GEORGE
TEL: +27 (0) 44 873 4923 **FAX:** +27 (0) 44 874 5953
EMAIL: info@sescc.net **WEBSITE:** www.sescc.net
ADDRESS: Unit 17 Cathedral Square, Cathedral Street, George, 6530
PO BOX: 9087, George, 6530

CAPE TOWN
TEL: +27 (0) 21 554 5195 **FAX:** +27 (0) 86 575 2869
EMAIL: betsy@sescc.net **WEBSITE:** www.sescc.net
ADDRESS: Tableview, Cape Town, 7441
PO BOX: 443, Milnerton, 7435

PRE-APPLICATION BASIC ASSESSMENT REPORT

FOR THE

PROPOSED EXPANSION OF MILKWOOD MANOR HOUSE AND PARKING ON ERF 10190, REMAINDER OF ERF 2066 AND REMAINDER OF ERF 706, PLETTENBERG BAY, WESTERN CAPE

In terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 (as amended 7 April 2017)

PREPARED FOR: *Robert More*
The More Family Collection

DATE: 5 September 2024

SES REF NO: MLKW/EXP/PB/06/24
DEA&DP REF.NO.: 16/3/3/6/7/1/D1/14/0217/24

Western Cape Government

Department of Environmental Affairs and Development Planning

BASIC ASSESSMENT REPORT

THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.

APRIL 2024

BASIC ASSESSMENT REPORT

THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.

APRIL 2024

(For official use only)	
Pre-application Reference Number (if applicable):	
EIA Application Reference Number:	
NEAS Reference Number:	
Exemption Reference Number (if applicable):	
Date BAR received by Department:	
Date BAR received by Directorate:	
Date BAR received by Case Officer:	

GENERAL PROJECT DESCRIPTION

(This must Include an overview of the project including the Farm name/Portion/Erf number)

Proposed expansion of Milkwood Manor House and parking on Erf 10190, Remainder of Erf 2066 and Remainder of Erf 706, Plettenberg Bay, Western Cape

IMPORTANT INFORMATION TO BE READ PRIOR TO COMPLETING THIS BASIC ASSESSMENT REPORT

1. **The purpose** of this template is to provide a format for the Basic Assessment report as set out in Appendix 1 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended) in order to ultimately obtain Environmental Authorisation.

2. The Environmental Impact Assessment ("EIA") Regulations is defined in terms of Chapter 5 of the National Environmental Management Act, 19998 (Act No. 107 of 1998) ("NEMA") hereinafter referred to as the "NEMA EIA Regulations".

3. *Submission of documentation, reports and other correspondence:*

   The Department has adopted a digital format for corresponding with proponents/applicants or the general public. If there is a conflict between this approach and any provision in the legislation, then the provisions in the legislation prevail. If there is any uncertainty about the requirements or arrangements, the relevant Competent Authority must be consulted.

   The Directorate: Development Management has created generic e-mail addresses for the respective Regions, to centralise their administration. Please make use of the relevant general administration e-mail address below when submitting documents:

   DEADPEIAAdmin@westerncape.gov.za
   Directorate: Development Management (Region 1):
   City of Cape Town; West Coast District Municipal area;
   Cape Winelands District Municipal area and Overberg District Municipal area.

   DEADPEIAAdmin.George@westerncape.gov.za
   Directorate: Development Management (Region 3):
   Garden Route District Municipal area and Central Karoo District Municipal area

   General queries must be submitted via the general administration e-mail for EIA related queries. Where a case-officer of DEA&DP has been assigned, correspondence may be directed to such official and copied to the relevant general administration e-mail for record purposes.

   All correspondence, comments, requests and decisions in terms of applications, will be issued to either the applicant/requester in a digital format via email, with digital signatures, and copied to the Environmental Assessment Practitioner ("EAP") (where applicable).

4. The required information must be typed within the spaces provided in this Basic Assessment Report ("BAR"). The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided.

5. All applicable sections of this BAR must be completed.

6. Unless protected by law, all information contained in, and attached to this BAR, will become public information on receipt by the Competent Authority. If information is not submitted with this BAR due to such information being protected by law, the applicant and/or Environmental Assessment Practitioner ("EAP") must declare such non-disclosure and provide the reasons for believing that the information is protected.

7. This BAR is current as of **April 2024**. It is the responsibility of the Applicant/ EAP to ascertain whether subsequent versions of the BAR have been released by the Department. Visit this Department's website at http://www.westerncape.gov.za to check for the latest version of this BAR.

8. This BAR is the standard format, which must be used in all instances when preparing a BAR for Basic Assessment applications for an environmental authorisation in terms of the NEMA EIA Regulations when the Western Cape Government Department of Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority.

9. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this BAR must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this Report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.

10. This BAR must be duly dated and originally signed by the Applicant, EAP (if applicable) and Specialist(s) and must be submitted to the Department at the details provided below.

11. The Department's latest Circulars pertaining to the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must be taken into account when completing this BAR.

12. Should a water use licence application be required in terms of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA"), the "One Environmental System" is applicable, specifically in terms of the synchronisation of the consideration of the application in terms of the NEMA and the NWA. Refer to this Department's Circular EADP 0028/2014: One Environmental Management System.

13. Where Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA") is triggered, a copy of Heritage Western Cape's final comment must be attached to the BAR.

14. The Screening Tool developed by the National Department of Environmental Affairs must be used to generate a screening report. Please use the Screening Tool link https://screening.environment.gov.za/screeningtool to generate the Screening Tool Report. The screening tool report must be attached to this BAR.

15. Where this Department is also identified as the Licencing Authority to decide on applications under the National Environmental Management: Air Quality Act (Act No. 29 of 2004) ('NEM:AQA"), the submission of the Report must also be made as follows, for-
Waste Management Licence Applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (Tel: 021-483-2728/2705 and Fax: 021-483-4425) at the same postal address as the Cape Town Office.

    Atmospheric Emissions Licence Applications, this report must also be (i.e., another hard copy and electronic copy) submitted for the attention of the Licensing Authority or this Department's Air Quality Management Directorate (Tel: 021 483 2888 and Fax: 021 483 4368) at the same postal address as the Cape Town Office.

DEPARTMENTAL DETAILS	
CAPE TOWN OFFICE: **DIRECTORATE: DEVELOPMENT MANAGEMENT (REGION 1)** (City of Cape Town, West Coast District, Cape Winelands District & Overberg District)	**GEORGE REGIONAL OFFICE:** **DIRECTORATE: DEVELOPMENT MANAGEMENT (REGION 3)** (Central Karoo District & Garden Route District)
The completed Form must be sent via electronic mail to: DEADPEIAAdmin@westerncape.gov.za Queries should be directed to the Directorate: Development Management (Region 1) at: E-mail: DEADPEIAAdmin@westerncape.gov.za Tel: (021) 483-5829 Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1) Private Bag X 9086 Cape Town, 8000	The completed Form must be sent via electronic mail to: DEADPEIAAdmin.George@westerncape.gov.za Queries should be directed to the Directorate: Development Management (Region 3) at: E-mail: DEADPEIAAdmin.George@westerncape.gov.za Tel: (044) 814-2006 Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530

MAPS

Provide a location map (see below) as Appendix A1 to this BAR that shows the location of the proposed development and associated structures and infrastructure on the property.	
Locality Map:	The scale of the locality map must be at least 1:50 000. For linear activities or development proposals of more than 25 kilometres, a smaller scale e.g., 1:250 000 can be used. The scale must be indicated on the map. The map must indicate the following: • an accurate indication of the project site position as well as the positions of the alternative sites, if any; • road names or numbers of all the major roads as well as the roads that provide access to the site(s) • a north arrow; • a legend; and • a linear scale. For ocean based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken. Where comment from the Western Cape Government: Transport and Public Works is required, a map illustrating the properties (owned by the Western Cape Government: Transport and Public Works) that will be affected by the proposed development must be included in the Report.
Provide a detailed site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all alternative properties and locations.	
Site Plan:	Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following: • The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be clearly indicated on the plan, preferably together with a linear scale. • The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan. • On land where the property has not been defined, the co-ordinates of the area in which the proposed activity or development is proposed must be provided. • The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be clearly indicated on the site plan. • The position of each component of the proposed activity or development as well as any other structures on the site must be indicated on the site plan. • Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the proposed development **must** be clearly indicated on the site plan. • Servitudes and an indication of the purpose of each servitude must be indicated on the site plan. • Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): o Watercourses / Rivers / Wetlands o Flood lines (*i.e.*, 1:100 year, 1:50 year and 1:10 year where applicable);

	○ Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"): ○ Ridges; ○ Cultural and historical features/landscapes; ○ Areas with indigenous vegetation (even if degraded or infested with alien species). • Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted. • North arrow A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.
Site photographs	Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as **Appendix C**. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.
Biodiversity Overlay Map:	A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as **Appendix D**.
Linear activities or development and multiple properties	GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system. Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix. For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as **Appendix A3**.

ACRONYMS

DAFF:	Department of Forestry and Fisheries
DEA:	Department of Environmental Affairs
DEA& DP:	Department of Environmental Affairs and Development Planning
DHS:	Department of Human Settlement
DoA:	Department of Agriculture
DoH:	Department of Health
DWS:	Department of Water and Sanitation
EMPr:	Environmental Management Programme
HWC:	Heritage Western Cape
NFEPA:	National Freshwater Ecosystem Protection Assessment
NSBA:	National Spatial Biodiversity Assessment
TOR:	Terms of Reference
WCBSP:	Western Cape Biodiversity Spatial Plan
WCG:	Western Cape Government

ATTACHMENTS

Note: The Appendices must be attached to the BAR as per the list below. Please use a ✓ **(**tick) or a **x** (cross) to indicate whether the Appendix is attached to the BAR.

The following checklist of attachments must be completed.

APPENDIX			**✓ (Tick) or x (cross)**
Appendix A:	**Maps**		
	Appendix A1:	**Locality Map**	✓
	Appendix A2:	**Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning**	✓
	Appendix A3:	**Map with the GPS co-ordinates for linear activities**	N/A
Appendix B:	**Appendix B1:**	**Site development plan(s)**	✓
	Appendix B2	**A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas;**	N/A
Appendix C:	**Photographs**		✓
Appendix D:	**Biodiversity overlay map**		✓
Appendix E:	**Permit(s) / license(s) / exemption notice, agreements, comments from State Department/Organs of state and service letters from the municipality.**		
	Appendix E1:	**Final comment/ROD from HWC**	✓
	Appendix E2:	**Copy of comment from Cape Nature**	
	Appendix E3:	**Final Comment from the DWS**	
	Appendix E4:	**Comment from the DEA: Oceans and Coast**	
	Appendix E5:	**Comment from the DAFF**	
	Appendix E6:	**Comment from WCG: Transport and Public Works**	
	Appendix E7:	**Comment from WCG: DoA**	
	Appendix E8:	**Comment from WCG: DHS**	
	Appendix E9:	**Comment from WCG: DoH**	

	Appendix E10:	**Comment from DEA&DP: Pollution Management**	
	Appendix E11:	**Comment from DEA&DP: Waste Management**	
	Appendix E12:	**Comment from DEA&DP: Biodiversity**	
	Appendix E13:	**Comment from DEA&DP: Air Quality**	
	Appendix E14:	**Comment from DEA&DP: Coastal Management**	
	Appendix E15:	**Comment from the local authority**	
	Appendix E16:	**Confirmation of all services (water, electricity, sewage, solid waste management)**	
	Appendix E17:	**Comment from the District Municipality**	
	Appendix E18:	**Copy of an exemption notice**	
	Appendix E19	**Pre-approval for the reclamation of land**	N/A
	Appendix E20:	**Proof of agreement/TOR of the specialist studies conducted.**	✓
	Appendix E21:	**Proof of land use rights**	
	Appendix E22:	**Proof of public participation agreement for linear activities**	N/A
Appendix F:	**Public participation information: including a copy of the register of I&APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required.**		✓
Appendix G:	**G1: Estuarine Impact Assessment Report: Confluent Environmental James Dabrowski**		✓
	G2: Terrestrial, animal and plant Impact Assessment: Jamie Pote		✓
	G3: Palaeontology Impact Assessment Report, Perception Planning CC Marion Bamford		✓
	G4: Heritage Assessment, Perception Planning CC Stefan de Kock		✓
	G5: Coastal Engineering Assessment, PRDW Africa (Pty) Ltd AR Wijnberg		✓
	G6: Departure and SDP Approval Applications by Planning Space Town and Regional Planners		✓
	G7: Bulk Electricity Services Analysis		✓
	G8: Bulk Water and Sewer Services Analysis		✓

Appendix H:	**H1: EMPr**	✓
	H2: Maintenance Management Plan	✓
Appendix I:	**Screening tool report**	✓
Appendix J:	**The impact and risk assessment for each alternative**	N/A
Appendix K:	**Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline**	N/A
Appendix L:	**Stormwater Management Plan**	✓

SECTION A: ADMINISTRATIVE DETAILS

Highlight the Departmental Region in which the intended application will fall	CAPE TOWN OFFICE: REGION 1		**GEORGE OFFICE: BEGION 3**
	(City of Cape Town, West Coast District	(Cape Winelands District & Overberg District)	**(Central Karoo District & Garden Route District)**
Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:	More Family Collection		
Name of contact person for Applicant/Proponent (if other):	Robert More		
Company/ Trading name/State Department/Organ of State:	The More Family Collection		
Company Registration Number:			
Postal address:	15 3rd Avenue, Parktown North, Johannesburg		
		Postal code:	
Telephone:	+27 (0) 11 880 9992	Cell:	
E-mail:	robert@more.co.za	Fax: ( )	
Company of EAP:	Sharples Environmental Services		
EAP name:	Michael Bennett (Registered EAP) Lu-anne Beets (Candidate EAP)		
Postal address:	PO Box 9087, George		
		Postal code:	
Telephone:	044 873 4923	Cell:	
E-mail:	michael@sescc.net luanne@sescc.net	Fax: ( )	
Qualifications:	Michael: Lu-anne:	BSc Environmental & Geographic Sciences and Ocean and Atmospheric Science BSc Zoology & Botany BSc Honours Environmental Management	
EAP registration no:	Michael: 2021/3163 Lu-anne: 2024/7962		
Duplicate this section where there is more than one landowner Name of landowner:	Groenendijk Trust		
Name of contact person for landowner (if other):	Groenendijk Trust		
Postal address:	Milkwood Manor on Sea, Salmack Road, Plettenberg Bay		
		Postal code: 6600	
Telephone:	( )	Cell: 083 367 2095	
E-mail:		Fax: ( )	
Name of landowner:	Bitou Municipality		
Name of contact person for landowner (if other):	Dr Ralph Links		
Postal address:	Salmack Road, Plettenberg Bay		
		Postal code: 6600	
Telephone:	044 501 3172	Cell:	
E-mail:	rlinks@plett.gov.za	Fax: ( )	
Name of Person in control of the land:	Bitou Municipality		
Name of contact person for person in control of the land:	Dr Ralph Links		
Postal address:	Private Bag x1002, Plettenberg Bay		
		Postal code: 6600	

Telephone:	044 501 3172	Cell:
E-mail:	rlinks@plett.gov.za	Fax: ( )
Name of Person in control of the land:	Groenendijk Trust	
Name of contact person for person in control of the land:	Groenendijk Trust	
Postal address:	Salmack Road, Plettenberg Bay	
Telephone:	044 501 3172	Cell: 083 367 2095
E-mail:		Fax: ( )

Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall:	Bitou Municipality	
Contact person:		
Postal address:	Private Bag x1002, Plettenberg Bay	
		Postal code: 6600
Telephone	044 501 3172	Cell:
E-mail:	rlinks@plett.gov.za	Fax: ( )

SECTION B: CONFIRMATION OF SPECIFIC PROJECT DETAILS AS INLCUDED IN THE APPLICATION FORM

1.	Is the proposed development (please tick):	New		**Expansion**	✖
2.	Is the proposed site(s) a brownfield of greenfield site? Please explain.				
The existing Milkwood Manor Guest House and Parking site is a brownfield site with existing infrastructure.					
3.	**For Linear activities or developments**				
3.1.	Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:				
3.2.	Development footprint of the proposed development for all alternatives.				m²
3.3.	Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.				
3.4.	Indicate how access to the proposed routes will be obtained for all alternatives.				
3.5.	SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives				
3.6.	**Starting point co-ordinates for all alternatives**				
	Latitude (S)	°	‘	“	
	Longitude (E)	°	‘	“	
	Middle point co-ordinates for all alternatives				
	Latitude (S)	°	‘	“	
	Longitude (E)	°	‘	“	
	End point co-ordinates for all alternatives				
	Latitude (S)	°	‘	“	
	Longitude (E)	°	‘	“	
Note: For Linear activities or developments longer than 500m, a map indicating the co-ordinates for every 100m along the route must be attached to this BAR as Appendix A3.					
4.	**Other developments**				
4.1.	Property size(s) of all proposed site(s):		Erf 10190		2840.6 m²

		RE/2066	284 987.44 m²
		RE/706	66 904.77 m²
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):		Approx. 7391.90 m²
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:		Approx. 8 337,65 m²
4.4.	Provide a detailed description of the proposed development and its associated infrastructure (This must include details of e.g. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities).		

The Bitou Municipal area has seen a period of rapid growth in recent years which has had the effect that the demand for short- and longer-term holiday rental units has dramatically increased. The More Family Collection proposed to expand the Milkwood Manor guest house and the public and private parking.

Guest house expansion

According to Drawing Number 073_SDP_A-02 revision 2, prepared by Black Sable Architect, the existing ground floor of the building is 563.87 m² and the existing first floor is 401.91 m². It is proposed to add new rooms, a reception, a bar, a transport area and pergola to the ground floor increasing the total ground floor to 1112.97 m². Upgrades to the first floor includes new rooms, a store and a spa increasing the total first floor to 957.98m². This will bring the total floor area of the new hotel to approx. 2,071m². It also proposed to reduce the size of the restaurant from about approx. 60 seats (currently 100 seats) which will mostly cater to the needs of resident guests but will not exclude the public.

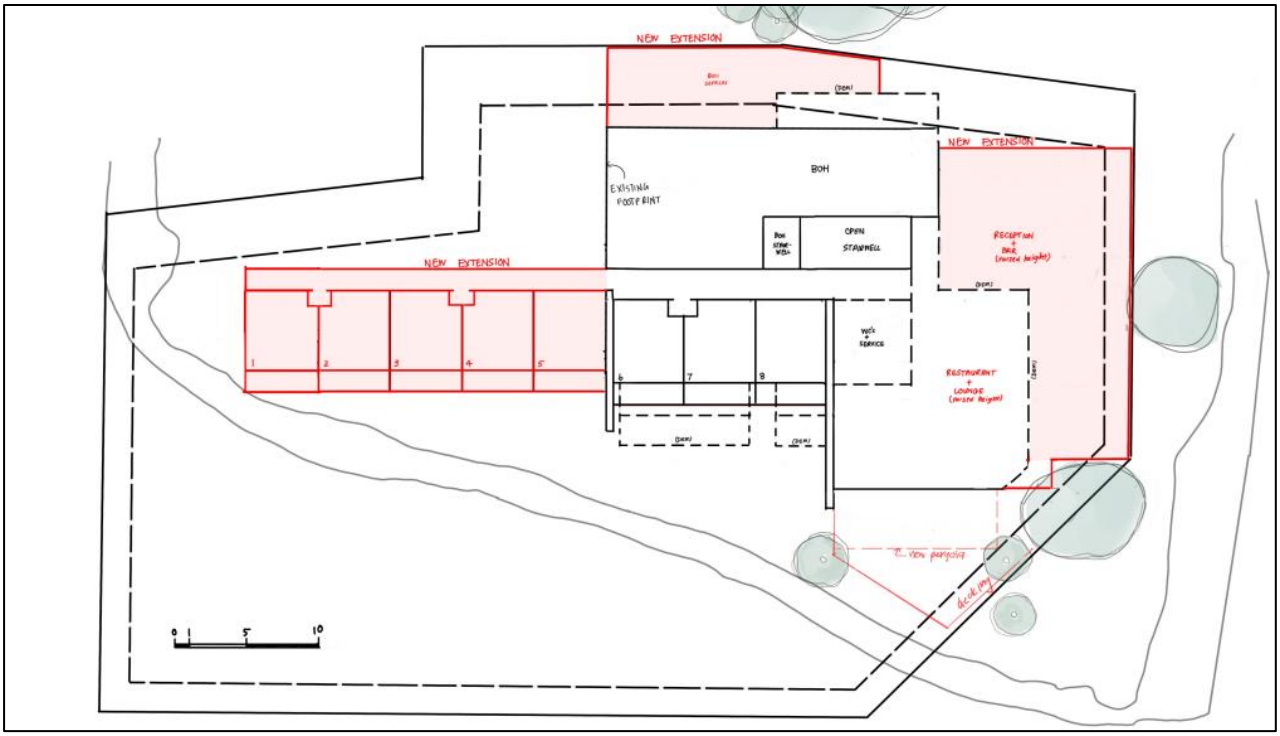

Figure 1: Proposed Ground floor layout

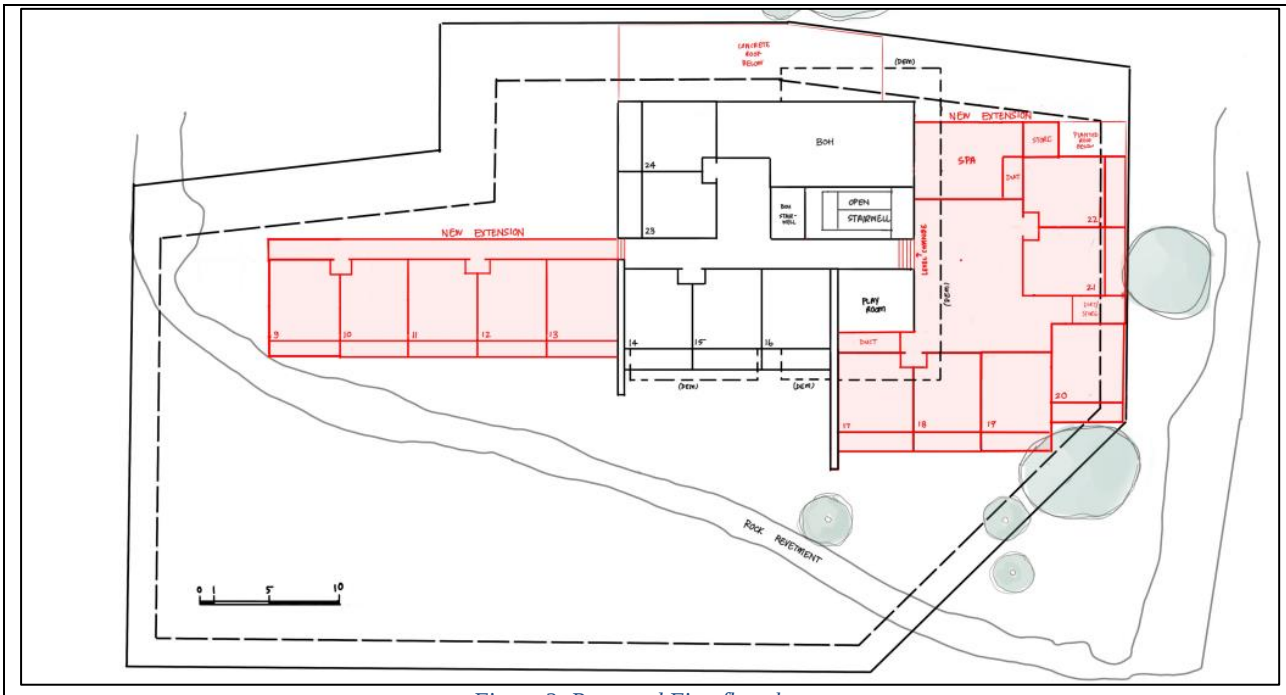

Figure 2: Proposed First floor layout

Parking Expansion

To accommodate the expansion of the guest house, the existing parking lot must also be expanded. 1.25 parking bays is required for every room in the hotel. The expansion of the hotel will have a total of 24 rooms therefore 30 parking bays is required. The Zoning Scheme does not provide specific parking requirements for a restaurant. In such a case, the By-law stipulates that the Municipality must determine on-site parking requirements for land uses not stipulated. It is proposed that the Business ratio of 4 parking bays per 100m² be used. The restaurant section measures 197m² and will require 8 additional bays. The total parking requirement calculates to 38 bays. The present proposal only provides for 5 on-site bays, which leaves a shortfall of 33 bays. As part of this extension, the new owners seek to reduce on-site parking requirements as stipulated in the Bitou Zoning Scheme, by utilising the adjacent public parking area and upgrading it to include 27 additional public parking bays as well as a bus drop-off parking bay (which could account for at least 6 individual bays).

The yellow indicates the existing parking that will remain the same. The red indicates the new public parking. The blue indicates new private hotel parking.

Figure 3: Proposed parking layout

Beach shower deck & Ablution Block

Currently Lookout Beach has no public amenities such as toilets and showers. Part of the proposal is to provide these facilities for the public's benefit. The new ablution block will be located adjacent to the existing municipal pump station on Remainder of Erf 2066. Effluent generated will tie into the existing system used by Milkwood Manor Guest House. The beach showers are located at the entrance to the beach east of the parking lot on Remainder of Erf 2066 and will consists of a wooden deck.

Figure 4: Proposed beach shower deck on RE/2066

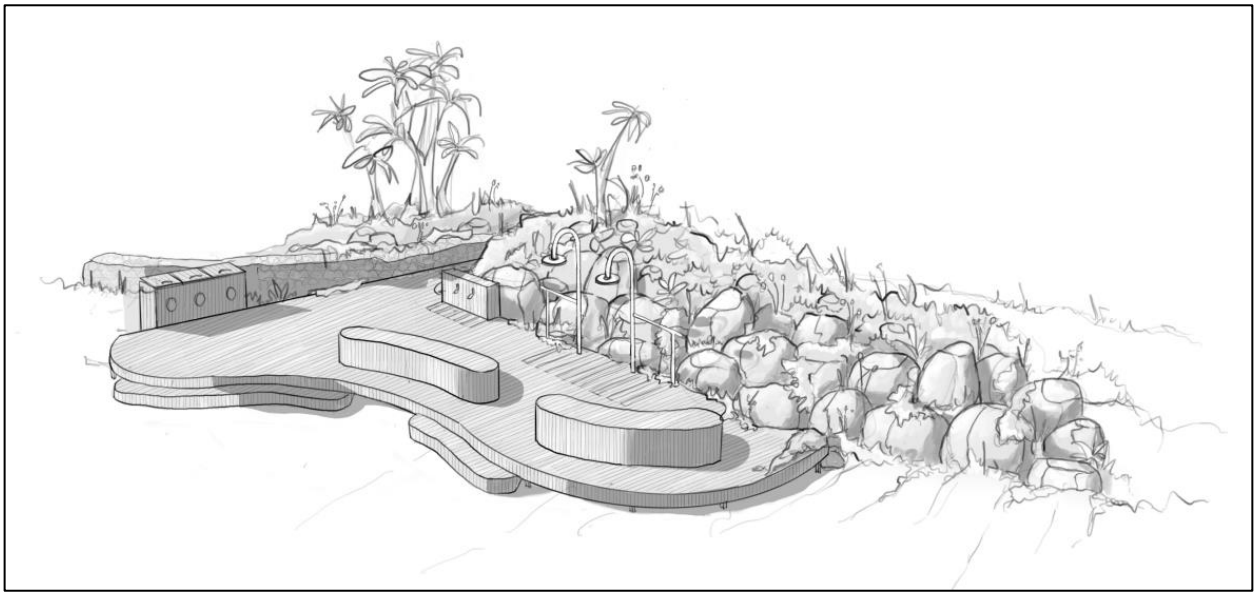

Figure 5: 3D rendering of beach shower deck

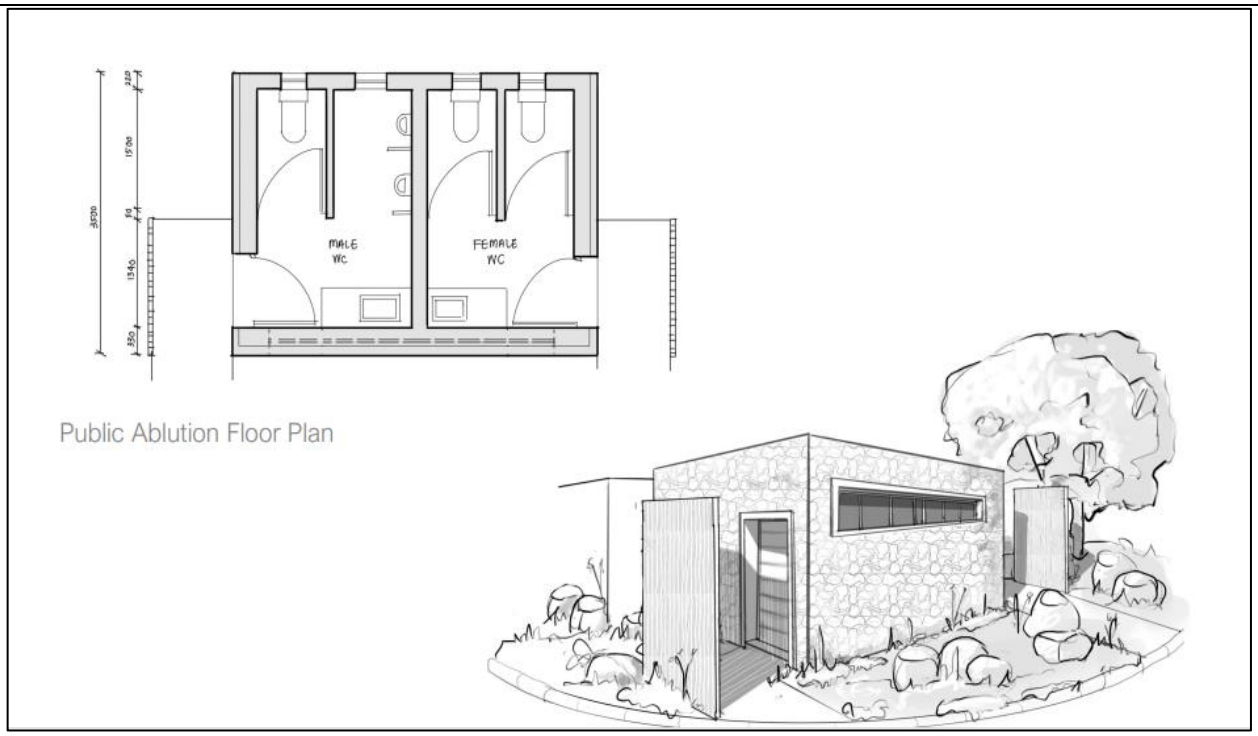

Figure 6: Proposed new ablution block

(Source: MILKWOOD MANOR REVETMENT: COASTAL ENGINEERING ASSESSMENT, prepared by Consulting Port and Coastal Engineers, dated 1 August 2024)

Rock revetment & existing deck

The existing rock revetment was installed as an emergency repair after the November 2007 flooding of the Bitou and Keurboom estuaries. The location of the mouth may be considered as being in a dynamic equilibrium as a function of fluvial flooding, prevailing sea level and ocean storm events. The implication is that the conditions which led to the need to construct the revetment during 2007/2008 should be expected to recur in future.

