2 Impacts on Archaeological Resources

Little if any tangible evidence of cultural significance are likely to remain at the site. However it is possible that subsurface historic material (e.g. old rubbish dumps) may be unearthed during construction, in which case the following HWC Standard Clause will apply:

“If during ground clearance or construction, any archaeological material or human graves are uncovered, work in that area should be stopped immediately and the ECO must report this to Heritage Western Cape. The heritage resource may require inspection by the heritage authorities, and it may require further mitigation in the form of excavation and curation in an approved institution.”

6.7.3 Impact on Palaeontological Resources

According to SAHRIS Palaeontological sensitivity mapping, the study area is highlighted as being **of low (blue) palaeontological sensitivity**. While **no further palaeontological studies** are recommended in areas, a protocol for potential finds is required[4].

6.7.4 Concluding Statement - Heritage

Based on the outcome of the heritage assessment, the proposal will not impact heritage resources of cultural significance and therefore, as contemplated in terms of Section 38(2) of the National Heritage Resources Act, 1999 (Act 25 of 1999), **no further heritage-related studies are considered necessary** in this instance.

6.8 IMPACT SUMMARY

The table below summarises the significance (with mitigation) of all impacts assessed in the sections above[4].

For ease of easy references, impacts are visually reflected using the following colour scheme[5].

All positive impacts (regardless of their significance)

Neutral or Negligible negative impacts

Very Low and Low negative impacts

Moderate and Moderate – High negative impacts

High and Very High negative impacts

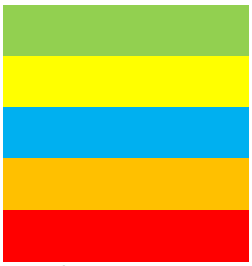


Table 35: Summary of the significance of impacts associated with Diepwalle Tented Camp[6].

Impact	Significance / Status with Mitigation
Construction Phase Terrestrial Biodiversity / Faunal Impacts	
Destruction, fragmentation or degradation of habitats	Low Negative
Spread and/or establishment of alien and/or invasive species	Low Negative
Mortalities and displacements of fauna and flora SCCs.	Low Negative
Operational Phase Terrestrial Biodiversity Impacts	
Continued fragmentation and degradation of habitats and ecosystems	Low Negative
Spread and/or establishment of alien and/or invasive species	Low Negative
Displacement and direct mortalities of faunal species (including SCC) due to disturbance (noise, light, vibration)	Low Negative
Reduced dispersal / movement of fauna	Low Negative
Decommissioning Phase Terrestrial Biodiversity Impacts	
Continued fragmentation and degradation of habitats and ecosystems	Low Negative
Spread and/or establishment of alien and/or invasive species	Low Negative
Construction Phase Botanical Impacts	
Loss of SCC & other delicate species (e.g., mosses) caused by vegetation clearance, site management practices, and disturbance.	Low Negative
Loss of SCC and other delicate species (e.g., mosses) caused by vegetation clearance and disturbance within the footprint of the project.	Negligible
Operation Phase Botanical Impacts	
Potential poaching of SCC seedlings & other plant species (e.g., orchids) from both guests and staff.	Negligible
SCC are negatively affected by maintenance activities: tree trimming & rotting vegetation removal.	Negligible
Decommissioning Phase Botanical Impacts	
SCC seedlings and other species (e.g., orchids) negatively affected by disassembly of infrastructure before the off season (i.e. Winter).	Negligible
Construction Phase Aquatic Risks	
Movement of vehicles, materials and workers diurbing wetland soils, habitat & species.	Negligible
Handling of fuel and other building materials polluting sensitive wetland habitat.	Negligible
Construction of boardwalks and platforms (decks) distrubing soils, habitat & animal movement.	Low Negative
Operation Phase Aquatic Risks	
Overflow of wastewate or backwashing of pool polluting wetland / buffer with Chlorine & personal care-products.	Negligible
Camp access for deliveries and removals expanding access road footprint into wetland.	Negligible
Camp activities disturbing aquatic biota: disruption of normal behavior, injury or death.	Negligible
Disposal of greywater & wastewater pollution to wetland, pool & buffer	Negligible
Decommissioning Phase Aquatic Risks	
Vehicles or workers removing materials from the site: disturbing wetland, pool & buffer.	Negligible
Heritage Impacts All Phases	
Impacts on Cultural Landscape	Low Negative
Impacts on Archaeology Resources	Low Negative
Impact on Palaeontology Resources	Low Negative
Construction Phase Social Impacts	
Creation of employment and business opportunities	Medium Positive

[4] In order to attain these outcomes, the mitigation measures reflected in section 7 of the report need to be implemented.

[5] Where specialist ratings fall across 2 of the groups, the worst case is reflected in the quick reference.

[6] This includes cumulative impacts associated with the facility

Impact	Significance / Status with Mitigation
Impact of construction activities and vehicles	Low Negative
Operational Phase Social Impacts	
Creation of employment and business opportunities	Medium Positive
Generate income & exposure for SANParks & Tourism	Medium Positive
Cumulative Social Impacts	
Cumulative impact on sense of place	Low Negative
Cumulative impact on services	Low Negative
Cumulative impact on local economies	Low Positive
Decommissioning Phase Social Impacts	
Social impact on the local economy associated with decommissioning	Low Negative

6.9 IMPACT STATEMENT

The majority of impacts range from medium positive to negligible. All high and very high negative impacts have been avoided by the avoidance of sensitive features or have been mitigated to acceptable levels

None of the participating specialists identified any impacts that remain high or very-high after mitigation. The preferred layout (Layout Alternative 13) avoids the main sensitive features, most notably the excavated pool, seep wetland & large protected trees / clumps in the clearing.

The affected area is considered suitable for development and there are no impacts associated with Diepwalle Forest Tented Camp that cannot be mitigated to an acceptable level. With the enhancement measures intended by the Applicant, positive impacts related to creation of employment and business opportunities, collaboration with local Community Tea Garden & tourism operators, generation of exposure and income for affected landowner (SANParks) and cumulative impact on local economies, can be expected.

As such, there are no fatal flaws or high post-mitigation impacts that should prevent the development from proceeding. Based on the layout provided for the assessment, Diepwalle Forest Tented Camp can be supported from a terrestrial biodiversity, botanical, aquatic biodiversity and heritage (inclusive of cultural landscape, archaeological & palaeontological) perspectives.

A map showing the proposed activity in relation to the key sensitive features is in attached in Appendix D. All sensitive features along with their appropriate buffers are shown in this plan. As required by the EMPr, all areas outside of the proposed development footprint are to be avoided as no go areas.

Please refer to the table in the section above listing the key impacts and their post mitigation significance for the preferred alternative. This section must be read in conjunction with the suggested mitigation measures listed in Section 7 of this Report.

The table below shows the listed activities applied for with a reference of where the impacts associated with the specific activity are assessed by specialists.

Table 36: Specialist Impact Assessment of Listed Activities.

Activity No(s):	Basic Assessment Activity(ies) as set out in Listing Notice 1 of the EIA Regulations, 2014 as amended	Specialist Study
12	The development of – (ii) infrastructure or structures with a physical footprint of 100 square metres or more; (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse.	The Tented camp is to be developed within 32m of a small, man-made & unmapped **pond** & **saddle seep wetland.** Aquatic Impact Assessment – Annexure E1 Terrestrial Biodiversity – Annexure E3
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal, or moving of soil, sand, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse.	The Tented camp is to be developed within 32m of a small, man-made & unmapped **pond** & **saddle seep wetland.** Aquatic Impact Assessment – Annexure E1 Terrestrial Biodiversity – Annexure E3
Activity No(s):	**Scoping and EIA Activity(ies) as set out in Listing Notice 2 of the EIA Regulations, 2014 as amended**	**Portion of the proposed project to which the applicable listed activity relates.**
N/A		
Activity No(s):	**Basic Assessment Activity(ies) as set out in Listing Notice 3 of the EIA Regulations, 2014 as amended**	**Portion of the proposed project to which the applicable listed activity relates.**
6	The development of resorts, lodges, hotels, tourism or hospitality facilities that sleep 15 people or more. i. Inside a protected area identified in terms of NEMPAA	All specialist studies in Appendix E.

12	The clearance of an area of 300m² 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. iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning or 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.	Clearance of vegetation more than 300m² within a National Protected Area: Garden Route National Park, for create of deck & tent footprints. Botanical Impact Assessment – Annexure E2 Terrestrial Assessment – Annexure E3 Faunal Assessment – Annexure E4 & E5
14	The development of - (ii) infrastructure or structures with a physical footprint of 10m² or more; where such development occurs— (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse; i. Outside urban areas:(aa) A protected area identified in terms of NEMPAA, excluding conservancies; (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (gg) Core areas in biosphere reserves.	The Tented camp is to be developed within 32m of a small, man-made & unmapped **pond** & **saddle seep wetland.** Aquatic Impact Assessment – Annexure E1 Terrestrial Biodiversity – Annexure E3
Activity 15 of Listing Notice 3 was considered, however as there is no re-zoning applicable that relates to residental, retail, commercial, industrial or institutional land uses, this Activity is **not applicable**. The proposed development is considered to be a tourism-based land-use, which aligns with the conservation land use of the National Park.		