Figure 7: November 2007 during flood

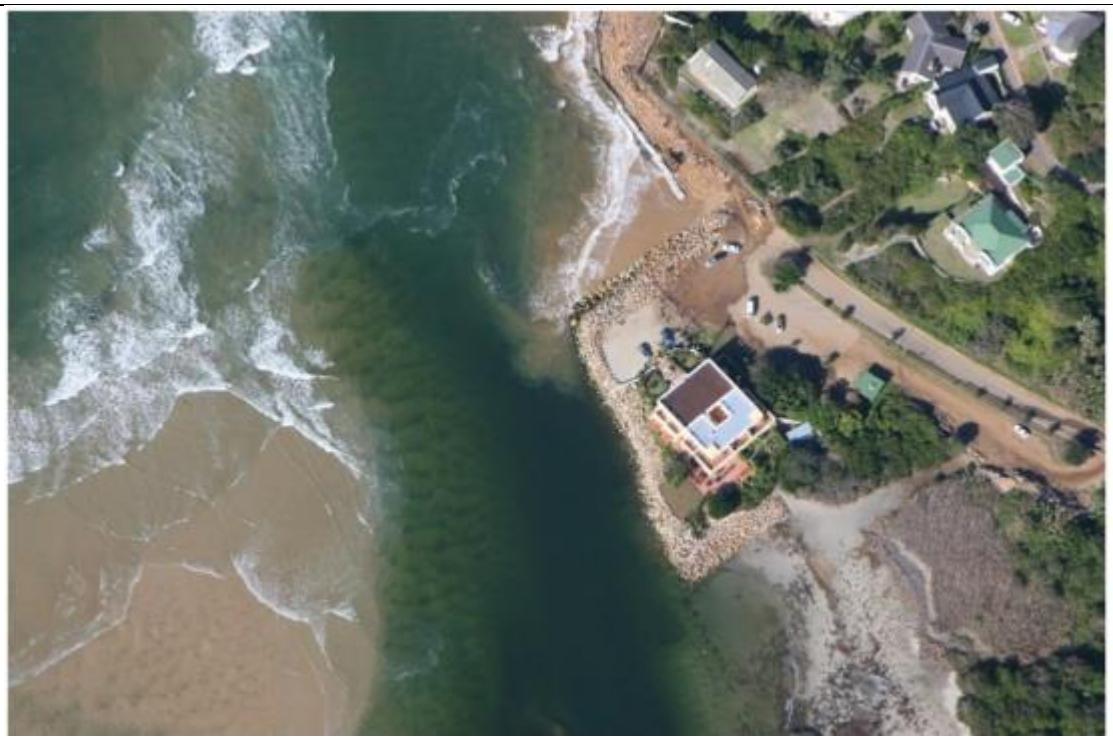

Figure 8: After construction of revetment (circa 2008)

The state of the revetment inspected during the site visit in July 2024 is good. The long-term stability of the revetment is dependent on the toe of the structure not being undermined, the units on the slope remaining in position and the crest not being damaged.

The construction of the revetment could not build the toe of the structure on bedrock and relies on additional rock in front of the main slope to form a falling apron in the event of future erosion. The stability of the structure is therefore a function of the amount of rock placed. The revetment appears to be adequate for the maintenance of the integrity of the structure.

After the rock revetment was constructed around the property, most of the useable open space around the hotel, including the swimming pool was lost. Therefore, a seating area in the form of a timber deck to the west of the existing building was constructed on the rock revetment. The deck, however, encroaches over the boundary line of the property into Erf 706 which belongs to the municipality. Part of the proposal is to remove the existing deck that is encroaching into public land. It is proposed that the removal of the deck will be done with manual labour to avoid using heavy machinery in the estuary or on the beach. Labourers will access the deck from an existing wooden path south of the building and work on the revetment itself to limit the working footprint in the Estuarine Functional Zone.

(Source: Departure and SDP Approval Applications ERF 10190 PLETTENBERG BAYMILKWOOD MANOR, prepared by Planning Space Town and Regional Planners, dated 8 August 2024)

Building line relaxation

The 2m boundary line is currently occupied by the outdoor seating area and garden. An application was made by Planning Space Town and Regional Planners to relax the southern boundary building line of 4 meters to 0m. The intention is to create an enclosed service area to contain service infrastructure such as water tanks, refuse storage, a generator room, and a delivery area which is presently located in the municipal parking area. This will improve the functionality of the hotel but will also neaten up the parking area and will also free up space for a more functional parking layout. Due to the position of the existing building and surrounding revetment, there is no other place to put these facilities.

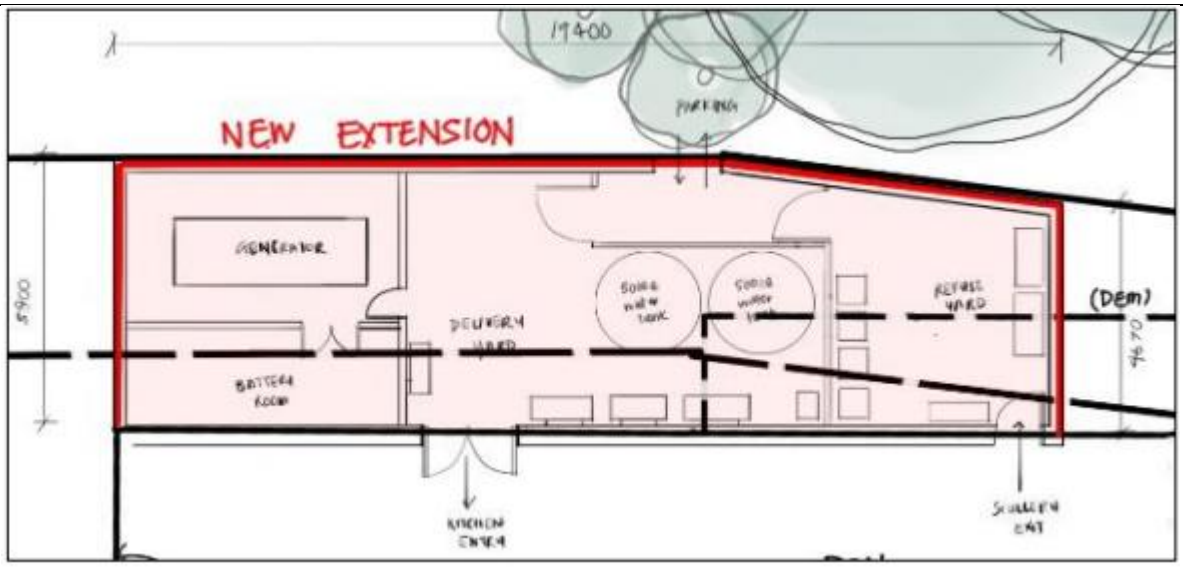

Figure 9: Proposed service yard

Additional upgrades

- Lighting
  - The proposal includes the installation of adequate lighting throughout the parking area to enhance safety and security, especially during evening and nighttime hours, and also be considerate of electricity usage and light pollution. Currently, there are no streetlights.
- Re-Surfacing
  - Presently, the parking area is partially surfaced with paving stones, gravel, and tar that has not been properly maintained. It is planned to resurface the entire parking area, which will include green infrastructure elements such as permeable paving and bioswales to manage stormwater runoff. As per the conditions of the Council resolution, the resurfacing will be in accordance with the specifications and requirements of the Engineering Department's: Roads Section, and all costs will be for the account applicant.
- Landscaping
  - Landscaping will enhance the aesthetic appeal of the parking area and include the use of Indigenous and drought-resistant plants to minimise water usage and maintenance. Several Milkwood trees are present and have been surveyed to inform the design. None will be removed.
- Signage
  - Directional and functional signage will also be added to the parking area making it easier for visitors to know where the ablutions are, the Hotel, and the Lookout Beach and to create a sense of arrival. The parking bays including a bus drop-off area will be demarcated.
- Transport options
  - A tour bus drop-off parking bay has been provided on the upgraded parking plan.

(Source: ELECTRICITY CAPACITY INVESTIGATION FOR THE MANOR HOUSE RE-DEVELOPMENT AT ERF 10190 IN PLETTENBERG BAY: CAPACITY ANALYSIS OF THE BULK ELECTRICAL SERVICES, Prepared by GSL Consulting (Pty) Ltd, dated 18 July 2024)

Electrical Demand

The network around the proposed site is currently mainly supplied by SS-1 Main, which is the substation supplying electricity to Plettenberg Bay town area. SS-1 Main currently has enough capacity to carry the additional 48 kVA maximum demand brought by the proposed expansion of

Milkwood Manor Guest House on Erf 10190. The MV feeders supplying the surrounding area have sufficient capacity to carry the additional demand at the proposed development.

It is also the intention to install a small-scale embedded generation (SSEG) at the development as a backup measure to ensure continuous electrical supply. The SSEG system will be registered with the municipality.

(Source: PROPOSED ADDITIONS AND ALTERATIONS TO MILKWOOD MANOR ON SEA, ERF 10190, PLETTENBERG BAY: CAPACITY ANALYSIS OF THE BULK WATER & SEWER SERVICES, Prepared by GSL Consulting (Pty) Ltd, dated 18 July 2024)

Water demand
The existing water system has sufficient capacity to accommodate the domestic water demand of the proposed development to comply with the pressure criteria as set out in the master plan. The existing system, however, has insufficient capacity to supply fire flow to Erf 10190 of more than 15L/s. In order to supply fire flow of roughly 15 L/s at 10 m head to Erf 10190 the following upgrades should be implemented:

- Upgrade existing 50 mm diameter pipeline from the Town PRV 2 water distribution zone to the development to a 110 mm diameter pipeline, or
- Install a new 110 mm diameter link services pipeline from the Town reservoir water distribution zone (at the corner of Erf 3904) to Erf 10190.

It is proposed that fire protection is provided on site if a fire flow requirement of more than 15 L/s is required for the development on Erf 10190.

The development falls within the existing Plettenberg Bay pumping station (PS) no. 2 drainage area. Sewage from the development is currently discharged directly into Plettenberg Bay PS no. 2 in Salmack Road. There is sufficient capacity in the existing sewer system to accommodate the proposed development.

(Source: Proposed Stormwater Management Plan, prepared by Dave Visser Consulting Engineer 19 August 2024)

Currently the site has 4 existing stormwater drainage points. The first point is a side inlet municipal catchpit with an outlet 150mm pipe. The second point is an earth open channel outlet. The third point is an existing open stone-pitched channel with a 300mm outlet pipe, and the fourth point is an existing soakaway into the rock revetment.

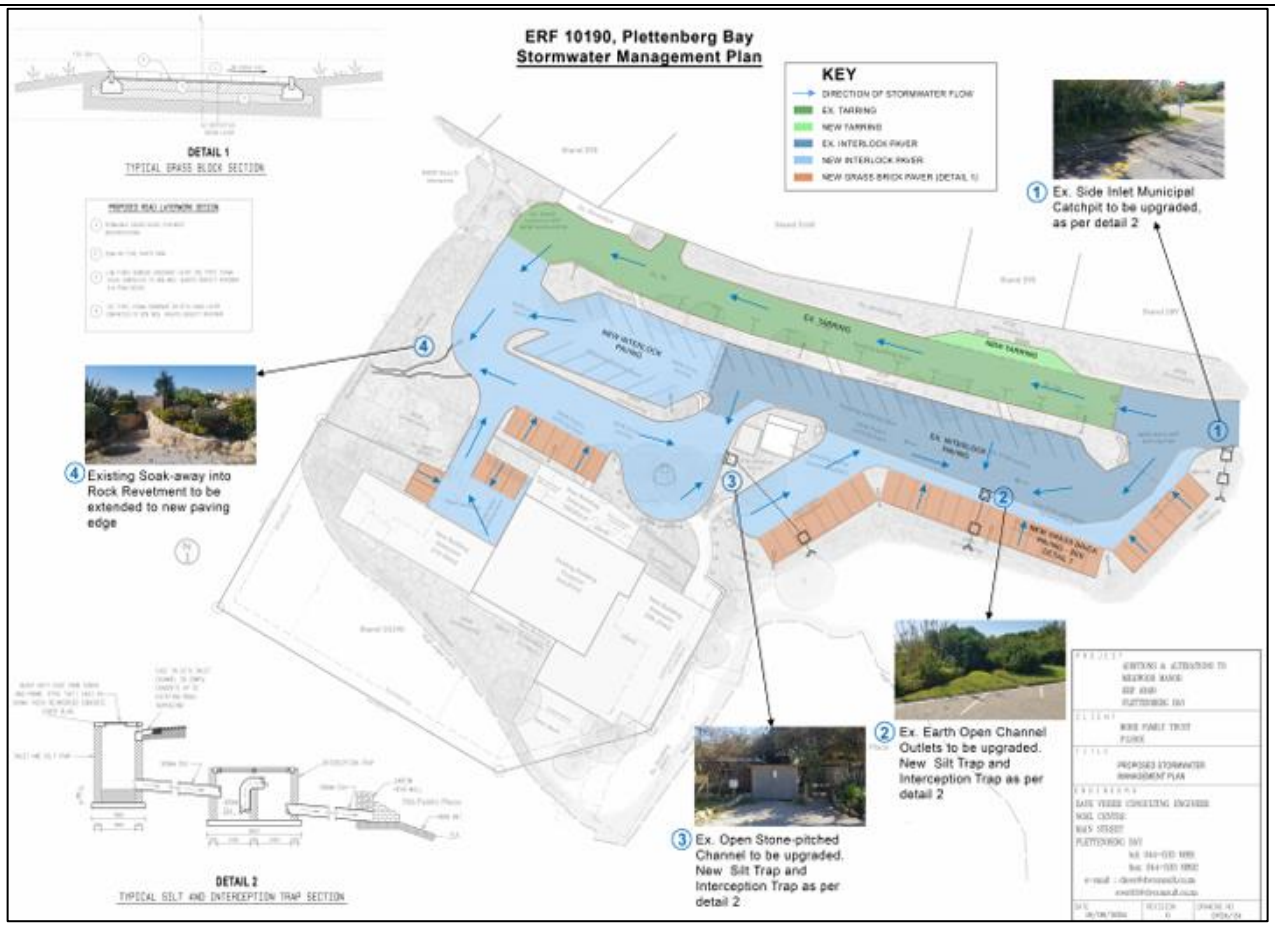

Figure 10: Stormwater management plan

Point 1,2 and 3 will be upgraded to include a typical silt and interception trap section. Point 4 will be upgraded to include typical grass blocks. The expanded car park area will be paved using grass brick paving to facilitate infiltration of water and reduce surface runoff from the expanded section of the car park.

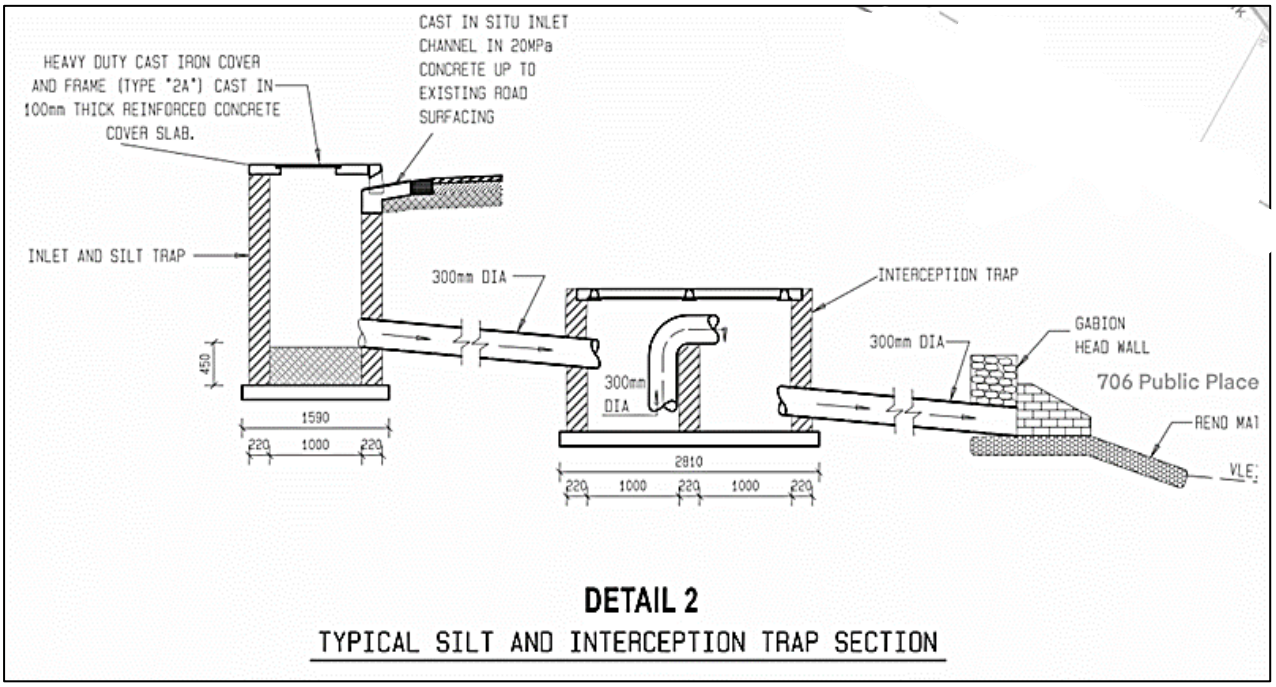

Figure 11: Typical silt and interception trap section

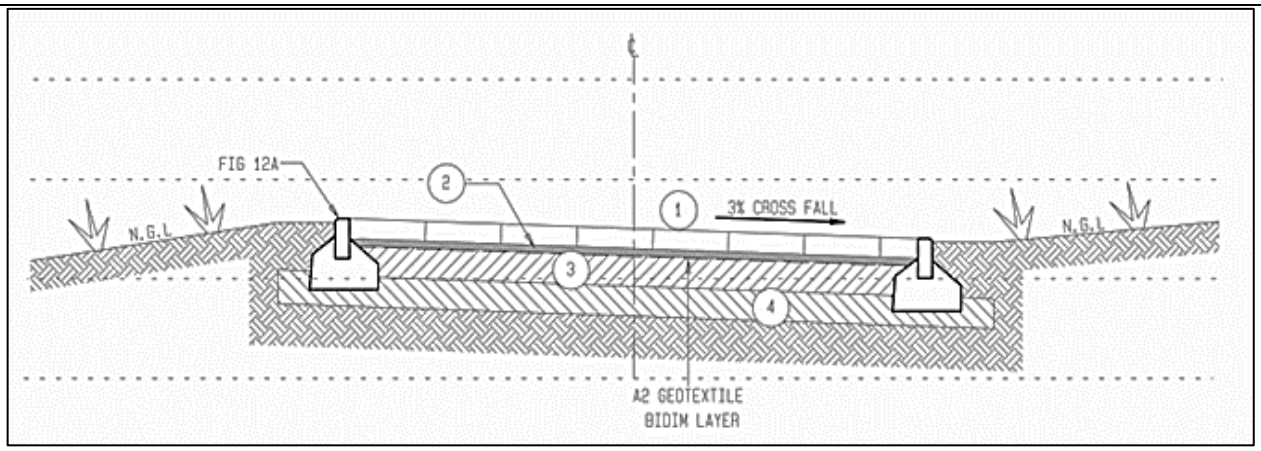

Figure 12: Typical grass block section

4.5.	Indicate how access to the proposed site(s) will be obtained for all alternatives.				
The site is directly accessed from Salmack Road.					
4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:	Erf 10190	C03900080001019000000		
		RE/706	C03900080000070600000		
		RE/2066	C03900080000206600000		
4.7.	Coordinates of the proposed site(s) for all alternatives:				
	Latitude (S)		34°	03'	01.91"
	Longitude (E)		23°	22'	32.44"

SECTION C: LEGISLATION/POLICIES AND/OR GUIDELINES/PROTOCOLS

1. Exemption applied for in terms of the NEMA and the NEMA EIA Regulations

Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes, include a copy of the exemption notice in Appendix E18.	YES	**NO**

2. Is the following legislation applicable to the proposed activity or development.

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"). If yes, attach a copy of the comment from the relevant competent authority as Appendix E4 and the pre-approval for the reclamation of land as Appendix E19.	**YES**	NO
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA"). If yes, attach a copy of the comment from Heritage Western Cape as Appendix E1.	**YES**	NO
The National Water Act, 1998 (Act No. 36 of 1998) ("NWA"). If yes, attach a copy of the comment from the DWS as Appendix E3.	YES	NO
The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"). If yes, attach a copy of the comment from the relevant authorities as Appendix E13.	YES	**NO**
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	YES	NO
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	YES	NO
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	**YES**	NO
The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). If yes, attach comment from the relevant competent authority as Appendix E5.	YES	**NO**

3. Other legislation

List any other legislation that is applicable to the proposed activity or development.
• Amended Environmental Impact Assessment Regulations, GN No. R. 324 – 327 (7 April 2017) • The Constitution of the Republic of South Africa, 1996 (Act 108 of 1996) • Spatial Planning and Land Use Management Act, No. 16 of 2013 (SPLUMA) • Infrastructure Development Act, 2014 (Act No. 23 of 2014) • The National Environmental Management Laws Amendment Act, 2022 • Natural Scientific Professions Act, 2003 (Act 27 of 2003)

- Regulation 41 of the EIA Regulations, 2014 (as amended)
- Section 24O (2) and (3) of NEMA and Regulations 7(2) and 43(2) of the EIA Regulations, 2014
- National Water Act, 1998 (Act No. 36 of 1998)
- National Heritage Resources Act, 1999 (Act No. 25 of 1999)

4. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.

Western Cape Provincial SDF (2014)

The PSDF puts in place a coherent framework for the Province's urban and rural areas that:

- Gives spatial expression to National and provincial development agendas.
- Serves as basis for coordinated and integrated planning alignment on National and Provincial Departmental Programmes.
- Supports municipalities to fulfil their mandates in line with national and provincial Agendas.
- Communicates government's spatial development agenda.

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

- Greater productivity, competitiveness and opportunities within the spatial economy.
- Strengthening resilience and sustainable development.

Eden Spatial Development Framework (2017)

The Eden District Spatial Development Framework aims to establish a strong strategic direction and vision, towards increasing levels of detail in the spatial recommendations that are directive rather than prescriptive and providing guidance to local municipalities in the District regarding future spatial planning, strategic decision making and regional integration. The vision and strategic direction identify four key drivers of spatial change within the District. These four strategies lie at the heart of this SDF and the problem statement, spatial concept, spatial proposals and implementation are organised around these directives.

5. Guidelines

List the guidelines which have been considered relevant to the proposed activity or development and explain how they have influenced the development proposal.

Guideline on Need and Desirability (2013/2017)	Guideline considered during the assessment of the Need and Desirability of the proposed development project.
Guideline on Environmental Management Plans (2005)	Guideline considered in the compilation of the EMP attached to this Basic Assessment Report.
Guideline for the Review of Specialist Input into the EIA Process (2005)	Guideline considered during the review and integration of specialist input into this Basic Assessment Report
Integrated Environmental Management Information Series 5: Impact Significance (2002)	Guideline considering during the identification and evaluation of potential impacts associated with the proposed development, and the reporting thereof in this Basic Assessment Report
Integrated Environmental Management Information Series 7: Cumulative Effects Assessment (2004)	Guideline considering during the assessment of the cumulative effect of the identified impacts.
Guideline on Public Participation (2013)	Guideline considered in the undertaking of the public participation for the proposed development. All relevant provisions contained in the guideline were adhered to in the basic assessment process as

	appropriate, except where an exemption/ deviation has been granted by the Competent Authority.
Guideline on Alternatives (2013)	Guideline considered when identifying and evaluating possible alternatives for the proposed development. Alternatives that were considered in the impact assessment process are reported on in this Basic Assessment Report (see section E)

Other guidelines:

- Keurbooms Estuary Estuarine Management Plan (2023)
- Western Cape Provincial Coastal Management Programme 2022 - 2027

6. Protocols

Explain how the proposed activity or development complies with the requirements of the protocols referred to in the NOI and/or application form

The following specialist studies were undertaken for this proposal:

Archaeological and Cultural Heritage Impact Assessment	General Protocol
Palaeontology Impact Assessment	General Protocol
Terrestrial Biodiversity Impact Assessment	Terrestrial Biodiversity Assessment Protocol
Aquatic Biodiversity Impact Assessment	Aquatic Biodiversity Assessment Protocol
Plant Species Assessment	Plant Species Assessment Protocol
Animal Species Assessment	Animal Species Assessment Protocol

The corresponding protocols were used by the specialists to compile and structure their reports.

SECTION D: APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Listing Notice 1**	Describe the portion of the proposed development to which the applicable listed activity relates.
15	**The development of structures in the coastal public property where the development footprint is bigger than 50 square metres,** excluding – (i) the development of structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (ii) the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (iii) the development of temporary structures within the beach zone where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared; or (iv) activities listed in activity 14 in Listing Notice 2 of 2014, in which case thatactivity applies.	The preferred location of the ablution block and some of the proposed new parking lots is within the coastal public property and will exceed 50 m². Therefore, this activity will be triggered.

19A	**The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from—** (i) the seashore; (ii) the littoral active zone, **an estuary** or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater; or (iii) the sea; but excluding where such infilling, depositing, dredging, excavation, removal or moving— (f)will occur behind a development setback; (g) is for maintenance purposes undertaken in accordance with a maintenance management plan; (h) falls within the ambit of activity 21 in this Notice, in which case that activity applies; (i) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.	According to CapeFarmpMapper the site is located within an estuary and estuarine functional zone. Therefore, this activity will be triggered by the proposal.
52	The expansion of structures in the coastal public property where the development footprint will be increased by more than 50 square metres, excluding such expansions within existing ports or harbours where there will be no increase in the development footprint of the port or harbour and excluding activities listed in activity 23 in Listing Notice 3 of 2014, in which case that activity applies.	Erf 10190 is not considered coastal public property; however, Remainder of 2066 is coastal public property. Therefor this activity will be triggered.
Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Listing Notice 3**	Describe the portion of the proposed development to which the applicable listed activity relates.
12	**The clearance of an area of 300 square metres or more of indigenous vegetation** except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. **(i) Western Cape:** (i) Within any critically endangered or endangered ecosystem listed in terms of section52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically	According to CapeFarmpMapper the site is located within an estuary and estuarine functional zone. Therefor this activity will be triggered.

	endangered in the National Spatial Biodiversity Assessment 2004; ii. Within critical biodiversity areas identified in bioregional plans; iii. **Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;** iv. On land, where, at the time of the coming into effect of this Notice or 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.	
17	**The expansion of a resort, lodge, hotel, tourism or hospitality facilities where the development footprint will be expanded, and the expanded facility can accommodate an additional 15 people or more.** **i. Western Cape** **i. Inside a protected area identified in terms of NEMPAA;** ii. Outside urban areas: (aa) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; or (bb) Within 5km from national parks, world heritage sites, areas identified in terms of NEMPAA or from the core area of a biosphere reserve; - excluding the conversion of existing buildings where the development footprint will not be increased.	The Milkwood house will expand by approx. 580 m² and will accommodate an additional 20 people. According to CapeFarmMapper, the site is located within Keurbooms River Nature Reserve - Seagull Colony and Aquatic and Estuary CBA. Therefore, this activity is triggered by the proposal.

Note:

- The listed activities specified above must reconcile with activities applied for in the application form. The onus is on the Applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, a new application for Environmental Authorisation will have to be submitted.
- Where additional listed activities have been identified, that have not been included in the application form, and amended application form must be submitted to the competent authority.

List the applicable waste management listed activities in terms of the NEM:WA

Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Category A**	Describe the portion of the proposed development to which the applicable listed activity relates.

List the applicable listed activities in terms of the NEM:AQA

Activity No(s):	Provide the relevant **Listed Activity(ies)**	Describe the portion of the proposed development to which the applicable listed activity relates.

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1.	Provide a description of the preferred alternative.

The preferred alternative:

- Expand Milkwood Manor Guest House by adding 10 new rooms
- Upgrade the restaurant, bar, lounge area and spa in the guest house
- Expand the hotel parking by adding 5 new parking bays
- Expand the public parking by adding 27 new parking bays
- Constructing a new public beach shower east of the parking on RE/2066
- Construct a new public ablution block next to the existing pump station on RE/2066
- Remove the existing deck on the rock revetment
- Add new landscaping
- Construct a new pergola and deck
- Construct a new bus stop and drop off area
- Implement new stormwater management measures

Figure 13: Site layout

2.	Explain how the proposed development is in line with the existing land use rights of the property as you have indicated in the NOI and application form? Include the proof of the existing land use rights granted in Appendix E21.

- Erf 10190 was rezoned from Minor Business to General Residential III and after the proposed expansion the Guest house the land use will remain the same.
- RE/2066 is zoned as Transport Zone II
- RE/706 is zoned as Open Space Zone I.

Land use consent was required for the construction of additional parking on Erf 706. On May 30th, 2024, The Department of Agriculture Land Reform and Rural Development: Office of Surveyor-

General: Western Cape responded with a letter (Ref: S/1517/31) stating that the open space can be used for public parking.

Land use consent was also obtained from the Bitou Municipality to construct additional parking bays on RE/2066.

Mr Robert More is in the process of buying the Milkwood Manor House from Nonelia Groendendijk, however consent has been obtained from her for the proposed expansion.

3.	Explain how potential conflict with respect to existing approvals for the proposed site (as indicated in the NOI/and or application form) and the proposed development have been resolved.

No potential conflicts.

4.	Explain how the proposed development will be in line with the following?
4.1	The Provincial Spatial Development Framework.

According to the Western Cape Spatial Development Framework Executive Summary of March 2014, their goals are:

- To be more inclusivity, productivity, competitiveness and opportunities in urban and rural space-economies.
- To better protection of spatial assets (e.g. cultural and scenic landscapes) and strengthened resilience of natural and built environments
- To improved effectiveness in the governance of urban and rural areas.

The proposal is to expand and upgrade the existing guest house and parking which will lead to more opportunities for local labourers to get jobs and the Bitou municipality for financial growth from the increase in tourism. The construction of the beach shower and ablution block for public use will lead to more inclusivity and improve the experience of tourists and locals going to the beach. The specialist studies conducted, concluded that all impacts can be mitigated to have a low negative impact on the environment. Therefore, the natural environment will not be lost during the construction and operation of this project. The proposal is therefor in line with the Western Cape SDF goals.

4.2	The Integrated Development Plan of the local municipality.

According to the Integrated Development Plan of the Bitou Municipality (2022-2027):

Re-starting the tourism and events sector: The tourism sector compromises a set of industries that facilitate traveling for leisure and business by providing necessary and desired infrastructure, products and services. The sector will both affect and be affected by the socio-economic and environmental performance; and impact on several industries including hospitality, attractions and recreation, entertainment, transport and retail. This interconnectedness, offer opportunities for collaboration and coordinated strategies with other sectors to provide innovative new products and serve new markets. The centrality of tourism to the Garden Route presents opportunities and risks to the region. In particular, the COVID19 crisis has emphasised the need for diversification and adaptability in sector development.