7. MITIGATION MEASURES

Please refer to the table below, which summarises the mitigation measures recommended by the Specialists, SANParks and *Cape EAPrac*. This table summarises the mitigations and details whether they should be included as conditions of approval, or whether they have been included as actions in the EMPr. The table furthermore reflects to which stage of the development the proposed mitigation measures are applicable. In instances where suggested mitigations have already been incorporated into the design phase, they have been reflected as such.

Table 37: Recommended mitigation measures required for the construction, operation and decommissioning of the Diepwalle Forest Tented Camp development.

Mitigation	Condition of Approval	Included in EMPr	Construction[7] Phase	Operational Phase	Decommissioning Phase
Aquatic & Botanical Biodiversity					
Check weather forecasts daily - cease work during, & immediately following, rainfall. Work must be undertaken during dry weather.		✓	✓		✓
Pre-construction, the wetland and pool buffer must be surveyed and demarated with temporary wooden survey poles and danger tape. The delineated edge of the existing road must be demarcated / fenced to ensure vehicles do not make the road any bigger / wider.		✓	✓		✓
All drivers and workers must be informed that the buffer and wetland beyond the danger tape is a 'No-go' area unless specifically working on construction of the communal platforms in the buffer or boardwalks along the buffer edge.		✓	✓	✓	✓
The vehicle parking area must be clearly demarcated with hoarding & laminated signs. This should be limited to the turnaround / drop off point indicated in the SDP.	✓	✓	✓		✓
As part of the site demarcation, a botanist must be present during this initial construction plan to point out and mark important trees and plants within the forest environment – to guide final placement / orientation of footprints. A plant search and rescue must be conducted in all footprints. All new staff must be briefed / inducted about the layout of the construction site and must be made aware of the no-go areas and fact that the surrounding environment is sensitive and must not be disturbed. Rescued seedlings and smaller plants must be kept in a nursery at Diepwalle Forest Station for the duration of the construction phase, where the plants will be cared for the nursery staff that already have long-term experience working with forest species in Knysna. Any additional SCC plants that are observed later of during construction within the development footprint must be rescued and added to the rescued plants in the nursery. Plants that were rescued and that can't be re-used in the development footprint after construction must be donated to an indigenous nursery or must be used by Diepwalle and SANParks in other forest restoration projects in the Knysna forest.	✓	✓	✓		✓
Staff must be told that the environment is sensitive, but care must be taken **not** to point out individual potentially ornamental plant species, such as the EN tree seedlings, tree orchids and mosses. Instead, staff must be aware of no-go areas and must be informed that no biological material may be removed from the site unless it is part of management of the site.		✓	✓	✓	✓
Ongoing monitoring and clearing of invasive plants on the site should occur. This is a requirement by law. No kikuyu grass (*Cenchrus clandestinus*) will be allowed anywhere, as this is a listed invasive species. This invasive species was not observed on the site.		✓	✓	✓	✓

[7] In this instance, the construction phase includes mitigation measures associated with pre-construction and planning.

Mitigation	Condition of Approval	Included in EMPr	Construction[7] Phase	Operational Phase	Decommissioning Phase
Areas for waste disposal including all litter and toilet facilities must be provided to accommodate workers, and no waste product of any sort may be burned or disposed of at the site.		✓	✓	✓	✓
Toilets must be placed on a level platform before construction starts. Ablution facilities must be regularly maintained and cleaned. At least one toilet per ten to fifteen construction staff should be available.		✓	✓		✓
If the road becomes very muddy and navigation becomes difficult, a combination of some / all of the following methods can be implemented: Improve drainage with cutoff drains, low berms across the road, and shaping the crows to drain downstream; compact the base layer & add a binding agent such as cement if necessary, add a surface layer of fractured stone, sand & fines & compact to a smooth surface.		✓	✓	✓	✓
During construction, no cement may be mixed anywhere except on the existing road surface.		✓	✓		
All refuelling of vehicles may be done at the tented camp, and no fuel or oil for vehicles may be stored at the proposed camp site.		✓	✓	✓	✓
Vehicles entering the site must be checked for leaks of oil or fuel at the Diepwalle camp before being permitted to enter the development site. Any vehicle with leaks must be immediately removed from the site until repaired. Sandbags or sawdust should be available on the site to ensure that any accidental oil or toxic material spills can be contained and stopped quickly. Any contaminated soil on the site must be removed by a registered hazardous waste service provider (Spill Tech, Interwaste, EnviroServ etc.). Vehicles with leaks must not be allowed to operate on the site until they have been repaired.		✓	✓	✓	✓
Stripping / grubbing of topsoil must be kept to a minimum. Where topsoil is disturbed (for installation of poles, water-tank platforms, staff & kitchen tents), this should be stockpiled for re-use on site i.e. may not be removed from site.		✓	✓		
Construction materials must be sourced, transported & stockpiled responsibly to minimise risk of contamination & pollution of site. Stockpiles and soil must all be covered by a geotextile or plastic covering, which must also be bunded (e.g., sandbags) when the piles are not in use on the site. This will prevent the material from washing away and contaminating the substrate of the site which likely still contains useful seeds and soil organisms.		✓	✓		
As far as possible, all wood cutting and preparation for decking and boardwalks must be done at the Diepwalle campsite so assembly is all that's required on site.		✓	✓		✓
If tools like electric drills are required on site, a generator will be necessary. This should be filled with fuel at the Diepwalle camp, and 2 x 5 L cans of fuel may be retained on site to refill the generator if required. Refilling must be undertaken with care (within drip trays) outside of the wetland buffer at the site of the staff camp indicated on the SDP.		✓	✓		✓
Wood for decking should be stockpiled in the staff quarters area, taking care to minimise the footprint of disturbance and not spread materials over an unnecessarily large area.		✓	✓		
Holes for pole supports for boardwalks and platforms must preferably be dug using an auger or by hand to minimise the footprint of disturbance.	✓	✓	✓		
Plants surrounding the work area will inevitably become trampled. Therefore, a maximum disturbance area of 2m either side of the deck and boardwalk is acceptable. However, wherever feasible steps should be taken to reduce the area disturbed.	✓	✓	✓		✓
Small gaps (15 - 20m) should be left between planks on the boardwalks to allow filtered light through so plants can still grow under the boardwalk.		✓	✓		
Boardwalk sides should be left open to allow small animals to move in and out of the buffer area, under the boardwalk, during quieter times.	✓	✓	✓	✓	✓

Mitigation	Condition of Approval	Included in EMPr	Construction[7] Phase	Operational Phase	Decommissioning Phase
All waste materials (screws, wood cuts etc) must be collected in designated bins as work progresses for disposal off site.		✓	✓		✓
Revegetation of bare soil following with rescue plants on conclusion of construction. Drainage structures must be checked to ensure that there are no blockages or pollution that is blocking the free flow of water over the site. Erosion control measure should be in place in areas of water flow.		✓	✓		✓
Cover the pools when not in use to reduce the risk of them filling up and overflowing during rain. Covering will also reduce cleaning requirements and algal growth. It will also reduce the relatively low risk of small animals getting into the pool and drowning				✓	✓
Backwashed water must be discharged to the wastewater tank for disposal at the Diepwalle camp site.	✓	✓		✓	
No pool / hot tub water may be discharged into the wetland or buffer area.	✓	✓		✓	✓
All camp staff and guests must be made aware that the wetland and artificial pool are sensitive site features with restricted access.	✓	✓	✓	✓	✓
When any water is brought into or out of the camp , a maximum of 5 000 L of water may be transported on one vehicle, as the weight may cause damage to the access road. Should damage to the road begin to occur (deep rutting) then a lighter weight tank will need to be used.		✓	✓	✓	✓
All vehicles must stick to the existing access track and turnaround point indicated on the SDP. No new tracks can be made, and no vehicles may enter the buffer or wetland.		✓	✓	✓	✓
Lighting along all boardwalks and decks in / adjacent to the buffer must be 'warm' in colour, solar powered, and motion triggered. This is to minimise the attraction of insects which in turn influences the behaviour or frogs and other animals that feed on them.		✓		✓	
At a reasonable time, all lights must be switched off so they don't continue to switch on with the motion trigger after 10pm.		✓		✓	
A single bench can be placed at the artificial pool so guests can enjoy the frog calls and appreciate a different outlook. This can be reached from a small footpath from the access road.			✓	✓	
No driving after dark as far as possible. The aim is avoid driving over frogs or toads which may move onto the road at night.		✓		✓	
No insect zappers are permitted in any part of the camp. The excavated pool and wetland provide habitat for many insects which in turn are prey for other animals. No insect killer sprays (e.g. Doom) are permitted in camp. If mosquitoes cause annoyance then people can apply deterrant lotions or sprays, and wear long sleeves / trousers.		✓		✓	
Emergency supplies or materials suitable for rapid response to spillage of waste (e.g. sewage) or diesel for the generator must be kept along with other safetey equipment like a fire extinguisher in the staff area. An example would be lime for spreading on spilt sewage, and spades for removing contaminated soil.		✓		✓	
All staff MUST be trained that all grey water must be disposed of in the wastewater container on site. This includes buckets of dirty water used for washing glass pod windows (if selected as an accommodation option), dishes, cleaning tents, cleaning the pool etc.		✓		✓	
Biodegradable, eco-friendly detergents must be sourced and used throughout the camp.	✓	✓		✓	
Washing of linen, towels and clothing must be done off site.	✓	✓		✓	
No buckets of dirty water may be thrown into the surrounding environment.					
Clear instructions must be provided for guests and staff for the use and management of chemical toilets.		✓		✓	
The access road to the proposed Camp site must be kept locked at all times when guests and staff are not making use of it.		✓	✓	✓	✓