Economic Development and Job Creation: Job creation is not a function of the municipality; however, the municipality is having a constitutional obligation to create a conducive environment for economic growth and job creation. The municipal strategy is to create a safe environment for investors and develop investor friendly policies. The aim is to revive and grow tourism in Bitou because tourism is the bed-rock of the local economy. The adjective is to create more inclusive economy for all communities to benefit. The plan is to support township tourism businesses and other SMME ventures.

The proposal is therefor in line with the Bitou Municipality IDP.

4.3.	The Spatial Development Framework of the local municipality.

According to the Bitou Local Municipality Spatial Development Framework of 2022:

Table 1:Spatial strategies

Objective 3	Objective 4	Objective 6			
Movement Network	**Sustainable Human Settlements**	**Economic Development and Job Creation**			
• Road Network • Public Transport • Airport	• Housing Typologies – Upgrading • Community Facilities – Standards – Programme • Thusong Centre	**Business** • CBD • Community Nodes	**Industrial** • Areas • Functions	**Agriculture** • Functional Areas • Commodities • Precision Farming	**Tourism** • Functional Areas • Eco Tourism • Agri Tourism • Adventure Tourism
		• Informal / Emerging Upscaling			
		• Tertiary Education and Skills Development			

The proposal is therefor in line with the objectives 3,4 and 6 of he local SDF.

4.4.	The Environmental Management Framework applicable to the area.

No intersections with EMF areas found.

5.	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.

Comments will be obtained during the public participation process.

6.	Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.

(Source: (Source: Terrestrial Biodiversity Assessment, Milkwood Manor Draft Version. Dated 26 July 2024, Prepared by Jamie Pote)

The Biodiversity Spatial Plan indicates areas of land as well as aquatic features which must to be safeguarded in their natural state if biodiversity is to persist and ecosystems are to continue functioning.
Land in this category is referred to as a Critical Biodiversity Area. CBAs incorporate:

I. areas that need to be safeguarded in order to meet national biodiversity thresholds.
II. areas required to ensure the continued existence and functioning of species and ecosystems, including the delivery of ecosystem services; and/or
III. important locations for biodiversity features or rare species.

The Western Cape Biodiversity Spatial Plan (2017) indicates the site falls on the edge of designated CBA 1 and Protected Area with the remainder being No Natural Area Remaining. Since the site is a developed Erf with only remnant Milkwood trees present and being on the edge of an urban area, the CBA1 designation would be considered incorrect, and the entire site is situated within what should be designated No Natural Area Remaining (NNAR). No CBAs or ESA's are thus likely to be affected by the proposed activity above current baseline levels, as the proposed expansion of the buildings will occur on primarily developed or landscape portions of the Erf with the few remnant Milkwood trees requiring removal. These remnant Milkwood trees do not perform any substantial ecosystem service. The WC BSP Protected Area designation (Keurbooms River Nature Reserve) does not align with the SAPAD Protected Area designation (None).

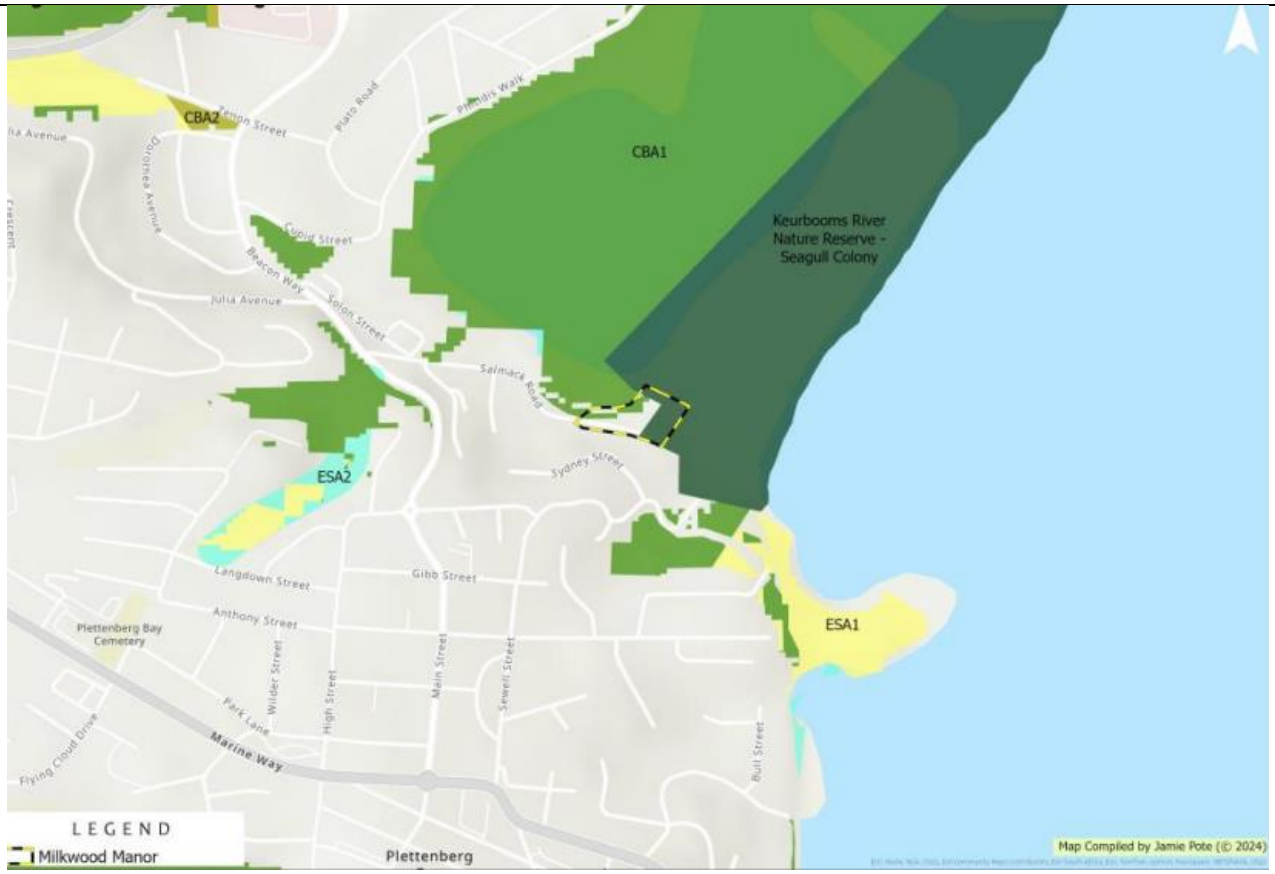

Figure 14: Eastern Cape Biodiversity Conservation Plan (ECBCP, 2019) – Terrestrial.

Ecological Support Areas (ESAs) are supporting zones required to prevent the degradation of Critical Biodiversity Areas and Protected Areas. An ESA may be an ecological process area that connects and therefore sustains Critical Biodiversity Areas or a terrestrial feature. None are present within the site or immediate vicinity.

(Source: Renovation of Milkwood Manor House and Expansion of the Public Car Park at Lookout Beach, Plettenberg Bay, Estuarine Impact Assessment. Prepared by J.M. Dabrowski (PhD), Confluent Environmental Pty (Ltd), 2 August 2024)

According to the Western Cape Spatial Biodiversity Plan, portions of the Milkwood Manor property and the area to be covered by the expanded car park fall within an aquatic Critical Biodiversity Area 1 (CBA1). It is also important to note that the part of the Milkwood Manor property does fall within and is immediately adjacent to a Protected Area (Keurbooms River Nature Reserve). Management objectives associated with CBAs are provided in Table 2 and expansion of the car park is not aligned to these objectives. Inclusion of a part of the existing Milkwood Manor House as a CBA is not an accurate representation of habitat on site and is most likely a result of coarse-scale mapping conducted during development of the WCBSP.

Table 2: Definitions and management objectives of the Western Cape Biodiversity Spatial Plan

Category	Description	Management Objective
CBA 1 (Estuaries)	Areas in a natural condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.	Maintain in a natural or near-natural state, with no further loss of natural habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land uses are appropriate.

Figure 15: Map indicating the area of development in relation to the Western Cape Spatial Biodiversity Plan (WCBSP).

7.	Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.

(Source: Renovation of Milkwood Manor House and Expansion of the Public Car Park at Lookout Beach, Plettenberg Bay, Estuarine Impact Assessment. Prepared by J.M. Dabrowski (PhD), Confluent Environmental Pty (Ltd), 2 August 2024)

Estuaries are recognised as particularly sensitive and dynamic ecosystems and the National Environmental Management: Integrated Coastal Management Act (No. 24 of 2008, as amended by Act 36 of 2014) (ICMA), via the prescriptions of the South African National Estuarine Management Protocol (the Protocol), require Estuary Management Plans (EMPs) to be prepared for estuaries in order to create informed platforms for efficient and coordinated estuarine management.

Management objectives that are relevant to the proposed development include the following:

- Development and land use in the catchment and estuarine area should not lower water quality or interfere with normal hydrodynamic or sedimentary processes and cycles;
- Planning should allow for the maintenance of a riparian zone along the length of the estuary where sensitive habitats (e.g. wetlands, supratidal saltmarsh and indigenous vegetation) occur. The application of the Coastal Protection Zone, floodlines and inclusion of Critical Biodiversity Areas in all planning schemes should allow for this.

Zones relevant to this proposal as defined by the Integrated Coastal Management Act (No. 24 of 2008, as amended by Act 36 of 2014) are:

16. Coastal protection Zone
    a) The coastal protection zone consists of land falling within an area declared in terms of the Environment Conservation Act, 1989 (Act No. 73 of 1989), as a sensitive coastal area within which activities identified in terms of section 21(1) of that Act may not be undertaken without an authorisation.
    b) any part of the littoral active zone that is not coastal public property;
    c) any coastal protection area, or part of such area, which is not coastal public property;

d) any land unit situated wholly or partially within one kilometre of the high-water mark which, when this Act came into force—
   (i) was zoned for agricultural or undetermined use; or
   (ii) was not zoned and was not part of a lawfully established township urban area or other human settlement;

8.	Explain whether the screening report has changed from the one submitted together with the application form. The screening report must be attached as Appendix I.

The screening tool has not changed.

9.	Explain how the proposed development will optimise vacant land available within an urban area.

The proposed site is located on an existing disturbed footprint.

10.	Explain how the proposed development will optimise the use of existing resources and infrastructure.

The proposal is to upgrade and expand the existing Milkwood Manor guest house and parking to accommodate the population growth of the Bitou Municipality. It is also proposed to construct a new ablution block and beach showers which will tie into the existing sewage system without needing to upgrade it.

11.	Explain whether the necessary services are available and whether the local authority has confirmed sufficient, spare, unallocated service capacity. (Confirmation of all services must be included in Appendix E16).

The network around the erven is currently mainly supplied by SS-1 Main, which is the substation supplying electricity to Plettenberg Bay town area. SS-1 Main currently has enough capacity to carry the additional 48 kVA maximum demand brought by the proposed re-development on Erf 10190. The MV feeders supplying the surrounding area have sufficient capacity to carry the additional demand at the proposed development.

The existing water system has sufficient capacity to accommodate the domestic water demand of the proposed development to comply with the pressure criteria as set out in the master plan.

The existing system, however, has insufficient capacity to supply fire flow to Erf 10190 of more than 15 L/s.
In order to supply fire flow of roughly 15 L/s at 10 m head to Erf 10190 the following upgrades should be implemented:

- Upgrade existing 50 mm diameter pipeline from the Town PRV 2 water distribution zone to the development to a 110 mm diameter pipeline, or
- Install a new 110 mm diameter link services pipeline from the Town reservoir water distribution zone (at the corner of Erf 3904) to Erf 10190

It is proposed that fire protection is provided on site if a fire flow requirement of more than 15 L/s is required for the development on Erf 10190.

There is sufficient capacity in the existing sewer system to accommodate the proposed development.

12.	In addition to the above, explain the need and desirability of the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013) or the DEA's Integrated Environmental Management Guideline on Need and Desirability. This may be attached to this BAR as Appendix K.

(Source: Departure and SDP Approval Applications, Prepared by Planning Space Town and regional Planners, dated 8 August 2024)

The extension is needed to accommodate the volume required for the type and level of hospitality service that will be provided. Most industry experts recommend that a luxury 5* boutique hotel should have at least 20 to 30 rooms to ensure financial viability, especially when accounting for the need for a luxury-experienced who requires a full-time leadership structure which would include a General Manager, Deputy General Manager, Executive Housekeeper, Food and Beverage Manager and Executive Chef and other fixed staffing costs. This range provides a cushion for operational stability, and profitability, and allows for economies of scale without diluting the personalised service that defines a boutique hotel.

The addition of public ablution and beach shower facilities addresses a crucial need in the area, enhancing the comfort and convenience of visitors to Lookout Beach. This upgrade elevates the overall attractiveness of the destination and encourages longer stays, benefiting both tourists and local businesses.

The MORE Family Collection creates bespoke luxury travel experiences for its clients. These guests are not self-drive tourists, and their travel packages normally include several destinations and transport. As part of the hospitality service, the company has a private shuttle service that picks up guests at airports and also provides transport to local attractions. Staff is also transported by company vehicles. It is submitted that the 5 on-site bays provided, are sufficient for the operational requirements of the hotel. This transport arrangement also aligns with the town's vision for sustainable mobility and reduces traffic congestion in the town.

SECTION F: PUBLIC PARTICIPATION

The Public Participation Process ("PPP") must fulfil the requirements as outlined in the NEMA EIA Regulations and must be attached as Appendix F. Please note that If the NEM: WA and/or the NEM: AQA is applicable to the proposed development, an advertisement must be placed in at least two newspapers.

1. Exclusively for linear activities: Indicate what PPP was agreed to by the competent authority. Include proof of this agreement in Appendix E22.

N/A

2. Confirm that the PPP as indicated in the application form has been complied with. All the PPP must be included in Appendix F.

To be included in the Final BAR.

3. Confirm which of the State Departments and Organs of State indicated in the Notice of Intent/application form were consulted with.

- Nina Viljoen - Garden Route District Municipality
- Brandon Layman - WCG: Department of Agriculture
- Carlo Abrahams Breede-Gouritz Catchment Management Agency
- Ms. Rabokale Mphahlele - Breede-Olifants Catchment Management Agency
- Megan Simons - Cape Nature
- Lizelle Stroh - South African Civil Aviation Authority
- Stephanie-Ann Barnardt - Heritage Western Cape
- Xander Smuts - WC Department of Transport and Public Works
- Dave Swart - Ward 2 Councillor: Bitou
- Gavin Benjamin - Western Cape Government:
- Ms M Laros - DEA&DP: Coastal Management
- Dr Ralph Links - Acting Municipal Manager
- Melanie Koen - Department of Agriculture, Forestry and Fisheries (DAFF)
- Plettenberg Bay Community Environmental Forum
- Ms. Ieptieshaam Bekko - DEA&DP: Biodiversity and Coastal Management
- Ms. Anjé Minne - Bitou Municipality: Environmental Management Officer
- Anton Bredell - Minister of Local Government, Environmental Affairs and Development Planning
- Oceans and Coast - National Department of Forestry, Fisheries and the Environment

4. If any of the State Departments and Organs of State were not consulted, indicate which and why.

Only relevant authorities are included.

5. if any of the State Departments and Organs of State did not respond, indicate which.

To be included in the Final BAR.

6. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated into the development proposal.

To be included in the Final BAR.

Note:

A register of all the I&AP's notified, including the Organs of State, and all the registered I&APs must be included in Appendix F. The register must be maintained and made available to any person requesting access to the register in writing.

The EAP must notify I&AP's that all information submitted by I&AP's becomes public information.

Your attention is drawn to Regulation 40 (3) of the NEMA EIA Regulations which states that *"Potential or registered interested and affected parties, including the competent authority, may be provided with an opportunity to comment on reports and plans contemplated in subregulation (1) prior to submission of an application but **must** be provided with an opportunity to comment on such reports once an application has been submitted to the competent authority."*

All the comments received from I&APs on the pre -application BAR (if applicable and the draft BAR must be recorded, responded to and included in the Comments and Responses Report and must be included in Appendix F.

All information obtained during the PPP (the minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded) and must be included in Appendix F.

Please note that proof of the PPP conducted must be included in Appendix F. In terms of the required "proof" the following is required:

- a site map showing where the site notice was displayed, dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
- in terms of the written notices given, a copy of the written notice sent, as well as:
  - if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
  - if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
  - if a facsimile was sent, a copy of the facsimile Report;
  - if an electronic mail was sent, a copy of the electronic mail sent; and
  - if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

1. Groundwater

1.1.	Was a specialist study conducted?	YES	**NO**
1.2.	Provide the name and or company who conducted the specialist study.		
1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.		
1.4.	Indicate the depth of groundwater and explain how the depth of groundwater and type of aquifer (if present) has influenced your proposed development.		

2. Surface water

2.1.	Was a specialist study conducted?	**YES**	NO
2.2.	Provide the name and/or company who conducted the specialist study.		
James Dabrowski – Confluent Environmental Pty (Ltd)			

2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.

(Source: Renovation of Milkwood Manor House and Expansion of the Public Car Park at Lookout Beach, Plettenberg Bay, Estuarine Impact Assessment. Prepared by J.M. Dabrowski (PhD), Confluent Environmental Pty (Ltd), 2 August 2024)

Study area characteristics:

The Milkwood Manor House is situated at the south-western-most extent of the Keurbooms Estuary, at the transition between estuarine and coastal dune habitat. The north-western corner of the property remains undeveloped and extends into the estuary. The perimeter of the developed portion of the property is protected from tidal action and flooding by a rock revetment which extends around the entire the perimeter of the property. The public parking is located to the south of the property and provides access to the popular Lookout Beach to the west. The entire property and adjacent public parking are located with the Keurbooms Estuarine Functional Zone (EFZ).

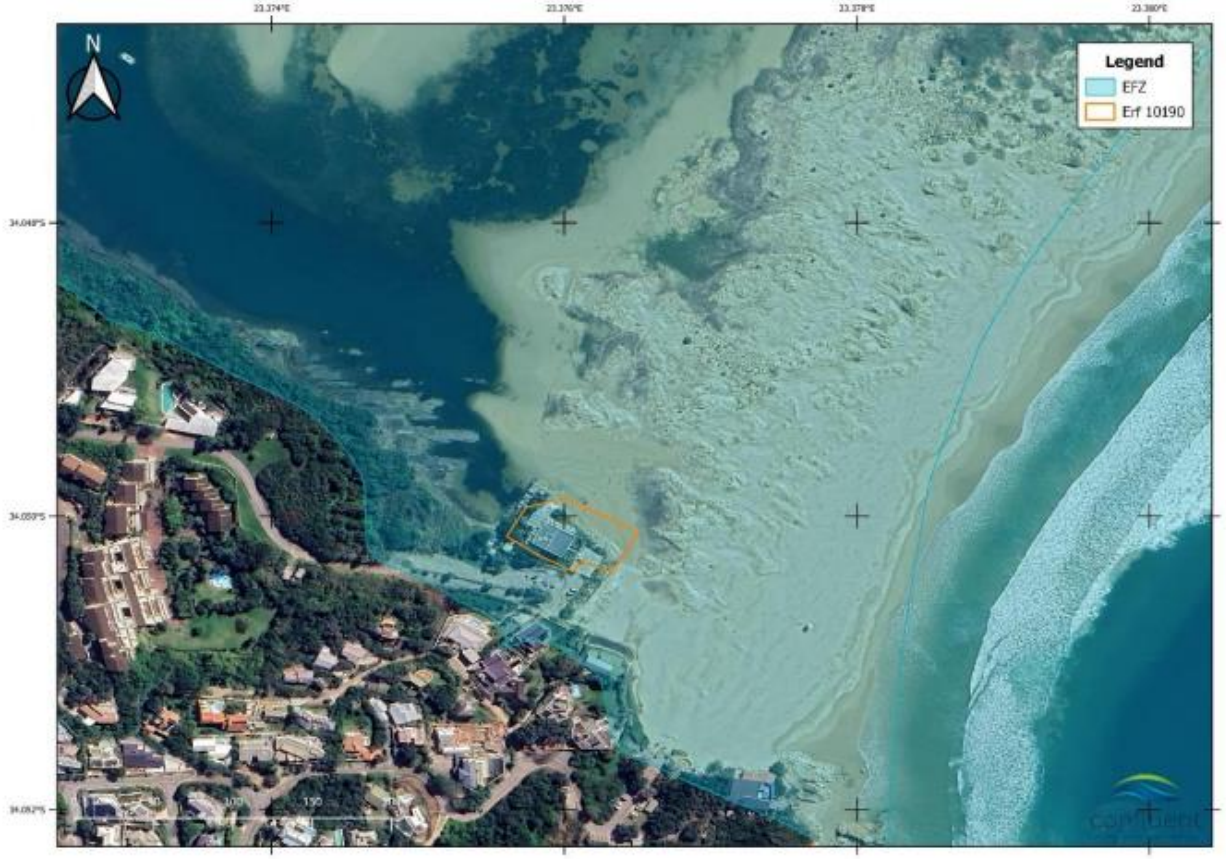

Figure 16: Map indicating the property boundary relative to the Keurbooms Estuarine Functional Zone.

The Keurbooms Estuary is classified as a Predominantly Open estuary which is characterised by the following (Van Niekerk et al., 2019c):

- They are open to the sea for more than 90 % of the time.
- They are linear systems in which mixing processes are dominated by both fluvial inputs and tidal action creating vertical and horizontal salinity gradients.
- They usually support wetlands, salt marshes, macrophyte beds and marine and estuarine fauna.
- They vary in size from as little as 10 ha to as much as 7 500 ha.

National Freshwater Ecosystem Priority Areas

The property falls within sub-quaternary catchment (SQC) 9188, which, according to the National Freshwater Ecosystem Priority Atlas (NFEPA, Nel et al., 2011), has been classified as a Freshwater Ecosystem Priority Area (FEPA). River FEPAs achieve biodiversity targets for river ecosystems and threatened/near-threatened fish species and were identified in rivers that are currently in a good condition (A or B ecological category). Their FEPA status indicates that they should remain in a good condition to contribute to national biodiversity goals and support sustainable use of water resources (Nel et al., 2011).

For river FEPAs, the whole SQC is identified as a FEPA, although the FEPA status applies to the actual river reach within such a sub-quaternary catchment. The shading of the whole sub-quaternary catchment indicates that the surrounding land and catchment area needs to be managed in a way that maintains the good ecological condition of the river reach, which in this case, is the lower reaches of the Bietou and Keurbooms rivers. It is therefore important that development does not result in any deterioration of the river or its catchment area. Similarly, the Keurbooms Estuary and adjacent wetland areas have been identified as an estuary FEPA, which is also indicative of the good ecological condition of the estuary. The larger drainage network and surrounding land use should therefore be managed to ensure the estuarine system remains in a good ecological condition.

Figure 17: Map illustrating the location of the project area in relation to FEPA sub-quaternary catchments.

3. Coastal Environment

3.1.	Was a specialist study conducted?	**YES**	NO
3.2.	Provide the name and/or company who conducted the specialist study.		
James Dabrowski			
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were taken into account and explain how this influenced your proposed development.		

a) Representations made by the applicant and by interested and affected parties:

The BAR will be out for public participation which will give the relevant authorities and interested and affected parties the opportunity to comment on the proposal. The applicant also proposed an open day at the site for interested and affected parties to attend to have any questions that they may have addressed.

b) The extent to which the applicant has in the past complied with similar authorisations:

The applicant is the More Family collection. They have numerous luxury accommodations all over South-Africa. To our knowledge, this is their first application relating to the Integrated Coastal Management Act.

c) Whether coastal public property, the coastal protection zone or coastal access land will be affected, and if so, the extent to which the proposed development or activity is consistent with the purpose for establishing and protecting those areas:

Construction of beach showers occurs on an undeveloped section of the coastal dune section of the EFZ, at the access point to the Lookout Beach. The public beach showers will be a welcomed upgrade for everyone going to the beach. While this area falls within the EFZ of the estuary, habitat is coastal, consisting of beach sand, well above the tidal mark. The area is not vegetated, and no aquatic estuarine biota (dependant on tidal exchange) inhabit the area. The area experiences high volumes of pedestrian traffic and is unlikely to be an important nesting, roosting or feeding area for coastal bird species.

d) The estuarine management plans, coastal management programme and coastal management objectives applicable in the area:

Estuaries are recognised as particularly sensitive and dynamic ecosystems and the National Environmental Management: Integrated Coastal Management Act (No. 24 of 2008, as amended by Act 36 of 2014) (ICMA), via the prescriptions of the South African National Estuarine Management Protocol (the Protocol), require Estuary Management Plans (EMPs) to be prepared for estuaries to create informed platforms for efficient and coordinated estuarine management. To this end, the Keurbooms EMP was compiled in 2017 (DEADP, 2018) and provides a detailed situation assessment of the estuary as well as management objects aimed at achieving an agreed upon vision for the estuary.

e) The socio-economic impact if the activity:

The socio-economic aspects are known and not complicated, the proposal is for the upgrading and expansion of a hotel and as such the construction costs will inject capital into the companies that will provide services, in addition to wages for the builders and labourers undertaking the construction phase. Additionally, it will accommodate more guests and lead to increased tourism into the Plettenberg Bay area. Please also see Section G.8.

f) The likely impact of the proposed activity on the coastal environment including the cumulative effect of its impact together with those of existing activities:

All impacts of the proposed activities can be mitigated to a low or very low significance after mitigation. Please also see Section I.1 for a summary of the impacts post mitigation.

g) The likely impact of coastal environmental processes on the proposed activity:

The location of the mouth may be considered as being in a dynamic equilibrium as a function of fluvial flooding, prevailing sea level and ocean storm events. The implication is that the conditions which led to the need to construct the revetment during 2007/2008 should be expected to recur in future. However, the current rock revetment can withstand those weather events if maintained.

3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.
	(Source: Renovation of Milkwood Manor House and Expansion of the Public Car Park at Lookout Beach, Plettenberg Bay, Estuarine Impact Assessment. Prepared by J.M. Dabrowski (PhD), Confluent Environmental Pty (Ltd), 2 August 2024) **Keurbooms-Bitou Estuary Management Plan:** Estuaries are recognised as particularly sensitive and dynamic ecosystems and the National Environmental Management: Integrated Coastal Management Act (No. 24 of 2008, as amended by Act 36 of 2014) (ICMA), via the prescriptions of the South African National Estuarine Management Protocol (the Protocol), require Estuary Management Plans (EMPs) to be prepared for estuaries in order to create informed platforms for efficient and coordinated estuarine management. To this end, the Keurbooms EMP was compiled in 2017 (DEADP, 2018) and provides a detailed situation assessment of the estuary as well as management objects aimed at achieving an agreed upon vision for the estuary which is as follows: "From catchment to coast, the Keurbooms and Bitou systems will be harmoniously managed through active participation to maintain their biodiversity in order to attract visitors, promote

	education, create awareness, and preserve the cultural, natural and recreational heritage for (the benefit of) all (South Africans)." Management objectives that are relevant to the proposed development include the following: • Development and land use in the catchment and estuarine area should not lower water quality or interfere with normal hydrodynamic or sedimentary processes and cycles; • Planning should allow for the maintenance of a riparian zone along the length of the estuary where sensitive habitats (e.g. wetlands, supratidal saltmarsh and indigenous vegetation) occur. The application of the Coastal Protection Zone, floodlines and inclusion of Critical Biodiversity Areas in all planning schemes should allow for this.
3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.
	(Source: Renovation of Milkwood Manor House and Expansion of the Public Car Park at Lookout Beach, Plettenberg Bay, Estuarine Impact Assessment. Prepared by J.M. Dabrowski (PhD), Confluent Environmental Pty (Ltd), 2 August 2024) The Keurbooms and Bitou estuaries (collectively referred to as the Keurbooms) are located close to Plettenberg Bay and both feed into what is known as the Keurbooms Lagoon, which is separated from the sea by a prominent berm, prior to it flowing out to sea. The confluence of the Bitou and Keurbooms estuaries is approximately 3.5 km from the mouth. The Bitou River is 23 km long, with its source at Buffelsnek, and is tidal for 7.2 km from the confluence to the causeway at Wittedrift. The Keurbooms River is approximately 85 km long, with its source at Spitskop in the Outeniqua Mountains, and is tidal for approximately 8.5 km from the confluence (CAPE Estuaries Programme, 2010). The affected portion of the Keurbooms Estuary falls in quaternary catchment K60G (Figure 18) which covers the entire catchment of the Piesangs River and the lower most reaches of the Bietou and Keurbooms estuaries. The estuary falls within level 22.02 of the Southern Coastal Belt ecoregion, which is characterised by moderately undulating plains of moderate relief with altitude ranging from 0 to 500 m above mean sea level. Mean annual precipitation for the catchment area is relatively high (between 300 and 700 mm per annum), and occurs year-round, with peaks in late winter and early spring (August to October). The Keurbooms Estuary is classified as a Predominantly Open estuary which is characterised by the following (Van Niekerk et al., 2019c): • They are open to the sea for more than 90 % of the time. • They are linear systems in which mixing processes are dominated by both fluvial inputs and tidal action creating vertical and horizontal salinity gradients. • They usually support wetlands, salt marshes, macrophyte beds and marine and estuarine fauna. • They vary in size from as little as 10 ha to as much as 7 500 ha.

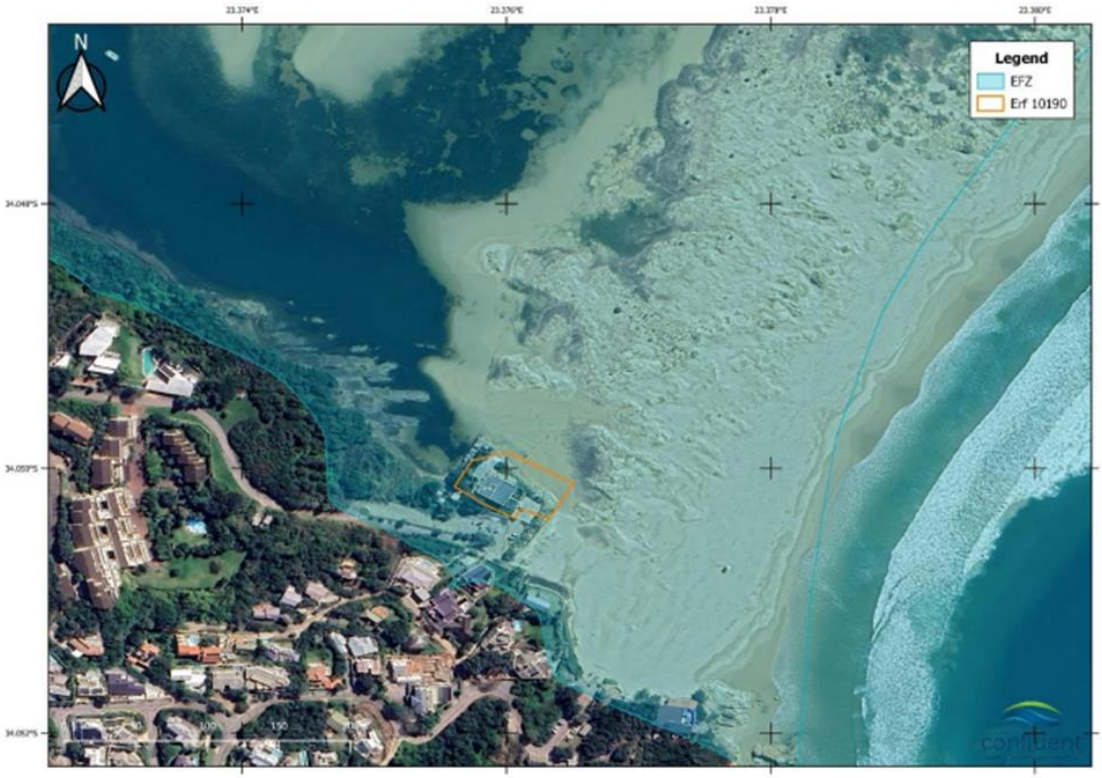

Figure 18: Map indicating the property boundary relative to the Keurbooms Estuarine Functional Zone.