Mitigation	Condition of Approval	Included in EMPr	Construction[7] Phase	Operational Phase	Decommissioning Phase
Diepwalle management can strategically monitor the plants within and nearby the camp to ensure that any loss of plants are due to natural causes and not poaching or bark stripping. Camera traps can be setup in the forest around the campsite. This can help to catch potential poachers and also help to monitor wildlife around the campsite during the year.		✓		✓	
Guests to the camp must be informed that no plant material may be removed from the site, but guests do not need to know exactly which species are vulnerable to poaching. Diepwalle can include information in the camp information folders stating the legal implications of plant poaching.		✓		✓	
All staff and guests must be made aware that the wetland area and forest are sensitive habitats and that they are not allowed to access any areas that are not clearly marked as paths or boardwalks.		✓		✓	
Work to remove items from the site must be undertaken in a similar manner recommended for the camp construction in that vehicles must stick to the road and not be overloaded, work may not be undertaken during rainfall, and the wetland and buffer are No-go areas.		✓			✓
From the perspective of aquatic sensitivities, the boardwalks and platforms may be left on site when the camp closes during the winter months. It is envisaged that the accommodation would be removed (e.g. glass pods / tents), along with water and wastewater storage tanks and pumps.		✓		✓	✓
Pools must be completely emptied and covered securely. They should preferably have covers made from decking underlain by irrigation plastic so they don't blow off in the wind and so that animals cannot fall into them, and they cannot be filled by rain.		✓		✓	✓
The site must be completely cleared of all waste or litter.		✓	✓	✓	✓
When boardwalks and decking are removed completely (end of concession with SANParks) all wood must be stockpiled for removal at a site already disturbed (i.e. the staff camp), and every hole in the ground must be completely refilled with soil from the area (SANParks to provide a suitable source).		✓			✓
Terrestrial Biodiversity / Fauna					
Clearing of Helichrysum & AIP removal to be done so strategically over time i.e. only small portions of habitat will be disturbed at one time. Alien plant removal & clearing areas directly surrounding the kitchen, dining and parking areas may also be prioritised as this will improve aesthetics and assist in preventing insects in these communal areas. No more than 25% of Helichrysum in clearing per season.		✓	✓	✓	✓
Control of AIPs & Bramble should be manual - removing as much of the plant (including root system) as possible. Follow-up clearing be done on a yearly basis to prevent reinfestation of AIP in the area.	✓	✓	✓	✓	✓
Rehabilitate / replant areas of clearance or disturbance with indigenous species rescued from the site.	✓	✓	✓		✓
ECO to oversee layout stages to advise on the best placement for poles and walkways in relation to mole excavations and activity. Excavations & activity sites to be demarcated to ensure plant & fauna species not disturbed by human traffic during setup and deconstruction.	✓	✓	✓		
Not using a generator (use solar & charged batteries), minimizing noise (no loud music etc) will likely lessen the effect on sensitive species.	✓			✓	
No artificial lighting should be used for aesthetic purposes (light the clearing or artificial dam). Lights should be downlighting & fitted with motion activation. Lights should be shielded to limit light emitted greater than 90˚. Lowest lumen lights possible for the desired effect are advised.		✓		✓	
All external lighting is switched off after certain time or when the specific area is not in use.		✓		✓	
Creating boardwalks with removable sections (e.g. two-meter section every 10 meters of boardwalk) – to be removed at the end of each season. Or sections raised 1 meter or more above the ground will allow the species to	✓	✓	✓		✓