According to 2018 National Biodiversity Assessment (NBA) (Van Niekerk et al., 2019a), the PES of the Keurbooms Estuary is A/B (Near Natural), indicating that it is relatively good ecological condition and has not been significantly modified from its natural state. Most of the abiotic indices used to derive the overall PES are in fact in a natural condition (A). Modifications to fish assemblages and bird populations are the most important drivers of change from the natural state. The ecological importance is therefore regarded as being high and Turpie (2004) ranked the Keurbooms estuary as the 18th most important system in South Africa in terms of conservation importance. According to Van Niekerk et al. (2019d) the ecosystem threat status of the Keurbooms Estuary, is Vulnerable. These systems are poorly protected in South Africa.

Table 3: Summary of the Present Ecological Status (PES) and Ecological Importance of the Keurbooms Estuary (Van Niekerk et al., 2019b).

Index	Category
Hydrology	*A*
Hydro-dynamics	*A*
Physical Habitat	*B*
Water Quality	*A*
Microalgae	*B*
Macrophytes	*C*
Invertebrates	*A*
Fish	*C*
Birds	*B*
Overall PES	**A/B**
Ecological Importance	**High**

The classification of water resources and development of Resource Quality Objectives (RQOs) for the Breede-Gouritz Catchment Management Area was finalised in 2018. Quaternary catchment K60F, falls within the G15 Coastal Integrated Unit of Analysis (IUA). The Water Resource Class for this IUA is II, indicating moderate protection and moderate utilisation. The

Target Ecological Category (TEC) for the Keurbooms Estuary has been set as an A (Natural), which indicates that the estuary must be managed to achieve a pristine state. Specific RQOs have been produced for the estuary in alignment with the TEC. These include specific limits at which indicators of water quantity and quality, habitat and biota must be maintained. The scale of the proposed activities is unlikely to affect the hydrodynamics, water quality, habitat or biota RQOs for such a large system. Expansion of the car park will result in a small loss of vegetation and is not aligned to the RQO for macrophytes.

Field Assessment

Renovations at the manor house and expansion of the public car park will occur in very close proximity to the estuary but is limited to the existing developed area of the property that is contained within the rock revetment border. This area is presently covered by buildings, car park, landscaped rock gardens and outdoor dining and recreational areas (i.e. raised decks overlooking the estuary). The renovations will therefore not result in any additional loss of area of estuarine (or coastal) habitat.

The proposed expansion of the public car park will however extend slightly north into an undeveloped area of the EFZ. Biota that may utilise the habitat will most likely be limited to terrestrial bird species and some small mammals (e.g. rodent species). The eastern expansion of the car park will overlap with a more modified section of the EFZ that includes existing out buildings and transformed vegetation.

Figure 19: Photographs illustrating stands of A. donnax in the area into which the car park will extend (A & B); stands of P. australis closer to the estuary (C) and a grassed area and out-buildings into which the car park will extend (D).

4. Biodiversity

4.1.	Were specialist studies conducted?	**YES**	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		
Jamie Pote (Pr. Sci. Nat.)			
4.3.	Explain which systematic conservation planning and other biodiversity informants such as vegetation maps, NFEPA, NSBA etc. have been used and how has this influenced your proposed development.		

(Source: Terrestrial Biodiversity Assessment, Milkwood Manor Draft Version. Dated 2 September 2024, Prepared by Jamie Pote)

Vegetation map: A product of The Vegetat2024. South Africa, Lesotho and Swaziland (VEGMAP) (Mucina & Rutherford, 2006). The South African National Biodiversity Institute (SANBI) has updated the VEGMAP (2018). These shapefiles were used. In addition, the National Web-based Environmental Screening Tool was applied to determine the Relative Plant Species Theme Sensitivity as is required of botanical specialists.

According to the 2018 Vegetation Map of South Africa, the site is located inside Goukamma Dune Thicket and Estuary. Goukamma Dune Thicket occurs in the Western Cape Province. In coastal stretches from Victoria Bay near Wilderness to the Knysna Heads, with smaller areas along the coast from Robberg Peninsula near Plettenberg Bay eastward to Keurboomstrand. This vegetation type is dominated by small trees and woody shrubs with lianas abundant, in a mosaic of low asteraceous fynbos. Thicket clumps are best developed in fire-protected dune slacks, which occasionally also support pockets of coastal forest (*Celtis africana, Ekebergia capensis, Searsia chirindensis*). The fynbos shrubland occurs on upper dune slopes and crests where succulents may be common in more open areas. The estuarine is predominantly open (including the Kromme River) and are open to the sea for more than 90% of the time. Some are permanently open owing to perennial river flows or the presence of large tidal prisms. Predominantly Open estuaries are linear systems in which mixing processes are dominated by both fluvial inputs and tidal action creating vertical and horizontal salinity gradients. These estuaries usually support wetlands, salt marshes, macrophyte beds and marine and estuarine fauna.

The vegetation of the study area is described by Mr. J Pote. Please refer to Appendix G2 for the full report on the vegetation of the site.

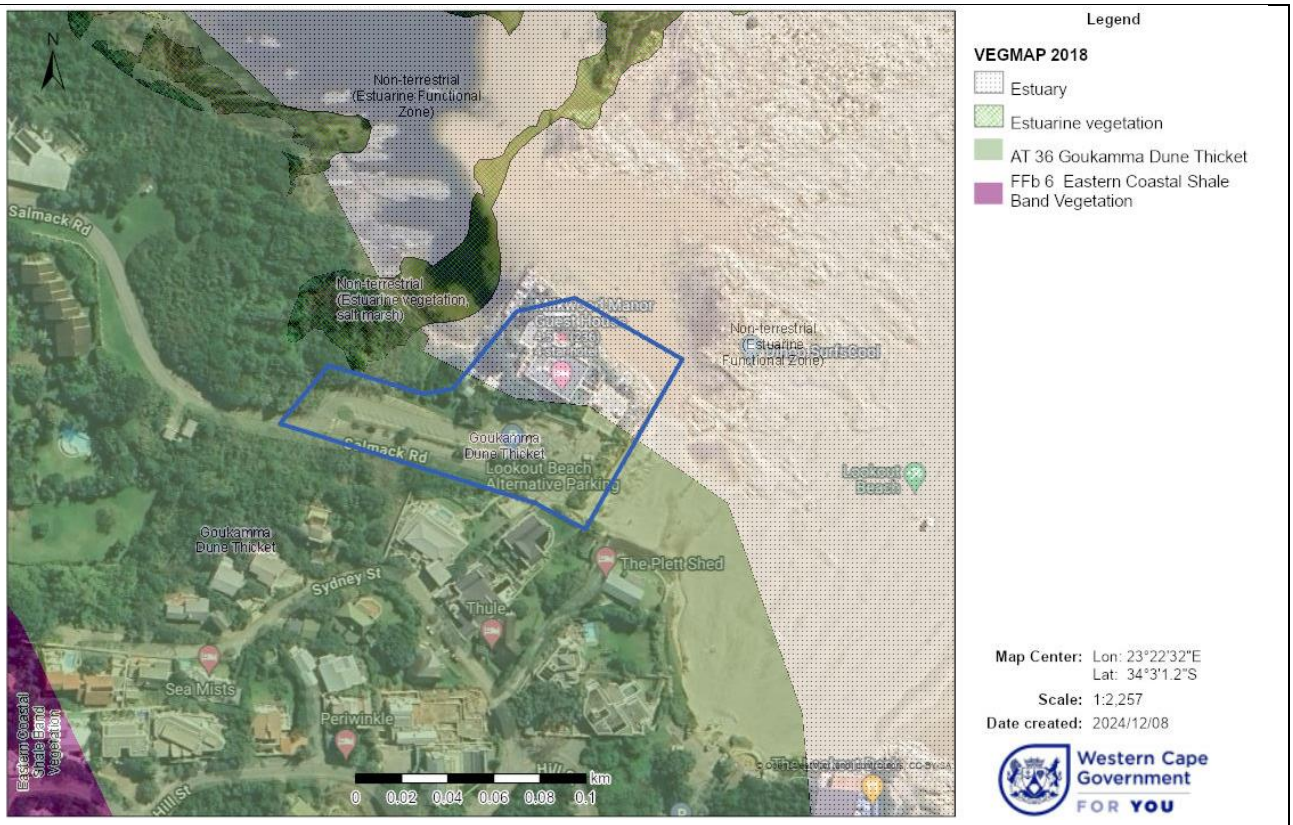

Figure 20: Extract of the 2018 SA Vegetation map

Vegetation on site

The site is located within a transformed developed suburb and is specifically situated on the western edge of the Keurbooms River estuary, within what would have historically been a predominantly Dune Thicket vegetated area on the banks of the estuary. The eastern side of the site falls within the estuary itself and is prone to being eroded as the estuary is constantly migrating in an east-west direction, depending on the estuarine configuration at the time, which is known to change periodically.

The site is comprised predominantly of transformed areas which include the buildings, wooden decks, parking areas, landscaped gardens and rock revetments around the boundary with the estuary. A few remnant Milkwood trees remain on the site, with a nominal understorey of natural elements remaining. As well as a small pocket of remnant Dune Thicket at the beach access point.

The landscaped or ornamental gardens comprise a mix of ornamental species including several indigenous species such as *Cotyledon spp., Aloe spp.* And several large Cycads *(Encephalartos),* which are in principle protected in terms of the Provincial Nature Conservation Ordinance. None of the naturally occurring Dune Thicket elements are protected, other than the Milkwood tress, which have a NFA (National Forests Act) protection. Milkwood trees are very widespread (occur along the entire south and east coast of south Africa into Mozambique and Limpopo), and removal will not have any significant impact to the broader conservation of the species.

While the site falls within a broader important ecological area, the specific site is a transformed developed Erf and thus will not contribute to any meaning manner to either conservation of ecosystems or ecological connectivity.

Several exotic invasive and other weed species were noted within the site and surrounding area. Proliferation of weedy and exotic species often indicate disturbance especially during or after construction. A list of species is included in Table 4. During construction it is highly likely that species currently not on site could be introduced through the construction process. A weed management programme is recommended after construction to counter the weed proliferation that would be expected after construction.

Table 4: Alien (exotic) invasive and other weed species and status.

SCIENTIFIC NAME	COMMON NAME	FAMILY	STATUS[5]	PRESENCE
Acacia cyclops	Rooikrantz	Fabaceae	CARA 1b	Present, odd individual/clump
Cestrum laevigatum	*Inkberry*	Solanaceae	CARA 1b	Present common between parking and estuary.
Pennisetum clandestinum	Kikuyu	Poaceae	CARA 1b	Present, odd individual/clump
Phragmites australis	*Spanish Reed*	Poaceae	CARA 1b	Present common between parking and estuary.
Ricinus communis	Castor Oil Plant		CARA 2	Present, odd individual/clump
Solanum mauritianum	Bugweed	Solanaceae	CARA 1b	Present, odd individual/clump
Solanum sisymbriifolium	Wild tomato	Solanaceae	CARA 1b	Present, odd individual/clump

Ecosystem threat status: Informed by (1) The National List of Threatened Terrestrial Ecosystems (Government Gazette, 2011), (2) The Western Cape State of Biodiversity 2017 Report (Turner, 2017), and (3) The National Biodiversity Assessment (2018) (SANBI, 2019).

The Western Cape BSP Ecosystem Threat Status (2016) designates a Least Threatened status to the Keurbooms Estuarine Salt Marshes and Seashore Vegetation and Goukamma Dune Thicket is mapped as Endangered.

Biodiversity planning: The 2017 Western Cape Biodiversity Spatial Plan (CapeNature, 2017) GIS (Geographical Information System) shapefiles for the George Municipality is important for determining the conservation importance of the designated habitat. Ground-truthing is an essential component in terms of determining the habitat condition.

Important species: The presence or absence of threatened (i.e., species of conservation concern) and ecologically important species informs the ecological condition and sensitivity of the site. The latest conservation status of species is checked in the Red List of South African Plants (Raimondo et al. 2009) (www.redlist.sanbi.org).

Site boundary: these and other resource layers were used to define the site boundary and to compile several maps. This information is available on the CapeFarmMapper website (Department of Agriculture: gis.elsenberg.com).

4.4.	Explain how the objectives and management guidelines of the Biodiversity Spatial Plan have been used and how has this influenced your proposed development.

The 2017 Western Cape Biodiversity Spatial Plan Handbook (Pool-Stanvliet et al., 2017) distinguishes between the various conservation planning categories. Critical Biodiversity Areas are habitats with high biodiversity and ecological value. Such areas include those that are likely to be in a natural condition (CBA1) and those that are potentially degraded or represent secondary vegetation (CBA2). Ecological Support Areas are not essential for meeting biodiversity targets but play an important role in supporting the functioning of Protected Areas or CBAs and are often vital for delivering ecosystem services. A distinction is made between ESAs that are still likely to be functional (i.e., in a natural, near natural or moderately degraded condition; (ESA 1) and Ecological Support Areas that are severely degraded, or have no natural cover remaining, and therefore require restoration (ESA2). Other Natural Area (ONA) sites are not currently identified as a priority but retain most of their natural character and perform a range of biodiversity and ecological infrastructure functions. Although not prioritised, they are still an important part of the natural ecosystem.

The Western Cape Biodiversity Spatial Plan (2017,) indicates the site falls on the edge of designated CBA1: Terrestrial and Protected Area with the remainder being No Natural Area Remaining. Since the site is a developed Erf with only remnant Milkwood trees present and being on the edge of an urban area, the CBA1: Terrestrial designation would be considered incorrect, and the entire site is situated within what should be designated No Natural Area Remaining (NNAR). Portions of the Milkwood Manor property and the area to be covered by the expanded car park fall within an aquatic Critical Biodiversity Area. Inclusion of a part of the existing Milkwood Manor House as a CBA is not an accurate representation of habitat on site and is most likely a result of coarse-scale mapping conducted during development of the WCBSP.

No CBAs or ESAs are thus likely to be affected by the proposed activity above current baseline levels.

Figure 21: Map indicating the area of development in relation to the Western Cape Spatial Biodiversity Plan (WCBSP) extracted from the Estuarine Impact Assessment report prepared by J Dabrowski

4.5.	Explain what impact the proposed development will have on the site specific features and/or function of the Biodiversity Spatial Plan category and how has this influenced the proposed development.

(Source: Terrestrial Biodiversity Assessment, Milkwood Manor Draft Version. Dated 2 September 2024, Prepared by Jamie Pote)

Present Ecological State

The area in and around the site is completely transformed to urban development on the western side, with a few remnant thicket species and pockets on developed and undeveloped adjacent erven. The area to the north, east and south of the site is comprised mostly of bare sand, with estuary being on the north, occasionally on the east and beach with unvegetated sand on the south and south-east. Alien invasion is presently moderate, in particular the area between the parking area and the estuary. A few remnant Milkwood trees are present within the site. No natural Provincial Nature Conservation Ordinance (PNCO protected species are present within the remnant dune thicket pockets (i.e. under the Milkwood trees). However, several of the species used for landscaping purposes would be considered to be PNCO species.

Red Listed, Endemic and Protected Flora and Fauna

The site falls within the general distribution range of several endemic species and other species with a highly localised distribution, some of which are Critically Endangered, Endangered, Vulnerable or Rare. Some of these species are also only from a single or a few populations. No Endangered or Critically Endangered flora species were confirmed to be present nor are known to be present in the affected area. Several Milkwood trees are present within the Erf and NFA (National Forest Act) permits will be required for their removal in order to undertake construction.

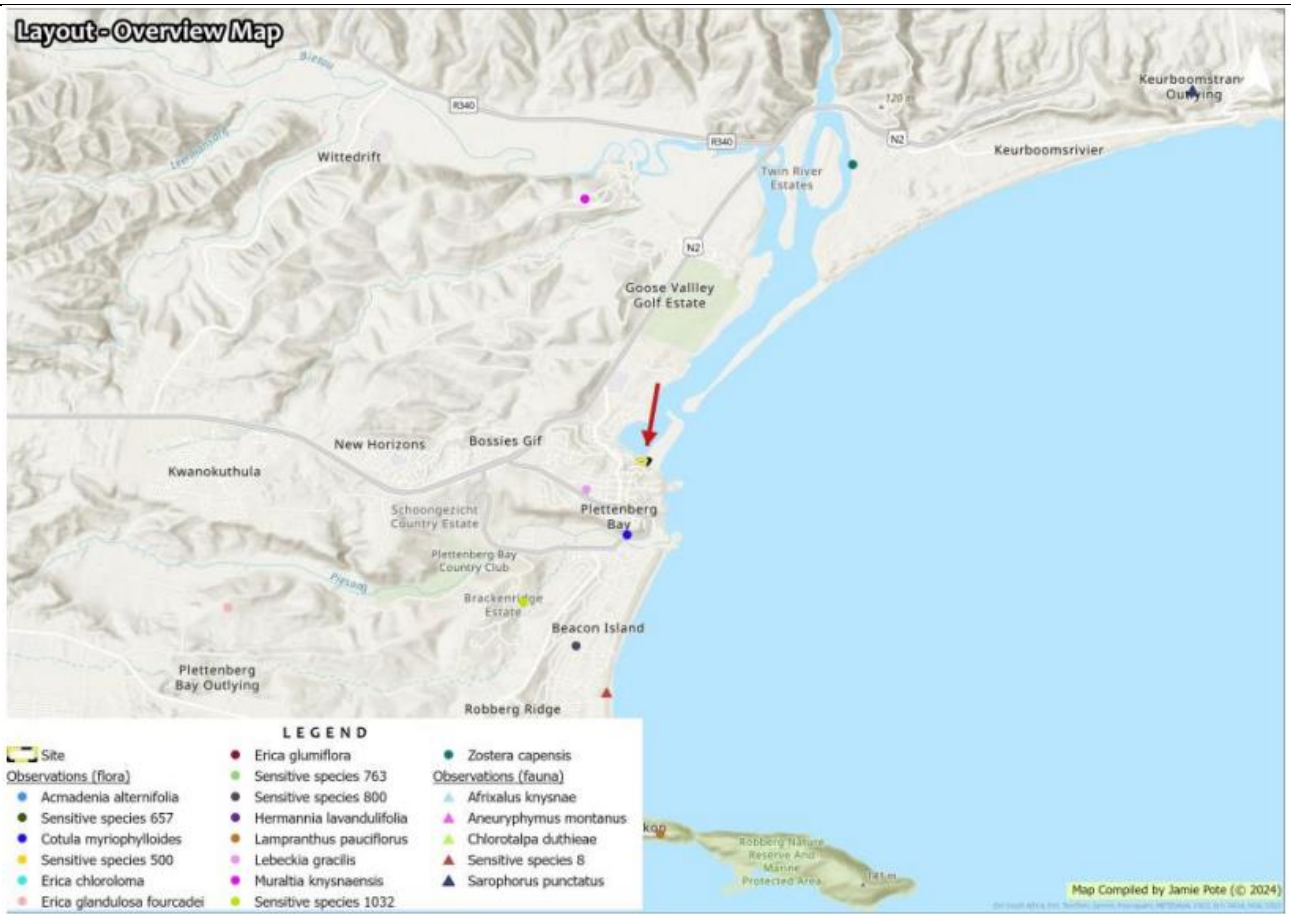

Figure 22: Distribution records of flora and fauna Species of Conservation Concern (GBIF, 26 July 2024) with known records in the vicinity of the site. NOTE some distribution records may have an offset for biosecurity purposes and/or accuracy errors but will non the less give an indication of general locality.

No Endangered or Critically fauna species were found to be present nor are known to be present in close proximity to the affected area or are likely to be directly affected by the proposed activity. The site falls within the general distribution range of a single faunal SCC, however none are confirmed to be present. Since the project footprint is relatively small, is situated directly adjacent to urban and disturbed areas and also surrounded by extensive outlying areas of natural habitat, any disturbance or displacement associated with increased activity or habitat destruction as a direct result of the activity is unlikely to pose a significant negative impact faunal species and in particular the species of special concern.

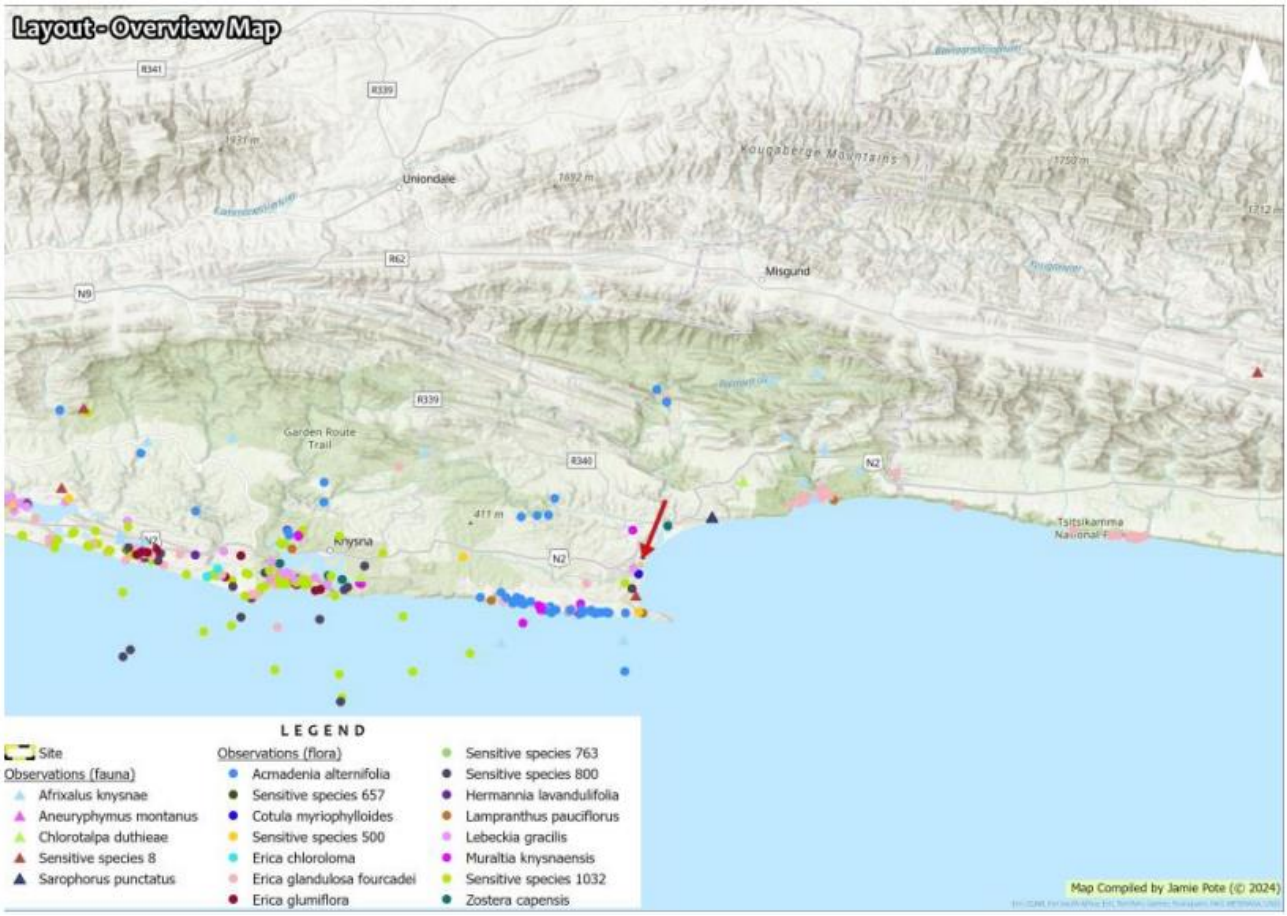

Figure 23: Distribution records of flora and fauna Species of Conservation Concern (GBIF, 26 July 2024) with known records from the broader area. NOTE some distribution records may have an offset for biosecurity purposes but will non the less give an indication of general locality (i.e. locality records in the sea).

(Source: Renovation of Milkwood Manor House and Expansion of the Public Car Park at Lookout Beach, Plettenberg Bay, Estuarine Impact Assessment. Prepared by J.M. Dabrowski (PhD), Confluent Environmental Pty (Ltd), 2 August 2024)

Species of Conservation Concern:

- Knysna Seahorse *(Hippocampus capensis*)
    - The Knysna seahorse (Hippocampus capensis) occurs only in the Keurbooms, Knysna and Swartvlei estuaries (Lockyear et al., 2006) and is listed as an endangered species on the IUCN Red List due to its fragmented distribution, small area of occupancy, the vulnerability of its habitat and susceptibility to high mortality due to freshwater flooding.
    - Can also tolerate a wide range of environmental conditions
    - Increased boat activity and associated noise has been show to significantly decrease activity within suitable habitats
- Eelgrass *(Zostera capensis)*
    - While endangered, this species is abundant in the estuary.
    - They provide important ecological services in estuaries, including stabilizing sediment, preventing erosion, reducing water flow, trapping nutrients and organic materials and providing sheltered habitat for fish and invertebrates.

As a result of coastal development, habitat destruction and its continued decline and is listed as vulnerable in the Red Data List of Species

4.6.	If your proposed development is located in a protected area, explain how the proposed development is in line with the protected area management plan.

The Keurbooms EMP was compiled in 2017 (DEADP, 2018) and provides a detailed situation assessment of the estuary as well as management objects aimed at achieving an agreed upon vision for the estuary.

Management objectives that are relevant to the proposed development include the following:

- Development and land use in the catchment and estuarine area should not lower water quality or interfere with normal hydrodynamic or sedimentary processes and cycles;
- Planning should allow for the maintenance of a riparian zone along the length of the estuary where sensitive habitats (e.g. wetlands, supratidal saltmarsh and indigenous vegetation) occur. The application of the Coastal Protection Zone, floodlines and inclusion of Critical Biodiversity Areas in all planning schemes should allow for this.

Taking the specialist reports into account, the proposal will not have an impact on the water quality if mitigation measures will prevent any sediment input into the estuary. The site is predominantly disturbed and little natural vegetation remains.

4.7.	Explain how the presence of fauna on and adjacent to the proposed development has influenced your proposed development.

(Source: Terrestrial Biodiversity Assessment, Milkwood Manor Draft Version. Dated 26 July 2024, Prepared by Jamie Pote)

Important Bird Areas

The site is situated on the edge of the Tsitsikamma – Plettenberg Bay Important Bird Area. The Tsitsikamma-Plettenberg Bay Important Bird Area (IBA) is an ecologically significant region in South Africa. It originally covered the Tsitsikamma section of the Garden Route National Park, but its boundary has been extended westward to include important habitats around Plettenberg Bay. The Tsitsikamma section of the Garden Route National Park spans approximately 24,000 hectares and stretches for about 80 kilometres along the coast. It begins west of the Sout River near Nature's Valley and extends eastward to the Groot River. The IBA now also includes the entire Plettenberg Bay coastline and near-shore areas. The IBA encompasses diverse habitats, including steep coastal cliffs, gorges, fynbos, and forests. Notably, it includes the Keurbooms estuary spit, an essential breeding site for Kelp Gulls and other bird species. The proposed activity, being situated on an already developed Erf, is unlikely to exceed current baseline impacts associated with the site on this IBA

Mammals

- *Chlorotalpa duthieae* (Duthies Golden Mole)
    - Known form the broader area, no evidence of any Golden Moles on site, which is primarily a landscaped garden and largely surrounded by compacted material.
- Sensitive species 8
    - Not recorded on site but found in surrounding area. May be a transient visitor in developed areas, but not likely to be affected above baseline levels due to the proposed activity within an already developed Erf.

Birds

- *Bradypterus sylvaticus* (Knysna warbler)
    - Unlikely to be affected above baseline levels by the proposed activity in an already transformed Erf & footprint.
- *Circus ranivorus* (African Marsh Harrier)
    - Unlikely to be affected above baseline levels by the proposed activity in an already transformed Erf & footprint.
- *Hydroprogne caspia* (Caspian Tern)
    - Unlikely to be affected above baseline levels by the proposed activity in an already transformed Erf & footprint.
- *Neotis denhami* (Denham's Bustard)

- Unlikely to be affected above baseline levels by the proposed activity in an already transformed Erf & footprint.
- *Polemaetus bellicosus* (Martial eagle)
  - Unlikely to be affected above baseline levels by the proposed activity in an already transformed Erf & footprint.

Reptiles
- None found on site visit conducted 23 July 2024

Amphibians
- *Afrixalus knysnae* (Knysna Spiny Reed Frog)
  - Unlikely to be present nor affected by the proposed temporary activity in a transformed & developed Erf. Not recorded.

Invertebrates
- *Aneuryphymus montanus* (Yellow-winged Agile Grasshopper)
  - No records from vicinity and not recorded on site. Unlikely to be present nor affected by the proposed temporary activity in a transformed & developed Erf. Not recorded.
- *Sarophorus punctatus* (Dung beetle)
  - Known record from Keurboomstrand area. Unlikely to be present nor affected by the proposed temporary activity in a transformed & developed Erf. Not recorded.

(Source: Renovation of Milkwood Manor House and Expansion of the Public Car Park at Lookout Beach, Plettenberg Bay, Estuarine Impact Assessment. Prepared by J.M. Dabrowski (PhD), Confluent Environmental Pty (Ltd), 2 August 2024)

Knysna Seahorse *(Hippocampus capensis)*
- The Knysna seahorse (Hippocampus capensis) occurs only in the Keurbooms, Knysna and Swartvlei estuaries (Lockyear et al., 2006) and is listed as an endangered species on the IUCN Red List due to its fragmented distribution, small area of occupancy, the vulnerability of its habitat and susceptibility to high mortality due to freshwater flooding.
- Can also tolerate a wide range of environmental conditions
- Increased boat activity and associated noise has been show to significantly decrease activity within suitable habitats

5. Geographical Aspects

Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.
Since the site is within 100m of the high-water mark, a portion of Erf 10190 can not be used due to previous storm events. As seen from Figure 25 the rock revetment is adequate to protect the existing guest house against future storm surges and allows for the site to be expanded.

Figure 24: November 2007 during flood

Figure 25: After construction of revetment (circa 2008)

6. Heritage Resources

6.1.	Was a specialist study conducted?	**YES**	NO
6.2.	Provide the name and/or company who conducted the specialist study.		
Stefan de Kock – Perception Planning			
6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development.		
	(Source: DRAFT VERSION of the PROPOSED DEVELOPMENT ON PORTIONS OF ERF 10190 & REMAINDERS OF ERVEN 706 & 2066, (PLETTENBERG BAY) KNYSNA DISTRICT AND BITOU MUNICIPALITY, dated August 2024, prepared by Stefan de Kock)		

	While the exact age of the primary building forming part of the Milkwood Manor boutique hotel could not be determined, no buildings are evident on the site on 1985 aerial imagery, and it is therefore deduced that the building is not older than 60 years. During fieldwork, which included a survey of the interior and exterior of existing building, no historic built fabric was recorded. Notwithstanding, the building is not considered of architectural and/or aesthetic cultural significance. No buildings of cultural significance were noted within the proximity of the study area during fieldwork undertaken on 19th July 2024. Basic historical background research did not identify or highlight any other significant heritage-related aspects related to the study area specifically. It is unlikely that detailed archival research would provide further meaningful insight into former use and/or broader understanding of heritage-related themes of the area. No further archaeological work is recommended.

7. Historical and Cultural Aspects

Explain whether there are any culturally or historically significant elements as defined in Section 2 of the NHRA that will be affected and how has this influenced the proposed development.
(Source: DRAFT VERSION of the PROPOSED DEVELOPMENT ON PORTIONS OF ERF 10190 & REMAINDERS OF ERVEN 706 & 2066, (PLETTENBERG BAY) KNYSNA DISTRICT AND BITOU MUNICIPALITY, dated August 2024, prepared by Stefan de Kock) **Cultural landscape** Aerial survey 114 of 1936 (Figure 26): • The image predates construction of the N2 National Road. The early alignment of the main road into the town centre (current Beacon Way) is noted passing directly south of the study area. • The early town grid together with several buildings are evident south of the study area. • The study area is noted as forming part of a rocky premonitory overlooking the adjoining estuary and beach. • Of interest is the fact that Erven 2063 and 2065 during this period was also essentially a sandbar devoid of any vegetation, much as in present day following the 2007 flood event. • No significant buildings are evident on the study area. • A patchwork of cultivated fields is visible along the coastal road to the west of the study area.

Figure 26: Study area within context of 1936 aerial imagery for the area (Flight Survey 114, Flight Strip 039, Image 11582, NGSI as edited).

Aerial survey 889 of 1985 (Figure 27):

- The image shows the now more established (and developed) town grid with Beacon Way as the primary road and Salmack Road leading towards Lookout Beach.
- An irregular-shaped area, cleared of vegetation and containing no significant buildings, extends between the Keurbooms River Estuary and Lookout Beach.
- The natural sandbar separating the Keurbooms River Estuary and Indian Ocean is once more densely overgrown by vegetation, confirming the dynamic nature of this area, continuous subject to natural processes.
- No buildings are evident on the study area.

From the above it is evident that the study area forms part of a dynamic coastal landscape continuously impact and transformed through natural processes. This is furthermore highlighted by the physical impacts of natural processes associated with the 2007 flood event, which altered the coastal landscape to a state comparable to that evident through the earliest available (1936) aerial imagery. The proposal, given its location and footprint will therefore not detract from a cultural landscape of high cultural significance.

Figure 27: Study area within context of 1985 aerial imagery for the area (Flight Survey 889, Flight Strip 08, Image 3969, NGSI as edited).

Archaeology
Development of the site will involve minimal vegetation clearing and earthmoving activities. Former flood events are likely to already have impacted any archaeological resources. Surveys have identified scatters of ESA and MSA material in the area, however they are generally in disturbed areas. Research has shown that LSA archaeological sites (shell middens) tend to concentrate close to rocky headlands, and there are fewer sites along the sand dunes associated with long sandy beaches (such as the Keurbooms River estuary). Impacts are expected to be LOW.

Palaeontology
According to SAHRIS Paleo-sensitivity mapping, the study area is earmarked as being of "Very High". The property lies on the Enon Formation (Uitenhage Group) conglomerate and sandstones that are incorrectly indicated as very highly sensitive for palaeontology. The fossil record is based on one repeated record of abraded and poorly preserved silicified wood, bones and teeth that have been transported and deposited. Nonetheless, a Fossil Chance Find Protocol should be added to the EMPr. Based on this information it is recommended that no further palaeontological impact assessment is required unless fossils are found by the contractor, environmental officer or other designated responsible person once excavations or drilling activities have commenced. Since the impact will be low, as far as the palaeontology is concerned, the project should be authorized.

Synthesis
From the above assessment it is our contention that the proposal would not impact any structure(s) or landscape of cultural significance, nor is it likely to impact on archaeological or palaeontological resources of cultural significance though the implementation of Protocol for Chance (Palaeontological) Finds is recommended.

8. Socio/Economic Aspects

8.1.	Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.
	According to Integrated Development Plan of the Bitou Municipality (2022-2027): In 2021 the population of Bitou was reported at 69 321 people, making it the most populated municipal area in the Garden Route District. This total is expected to grow to 77 243 by 2025, equating to an average annual growth rate of 2.7 percent. With 21195 households in the municipal area, 71.1 per cent have access to formal housing, the lowest when compared with other municipalities in the GRD area. The district average was 82.7 per cent. Considering the high level of households living in informal dwellings (25.7 per cent), access to formal housing remains a challenge in the municipal area. Even though there was a relatively low proportion of households living in formal dwellings, service access levels were significantly higher. Access to piped water inside or within 200m of the dwelling is at 92.3 per cent. Access to a flush or chemical toilet is at 83.6 per cent, access to electricity (for lighting) at 94.1 per cent and the removal of refuse at least weekly by local authority at 88.1 per cent of households. These access levels were above the district averages for all services except for access to a flush or chemical toilet (83.6 per cent). The number of households receiving free basic services in the Municipality has shown a significant increase from 2019/20 to 2020/21 in all services, this may be attributed to the impact of the COVID-19 pandemic on the local economy which resulted in job losses. In 2019, the economy of Bitou was valued at R3.37 billion (current prices) and employed 19866 people. Historical trends between 2015 and 2019 indicate that the municipal area realised an average annual growth rate of 0.7 per cent, which can mostly be attributed to the tertiary sector that registered a positive annual growth rate of 1.2 per cent. However, growth in the economy slowed to 6.4 per cent in 2020, with only the agriculture sector registering growth because of improved drought conditions and favourable commodity prices. In terms of unemployment, it stands at 24.2 per cent, which is the highest unemployment rate in the GRD area, even higher than the district at 15.4 per cent and Western Cape at 18.9 per cent unemployment rates. Unemployment has been volatile from 2010-2020. After slowly rising from 22.7 per cent in 2018 to 24.5 per cent in 2019, it declined slightly to 24.2 per cent in 2020.
8.2.	Explain the socio-economic value/contribution of the proposed development.
The hotel expansion project will create temporary construction jobs, providing employment opportunities for local workers. The construction project will span one year from mid-2025 and the estimated total investment cost is R90M. In order to provide a forecast of employment, the multipliers have been adjusted for inflation from 2019 to 2026, i.e. midway through the project. Average annual inflation for 2019 to 2023 was sourced from Macrotrends.net, and from 2024 to 2026 from Investec Bank forecasts as of August 2024.This inflation adjustment reduces the construction multiplier to 4.98 and the government multiplier to 6.02. To assess employment, the estimated imported content, at R18 million is excluded from the project expenditure, resulting in R72 million of spend excluding imports and VAT. Applying the employment multiplier indicates that the construction element of the project will support the equivalent of 365 annual jobs in construction, in its supply chain and investment activities, and spending of construction wages and profits.	
8.3.	Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.
The upgrade and extension of the hotel and parking have several positive social benefits for the local economy and community. Employing and purchasing locally and setting up business relationships with local people will help to create employment, transfer skills, stimulate entrepreneurial activity, increase investment in infrastructure, and boost the overall standard of living in your region Most of the projected employment opportunities for low and semi-skilled workers will benefit local Historically Disadvantaged (HD) members of the community. This presents an opportunity for local	

building contractors and community members employed in the building sector. Although employment opportunities during the construction phase are often considered temporary, it is important to recognise that workers in the construction industry inherently rely on these "temporary" jobs for their livelihood. In this context, "permanent" employment in the construction sector is linked to the ability of construction companies to continuously secure a series of temporary projects over time. Therefore, each development, including the proposed one, contributes to creating "permanent" employment in the construction sector.

During the operational phase the extended hotel will require additional staff for various roles such as housekeeping, maintenance, front desk, management, and food and beverage services. This will lead to long-term employment opportunities for local residents. The 24-bedroom hotel will employ 65 staff members inclusive of management, middle management, and the general workforce. It is the intention to employ all 65 of these staff members from the local Plettenberg Bay Community. Most (70%) of the employment opportunities will benefit Historically Disadvantaged Individuals (HDIs) from the local community.

All staff would receive ongoing training from an in-house team of specialists. The in-house team specialises in Food & Beverage, Guest Relations, Spa, Guiding, and Maintenance. The training programs for new employees will result in skill development and professional growth opportunities for residents. This can have long-term benefits for the community, increasing the employability and skill level of the local workforce.

The expanded hotel can accommodate more tourists, leading to increased spending in the local economy. Visitors will spend on local attractions, restaurants, shops, and recreational activities, boosting the overall revenue for local businesses. With more tourists' local suppliers and service providers will benefit. This includes food and beverage suppliers, laundry services, transportation companies, and local artisans. The multiplier effect will see a rise in demand for these businesses, leading to economic growth.

8.4.	Explain whether the proposed development will impact on people's health and well-being (e.g. in terms of noise, odours, visual character and sense of place etc) and how has this influenced the proposed development.

The renovation of the building and the parking area will have an aesthetic appeal that will enhance the look and feel of the area and should be to the benefit of the surrounding neighbours. The neighbours will be inconvenienced by the construction noise, this is however a temporary and minor impact.

The sense of place will not change. Currently, the building consists of a double-storey structure, measuring about 8.3m in height. It is proposed to expand the east side of the guest house to double-storey which will be visible to the properties to the north, but due to the elevated nature of the houses in relation to the guest house, they will still be able to overlook the property and the impact on their view will not be significant.

The extensions to the south and the east will transgress building lines and do not fall within the approved development footprint of the site. These extensions will however not be visible from the south as they will be obscured by the existing clump of milkwood trees that is more or less the same height as the current building as well as the planned western extension.

SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

1. Details of the alternatives identified and considered

1.1.	Property and site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred property and site site alternative.	
The preferred site is located across 3 properties: Remainder of Erf 2066, Erf 706 and Erf 10190. The existing guest house is located on Erf 10190 and the existing parking lot is located on RE/2066 and RE/706.	
Provide a description of any other property and site alternatives investigated.	
No site alternatives were investigated as the guest house and parking is existing infrastructures.	

Provide a motivation for the preferred property and site alternative including the outcome of the site selectin matrix.
Not applicable
Provide a full description of the process followed to reach the preferred alternative within the site.
Not applicable
Provide a detailed motivation if no property and site alternatives were considered.
The proposal is to upgrade the existing guest house and existing parking and construct a new beach shower deck and ablution block.
List the positive and negative impacts that the property and site alternatives will have on the environment.
Not applicable

1.2.	Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred activity alternative.
The preferred activity is to upgrade the Milkwood Manor Guest House and parking and to construct a new public ablution block and beach shower deck.
Provide a description of any other activity alternatives investigated.
No activity alternatives were explored for this proposal.
Provide a motivation for the preferred activity alternative.
Not applicable
Provide a detailed motivation if no activity alternatives exist.
Not applicable
List the positive and negative impacts that the activity alternatives will have on the environment.
Not applicable

1.3.	Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts

Provide a description of the preferred design or layout alternative.

The preferred layout consists of:

- Expanding to the Milkwood Manor Guest House by approx. 2071 m² (10 additional rooms)
- Expand and re-surface the existing parking lot by adding 32 new parking bays
- Construction of a beach shower deck
- Construction of an ablution block next to the existing pumpstation (16.8 m²)
- Construction of a new bus drop-off area
- Add new signage
- Add new landscaping
- Add new lighting

Figure 28: Preferred layout

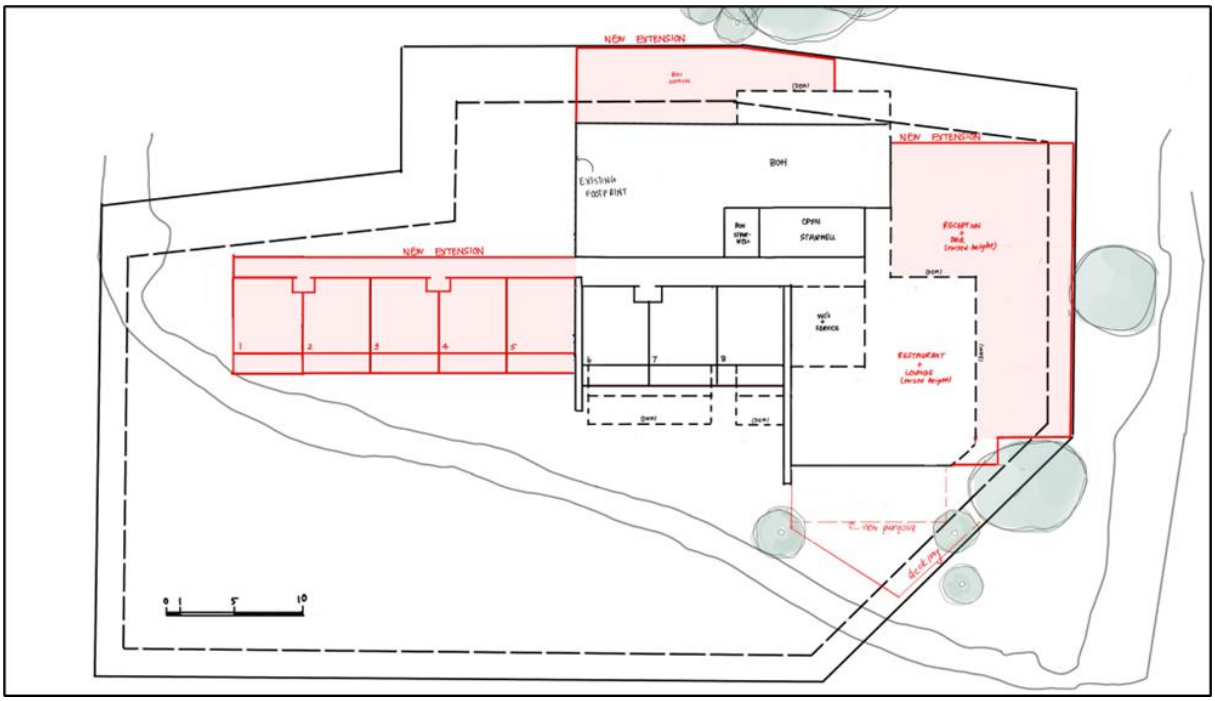

Figure 29: Preferred ground floor layout

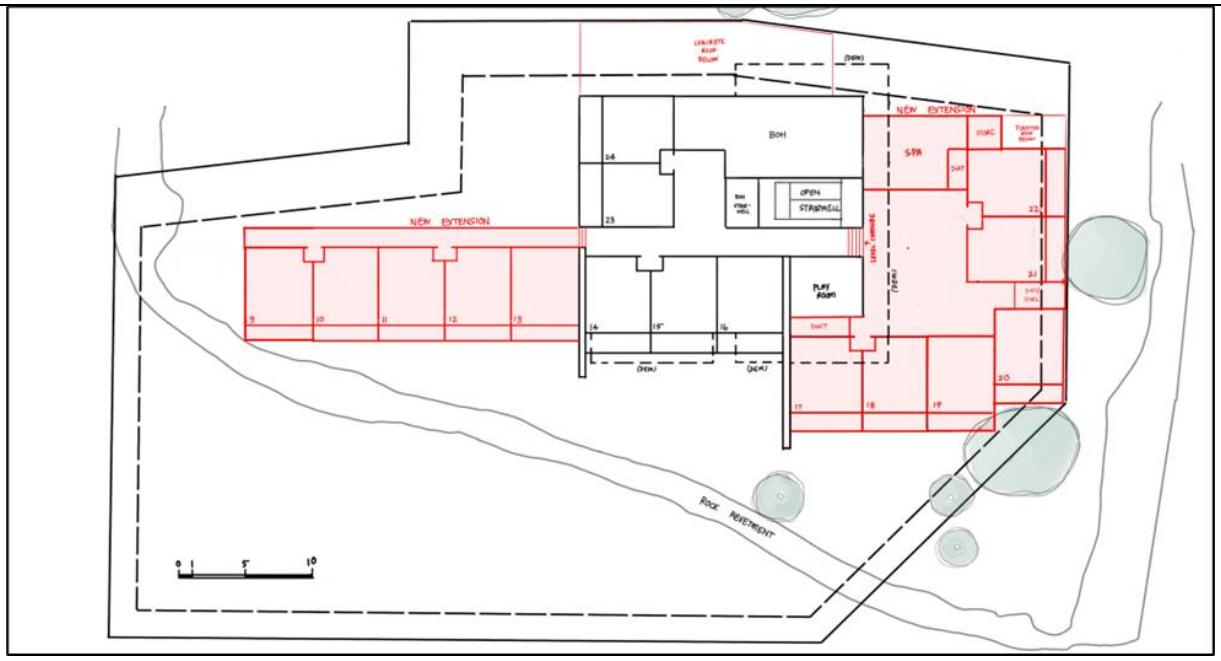

Figure 30: Preferred first floor layout

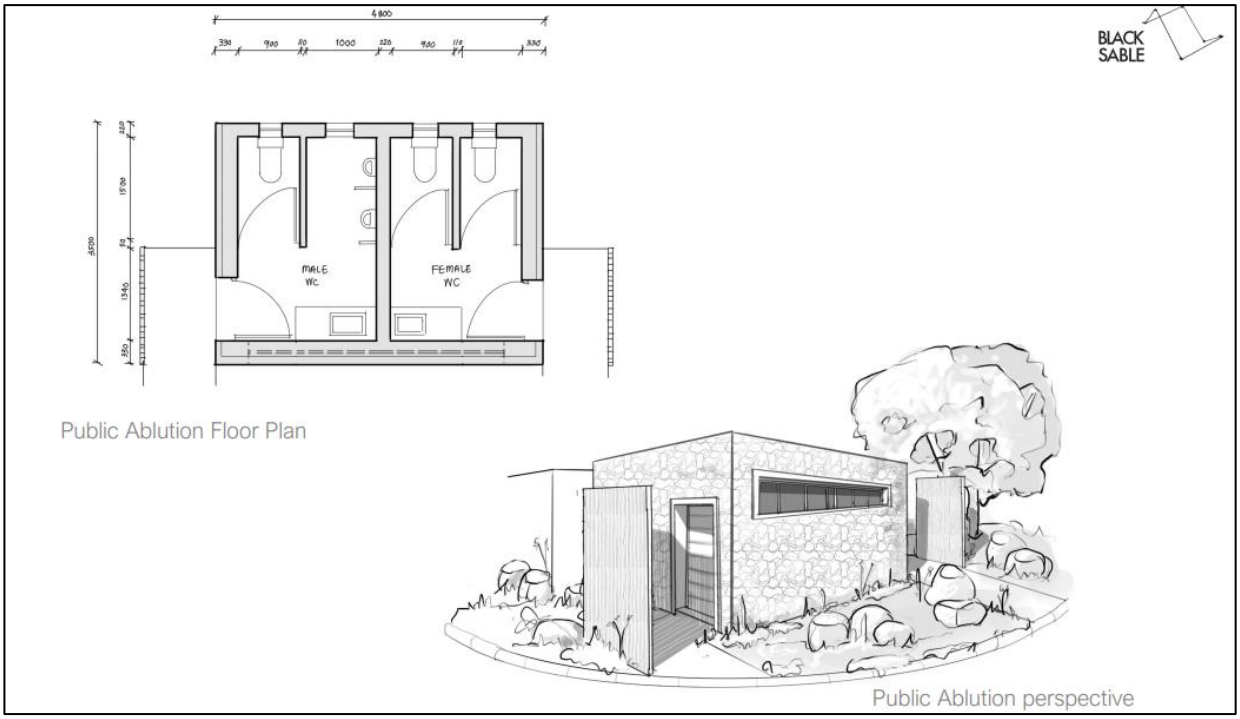

Figure 31: Preferred ablution block layout

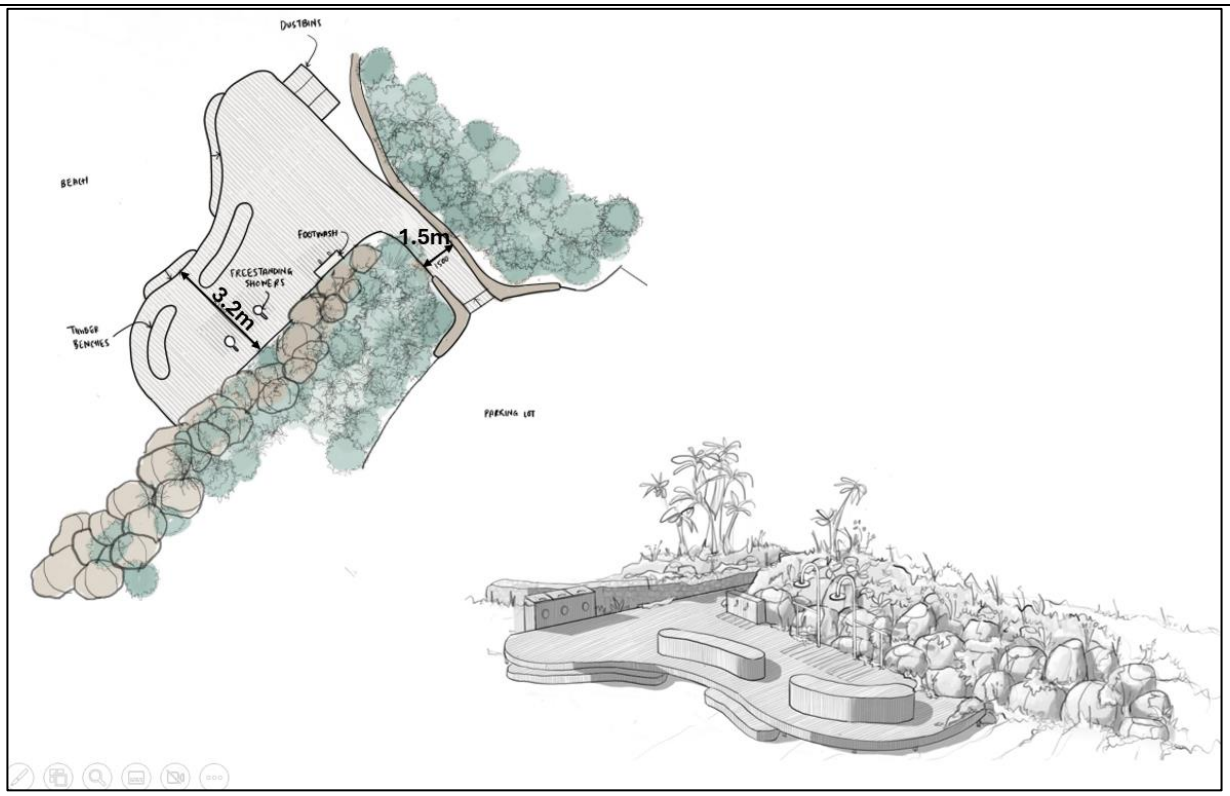

Figure 32:Preferred beach shower deck

Provide a description of any other design or layout alternatives investigated.

The alternative layout consists of:

- Expanding to the Milkwood Manor Guest House by approx. 2 160,76 m² (12 additional rooms)
- Expand and re-surface the existing parking lot by adding 32 new parking bays
- Construction of a beach shower deck
- Construction of an ablution block next to the existing beach entrance (21 m²)
- Construction of a new bus drop-off area
- Add new signage
- Add new landscaping
- Add new lighting