Mitigation	Condition of Approval	Included in EMPr	Construction[7] Phase	Operational Phase	Decommissioning Phase
move freely though the area and limit the negative effects of linear infrastructure.					
Once walkways have been constructed, no person should walk next to or through the natural vegetation	✓		✓	✓	
Access road management should not be graded but rather manual repairs be done where needed – maintain as 'two-track road'. Placing gravel surfaces where necessary to enable drainage & prevent mud. Alternatively, a small culvert can be placed along the up side of the road to divert water to an area where suitable under-road drainage can be constructed. Small bolster humps and associated drains on the downward slope of the road verge drains flow into into well vegetated and stable areas.	✓		✓	✓	
Avoid excessive activities around excavated pool. Place small bench for guest to observe animals visiting pool to drink.		✓	✓	✓	✓
Final position of tents, decks & walkways should incorporate trees as far as possible (be built around trees rather than removing them).		✓	✓		
Search & rescue of saplings of particulraly *Afrocarpus falcatus, Curtisia dentata, Ocotea bullata & Podocarpus latifolius* at possible tent locations. Rescued plants should be transplanted elsewhere (e.g. in the clearing for aesthetical value) or moved to teh Diepwalle Forest Nursery for rehabilitation post decommissioning or rehabilitation project elsewhere.	✓		✓		✓
All refuse facilities must be animal proof and rubbish bins have lockable lids. No food or food waste left unattended at kitchen and dining areas.		✓	✓	✓	
All tents and equipment to be removed from the site during each seasonal deconstruction. Movement and disturbance must be restricted to the use the walkways and existing footprints / envelopes.		✓	✓	✓	✓
At the end of each seasonal operation final sweeps should be carried out to ensure that there is no litter or plastic debris remaining on the site. This includes anything that may have fallen through cracks in the decks or walkways.		✓	✓		✓
Removal all materials that can harm wildlife: liquids such as fuels and oils, exposed wires and lighting.		✓	✓	✓	✓
Water tanks are left on the site must be sealed or closed properly, to avoid wildlife getting trapped. Should animals and vegetation get trapped in water tanks, they would need to be cleaned and sanitized prior to opening the camp again.		✓	✓	✓	✓
Any damage to the environment caused during dismantling / decommissioing should be rehabilitated before the camp is closed: includes repairs to road verges & parking areas where there is heavy vehicle traffic.		✓	✓	✓	✓
Heritage					
If during ground clearance or construction, any archaeological or palaeontological material or human graves are uncovered, work in that area should be stopped immediately and the ECO must report this to Heritage Western Cape. The heritage resource may require inspection by the heritage authorities, and it may require further mitigation in the form of excavation and curation in an approved institution.	✓	✓	✓		

8. MONITORING

The following has been included in the Environmental Management Programme to ensure that the implementation of the mitigation measures is undertaken:

- An audit checklist must be compiled as an appendix of the EMPr to ensure environmental compliance. Audit checks should be undertaken during construction / re-assembly, during operation and after each seasonal removal of the facilities on an annual basis.
- In addition, to the environmental compliance audits, the Environmental Manager and relevant Section Ranger will conduct site inspections from time to time. SANParks will monitor, evaluate and score the

operations (based on the line items in the checklist) and that a score of less than 85% for three (3) consecutive audits would imply material breach of the PPP Agreement.

- The Applicant must acknowledge SANParks' right to undertake necessary conservation management activities in and in proximity to the Diepwalle site .
- The Applicant should participate in any SANParks-Private Parties forum, should this be formed, and to comply with any standards thereby agreed or established.
- The Applicant must acknowledge that failure to comply with any of the environmental standards and requirements would imply material breach of the PPP Agreement.

In addition to the above, the Terrestrial Biodiversity specialist indicated that despite the proposed camp having an anticipated low impact on the environment, it is recommend (although it Is not a pre-requisite) that a **monitoring plan** be implemented. Ideally, a baseline monitoring assessment should be implemented prior to the project beginning as to understand how species occurrence changes during and post development. Although, this may not be of direct significance to the proposed project, it will hugely assist other projects of a similar nature going forward. The plan should include the implementation of **camera traps** and possible **recording devices for species detection**. **Invertebrate mortalities** should also be recorded periodically around the camp as a direct result of lighting in the evenings and at night. Collaborations between SANParks and local research institutions may be one way to approach this. Furthermore, it would be beneficial to keep a **record of interesting and unexpected animal species** that are seen in and around the camp. One possible record keeping that is recommended is that of iNaturalist (https://www.inaturalist.org/) as this makes records available and contributes to our knowledge of species through citizen science.

9. PUBLIC PARTICIPATION PROCESS

Section 41 in Chapter 6 of regulation 982 details the public participation process that has to take place as part of an environmental process. The table below provides a quick reference to show how this environmental process has or intends to comply with these legislated requirements relating to public participation.

Please refer to **Appendix F**, where evidence of public participation will be included.

Table 38: Public participation requirements in terms of S41 of R982

Regulated Requirement	Description
(1) If the proponent is not the owner or person in control of the land on which the activity is to be undertaken, the proponent must, before applying for an environmental authorisation in respect of such activity, obtain the written consent of the landowner or person in control of the land to undertake such activity on that land. (2) Sub regulation (1) does not apply in respect of - (a) linear activities;	Proof of landowner consent for Diepwalle Forest Tented Camp is attached in **Annexure G1.** .
The person conducting a public participation process must take into account any relevant guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of an application or proposed application which is subjected to public participation by -	
(a) fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of - (i) the site where the activity to which the application or proposed application relates is or is to be undertaken; and (ii) any alternative site;	Site notices (English & Afrikaans) were placed at: - The Diepwalle Forest Station, adjacent to the Tea Garden; and - The entrance to the 'Ysterhoutrug road' / private access route to the site, adjacent to the R339. Notices (Eng. & Afr.) were placed at: - Guard house at nearby King Edward VII / Diepwalle Big Tree; and - SANParks reception office at Diepwalle Forest Station. Photographic evidence and the location of these notices is attached in **Annexure F3**.
(b) giving written notice, in any of the manners provided for in section 47D of the Act, to -	
(i) the occupiers of the site and, if the proponent or applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	Notification letters were hand delivered to the residents of the nearby Diepwalle Forest Station (34 households).
(ii) owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	Owners of adjacent properties have been notified of this environmental process via email & WhatsApp Please refer to **Annexure F4** for copies of these notifications