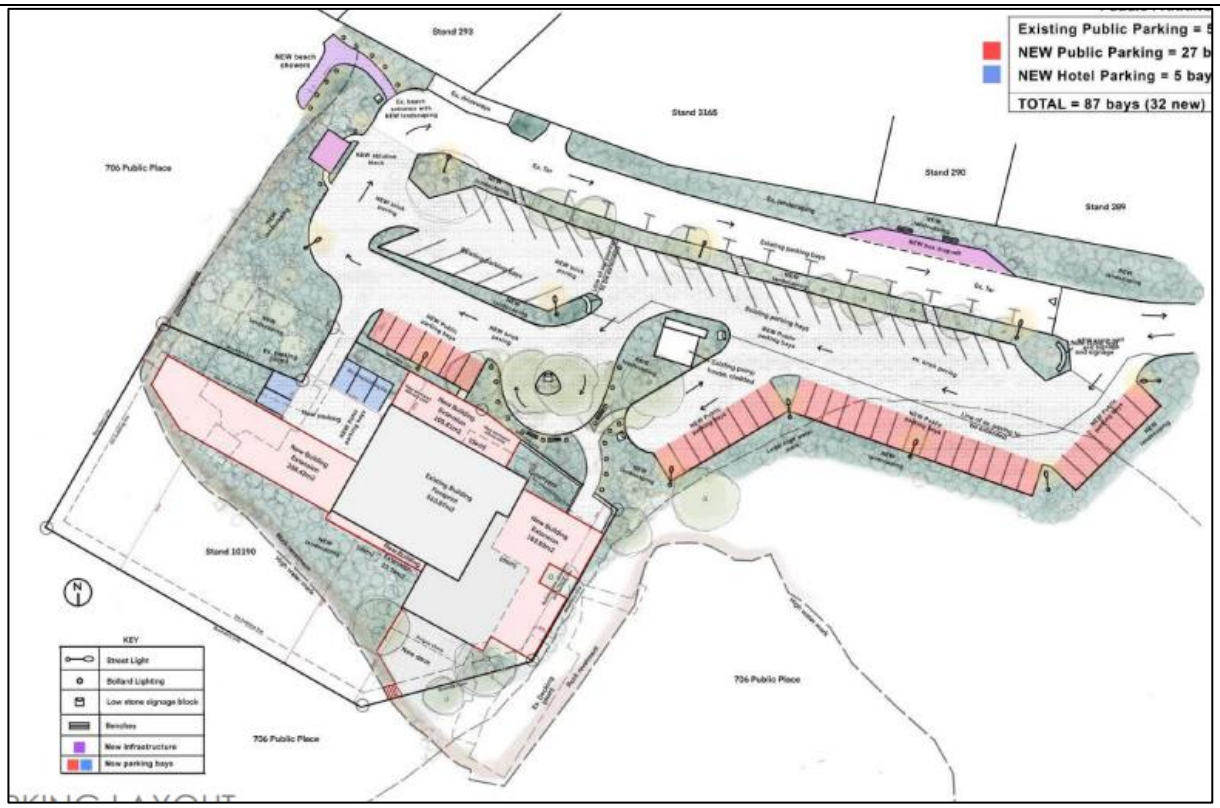

Figure 33: Alternative layout

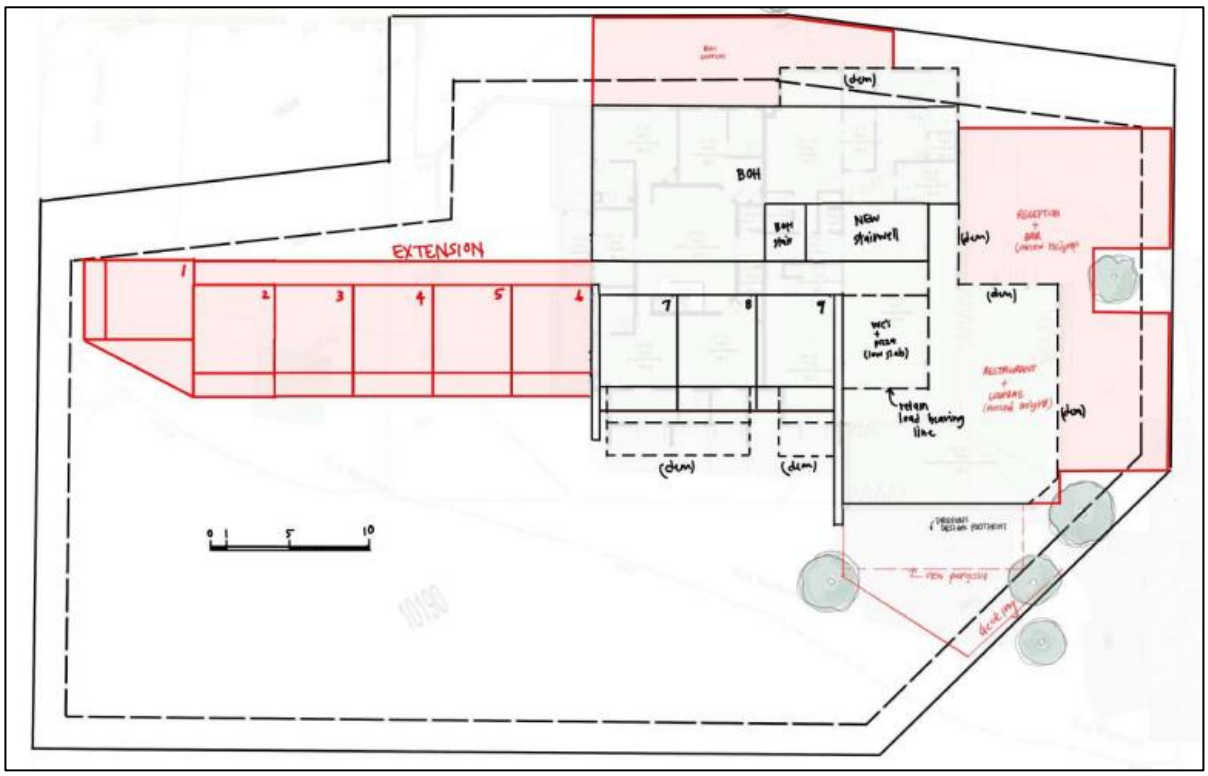

Figure 34: Alternative ground floor layout

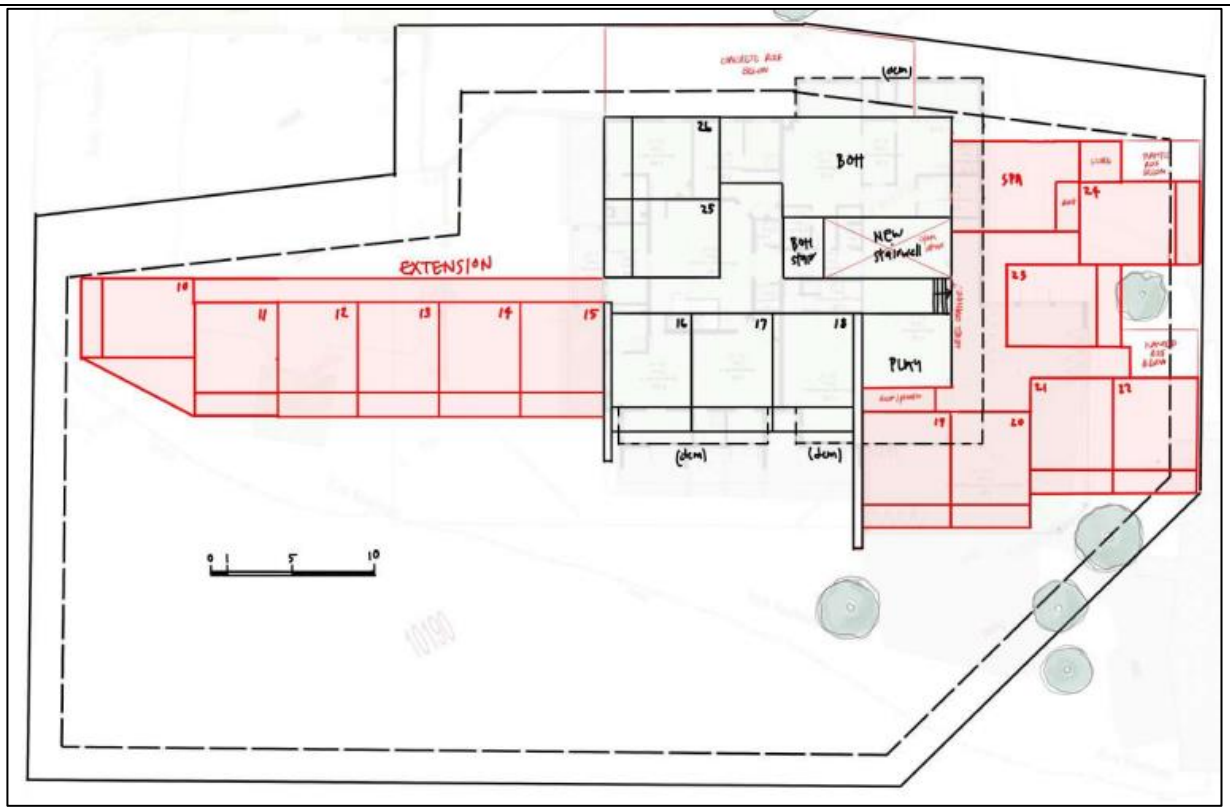

Figure 35: Alternative first floor layout

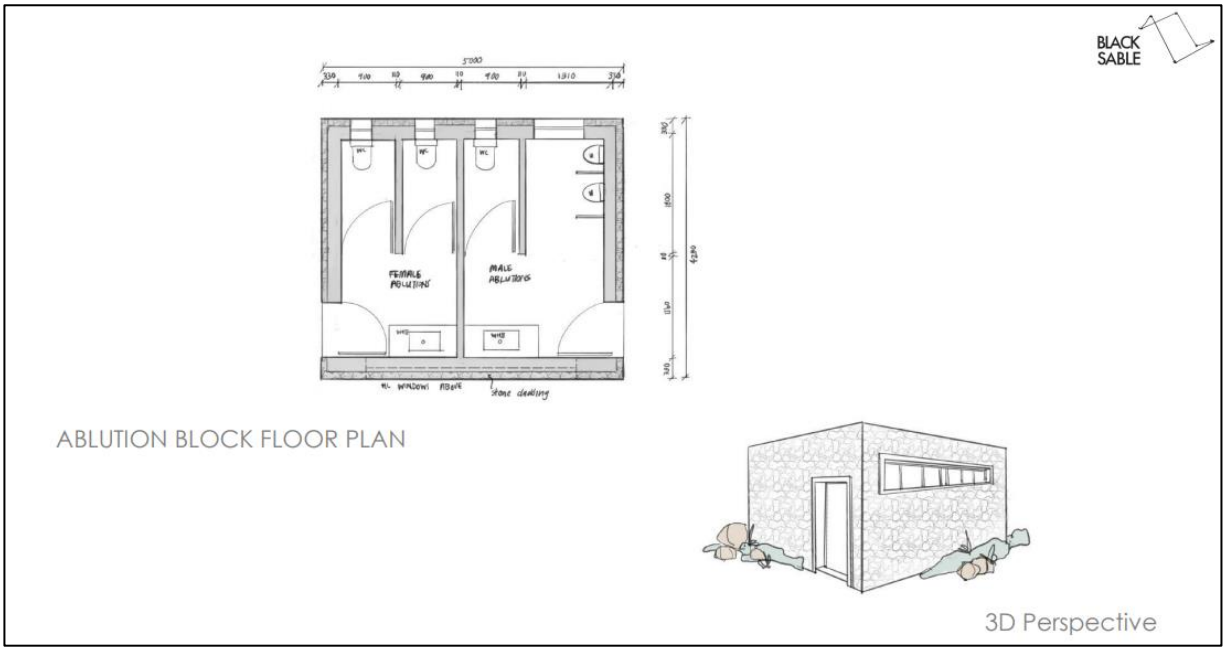

Figure 36: Alternative ablution block layout

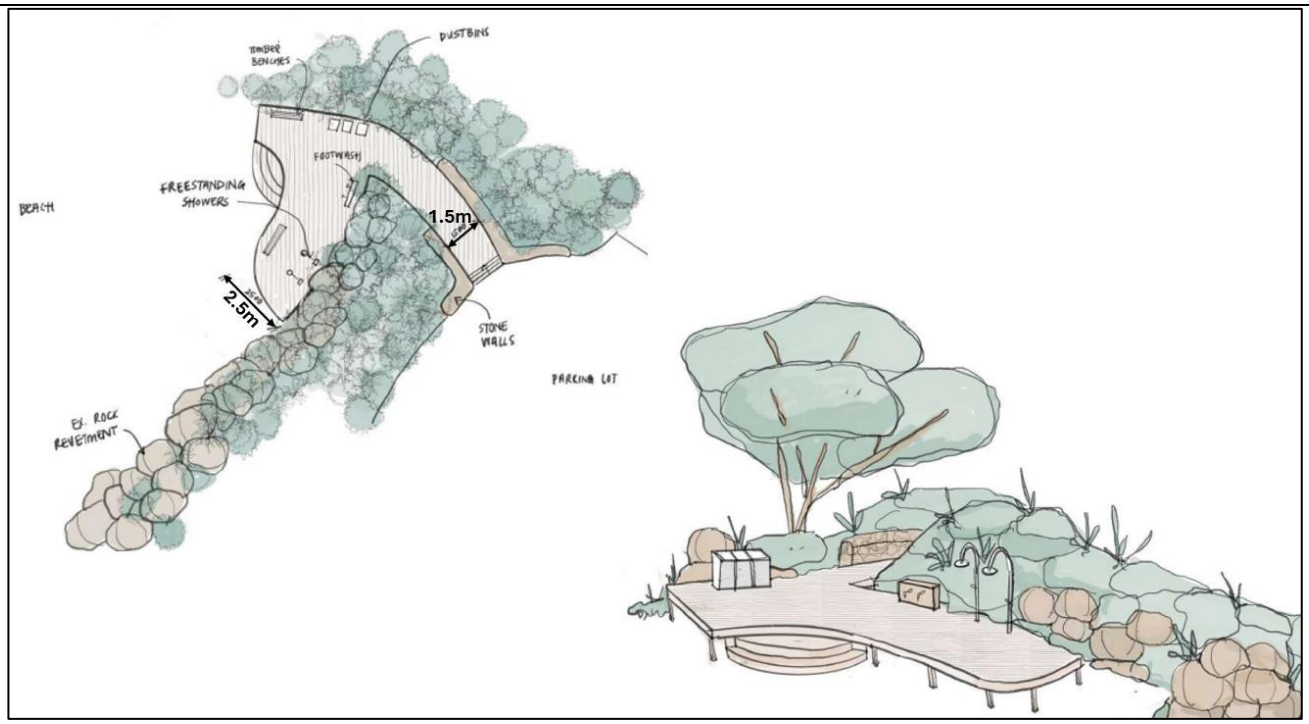

Figure 37: Alternative beach shower deck

Provide a motivation for the preferred design or layout alternative.

Preferred location of the ablution block
The coastal engineer recommended that the building and infrastructure associated with it should be moved away from the seaside boundary.

Preferred reduced footprint for the guest house layout
The coastal engineer recommended that the new eastern building extension be set back from the ocean by about 9.45m to accommodate increased overtopping such that any direct wave loading is avoided. This resulted in losing 2 rooms.

Provide a detailed motivation if no design or layout alternatives exist.

Not applicable

List the positive and negative impacts that the design alternatives will have on the environment.

Positive:

- Decrease chance of sewage spillage onto the beach
- Reduced footprint
- Increased resilience against high tide waves or storm events

Negative:

- Loss of undeveloped land

1.4.	Technology alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred technology alternative:

Not applicable

Provide a description of any other technology alternatives investigated.

Not applicable

Provide a motivation for the preferred technology alternative.

Not applicable

Provide a detailed motivation if no alternatives exist.

Not applicable

List the positive and negative impacts that the technology alternatives will have on the environment.

Not applicable

1.5.	Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred operational alternative.	
Not applicable	
Provide a description of any other operational alternatives investigated.	
Not applicable	
Provide a motivation for the preferred operational alternative.	
Not applicable	
Provide a detailed motivation if no alternatives exist.	
Not applicable	
List the positive and negative impacts that the operational alternatives will have on the environment.	
Not applicable	
1.6.	The option of not implementing the activity (the 'No-Go' Option).
Provide an explanation as to why the 'No-Go' Option is not preferred.	
The No-Go option is not preferred because all the impacts can be mitigated to Low or Very Low. The socio-economic impact for this proposal is very positive. The Bitou municipality will benefit financially from this project and the local community will benefit from job opportunities.	
1.7.	Provide and explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist.
Not applicable	
1.8.	Provide a concluding statement indicating the preferred alternatives, including the preferred location of the activity.
Taking the findings of the specialists into account, the impacts associated with Alternatives A and B are the same, as such the deciding factor for the Preferred Alternative A extends from the client.	

2. "No-Go" areas

Explain what "no-go" area(s) have been identified during identification of the alternatives and provide the co-ordinates of the "no-go" area(s).
The Estuarine Impact Assessment specialist identified estuarine and coastal habitat outside of the working area and undeveloped areas of the EFZ (i.e. estuarine and coastal habitat) within the property boundary (i.e. outside of the rock revetment) and outside of the property boundary as No-Go areas.

Figure 38: No-Go areas

3. Methodology to determine the significance ratings of the potential environmental impacts and risks associated with the alternatives.

Describe the methodology to be used in determining and ranking the nature, significance, consequences, extent, duration of the potential environmental impacts and risks associated with the proposed activity or development and alternatives, the degree to which the impact or risk can be reversed and the degree to which the impact and risk may cause irreplaceable loss of resources.

The assessment criteria utilised in this environmental impact assessment is based on, and adapted from, the Guideline on Impact Significance, Integrated Environmental Management Information Series 5 (Department of Environmental Affairs and Tourism (DEAT), 2002) and the Guideline 5: Assessment of Alternatives and Impacts in Support of the Environmental Impact Assessment Regulations (DEAT, 2006).

Determination of Extent (Scale):

Site specific	On site or within 100 m of the site boundary, but not beyond the property boundaries.
Local	The impacted area includes the whole or a measurable portion of the site and property, but could affect the area surrounding the development, including the neighbouring properties and wider municipal area.
Regional	The impact would affect the broader region (e.g., neighbouring towns) beyond the boundaries of the adjacent properties.
National	The impact would affect the whole country (if applicable).

Determination of Duration:

Temporary	The impact will be limited to the construction phase.
Short term	The impact will either disappear with mitigation or will be mitigated through a natural process in a period shorter than 8 months after the completion of the construction phase.
Medium term	The impact will last up to the end of the construction phase, where after it will be entirely negated in a period shorter than 3 years after the completion of construction activities.
Long term	The impact will continue for the entire operational lifetime of the development but will be mitigated by direct human action or by natural processes thereafter.
Permanent	This is the only class of impact that will be non-transitory. Such impacts are regarded to be irreversible, irrespective of what mitigation is applied.

Determination of Probability:

Improbable	The possibility of the impact occurring is very low, due either to the circumstances, design or experience.
Probable	There is a possibility that the impact will occur to the extent that provisions must therefore be made.
Highly probable	It is most likely that the impacts will occur at some stage of the development. Plans must be drawn up to mitigate the activity before the activity commences.
Definite	The impact will take place regardless of any prevention plans.

Determination of Significance (without mitigation):

No significance	The impact is not substantial and does not require any mitigation action.
Low	The impact is of little importance but may require limited mitigation.
Medium	The impact is of sufficient importance and is therefore considered to have a negative impact. Mitigation is required to reduce the negative impacts to acceptable levels.

Medium-High	The impact is of high importance and is therefore considered to have a negative impact. Mitigation is required to manage the negative impacts to acceptable levels.
High	The impact is of great importance. Failure to mitigate, with the objective of reducing the impact to acceptable levels, could render the entire development option or entire project proposal unacceptable. Mitigation is therefore essential.
Very High	The impact is critical. Mitigation measures cannot reduce the impact to acceptable levels. As such the impact renders the proposal unacceptable.

Determination of Significance (with mitigation):

No significance	The impact will be mitigated to the point where it is regarded to be insubstantial.
Low	The impact will be mitigated to the point where it is of limited importance.
Medium	Notwithstanding the successful implementation of the mitigation measures, the impact will remain of significance. However, taken within the overall context of the project, such a persistent impact does not constitute a fatal flaw.
High	Mitigation of the impact is not possible on a cost-effective basis. The impact continues to be of great importance, and taken within the overall context of the project, is considered to be a fatal flaw in the project proposal.

Determination of Reversibility:

Completely Reversible	The impact is reversible with implementation of minor mitigation measures
Partly Reversible	The impact is partly reversible but more intense mitigation measures
Barely Reversible	The impact is unlikely to be reversed even with intense mitigation measures
Irreversible	The impact is irreversible, and no mitigation measures exist

Determination of Degree to which an Impact can be Mitigated:

Can be mitigated	The impact is reversible with implementation of minor mitigation measures
Can be partly mitigated	The impact is partly reversible but more intense mitigation measures
Can be barely mitigated	The impact is unlikely to be reversed even with intense mitigation measures
Not able to mitigate	The impact is irreversible, and no mitigation measures exist

Determination of Loss of Resources:

No loss of resource	The impact will not result in the loss of any resources
Marginal loss of resource	The impact will result in marginal loss of resources
Significant loss of resources	The impact will result in significant loss of resources
Complete loss of resources	The impact will result in a complete loss of all resources

Determination of Cumulative Impact:

Negligible	The impact would result in negligible to no cumulative effects
Low	The impact would result in insignificant cumulative effects
Medium	The impact would result in minor cumulative effects

High	The impact would result in significant cumulative effects

Determination of Consequence significance:

Negligible	The impact would result in negligible to no consequences
Low	The impact would result in insignificant consequences
Medium	The impact would result in minor consequences
High	The impact would result in significant consequences

4. Assessment of each impact and risk identified for each alternative

Note: The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. The EAP may decide to include this section as Appendix J to this BAR.

Development/Construction Phase Impacts

Alternative:	**Preferred alternative A**	**Alternative B**	**No-Go Alternative**
PLANNING, DESIGN AND DEVELOPMENT PHASE			
ESTUARINE ASSESSMENT IMPACT 1			
Potential impact and risk:	**LOSS OF EFZ HABITAT (ESTUARINE) CAUSED BY THE EXPANSION OF THE PUBLIC CAR PARK.**		
Nature of impact:	Expansion of public car park		**No Impact**
Extent and duration of impact:	• Permanent • Site specific	• Permanent • Site specific	
Consequence of impact or risk:	Loss of estuarine habitat	Loss of estuarine habitat	
Probability of occurrence:	Definite	Definite	
Degree to which the impact may cause irreplaceable loss of resources:	Marginal Loss	Marginal Loss	
Degree to which the impact can be reversed:	Irreversible	Irreversible	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	Low	Low	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**	**Medium (-)**	**No Impact**
Degree to which the impact can be avoided:	Low	Low	
Degree to which the impact can be managed:	High	High	
Degree to which the impact can be mitigated:	Moderate	Moderate	
Proposed mitigation:	See below		
Residual impacts:	Low	Low	
Cumulative impact post mitigation:	Low	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**

Mitigation measures to reduce residual risk or enhance opportunities:

- Working areas must be clearly demarcated. Estuarine habitat outside of the working area must be designated as No-Go and no disturbance (i.e. trampling, smothering etc.) of estuarine habitat in this area is permitted.
- No excavated material must be dumped or stockpiled in the No-Go area.

- A comprehensive method statement must be drawn up which provides a clear step by step plan of the sequence of construction activities that will be undertaken. The method statement must aim to minimise the length of time that cleared areas remain exposed and vulnerable to erosion.
- Clearing of vegetation in the EFZ should ideally take place during the winter (May to July) months when the presence of nesting bird species is likely to be minimal.
- Alien invasive trees and shrubs must be removed from the remaining buffer (i.e. undeveloped portion of the EFZ).

Alternative:	**Preferred alternative A**	**Alternative B**	**No-Go Alternative**
PLANNING, DESIGN AND DEVELOPMENT PHASE			
ESTUARINE ASSESSMENT IMPACT 2			
Potential impact and risk:	**LOSS OF EFZ HABITAT (COASTAL) CAUSED BY THE CONSTRUCTION OF BEACH SHOWERS.**		
Nature of impact:	Construction of beach showers		**No Impact**
Extent and duration of impact:	• Permanent • Site specific	• Permanent • Site specific	
Consequence of impact or risk:	Loss of coastal dune habitat in the EFZ	Loss of coastal dune habitat in the EFZ	
Probability of occurrence:	Definite	Definite	
Degree to which the impact may cause irreplaceable loss of resources:	Marginal Loss	Marginal Loss	
Degree to which the impact can be reversed:	Fully reversible	Fully reversible	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	Negligible	Negligible	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**
Degree to which the impact can be avoided:	Unmanageable	Unmanageable	
Degree to which the impact can be managed:	High	High	
Degree to which the impact can be mitigated:	Moderate	Moderate	
Proposed mitigation:	See below		
Residual impacts:	Very Low	Very Low	
Cumulative impact post mitigation:	Negligible	Negligible	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**

Mitigation measures to reduce residual risk or enhance opportunities:

- Working areas must be clearly demarcated. Coastal estuarine habitat outside of the working area must be designated as No-Go and no disturbance (i.e. trampling, smothering etc.) of estuarine habitat in this area is permitted.
- No excavated material must be dumped or stockpiled in the No-Go area.

Alternative:	Preferred alternative A	Alternative B	No-Go Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE			
ESTUARINE ASSESSMENT IMPACT 3			
Potential impact and risk:	**EROSION AND SEDIMENTATION CAUSED BY CLEARING OF VEGETATION DURING CONSTRUCTION OF CAR PARK.**		
Nature of impact:	Erosion of exposed soil		**No Impact**
Extent and duration of impact:	• Permanent • Site specific	• Permanent • Site specific	
Consequence of impact or risk:	Sediment runoff and smothering of estuarine habitat	Sediment runoff and smothering of estuarine habitat	
Probability of occurrence:	Probable	Probable	
Degree to which the impact may cause irreplaceable loss of resources:	No Loss	No Loss	
Degree to which the impact can be reversed:	Fully reversible	Fully reversible	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	Low	Low	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**	**Medium (-)**	**No Impact**
Degree to which the impact can be avoided:	High	High	
Degree to which the impact can be managed:	High	High	
Degree to which the impact can be mitigated:	High	High	
Proposed mitigation:	See below		
Residual impacts:	Low	Low	
Cumulative impact post mitigation:	Low	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**

Mitigation measures to reduce residual risk or enhance opportunities:

- Working areas must be clearly demarcated to avoid unnecessary clearing of vegetation. Estuarine habitat outside of the working area must be designated as No-Go and no disturbance (i.e. trampling, smothering etc.) of estuarine habitat in this area is permitted.
- Construction of the car park must be planned for the dry season (May to July).
- A comprehensive method statement must be drawn up which provides a clear step by step plan of the sequence of construction activities that will be undertaken. The method statement must aim to minimise the length of time that cleared areas remain exposed and vulnerable to erosion.
- Silt fencing must be placed along the outer perimeter of the expanded park area to prevent sediment input in the event of a rainfall even.
- Any disturbed, exposed areas must be reprofiled to natural contours and re-vegetated.

Alternative:	Preferred alternative A	Alternative B	No-Go Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE			
ESTUARINE ASSESSMENT IMPACT 4			
Potential impact and risk:	**DISTURBANCE OF ESTUARINE AND COASTAL HABITAT CAUSED BY GENERAL CONSTRUCTION ACTIVITIES.**		
Nature of impact:	Construction activities, including stockpile and laydown areas, waste management, site access, refuelling of construction vehicles and machinery		**No Impact**
Extent and duration of impact:	• Permanent • Site specific	• Permanent • Site specific	
Consequence of impact or risk:	Physical disturbance and pollution (chemical and solid waste) of sensitive estuarine coastal and estuarine habitat		
Probability of occurrence:	Probable	Probable	
Degree to which the impact may cause irreplaceable loss of resources:	No Loss	No Loss	
Degree to which the impact can be reversed:	Fully reversible	Fully reversible	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	Low	Low	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**	**Medium (-)**	**No Impact**
Degree to which the impact can be avoided:	High	High	
Degree to which the impact can be managed:	High	High	
Degree to which the impact can be mitigated:	High	High	
Proposed mitigation:	See below		
Residual impacts:	None (no additional loss of estuarine habitat)		
Cumulative impact post mitigation:	Low	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**

Mitigation measures to reduce residual risk or enhance opportunities:

- Undeveloped areas of the EFZ (i.e. estuarine and coastal habitat) within the property boundary (i.e. outside of the rock revetment) and outside of the property boundary must be designated as No-Go areas.
- Access to the property via the beach/estuary is not permitted. Only the existing access from the car park can be used.
- No construction materials to be stored or stockpiled outside of the area delineated by the rock revetment or in any part of the undeveloped areas of the EFZ.
- Rubble and waste materials must be managed on site and must not be dumped or stockpiled within undeveloped areas of the EFZ.
- Chemical toilets should be provided on-site at 1 toilet per 10 persons.
- Waste from chemical toilets must be disposed of regularly (at least once a week) in a responsible manner by a registered waste contractor

Alternative:	Preferred alternative A	Alternative B	No-Go Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE			
TERRESTRIAL BIODIVERSITY ASSESSMENT IMPACT 1			
Potential impact and risk:	**PERMANENT OR TEMPORARY LOSS OF INDIGENOUS VEGETATION**		
Nature of impact:	Permanent or temporary loss of indigenous vegetation cover because of site clearing. Site clearing before construction will result in the blanket clearing of vegetation within the affected footprint.		**No Impact**
Extent and duration of impact:	• Local and limited to site • Short term (1-5 years)	• Local and limited to site • Short term (1-5 years)	
Consequence of impact or risk:	Loss of indigenous vegetation	Loss of indigenous vegetation	
Probability of occurrence:	Definite	Definite	
Degree to which the impact may cause irreplaceable loss of resources:	Low to very low	Low to very low	
Degree to which the impact can be reversed:	High	High	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	None	None	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**
Degree to which the impact can be avoided:	Unavoidable	Unavoidable	
Degree to which the impact can be managed:	High	High	
Degree to which the impact can be mitigated:	High	High	
Proposed mitigation:	See below		
Residual impacts:	None	None	
Cumulative impact post mitigation:	None	None	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very Low (-)**	**Very Low (-)**	**No Impact**

Mitigation measures to reduce residual risk or enhance opportunities:

- No clearing outside of development footprint to take place.
- Surrounding Dune Thicket and Estuarine habitat is to be conserved and not harmed during the construction process.
- Rehabilitation of vegetation of the site must be done as described in the Rehabilitation Plans.
- Trees and shrubs that are directly affected by the operations may be felled or cleared but only by the expressed written permission of the ECO.

Alternative:	Preferred alternative A	Alternative B	No-Go Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE			
TERRESTRIAL BIODIVERSITY ASSESSMENT IMPACT 2			
Potential impact and risk:	**LOSS OF FLORA SPECIES OF CONSERVATION**		
Nature of impact:	Loss of flora Species of Conservation Concern during pre-construction site clearing activities. Several special of concern are known from surrounding areas, which could be destroyed during site preparation, none of which were confirmed to be present.		**No Impact**
Extent and duration of impact:	• Local and limited to site • Short term (1-5 years)	• Local and limited to site • Short term (1-5 years)	
Consequence of impact or risk:	Loss of Flora SCC	Loss of Flora SCC	
Probability of occurrence:	Probable	Probable	
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low	
Degree to which the impact can be reversed:	High	High	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	None	None	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**
Degree to which the impact can be avoided:	High – No SCC found on site	High – No SCC found on site	
Degree to which the impact can be managed:	Manageable	Manageable	
Degree to which the impact can be mitigated:	Can be mitigated	Can be mitigated	
Proposed mitigation:	A flora search and rescue is unlikely to be required and no protected flora were found to be present within a natural context.		
Residual impacts:	None	None	
Cumulative impact post mitigation:	None	None	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very Low (-)**	**Very Low (-)**	**No Impact**

Mitigation measures to reduce residual risk or enhance opportunities:

- Workers are NOT allowed to collect any flora species. All flora species remain the property of the landowner and must not be disturbed, upset or used without their expressed consent.

Alternative:	Preferred alternative A	Alternative B	No-Go Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE			
TERRESTRIAL BIODIVERSITY ASSESSMENT IMPACT 3			
Potential impact and risk:	**ALIEN INVASIVE SPECIES**		
Nature of impact:	Susceptibility of post construction disturbed areas to invasion by exotic and alien invasive species and removal of exotic and alien invasive species during construction. Post construction disturbed areas having no vegetation cover are often susceptible to invasion by weedy and alien species, which can not only become invasive but also prevent natural flora from becoming established.		**No Impact**
Extent and duration of impact:	• Local and limited to site • Medium term (5-15 years)	• Local and limited to site • Medium term (5-15 years)	
Consequence of impact or risk:	Alien infestation on site	Alien infestation on site	
Probability of occurrence:	High	High	
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low	
Degree to which the impact can be reversed:	High	High	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	None	None	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**
Degree to which the impact can be avoided:	Avoidable	Avoidable	
Degree to which the impact can be managed:	High	High	
Degree to which the impact can be mitigated:	High	High	
Proposed mitigation:	A suitable weed management strategy must be implemented in the construction phase and carried through the operational phase.		
Residual impacts:	None	None	
Cumulative impact post mitigation:	None	None	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very Low (-)**	**Very Low (-)**	**No Impact**

Mitigation measures to reduce residual risk or enhance opportunities:

- Alien species must be removed from the site as per the National Environmental Management: Biodiversity Act (No. 10 of 2004) requirements.
- The Contractor is responsible for the removal of alien species within all areas disturbed during construction activities. Disturbed areas include (but are not limited to) access roads, construction camps, site areas and temporary storage areas.
- In consultation with relevant authorities, the Engineer may order the removal of alien plants (when necessary). Areas within the confines of the site are to be included.
- All alien plant material (including brushwood and seeds) should be removed from site and disposed of at a registered waste disposal site. Should brushwood be utilised for soil stabilization or mulching, it must be seed free.
- After clearing is completed, an appropriate cover crop may be required, should natural re-establishment of grasses not take place in a timely.

Alternative:	Preferred alternative A	Alternative B	No-Go Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE			
TERRESTRIAL BIODIVERSITY ASSESSMENT IMPACT 4			
Potential impact and risk:	**EROSION**		
Nature of impact:	Susceptibility of some areas to erosion because of construction related disturbances. Removal of vegetation cover and soil disturbance may result in some areas being susceptible to soil erosion after completion of the activity.		**No Impact**
Extent and duration of impact:	• Local and limited to site • Medium term (5-15 years)	• Local and limited to site • Medium term (5-15 years)	
Consequence of impact or risk:	Increased erosion on site	Increased erosion on site	
Probability of occurrence:	Probable	Probable	
Degree to which the impact may cause irreplaceable loss of resources:	Very low	Very low	
Degree to which the impact can be reversed:	Reversible	Reversible	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	None	None	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**
Degree to which the impact can be avoided:	Avoidable	Avoidable	
Degree to which the impact can be managed:	High	High	
Degree to which the impact can be mitigated:	High	High	
Proposed mitigation:	See below		
Residual impacts:	None	None	
Cumulative impact post mitigation:	None	None	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very Low (-)**	**Very Low (-)**	**No Impact**

Mitigation measures to reduce residual risk or enhance opportunities:

- Suitable measures must be implemented in areas that are susceptible to erosion, including the stormwater structures around the parking areas as well as where mobile dune sands are present. Areas must be rehabilitated, and a suitable cover crop planted and/or other structures constructed.
- If natural vegetation re-establishment does not occur, a suitable grass must be applied on non-sand areas.
- Stormwater Management Plans must be developed for the site and should include: the management of stormwater during construction, the installation of stormwater and erosion control infrastructure, the management of infrastructure after completion of construction.
- Temporary drainage works may be required to prevent stormwater to prevent silt laden surface water from draining into the estuary in proximity to the site. Stormwater must be prevented from entering or running off in an unmanaged manner.
- To ensure that site is not subjected to excessive erosion and capable of drainage runoff with minimum risk of scour, their slopes should be profiled at a maximum 1:3 gradient.
- Diversion channels should be constructed ahead of the open cuts, and above emplacement areas and stockpiles to intercept clean runoff and divert it around disturbed areas into the natural drainage system downstream of the site.

- Existing vegetation must be retained as far as possible to minimise erosion problems.
- It is importation that the rehabilitation of site is planned and completed in such a way that the runoff water will not cause erosion.
- Sediment-laden runoff from cleared areas must be prevented from entering the estuary.
- No estuary or surface water may be affected by silt emanating from the site.

Alternative:	**Preferred alternative A**	**Alternative B**	**No-Go Alternative**
PLANNING, DESIGN AND DEVELOPMENT PHASE			
TERRESTRIAL BIODIVERSITY ASSESSMENT IMPACT 5			
Potential impact and risk:	**ECOLOGICAL, AQUATIC AND RIPARIAN PROCESSES**		
Nature of impact:	Activity may result in disturbances to ecological processes. No Aquatic, estuarine and riparian processes will be affected.		**No Impact**
Extent and duration of impact:	• Local and limited to site • Very short to short term (0-5 years)	• Local and limited to site • Very short to short term (0-5 years)	
Consequence of impact or risk:	Disturbance to ecological, aquatic and riparian processes.	Disturbance to ecological, aquatic and riparian processes.	
Probability of occurrence:	Probable	Probable	
Degree to which the impact may cause irreplaceable loss of resources:	Very low	Very low	
Degree to which the impact can be reversed:	Reversible	Reversible	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	None	None	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**
Degree to which the impact can be avoided:	Avoidable	Avoidable	
Degree to which the impact can be managed:	High	High	
Degree to which the impact can be mitigated:	High	High	
Proposed mitigation:	Adequate measures to be implemented for erosion and stormwater management from the site and parking areas into the adjacent estuary (see Terrestrial Impact 4 proposed mitigation measures)		
Residual impacts:	None	None	
Cumulative impact post mitigation:	None	None	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very Low (-)**	**Very Low (-)**	**No Impact**

Alternative:	Preferred alternative A	Alternative B	No-Go Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE			
TERRESTRIAL BIODIVERSITY ASSESSMENT IMPACT 6			
Potential impact and risk:	**FAUNAL SPECIES, HABITAT AND PROCESSES**		
Nature of impact:	Loss of faunal SCC due to construction activities: Activities associated with bush clearing, killing of perceived dangerous fauna, may lead to increased mortalities among faunal species. Loss of Faunal Habitat: Activity may result in the loss of habitat for faunal species, which could result in disturbance and displacement of faunal species. Impacts to faunal processes because of the activity.		**No Impact**
Extent and duration of impact:	• Local and limited to site • Very short term (0-1 years)	• Local and limited to site • Very short term (0-1 years)	
Consequence of impact or risk:	Loss of faunal SCC, loss of faunal habitat and disturbance to faunal processes.	Loss of faunal SCC, loss of faunal habitat and disturbance to faunal processes.	
Probability of occurrence:	Loss of faunal SCC: Probable Loss of faunal habitat: Definite Disturbance to faunal processes: Probable	Loss of faunal SCC: Probable Loss of faunal habitat: Definite Disturbance to faunal processes: Probable	
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low	
Degree to which the impact can be reversed:	Reversible	Reversible	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	None	None	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**
Degree to which the impact can be avoided:	Medium to High	Medium to High	
Degree to which the impact can be managed:	High	High	
Degree to which the impact can be mitigated:	High	High	
Proposed mitigation:	See below		
Residual impacts:	None	None	
Cumulative impact post mitigation:	None	None	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very Low (-)**	**Very Low (-)**	**No Impact**

Mitigation measures to reduce residual risk or enhance opportunities:

- The habitats and microhabitats present on the project site are not unique and are widespread in the general area, hence the local impact associated with the footprint would be of low significance if mitigation measures are adhered to.
- Small mammals within the habitat on and around the affected area are generally mobile and likely to be transient to the area. The risk of species of special concern is low, and it is unlikely that there will be any impact to populations of such species because of the activity.

- A faunal search and rescue is unlikely to be required and no protected species are likely to be affected.
- No animals are to be harmed or killed during the course of operations.
- No snares or harming of any faunal species permitted.

Alternative:	**Preferred alternative A**	**Alternative B**	**No-Go Alternative**
PLANNING, DESIGN AND DEVELOPMENT PHASE			
CONSTRUCTION RELATED JOB OPPORTUNITIES			
Potential impact and risk:	**IT IS ANTICIPATED THAT CONSTRUCTION RELATED COSTS WILL BE IN THE REGION OF R72 MILLION TO R90 MILLION**		
Nature of impact:	Applying the employment multiplier indicates that the construction element of the project will support the equivalent of 365 annual jobs in construction, in its supply chain and investment activities, and spending of construction wages and profits.		**No Impact**
Extent and duration of impact:	• Local • Short term	• Local • Short term	
Consequence of impact or risk:	Capital influx for businesses involved and knock on effect as the businesses that will supply services and materials for the development will benefit from the capital influx and job creation.		
Probability of occurrence:	Definite		
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resources		
Degree to which the impact can be reversed:	Not applicable		
Indirect impacts:	Growth for business involved in the development and general influx of capital into the construction sector support industries. Temporary construction job creation for the community.		
Cumulative impact prior to mitigation:	None		
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (+)**		**No Impact**
Degree to which the impact can be avoided:	Unavoidable		
Degree to which the impact can be managed:	Can be managed by encouraging proponent to support local business and employ local residents.		
Degree to which the impact can be mitigated:	Support of local businesses and employment of local residents can be encouraged but not guaranteed.		
Proposed mitigation:	Local business and employment of local residents should be supported as far as possible		
Residual impacts:	Certain services or materials may need to be sourced from outside of the George Municipal area		
Cumulative impact post mitigation:	None	None	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (+)**		**No Impact**

Alternative:	Preferred alternative A	Alternative B	No-Go Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE			
IMPACT GENERATED BY CONSTRUCTION ACTIVITIES			
Potential impact and risk:	**CONSTRUCTION RELATED NOISE**		
Nature of impact:	Negative		No Impact
Extent and duration of impact:	• Local • Temporary		
Consequence of impact or risk:	Negligible • Frustrations and disruptions experienced by surrounding landowners • Detract from sense of place (peacefulness)		
Probability of occurrence:	Definite		
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resource		
Degree to which the impact can be reversed:	High		No impact
Indirect impacts:	None identified		
Cumulative impact prior to mitigation:	• Nuisance from construction noise at inappropriate hours		
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**		**No Impact**
Degree to which the impact can be avoided:	Not avoidable		
Degree to which the impact can be managed:	Medium		
Degree to which the impact can be mitigated:	Medium		
Proposed mitigation:	• Restricting construction activities to normal construction hours.		
Residual impacts:	Non-identified		
Cumulative impact post mitigation:	• Less noise disturbance		
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**		**No Impact**

Operational Phase Impacts

Alternative:	Preferred alternative A	Alternative B	No-Go Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE			
ESTUARINE ASSESSMENT IMPACT 5			
Potential impact and risk:	**EROSION OF ESTUARINE HABITAT CAUSED BY INCREASED STORMWATER RUNOFF FROM THE EXPANDED CAR PARK**		
Nature of impact:	Increased stormwater runoff from the expanded car park.		**No Impact**
Extent and duration of impact:	• Permanent • Site specific	• Permanent • Site specific	
Consequence of impact or risk:	Erosion of estuarine habitat		
Probability of occurrence:	Highly Probable	Highly Probable	

Degree to which the impact may cause irreplaceable loss of resources:	Marginal Loss	Marginal Loss	
Degree to which the impact can be reversed:	Fully reversible	Fully reversible	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	Low	Low	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**	**Medium (-)**	**No Impact**
Degree to which the impact can be avoided:	High	High	
Degree to which the impact can be managed:	High	High	
Degree to which the impact can be mitigated:	High	High	
Proposed mitigation:	See below		
Residual impacts:	Low	Low	
Cumulative impact post mitigation:	Low	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**

Mitigation measures to reduce residual risk or enhance opportunities:

- The stormwater management plan must be implemented as specified in Section B4.4
- Silt and interception traps must be routinely inspected and cleared to ensure that they continue to operate as designed.

Alternative:	**Preferred alternative A**	**Alternative B**	**No-Go Alternative**
PLANNING, DESIGN AND DEVELOPMENT PHASE			
TERRESTRIAL BIODIVERSITY ASSESSMENT IMPACT 7			
Potential impact and risk:	**ALIEN INVASIVE SPECIES**		
Nature of impact:	Susceptibility of post construction disturbed areas to invasion by exotic and alien invasive species and removal of exotic and alien invasive species during construction. Post construction disturbed areas having no vegetation cover are often susceptible to invasion by weedy and alien species, which can not only become invasive but also prevent natural flora from becoming established.		**No Impact**
Extent and duration of impact:	• Local and limited to site • Medium term (5-15 years)	• Local and limited to site • Medium term (5-15 years)	
Consequence of impact or risk:	Alien infestation on site	Alien infestation on site	
Probability of occurrence:	High	High	
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low	
Degree to which the impact can be reversed:	High	High	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	None	None	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**
Degree to which the impact can be avoided:	Avoidable	Avoidable	

Degree to which the impact can be managed:	High	High	
Degree to which the impact can be mitigated:	High	High	
Proposed mitigation:	See below		
Residual impacts:	None	None	
Cumulative impact post mitigation:	None	None	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very Low (-)**	**Very Low (-)**	**No Impact**

Mitigation measures to reduce residual risk or enhance opportunities:

- After clearing is completed, an appropriate cover crop may be required, should natural re-establishment of grasses not take place in a timely manner.
- A suitable weed management strategy to be implemented in and around the site post construction, which is likely to result in proliferation of weeds in disturbed areas on completion.

Alternative:	**Preferred alternative A**	**Alternative B**	**No-Go Alternative**
PLANNING, DESIGN AND DEVELOPMENT PHASE			
TERRESTRIAL BIODIVERSITY ASSESSMENT IMPACT 8			
Potential impact and risk:	**EROSION**		
Nature of impact:	Removal of vegetation cover and soil disturbance may result in some areas being susceptible to soil erosion after completion of the activity.		**No Impact**
Extent and duration of impact:	• Local and limited to site • Medium term (5-15 years)	• Local and limited to site • Medium term (5-15 years)	
Consequence of impact or risk:	Increased erosion on site	Increased erosion on site	
Probability of occurrence:	Probable	Probable	
Degree to which the impact may cause irreplaceable loss of resources:	Very low	Very low	
Degree to which the impact can be reversed:	Reversible	Reversible	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	None	None	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**
Degree to which the impact can be avoided:	Avoidable	Avoidable	
Degree to which the impact can be managed:	High	High	
Degree to which the impact can be mitigated:	High	High	
Proposed mitigation:	• Suitable measures must be implemented in areas that are susceptible to erosion, including the stormwater structures around the parking areas as well as where mobile dune sands are present. Areas must be rehabilitated, and a suitable cover crop planted and/or other structures constructed. • If natural vegetation re-establishment does not occur, a suitable grass must be applied on non-sand areas.		
Residual impacts:	None	None	

Cumulative impact post mitigation:	None	None	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very Low (-)**	**Very Low (-)**	**No Impact**

Mitigation measures to reduce residual risk or enhance opportunities:

- Rehabilitation is necessary to control erosion and sedimentation of all eroded areas (where works will take place).
- Areas where construction is completed should be rehabilitated immediately.
- Areas to be disturbed in future activities will be kept as small as possible (i.e. conducting the operations in phases), thereby limiting the scale of erosion.
- Slopes will be profiled to ensure that they are not subjected to excessive erosion but capable of drainage runoff with minimum risk of scour (maximum 1:3 gradient).
- Existing vegetation will be retained as far as possible to minimize erosion problems.

Alternative:	**Preferred alternative A**	**Alternative B**	**No-Go Alternative**
PLANNING, DESIGN AND DEVELOPMENT PHASE			
TERRESTRIAL BIODIVERSITY ASSESSMENT IMPACT 9			
Potential impact and risk:	**ECOLOGICAL, AQUATIC AND RIPARIAN PROCESSES**		
Nature of impact:	Activity may result in disturbances to ecological processes. No Aquatic and riparian processes will be affected.		**No Impact**
Extent and duration of impact:	• Local and limited to site • Very short to short term (0-5 years)	• Local and limited to site • Very short to short term (0-5 years)	
Consequence of impact or risk:	Disturbance to ecological, aquatic and riparian processes.	Disturbance to ecological, aquatic and riparian processes.	
Probability of occurrence:	Probable	Probable	
Degree to which the impact may cause irreplaceable loss of resources:	Very low	Very low	
Degree to which the impact can be reversed:	Reversible	Reversible	
Indirect impacts:	None identified.	None identified.	
Cumulative impact prior to mitigation:	None	None	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low (-)**	**Low (-)**	**No Impact**
Degree to which the impact can be avoided:	Avoidable	Avoidable	
Degree to which the impact can be managed:	High	High	
Degree to which the impact can be mitigated:	High	High	
Proposed mitigation:	Adequate measures to be implemented for erosion and stormwater management from the site and parking areas into the adjacent estuary.		
Residual impacts:	None	None	
Cumulative impact post mitigation:	None	None	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very Low (-)**	**Very Low (-)**	**No Impact**

Alternative:	Preferred alternative A	Alternative B	No-Go Alternative
PLANNING, DESIGN AND DEVELOPMENT PHASE			
OPERATIONAL RELATED JOB OPPORTUNITIES			
Potential impact and risk:	**POST-CONSTRUCTION, THE EXTENDED HOTEL WILL REQUIRE ADDITIONAL STAFF**		
Nature of impact:	Post-construction, the extended hotel will require additional staff for various roles such as housekeeping, maintenance, front desk, management, and food and beverage services. This will lead to long-term employment opportunities for local residents. The 24-bedroom hotel will employ 65 staff members inclusive of management, middle management, and the general workforce. It is the intention to employ all 65 of these staff members from the local Plettenberg Bay Community. Most (70%) of the employment opportunities will benefit Historically Disadvantaged Individuals (HDIs) from the local community.		**No Impact**
Extent and duration of impact:	• Local • Long term	• Local • Long term	
Consequence of impact or risk:	Long term job opportunities for 65 staff members		
Probability of occurrence:	Definite		
Degree to which the impact may cause irreplaceable loss of resources:	No loss of resources		
Degree to which the impact can be reversed:	Not applicable		
Indirect impacts:	Improved quality of life for community members.		
Cumulative impact prior to mitigation:	None		
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (+)**		**No Impact**
Degree to which the impact can be avoided:	Unavoidable		
Degree to which the impact can be managed:	Can be managed by encouraging proponent to employ local residents.		
Degree to which the impact can be mitigated:	Support of employment of local residents can be encouraged but not guaranteed.		
Proposed mitigation:	Employment of local residents should be supported as far as possible		
Residual impacts:			
Cumulative impact post mitigation:	None	None	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (+)**		**No Impact**

SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

1.	Provide a summary of the findings and impact management measures identified by all Specialist and an indication of how these findings and recommendations have influenced the proposed development.

Table 5 below summarises the potential Impacts associated with the proposed upgrades and expansion to the Milkwood Manor Guest House and parking, post mitigation. Please refer to the Section I (2) for the proposed mitigation measures to ensure the corresponding rating post mitigation.

Table 5: Summary of Impacts Post Mitigation

Impact	Preferred Alternative A	Alternative B	No-Go Alternative
Construction Phase			
Loss of EFZ (estuarine) habitat caused by the expansion of the car park	**Low (-)**	**Low (-)**	**No Impact**
Loss of EFZ habitat (coastal) caused by the construction of beach showers	**Low (-)**	**Low (-)**	**No Impact**
Erosion and sedimentation caused by clearing of vegetation during construction of the car park	**Low (-)**	**Low (-)**	**No Impact**
Disturbance of estuarine and coastal habitat caused by general construction activities	**Low (-)**	**Low (-)**	**No Impact**
Permanent or temporary loss of indigenous vegetation	**Very Low (-)**	**Very Low (-)**	**No Impact**
Loss of flora species of conservation concern caused by pre-construction clearing	**Very Low (-)**	**Very Low (-)**	**No Impact**
Infestation of alien invasive species	**Very Low (-)**	**Very Low (-)**	**No Impact**
Erosion caused by construction related disturbances	**Very Low (-)**	**Very Low (-)**	**No Impact**
Disturbances to ecological, aquatic and riparian processes caused by construction activities	**Very Low (-)**	**Very Low (-)**	**No Impact**
Loss of faunal species and habitat and disturbance of faunal processes cause by construction activities	**Very Low (-)**	**Very Low (-)**	**No Impact**
Construction related job opportunities	**Medium (+)**	**Medium (+)**	**No Impact**
Noise disturbance due to construction activities	**Low (-)**	**Low (-)**	**No Impact**
Operational Phase			
Erosion of estuarine habitat caused by increased stormwater runoff from the expanded car park	**Low (-)**	**Low (-)**	**No Impact**
Infestation of alien invasive species	**Very Low (-)**	**Very Low (-)**	**No Impact**
Erosion after completion of the activity.	**Very Low (-)**	**Very Low (-)**	**No Impact**
Disturbances to ecological, aquatic and riparian processes caused by construction activities	**Very Low (-)**	**Very Low (-)**	**No Impact**
Operational related job opportunities	**Medium (+)**	**Medium (+)**	**No Impact**

Estuarine Impact Assessment, Appendix G1:
Renovations to the existing Milkwood Manor House will occur in close proximity to estuarine and coastal habitat. Impacts associated with the renovations to the house are however manageable and can be mitigated to result in low impacts and no residual impact on biodiversity. The expansion to the car park will result in the permanent transformation of a small area of the EFZ and is not aligned to CBA management objectives and macrophyte RQOs for the estuary. The open water body of the estuary will remain well buffered by dense reed vegetation (approximately 30 m in width) and construction activities are unlikely to affect any of the other RQOs for the estuary. Stormwater runoff from the existing car park has resulted in erosion of the bank of the estuary and expanding the car park will slightly increase the intensity of this impact. The loss of the vegetation is acceptable and will result in low residual impacts on estuarine habitat and biodiversity. Furthermore, implementation of the proposed stormwater management plan will adequately address and mitigate stormwater flows from the car park and represents an improvement when compared to the current scenario. Based on these findings the proposed renovations and expansion of the car park are considered acceptable from an aquatic biodiversity perspective.

Mitigation measures recommended by the specialist:

- Working areas must be clearly demarcated. Estuarine habitat outside of the working area must be designated as No-Go and no disturbance (i.e. trampling, smothering etc.) of estuarine habitat in this area is permitted.
- No excavated material must be dumped or stockpiled in the No-Go area.
- A comprehensive method statement must be drawn up which provides a clear step by step plan of the sequence of construction activities that will be undertaken. The method statement must aim to minimise the length of time that cleared areas remain exposed and vulnerable to erosion.
- Clearing of vegetation in the EFZ should ideally take place during the winter (May to July) months when the presence of nesting bird species is likely to be minimal.
- Alien invasive trees and shrubs must be removed from the remaining buffer (i.e. undeveloped portion of the EFZ).
- Working areas must be clearly demarcated to avoid unnecessary clearing of vegetation.
- Construction of the car park must be planned for the dry season (May to July).
- Silt fencing must be placed along the outer perimeter of the expanded park area to prevent sediment input in the event of a rainfall even.
- Any disturbed, exposed areas must be reprofiled to natural contours and re-vegetated.
- Undeveloped areas of the EFZ (i.e. estuarine and coastal habitat) within the property boundary (i.e. outside of the rock revetment) and outside of the property boundary must be designated as No-Go areas.
- Access to the property via the beach/estuary is not permitted. Only the existing access from the car park can be used.
- No construction materials to be stored or stockpiled outside of the area delineated by the rock revetment or in any part of the undeveloped areas of the EFZ.
- Rubble and waste materials must be managed on site and must not be dumped or stockpiled within undeveloped areas of the EFZ.
- Chemical toilets should be provided on-site at 1 toilet per 10 persons.
- Waste from chemical toilets must be disposed of regularly (at least once a week) in a responsible manner by a registered waste contractor.
- The stormwater management plan must be implemented as specified in Section B4.4
- Silt and interception traps must be routinely inspected and cleared to ensure that they continue to operate as designed.

Terrestrial Impact Assessment, Appendix G2:
The vegetation on site is generally transformed and comprising a landscaped garden with some remnant dune thicket elements, including several milkwood trees as some associated remnant dune thicket elements. A small pocket of dune thicket is also present at the parking beach access point. No Sensitive plant or Animal species identified as per the National Environmental Screening Tool were

found to be present or likely to be present. Several Cycads are present but are introduced for landscape garden purposes and are not in a natural context. Although areas are designated CBA 1 & Protected Area, these designations are incorrect as the site is significantly transformed, being a developed erf on the edge of an urban area. Most of the site is considered to have a LOW Sensitivity due to the disturbed and transformed nature. A few minor MODERATE sensitivity patches are designated where Milkwood trees and/or remnant dune thicket is present, which largely has negligible ecological value. No HIGH sensitivity areas are identified within the terrestrial environment, but the estuarine and dune environment are outside the context of this assessment and report. No No-go areas are identified within the site footprint. No significant direct, indirect or cumulative impacts are anticipated.

Mitigation measures and recommendations by the specialist:

- No clearing outside of development footprint to take place.
- Surrounding Dune Thicket and Estuarine habitat is to be conserved and not harmed during the construction process.
- Rehabilitation of vegetation of the site must be done as described in the Rehabilitation Plans.
- Trees and shrubs that are directly affected by the operations may be felled or cleared but only by the expressed written permission of the ECO.
- Workers are NOT allowed to collect any flora species. All flora species remain the property of the landowner and must not be disturbed, upset or used without their expressed consent.
- Alien species must be removed from the site as per the National Environmental Management: Biodiversity Act (No. 10 of 2004) requirements.
- The Contractor is responsible for the removal of alien species within all areas disturbed during construction activities. Disturbed areas include (but are not limited to) access roads, construction camps, site areas and temporary storage areas.
- In consultation with relevant authorities, the Engineer may order the removal of alien plants (when necessary). Areas within the confines of the site are to be included.
- All alien plant material (including brushwood and seeds) should be removed from site and disposed of at a registered waste disposal site. Should brushwood be utilised for soil stabilization or mulching, it must be seed free.
- After clearing is completed, an appropriate cover crop may be required, should natural reestablishment of grasses not take place in a timely.
- Suitable measures must be implemented in areas that are susceptible to erosion, including the stormwater structures around the parking areas as well as where mobile dune sands are present. Areas must be rehabilitated, and a suitable cover crop planted and/or other structures constructed.
- If natural vegetation re-establishment does not occur, a suitable grass must be applied on non-sand areas.
- Stormwater Management Plans must be developed for the site and should include: the management of stormwater during construction, the installation of stormwater and erosion control infrastructure, the management of infrastructure after completion of construction.
- Temporary drainage works may be required to prevent stormwater to prevent silt laden surface water from draining into the estuary in proximity to the site. Stormwater must be prevented from entering or running off in an unmanaged manner.
- To ensure that site is not subjected to excessive erosion and capable of drainage runoff with minimum risk of scour, their slopes should be profiled at a maximum 1:3 gradient.
- Diversion channels should be constructed ahead of the open cuts, and above emplacement areas and stockpiles to intercept clean runoff and divert it around disturbed areas into the natural drainage system downstream of the site.
- Existing vegetation must be retained as far as possible to minimise erosion problems.
- It is importation that the rehabilitation of site is planned and completed in such a way that the runoff water will not cause erosion.
- Sediment-laden runoff from cleared areas must be prevented from entering the estuary.

- No estuary or surface water may be affected by silt emanating from the site.
- A suitable weed management strategy must be implemented in the construction phase and carried through the operational phase.
- The habitats and microhabitats present on the project site are not unique and are widespread in the general area, hence the local impact associated with the footprint would be of low significance if mitigation measures are adhered to.
- Small mammals within the habitat on and around the affected area are generally mobile and likely to be transient to the area. The risk of species of special concern is low, and it is unlikely that there will be any impact to populations of such species because of the activity.
- A faunal search and rescue is unlikely to be required and no protected species are likely to be affected.
- No animals are to be harmed or killed during the course of operations.
- No snares or harming of any faunal species permitted.
- A suitable weed management strategy to be implemented in and around the site post construction, which is likely to result in proliferation of weeds in disturbed areas on completion.
- Rehabilitation is necessary to control erosion and sedimentation of all eroded areas (where works will take place).
- Areas where construction is completed should be rehabilitated immediately.
- Areas to be disturbed in future activities will be kept as small as possible (i.e. conducting the operations in phases), thereby limiting the scale of erosion.
- Slopes will be profiled to ensure that they are not subjected to excessive erosion but capable of drainage runoff with minimum risk of scour (maximum 1:3 gradient).
- Adequate measures to be implemented for erosion and stormwater management from the site and parking areas into the adjacent estuary.

Appendix C: Biodiversity Environmental Management Plan
Protection of Flora and Fauna

- No animals are to be harmed or killed during the course of operations.
- No domestic animals are permitted on the site.
- Trees and shrubs that are directly affected by the operations may be felled or cleared but only by the expressed written permission of the ECO.
- Rehabilitation of vegetation of the site must be done as described in the Rehabilitation Plans.

Alien Invasive Species Management Plan:

- Alien species must be removed from the site as per the National Environmental Management: Biodiversity Act (No. 10 of 2004) requirements.
- A suitable weed management strategy must be implemented in the construction phase and carried through the operational phase.
- The Contractor is responsible for the removal of alien species within all areas disturbed during construction activities. Disturbed areas include (but are not limited to) access roads, construction camps, site areas and temporary storage areas.
- All alien plant material (including brushwood and seeds) should be removed from site and disposed of at a registered waste disposal site. Should brushwood be utilised for soil stabilization or mulching, it must be seed free.
- After clearing is completed, an appropriate cover crop may be required, should natural re-establishment of grasses not take place in a timely manner.

Fire Risk:

- The Contractor must ensure that an emergency preparedness plan is in place in order to fight accidental fires or veld fires, should they occur. The adjacent landowners/users/managers should also be informed or otherwise involved.
- Enclosed areas for food preparation should be provided and the Contractor must strictly prohibit the use of open fires for cooking and heating purposes.

- The use of branches of trees and shrubs for fire-making must be strictly prohibited.
- The Contractor should take all reasonable and active steps to avoid increasing the risk of fire through their activities on-site. No fires may be lit except at places approved by the ECO.
- The Contractor must ensure that the basic fire-fighting equipment is to the satisfaction of the Local Emergency Services.
- The Contractor must supply all living quarters, site offices, kitchen areas, workshop areas, materials, stores and any other relevant areas with tested and approved fire-fighting equipment.
- Fires and "hot work" must be restricted to demarcated areas.
- The Contractor must take precautions when working with welding or grinding equipment near potential sources of combustion. Such precautions include having a suitable, tested and approved fire extinguisher immediately at hand and the use of welding curtains.

Soil Aspects:

- Sufficient topsoil must be stored for later use during decommissioning, particularly from outcrop areas.
- Topsoil shall be removed from all areas where physical disturbance of the surface will occur.
- Topsoil shall be kept separate from overburden and shall not be used for building or maintenance of roads.
- The stockpiled topsoil shall be protected from being blown away or being eroded. The application of a suitable grass seed/runner mix will facilitate this and reduce the minimise weeds.

Dust:

- If required, water spray vehicles will be used to control wind cause by strong winds during activities on the works.
- No over-watering of the site or road surfaces.
- Wind screens should be used to reduce wind and dust in open areas.

Topsoil:

- Topsoil shall be removed from all areas where physical disturbance of the surface will occur.
- Topsoil shall be kept separate from overburden and shall not be used for building or maintenance of roads.
- The stockpiled topsoil shall be protected from being blown away or being eroded. The use of a suitable grass seed/runner mix will facilitate soil protection and minimise weeds/weed growth.

Stormwater and Erosion control:

- Stormwater Management Plans must be developed for the site and should include the following:
    - The management of stormwater during construction.
    - The installation of stormwater and erosion control infrastructure.
    - The management of infrastructure after completion of construction.
- Temporary drainage works may be required to prevent stormwater to prevent silt laden surface water from draining into river systems in proximity to the site. Stormwater must be prevented from entering or running off site.
- To ensure that site is not subjected to excessive erosion and capable of drainage runoff with minimum risk of scour, their slopes should be profiled at a maximum 1:3 gradient.
- Diversion channels should be constructed ahead of the open cuts, and above emplacement areas and stockpiles to intercept clean runoff and divert it around disturbed areas into the natural drainage system downstream of the site.
- Rehabilitation is necessary to control erosion and sedimentation of all eroded areas (where works will take place).
- Existing vegetation must be retained as far as possible to minimise erosion problems.

- It is importation that the rehabilitation of site is planned and completed in such a way that the runoff water will not cause erosion.
- Sediment-laden runoff from cleared areas must be prevented from entering rivers and streams.
- No river or surface water may be affected by silt emanating from the site.

Site Office / Camp Sites:

- No site offices or camp sites will be constructed on the site under current operating conditions, existing structures will be used.

Operating Procedures in the Site:

- Construction shall only take place within the approved demarcated site.
- Construction may be limited to the areas indicated by the Regional Manager on assessment of the application.
- The holder of the environmental authorisation shall ensure that operations take place only in the demarcated areas as described in this report.
- Watering to minimise the effect of dust generation should be carried out as frequently as necessary. Noise should also be kept within reason.
- No workers will be allowed to damage or collect any indigenous plant or snare any animal.
- Grass and vegetation of the immediate environment or adapted grass / vegetation will be re-established on completion of construction activities, where applicable.
- No firewood to be collected on site and the lighting of fires must be prohibited.
- Cognisance is to be taken of the potential for endangered species occurring in the area. It is considered unlikely, however, that these species will be affected by the proposed activity, or the access road.

Excavations:

- Topsoil shall be handled as described in this EMP.
- Excavations shall take place only within the approved demarcated site.
- Excavations must follow the contour lines where possible.
- The construction site will not be left in any way to deteriorate into an unacceptable state.
- The excavated area must serve as a final depositing area for waste rock and overburden during the rehabilitation process.
- Once excavations have been filled with overburden, rocks and coarse natural materials and profiled with acceptable contours (including erosion control measures), the previous stored topsoil shall be returned to its original depth over the area.
- The area shall be fertilised, if necessary, to allow vegetation to establish rapidly. The site shall be seeded with a local or adapted indigenous seed mix in order to propagate the locally occurring flora.

Rehabilitation of Processing and Excavation Areas:

- On completion of construction, the surface of the processing areas especially if compacted due to hauling and dumping operations shall be scarified to a depth of at least 200 mm and graded to an even surface condition and the previously stored topsoil will be returned to its original depth over the area.
- The area shall be fertilised, if necessary, to allow vegetation to establish rapidly. The site shall be seeded with suitable grasses and local indigenous seed mix.
- Waste (non-biodegradable refuse) will not be permitted to be deposited in the excavations.
- Final rehabilitation must comply with the requirements mention in the Rehabilitation Plan.

Rehabilitation Plan

Topsoil and Subsoil Replacement:

Topsoil and subsoil will be stripped and stockpiled separately and only used in rehabilitation work towards the end of the operation. This is in contract to the gravel activity where rehabilitation and topsoil replacement was earmarked at the completion of each phase. Stripped overburden will be

backfilled into the worked-out areas where needed. Stripped topsoil will be spread over the re-profiled areas to an adequate depth to encourage plant regrowth. The vegetative cover will be stripped with the thin topsoil layer to provide organic matter to the relayed material and to ensure that the seed store contained in the topsoil is not diminished. Reseeding may be required should the stockpiles stand for too long and be considered barren from a seed bank point of view. Stockpiles should ideally be stored for no longer than a year. The topsoil and overburden will be keyed into the reprofiled surfaces to ensure that they are not eroded or washed away. The topsoiled surface will be left fairly rough to enhance seedling establishment, reduce water runoff and increase infiltration.

Revegetation:
All prepared surfaces will be seeded with suitable grass species to provide an initial ground cover and stabilize the soil surface. The following grass seed that is commonly available and suitable.