Regulated Requirement	Description
(iii) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;	The ward councillor has been notified of this environmental process. Please refer to **Annexure F4** for copies of these notifications.
(iv) the municipality which has jurisdiction in the area;	The Knysna Local Municipality (Environmental, Planning & Technical Services) as well as the Garden Route District Municipality have been notified of this environmental process. Please refer to **Annexure F4** for copies of these notifications.
(v) any organ of state having jurisdiction in respect of any aspect of the activity; and	Please refer to section **Annexure F1** showing the list of organs of state that were notified as part of this environmental process. Please refer to **Annexure F4** for copies of these notifications.
(vi) any other party as required by the competent authority;	The DFFE has been given an opportunity to comment on this Draft BAR, any other parties identified will be given an opportunity to comment.
(c) placing an advertisement in - (i) one local newspaper; or (ii) any official Gazette that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;	An advert calling for registration of I&APs and notifying of the availability of the Draft Basic Assessment Report was placed in the Knysna Herald local newspaper on 01 February 2024. Please refer to **Annexure F3** for a copy of this advertisement. There is currently no official Gazette that has been published specifically for the purpose of providing public notice of applications
(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official Gazette referred to in paragraph (c)(ii);and	Adverts were not placed in provincial or national newspapers, as the potential impacts are local and will not extend beyond the borders of the municipal area.
(e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desirous of but unable to participate in the process due to - (i) illiteracy; (ii) disability; or (iii) any other disadvantage.	Notifications have included provision for alternative engagement in the event of illiteracy, disability or any other disadvantage. In such instances, *Cape EAPrac* will engage with such individuals in such a manner as agreed on with the competent authority.
(3) A notice, notice board or advertisement referred to in sub regulation (2) must - (a) give details of the application or proposed application which is subjected to public participation; and (b) state - (i) whether basic assessment or S&EIR procedures are being applied to the application; (ii) the nature and location of the activity to which the application relates; (iii) where further information on the application or proposed application can be obtained; and (iv) the manner in which and the person to whom representations in respect of the application or proposed application may be made.	Please refer to **Annexure F3**.
(4) A notice board referred to in sub regulation (2) must - (a) be of a size at least 60cm by 42cm; and (b) display the required information in lettering and in a format as may be determined by the competent authority.	Please refer to **Annexure F3**.
(5) Where public participation is conducted in terms of this regulation for an application or proposed application, sub regulation (2)(a), (b), (c) and (d) need not be complied with again during the additional public participation process contemplated in regulations 19(1)(b) or 23(1)(b) or the public participation process contemplated in regulation 21(2)(d), on condition that - (a) such process has been preceded by a public participation process which included compliance with sub regulation (2)(a), (b), (c) and (d); and (b) written notice is given to registered interested and affected parties regarding where the - (i) revised basic assessment report or, EMPr or closure plan, as contemplated in regulation 19(1)(b);	This will be complied with if final reports are produced later on in the environmental process.

Regulated Requirement	Description
(ii) revised environmental impact report or EMPr as contemplated in regulation 23(1)(b); or (iii) environmental impact report and EMPr as contemplated in regulation 21(2)(d); may be obtained, the manner in which and the person to whom representations on these reports or plans may be made and the date on which such representations are due.	
(6) When complying with this regulation, the person conducting the public participation process must ensure that - (a) information containing all relevant facts in respect of the application or proposed application is made available to potential interested and affected parties; and (b) participation by potential or registered interested and affected parties is facilitated in such a manner that all potential or registered interested and affected parties are provided with a reasonable opportunity to comment on the application or proposed application. (7) Where an environmental authorisation is required in terms of these Regulations and an authorisation, permit or licence is required in terms of a specific environmental management Act, the public participation process contemplated in this Chapter may be combined with any public participation processes prescribed in terms of a specific environmental management Act, on condition that all relevant authorities agree to such combination of processes.	All reports that are submitted to the competent authority will be subject to a public participation process. These include: - Draft BAR - Draft EMPr - All specialist reports that form part of this environmental process.

9.1 REGISTRATION OF KEY STAKEHOLDERS

A number of key stakeholders were automatically registered and were given an opportunity to comment on the Draft BAR. Copies and proof of these notifications are included in **Annexure F4**. A list of key stakeholders registered for this process included in the table below.

Table 39: Key Stakeholders automatically registered as part of the Environmental Process

Stakeholders Registered		
Neighbouring property owners: - Republic of SA – Garden Route National Park; - Geo Parkes & Sons (Pty) Ltd.; - Uplands Farming (Pty) Ltd.	Knysna Local Municipality: Environmental, Planning & Technical Services Departments.	Garden Route District Municipality
Western Cape Department of Transport and Public Works	Knysna Municipality: Ward 4 Councillor	Heritage Western Cape
Breede Olifants Catchment Management Agency (BOCMA)	Affected Landowner: SANParks: - Regional Manager - Park Manager - Principle Planner - Scientific Services - Section Ranger	Western Cape Department of Infrastructure: Road Use Management
Department of Forestry, Fisheries and the Environment: Forestry Directorate	Cape Nature	Western Cape Department of Environmental Affairs & Development Planning.

9.2 AVAILABILITY OF DRAFT BASIC ASSESSMENT REPORT.

This Draft Basic Assessment report is available to all Relevant State Departments / Organs of State (Stakeholders) and Potential Interested and Affected Parties (I&APs) for a 30 day-comment period extending from **06 February to 06 March 2024.**

10. CONCLUSION AND RECOMMENDATIONS

This environmental process is currently being undertaken to present proposals to the public and potential I&APs and to identify and assess environmental impacts, issues and concerns raised as a result of the proposed development.

Cape EAPrac is of the opinion that the information contained in this Basic Assessment Report and the documentation attached hereto is sufficient to allow the I&APs to apply their minds to the potential negative and/or positive impacts associated with the development, in respect of the activities applied for.

This environmental process has not identified any fatal flaws with the proposal and as such, it is our reasoned view that the project should be considered for authorisation, subject to the outcome of the public participation process and on condition that all the mitigation measures outlined in section 7 of the report are adopted and implemented. All specialists concur that the development as proposed (Preferred Layout Alternative 13) can be considered for approval subject to the implementation of all mitigation measures. All impacts range from positive to medium - high negative and all high, very high and critical negative impacts have been avoided by the risk adverse approach or mitigated to acceptable levels.

All stakeholders are requested to review the Draft BAR and the associated appendices, and provide comment, or raise issues of concern, directly to *Cape EAPrac* within the specified 30-day comment period. All comments received during this comment period will be considered, responded and included in the Final BAR that will be submitted to DFFE for decision making.

It is the recommendation of *Cape EAPrac* that the development proposal, Preferred Layout Alternative 13, be considered for approval by the competent Authority, subject to the outcome of the public participation process and on condition that all the suggested mitigation measures are implemented, all other legislative approvals be obtained, and that the final EMPr be strictly adhered to.

10.1 REMAINDER OF ENVIRONMENTAL PROCESS

The following process is to be followed for the remainder of the environmental process:

- All registered I&AP's are provided with an opportunity to review and comment on this document.
- All comments will be considered and responded to and the proposed development adapted, if and where necessary.
- The Final BAR will then be submitted to the DFFE for consideration and decision-making;
- The DFFE's decision (Environmental Authorisation) and the appeal process will be communicated with all registered I&APs.

11. ABBREVIATIONS

AIPS	Alien Invasive Plant Species
BGIS LUDS	Biodiversity Geographic Information System Land Use Decision Support
CBA	Critical Biodiversity Area
CDSM	Chief Directorate Surveys and Mapping
DEA&DP	Department of Environmental Affairs and Development Planning
DFFE	Department of Forestry, Fisheries & the Environment
EAP	Environmental Impact Practitioner
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
ESA	Ecological Support Area
GPS	Global Positioning System
HIA	Heritage Impact Assessment
I&APs	Interested and Affected Parties
IDP	Integrated Development Plan
LUDS	Land Use Decision Support
LUPO	Land Use Planning Ordinance
NEMA	National Environmental Management Act
NEM:BA	National Environmental Management: Biodiversity Act
NERSA	National Energy Regulator of South Africa
NFA	National Forest Act
NID	Notice of Intent to Develop
NHRA	National Heritage Resources Act
NPAES	National Protected Area Expansion Strategy
NSBA	National Spatial Biodiversity Assessment
NWA	National Water Act
PM	Post Meridiem; “Afternoon”
PSDF	Provincial Spatial Development Framework
S.A.	South Africa
SANParks	South African National Parks
SANBI	South Africa National Biodiversity Institute
SANS	South Africa National Standards
SCC	Species of Conservation Concern
SDF	Spatial Development Framework
TOPS	Threatened and Protected Species

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