Botanical name	Common name	Approx seed mixture /Ha
Cynodon dactylon	Kweek	12 kg/ Ha
Eragrostis curvula	Weeping Love Grass	6 kg/ Ha
Eragrostis tef	Teff	2 kg/ Ha
Digitaria eriantha	Smuts Grass	4 kg/ Ha
Other indigenous veld grasses can be added to the seed mix		± 4 kg/Ha

The overall revegetation plan will, therefore, be as follows:

- Ameliorate the aesthetic impact of the site.
- Stabilise disturbed soil and rock faces.
- Minimize surface erosion and consequent siltation of natural water course located on site.
- Control wind-blown dust problems.
- Enhance the physical properties of the soil.
- Re-establish nutrient cycling.
- Re-establish a stable ecological system.

Every effort must be made to avoid unnecessary disturbance of the natural vegetation during operations.

Drainage and Erosion Control:

- Areas where construction is completed should be rehabilitated immediately.
- Areas to be disturbed in future activities will be kept as small as possible (i.e. conducting the operations in phases), thereby limiting the scale of erosion.
- Slopes will be profiled to ensure that they are not subjected to excessive erosion but capable of drainage runoff with minimum risk of scour (maximum 1:3 gradient).
- Existing vegetation will be retained as far as possible to minimize erosion problems.

Visual Impacts Amelioration:

- Confining the footprint to an area as small as possible
- Re-topsoiling and vegetating all disturbed areas.

Monitoring and Reporting
Adequate management, maintenance and monitoring will be carried out annually by the applicant to ensure successful rehabilitation of the property until a closure certificate is obtained. To minimise adverse environmental impacts associated with operations it is intended to adopt a progressive rehabilitation programme, which will entail carrying out the proposed rehabilitation procedures concurrently with activity.

Closure Objectives
The closure of the site will involve removal of all debris and rehabilitation of areas disturbed during the construction phase of the project. This will comprise the scarification of compacted areas, reshaping of areas, topsoiling and rehabilitating all prepared surfaces.

Palaeontology Impact Assessment, Appendix G3:
The property lies on the Enon Formation (Uitenhage Group) conglomerate and sandstones that are incorrectly indicated as very highly sensitive for palaeontology. The fossil record is based on one repeated record of abraded and poorly preserved silicified wood, bones and teeth that have been transported and deposited. Based on the nature of the project, surface activities may impact upon the fossil heritage if preserved in the development footprint. The geological structures suggest that the rocks are either much too old to contain fossils or are the wrong kind (soils and conglomerates). Furthermore, the material to be excavated s soil and this does not preserve fossils. Taking account of the defined criteria, the potential impact to fossil heritage resources is extremely low.

Based on experience and the lack of any previously recorded fossils from the area, it is extremely unlikely that any fossils would be preserved in the overlying soils of the Quaternary. There is a very small chance that fossils may occur in the underlying conglomerates of the Enon Formation so a Fossil Chance Find Protocol should be added to the EMPr. If fossils are found by the environmental officer, or other responsible person once excavations for amenities, infrastructure and foundations have commenced then they should be rescued, and a palaeontologist called to assess and collect a representative sample. The impact on the palaeontological heritage would be low, as far as the palaeontology is concerned, so the project should be authorised.

Heritage Assessment Appendix G4:
Development of the site will involve minimal vegetation clearing and earthmoving activities. Former flood events are likely to already have impacted any archaeological resources. Surveys have identified scatters of ESA and MSA material in the area, however they are generally in disturbed areas. Research has shown that LSA archaeological sites (shell middens) tend to concentrate close to rocky headlands, and there are fewer sites along the sand dunes associated with long sandy beaches (such as the Keurbooms River estuary). Impacts are expected to be LOW. From the assessment it is the specialist's contention that the proposal would not impact any structure(s) or landscape of cultural significance, nor is it likely to impact on archaeological or palaeontological resources of cultural significance though the implementation of Protocol for Chance (Palaeontological) Finds is recommended.

No further archaeological work is recommended.

Coastal Engineering Assessment Appendix G5:
This report provides a high-level assessment of the rock revetment protecting the existing Milkwood Manor buildings. The structure was inspected visually and found to be in good condition. The conditions which led to the need to build the structure at the end of 2007 can be expected to recur in future. Whilst the existing structure is considered adequate for conditions experienced to date, the effects of global climate change are expected to lead to increased flooding and overtopping. Various mitigatory measures have been recommended regarding the development of the site to reduce this risk.

Mitigation measures and recommendations by the specialist:

- Additional rock armour to be added to the structure as part the existing management plan. This will ensure that the structure is resilient into the future.
- Consideration to be given to increasing the floor levels in the buildings where possible.
- Setback lines from the sea facing section of the revetment have been considered such that wave loading and overtopping on the buildings is avoided.
- Allowance has been made for adequate drainage away from the buildings toward the estuary to prevent the build-up of flood waters should overtopping of the revetment take place.

2.	List the impact management measures that were identified by all Specialist that will be included in the EMPr

Estuarine Impact Assessment mitigation measures:

- Working areas must be clearly demarcated. Estuarine habitat outside of the working area must be designated as No-Go and no disturbance (i.e. trampling, smothering etc.) of estuarine habitat in this area is permitted.
- No excavated material must be dumped or stockpiled in the No-Go area.

- A comprehensive method statement must be drawn up which provides a clear step by step plan of the sequence of construction activities that will be undertaken. The method statement must aim to minimise the length of time that cleared areas remain exposed and vulnerable to erosion.
- Alien invasive trees and shrubs must be removed from the remaining buffer (i.e. undeveloped portion of the EFZ).
- Silt fencing must be placed along the outer perimeter of the expanded park area to prevent sediment input in the event of a rainfall even.
- Any disturbed, exposed areas must be reprofiled to natural contours and re-vegetated.
- Undeveloped areas of the EFZ (i.e. estuarine and coastal habitat) within the property boundary (i.e. outside of the rock revetment) and outside of the property boundary must be designated as No-Go areas.
- Access to the property via the beach/estuary is not permitted. Only the existing access from the car park can be used.
- No construction materials to be stored or stockpiled outside of the area delineated by the rock revetment or in any part of the undeveloped areas of the EFZ.
- Rubble and waste materials must be managed on site and must not be dumped or stockpiled within undeveloped areas of the EFZ.
- Chemical toilets should be provided on-site at 1 toilet per 10 persons.
- Waste from chemical toilets must be disposed of regularly (at least once a week) in a responsible manner by a registered waste contractor.
- The stormwater management plan must be implemented as specified in Section B4.4
- Silt and interception traps must be routinely inspected and cleared to ensure that they continue to operate as designed.

Terrestrial Impact Assessment mitigation measures:

- No clearing outside of development footprint to take place.
- No domestic animals are permitted on the site.
- Surrounding Dune Thicket and Estuarine habitat is to be conserved and not harmed during the construction process.
- Rehabilitation of vegetation of the site must be done as described in the Rehabilitation Plans.
- Trees and shrubs that are directly affected by the operations may be felled or cleared but only by the expressed written permission of the ECO.
- Workers are NOT allowed to collect any flora species. All flora species remain the property of the landowner and must not be disturbed, upset or used without their expressed consent.
- Alien species must be removed from the site as per the National Environmental Management: Biodiversity Act (No. 10 of 2004) requirements.
- The Contractor is responsible for the removal of alien species within all areas disturbed during construction activities. Disturbed areas include (but are not limited to) access roads, construction camps, site areas and temporary storage areas.
- In consultation with relevant authorities, the Engineer may order the removal of alien plants (when necessary). Areas within the confines of the site are to be included.
- All alien plant material (including brushwood and seeds) should be removed from site and disposed of at a registered waste disposal site. Should brushwood be utilised for soil stabilization or mulching, it must be seed free.
- Suitable measures must be implemented in areas that are susceptible to erosion, including the stormwater structures around the parking areas as well as where mobile dune sands are present. Areas must be rehabilitated, and a suitable cover crop planted and/or other structures constructed.
- It is importation that the rehabilitation of site is planned and completed in such a way that the runoff water will not cause erosion.
- Sediment-laden runoff from cleared areas must be prevented from entering the estuary.

- No estuary or surface water may be affected by silt emanating from the site.
- A suitable weed management strategy must be implemented in the construction phase and carried through the operational phase.
- The habitats and microhabitats present on the project site are not unique and are widespread in the general area, hence the local impact associated with the footprint would be of low significance if mitigation measures are adhered to.
- Small mammals within the habitat on and around the affected area are generally mobile and likely to be transient to the area. The risk of species of special concern is low, and it is unlikely that there will be any impact to populations of such species because of the activity.
- A faunal search and rescue is unlikely to be required and no protected species are likely to be affected.
- No animals are to be harmed or killed during the course of operations.
- No snares or harming of any faunal species permitted.
- After clearing is completed, an appropriate cover crop may be required, should natural reestablishment of grasses not take place in a timely manner.
- A suitable weed management strategy to be implemented in and around the site post construction, which is likely to result in proliferation of weeds in disturbed areas on completion.
- Rehabilitation is necessary to control erosion and sedimentation of all eroded areas (where works will take place).
- Areas where construction is completed should be rehabilitated immediately.
- Areas to be disturbed in future activities will be kept as small as possible (i.e. conducting the operations in phases), thereby limiting the scale of erosion.
- Slopes will be profiled to ensure that they are not subjected to excessive erosion but capable of drainage runoff with minimum risk of scour (maximum 1:3 gradient).
- Existing vegetation will be retained as far as possible to minimize erosion problems.
- Adequate measures to be implemented for erosion and stormwater management from the site and parking areas into the adjacent estuary.

Palaeontology Impact Assessment mitigation measures:
Fossil Chance Find Protocol should be added to the EMPr

Coastal Engineer mitigation measures:

- Additional rock armour to be added to the structure as part the existing management plan
- Periodic maintenance of the rock revetment should be carried out to ensure that any settlement, displacement or weathering of the material is addressed.

3.	List the specialist investigations and the impact management measures that will **not** be implemented and provide an explanation as to why these measures will not be implemented.

Estuarine Impact Assessment mitigation measures that will not be included in the EMPr:

Mitigation measure to be excluded	Reason for exclusion
Clearing of vegetation in the EFZ should ideally take place during the winter (May to July) months when the presence of nesting bird species is likely to be minimal.	The flagged Avifauna (bird) species *Bradypterus sylvaticus* (Knysna warbler), could in principle occasionally perch in the Milkwood trees if present and foraging in the surround area, but is unlikely to be affected above any baseline disturbances. The remaining flagged Avifauna (bird) species would be associated with the adjacent dune and/or estuarine environments and/or unpopulated areas and thus the site is unlikely to provide suitable habitat. If present occasionally, it would suggest that the individuals are somewhat acclimatised to a peri-urban environment and would also not be significantly affected.

Construction of the car park must be planned for the dry season (May to July).	It is unrealistic to only construct the car park during the recommended dry season. Mitigation measures such as silt fencing will be placed along the outer perimeter of the expanded park area to prevent sediment input in the event of a rainfall even.

Appendix C of the Terrestrial Impact Assessment prepared by J. Pote is: "A Biodiversity Management Plan with specific measures relating to management of Biodiversity Impacts that must be included in the project Environmental Management Programme (EMPr). The impacts identified and listed in this report will be managed / controlled as set out under mitigating measures and as detailed in this section, which provides general management guidelines, which may or may not be appropriate, depending on the specific circumstances."

The EAP disagrees with some of the mitigation measures recommended in Appendix C and will exclude them from the EMPr since it is not relevant to the proposal's potential impacts or proposed activities.

Terrestrial Impact Assessment mitigation measures that will not be included in the EMPr:

Mitigation measure to be excluded	Reason for exclusion
Fire risk	Similar mitigation measures are included in the EMPr
Soil aspects	Similar mitigation measures are included in the EMPr, however relevant mitigation measures will also be included.
Dust	Similar mitigation measures are included in the EMPr
Topsoil	Similar mitigation measures are included in the EMPr, however relevant mitigation measures will also be included.
Stormwater and Erosion control	A stormwater management plan has been developed; however relevant mitigation measures will also be included.
Site Office / Camp Sites	The existing guest house can be used as a site camp for the upgrade of the parking lot and vice versa.
Operating Procedures in the Site	Similar mitigation measures are included in the EMPr, however relevant mitigation measures will also be included.
Excavations	Similar mitigation measures are included in the EMPr, however relevant mitigation measures will also be included.
Rehabilitation of Processing and Excavation Areas	Similar mitigation measures are included in the EMPr, however relevant mitigation measures will also be included.
Rehabilitation Plan	Similar mitigation measures are included in the EMPr, however relevant mitigation measures will also be included.

Coastal Engineer mitigation measures that will not be include in the EMPr:

Mitigation measure to be excluded	Reason for exclusion
Consideration to be given to increasing the floor levels in the buildings where possible	Additional measures have been taken to increase the floor levels for any new developments
Setback lines from the sea facing section of the revetment	Alterations were made to the building to set it back from the northern boundary to accommodate increased overtopping such that any direct wave loading is avoided.

All open areas are to be designed to drain away from the buildings and parking areas back into the estuary.	Allowance has been made for adequate drainage away from the buildings toward the estuary to prevent the build-up of flood waters should overtopping of the revetment take place.

4.	Explain how the proposed development will impact the surrounding communities.

During the construction phase the surrounding community will be temporarily inconvenienced by the construction noise that will take place however these impacts are temporary in nature. Labourers from the Bitou Municipality will be used as labour during the construction phase, therefor providing them with an income.

5.	Explain how the risk of climate change may influence the proposed activity or development and how has the potential impacts of climate change been considered and addressed.

(Source: MILKWOOD MANOR REVETMENT: COASTAL ENGINEERING ASSESSMENT, prepared by Consulting Port and Coastal Engineers, dated 1 August 2024)

It is expected that global climate will affect the conditions prevailing at the site over the next 100 years. This is likely to affect the revetment in the following manner:

- Rainfall patterns in the area are not expected to change and therefore no major changes in the river discharge volumes are expected.
- By 2100 extreme wave conditions are expected to increase by some 5% with a southward rotation of the south westerly swell of approximately 5%.
- The extent of sea level rise is dependent on the future emission reductions achieved globally. If a mid-level scenario (upper confidence level) is selected for 2060 an increase in sea level of 0.4 m is forecast whilst for 2100 an increase of 0.8 m is forecast. Increased sea levels in future will result in higher flooding levels in the estuary.

The impact of climate change will therefore lead to more severe conditions at the site. This will be experienced as higher flooding levels and increased wave heights on the seaward portion of the revetment with resultant higher levels of overtopping and flooding behind the revetment.

The current rock revetment is considered fit for purpose in terms of what has been experienced at the site to date. With the expectation of climate change effects coming into play in future and the resultant increased severity of the site conditions the following mitigatory measures have been considered.

- Additional rock armour to be added to the structure as part the existing management plan. This will ensure that the structure is resilient into the future.
- Consideration to be given to increasing the floor levels in the buildings where possible.
- Setback lines from the sea facing section of the revetment have been considered such that wave loading and overtopping on the buildings is avoided.
- Allowance has been made for adequate drainage away from the buildings toward the estuary to prevent the build-up of flood waters should overtopping of the revetment take place.

6.	Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.

No conflicting recommendations.

7.	Explain how the findings and recommendations of the different specialist studies have been integrated to inform the most appropriate mitigation measures that should be implemented to manage the potential impacts of the proposed activity or development.

The recommendation of the specialists has been incorporated into the EMPr, expect for those mentioned in Section I 3 and compliance will be monitored by the appointed ECO during the construction phase.

8.	Explain how the mitigation hierarchy has been applied to arrive at the best practicable environmental option.

Table 6: Mitigation hierarchy

MITIGATION HIERARCHY		
1	AVOID IMPACTS	As the proposal is to upgrade and expand the existing the existing Milkwood Manor Guest house and parking the impacts cannot be avoided at this location. No-go areas will be prescribed.
2	MINIMISE IMPACTS	The recommended mitigation measures of the specialists reports in addition to the compressive mitigation measures contained in the EMPr will minimise the impact of the development.

3	RECTIFY	The disturbances created by the construction phase will be rehabilitated in accordance with the EMPr.
4	OFFSET	Not necessary as no residual impacts not addressed by the previous steps of the mitigation hierarchy

SECTION J: GENERAL

1. Environmental Impact Statement

1.1.	Provide a summary of the key findings of the EIA.

Estuarine Impact Assessment, Appendix G1:
Renovations to the existing Milkwood Manor House will occur in close proximity to estuarine and coastal habitat. Impacts associated with the renovations to the house are however manageable and can be mitigated to result in low impacts and no residual impact on biodiversity. The expansion to the car park will result in the permanent transformation of a small area of the EFZ and is not aligned to CBA management objectives and macrophyte RQOs for the estuary. The open water body of the estuary will remain well buffered by dense reed vegetation (approximately 30 m in width) and construction activities are unlikely to affect any of the other RQOs for the estuary. Stormwater runoff from the existing car park has resulted in erosion of the bank of the estuary and expanding the car park will slightly increase the intensity of this impact. The loss of the vegetation is acceptable and will result in low residual impacts on estuarine habitat and biodiversity. Furthermore, implementation of the proposed stormwater management plan will adequately address and mitigate stormwater flows from the car park and represents an improvement when compared to the current scenario. Based on these findings the proposed renovations and expansion of the car park are considered acceptable from an aquatic biodiversity perspective.

Terrestrial Impact Assessment, Appendix G2:
The vegetation on site is generally transformed and comprising a landscaped garden with some remnant dune thicket elements, including several milkwood trees as some associated remnant dune thicket elements. A small pocket of dune thicket is also present at the parking beach access point. No Sensitive plant or Animal species identified as per the National Environmental Screening Tool were found to be present or likely to be present. Several Cycads are present but are introduced for landscape garden purposes and are not in a natural context. Although areas are designated CBA 1 & Protected Area, these designations are incorrect as the site is significantly transformed, being a developed erf on the edge of an urban area. Most of the site is considered to have a LOW Sensitivity due to the disturbed and transformed nature. A few minor MODERATE sensitivity patches are designated where Milkwood trees and/or remnant dune thicket is present, which largely has negligible ecological value. No HIGH sensitivity areas are identified within the terrestrial environment, but the estuarine and dune environment are outside the context of this assessment and report. No No-go areas are identified within the site footprint. No significant direct, indirect or cumulative impacts are anticipated.

Palaeontology Impact Assessment, Appendix G3:
The property lies on the Enon Formation (Uitenhage Group) conglomerate and sandstones that are incorrectly indicated as very highly sensitive for palaeontology. The fossil record is based on one repeated record of abraded and poorly preserved silicified wood, bones and teeth that have been transported and deposited. Nonetheless, a Fossil Chance Find Protocol should be added to the EMPr. Based on this information it is recommended that no further palaeontological impact assessment is required unless fossils are found by the contractor, environmental officer or other designated responsible person once excavations or drilling activities have commenced. Since the impact will be low, as far as the palaeontology is concerned, the project should be authorised.

Heritage Impact Assessment, Appendix G4:
Development of the site will involve minimal vegetation clearing and earthmoving activities. Former flood events are likely to already have impacted any archaeological resources. Surveys have identified scatters of ESA and MSA material in the area, however they are generally in disturbed areas. Research has shown that LSA archaeological sites (shell middens) tend to concentrate close to rocky headlands, and there are fewer sites along the sand dunes associated with long sandy beaches (such as the Keurbooms River estuary). Impacts are expected to be LOW. From the assessment it is the specialist's contention that the proposal would not impact any structure(s) or landscape of cultural significance, nor is it likely to impact on archaeological or palaeontological resources of cultural significance though the implementation of Protocol for Chance (Palaeontological) Finds is recommended.

Coastal Engineering Assessment, Appendix G5:
This report provides a high-level assessment of the rock revetment protecting the existing Milkwood Manor buildings. The structure was inspected visually and found to be in good condition. The conditions which led to the need to build the structure at the end of 2007 can be expected to recur in future. Whilst the existing structure is considered adequate for conditions experienced to date, the effects of global climate change are expected to lead to increased flooding and overtopping. Various mitigatory measures have been recommended regarding the development of the site to reduce this risk

1.2.	Provide a map that that superimposes the preferred activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers. (Attach map to this BAR as Appendix B2)

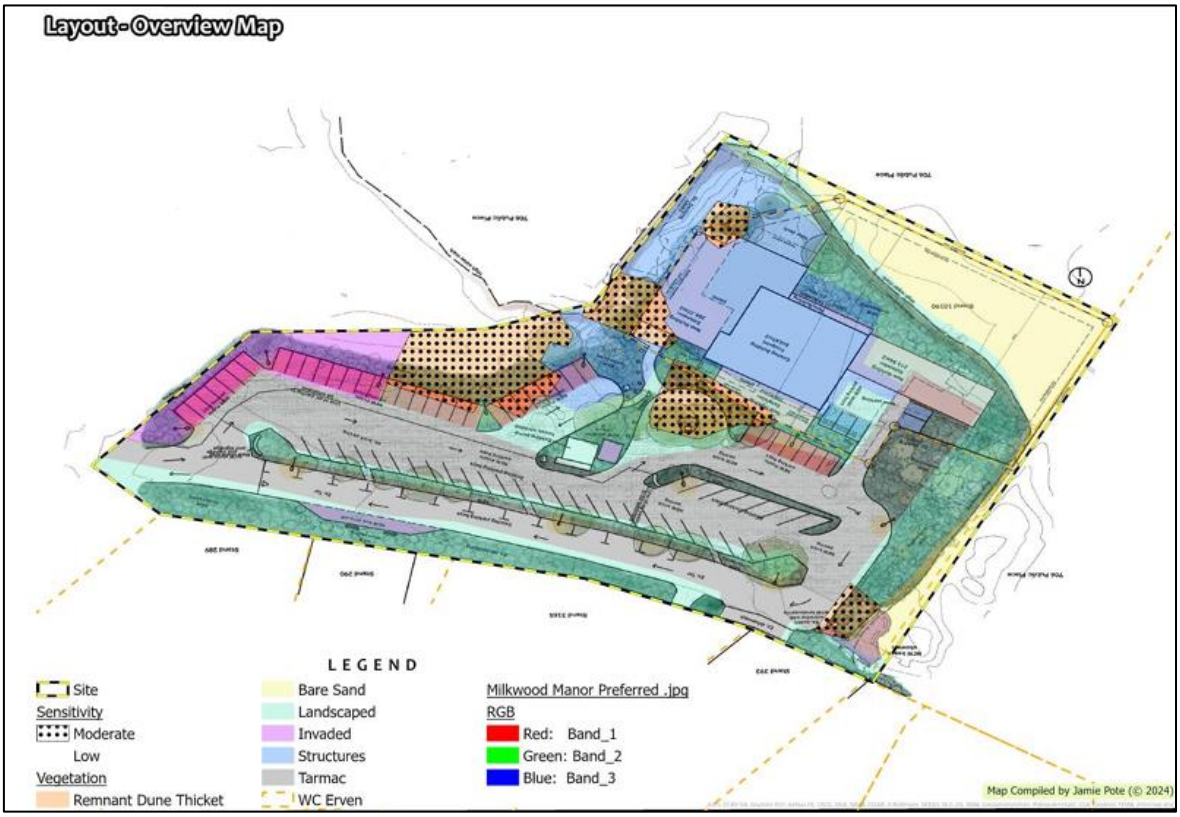

Figure 39: Vegetation Sensitivity for prefrred Site Development Plan. As described by J Pote

1.3.	Provide a summary of the positive and negative impacts and risks that the proposed activity or development and alternatives will have on the environment and community.

Positive:

- Temporary and permanent job opportunities
- Increased tourism in Bitou Municipality
- Increased beach parking for the public
- Public facilities such as ablutions and beach showers

Negative:

- Temporary construction phase eyesore
- Temporary nuisances from construction vehicles and construction noise

2. Recommendation of the Environmental Assessment Practitioner ("EAP")

2.1.	Provide Impact management outcomes (based on the assessment and where applicable, specialist assessments) for the proposed activity or development for inclusion in the EMPr

In order to obtain/reach the impact management objects the corresponding mitigation measures prescribed in the BAR and EMPr must be implemented. Potential impacts were assessed and mitigation measures to minimise the negative impacts were explored in greater depth Section G of this BAR. Within the Environmental Management Programme (attached as Appendix H) the Environmental Impact Management has been separated into 3 sections, Pre-construction Phase, Construction Phase and Post Construction Rehabilitation Phase.

IMPACT MANAGEMENT OBJECTIVES	IMPACT MANAGEMENT OUTCOMES
PRE-CONSTRUCTION PHASE	
Identify and demarcate no-go areas, working areas and site facilities	Future construction activities will be restricted to within the designated areas & environmentally sensitive areas (no-go areas) will be protected from disturbance
To set up and equip the site camp and associated site facilities in a manner that will promote good environmental management.	Site camp facilities do not impact significantly on environment. The equipment required to implement the provisions of the EMPr are provided on site.
Environmental Control Officer to conduct an inspection prior to the commencement of construction activities on site	Good environmental management is promoted and enforced by the ECO during the full pre-construction and construction phases. Site facilities are appropriately located on site. Construction workers receive environmental awareness training before commencing work on site
CONSTRUCTION PHASE	
Prevent loss of estuarine functional zone habitat	Delineated footprints area not exceeded.
Prevent loss of coastal habitat	Delineated footprints area not exceeded.
Prevent erosion and input of sediment and construction material into the estuary	No soil erosion and changes in estuarine vegetation is present.
Prevent disturbances to estuarine and coastal habitat during the clearing of vegetation	No solid waste pollution and chemical pollution is present on site.
Limit the loss of indigenous vegetation	No clearing takes place outside the approved footprint and working corridor
Prevent the loss of SCC	None present on site during the site visit conducted by J Pote.
Removal of alien invasive species	All alien invasive species are eradicated from the developmental footprint.
Prevent and limit disturbance to ecological, riparian and aquatic processes	Aquatic, riparian and ecological processes are not disturbed.
Limit habitat destruction and direct mortality of fauna	No fauna mortality or loss of natural habitats as a results of construction activities.
To limit noise generated by construction activities	No avoidable noise impacts emanate from the site during the construction phase
To create employment opportunities with potential for skills transfer, for members of the local community	The Bitou Municipality labourers benefits from the employment opportunities created during the construction phase.

Prevent disturbance of flora species, habitat and processes.	Delineated footprints area not exceeded.
POST CONSTRUCTION REHABILITATION PHASE	
Prevent erosion of estuarine habitat	No increased volumes of stormwater runoff in areas of hardened surfaces.
To rehabilitate all areas disturbed by construction activities in an environmentally sensitive manner	The site is neat and tidy, and all exposed surfaces are suitably covered/ stabilised. There is no construction-related waste or pollution remaining on site.
Prevent alien vegetation establishment on the site	Only indigenous vegetation species establish on the disturbed areas
Prevent disturbances to faunal processes	Faunal processes are not disturbed
Prevent and limit disturbance to ecological, riparian and aquatic processes	Aquatic, riparian and ecological processes are not disturbed.

2.2.	Provide a description of any aspects that were conditional to the findings of the assessment either by the EAP or specialist that must be included as conditions of the authorisation.

The EMPr must be implemented, this is however a standard condition of Environmental Authorisation.

All mitigation measures from the specialists, expect those highlighted in Section I.3 have been incorporated into the EMPr and as such are conditional to the environmental authorisation.

2.3.	Provide a reasoned opinion as to whether the proposed activity or development should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be included in the authorisation.

Considering the specialist reports, all impacts can be mitigated to Low or Very low significance. The economic and social benefits that the Bitou Municipality will gain from this proposal outweighs the low negative impacts identified. Most of the proposed site is disturbed and does not have natural biodiversity left, therefor it would be a loss of undeveloped land.

2.4.	Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.

Assumptions, Uncertainties and Gaps in Knowledge related to the Terrestrial Biodiversity, Animal and Plant Species combined Assessment:

The findings and recommendations of this report may be susceptible to the following uncertainties and limitation:

- No assessment has been made of aquatic or estuarine aspects relating to any wetlands, pans, and rivers/seeps and/or estuaries or marine ecosystems outside of the scope of a terrestrial biodiversity report. Refer to separate reporting.
- Any botanical surveys based upon a limited sampling time-period, may not reflect the actual species composition of the site due to seasonal variations in flowering times. Additionally, the composition of fire adapted vegetation may vary depending on level of maturity or time since last burn. As far as possible, site collected data has been supplemented with desktop and database centred distribution data.
- As far as possible, site collected data has been supplemented with desktop and database-centred distribution data as well as previous studies undertaken in the area.

Assumptions, Uncertainties and Gaps in Knowledge related to the Estuarine Impact Assessment:

- Estuaries are complex, dynamic systems influenced by multiple environmental and anthropogenic variables. A comprehensive assessment that considers all of these variables did not form part of the scope of work. Assessments of the ecological state of the estuary were therefore derived using appropriate desktop resources.
- The dynamic nature of estuaries means that the structure of physical habitat and associated estuarine fauna and flora can change rapidly in response to tidal and hydrological (e.g. flooding events) influences. This assessment is based on a single site visit that took place in June 2024 and represents a 'snapshot' in time.
- No sampling of biota was undertaken (e.g. fish, invertebrates, microphytes, etc.) and all biotic data was derived from desktop sources.

	Assumptions, Uncertainties and Gaps in Knowledge related to the Palaeontology Impact Assessment: Based on the geology of the area and the palaeontological record as we know it, it can be assumed that the formation and layout of the dolomites, sandstones, shales and sands are typical for the country and do not contain fossil plant, insect, invertebrate and vertebrate material. The sands of the Quaternary period would not preserve fossils.
2.5.	The period for which the EA is required, the date the activity will be concluded and when the post construction monitoring requirements should be finalised.

The construction project is expected to last one year from mid-2025.

Therefore, the EA should be valid for 3 years to allow for enough time obtain construction permits etc and to accommodate for potential delays in the project.

3. Water

Since the Western Cape is a water scarce area explain what measures will be implemented to avoid the use of potable water during the development and operational phase and what measures will be implemented to reduce your water demand, save water and measures to reuse or recycle water.

- Rainwater tanks will be added to support the functionality of the hotel

4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.

Solid waste will be collected by the municipality as part of their municipal collection routing. The Site Plan indicates an enclosed refuse yard from where the waste can be collected. In addition to this, there will be a separation of recycled materials on-site for collection by a community-based collection service. Recycled waste is recorded and kept as part of the company's internal sustainability records.

5. Energy Efficiency

8.1.	Explain what design measures have been taken to ensure that the development proposal will be energy efficient.

- Street and bollard lighting in the parking lot will be eco-friendly and low light pollution
- All internal lighting will be low consumption energy saving lights.

SECTION K: DECLARATIONS

DECLARATION OF THE APPLICANT

Note: Duplicate this section where there is more than one Applicant.

I, Robert Thomas More, ID number 7205115163089 in my personal capacity or duly authorised thereto hereby declare/affirm that all the information submitted or to be submitted as part of this application form is true and correct, and that:

- I am fully aware of my responsibilities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment ("EIA") Regulations, and any relevant Specific Environmental Management Act and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- I am aware of my general duty of care in terms of Section 28 of the NEMA;

- I am aware that it is an offence in terms of Section 24F of the NEMA should I commence with a listed activity prior to obtaining an Environmental Authorisation;

- I appointed the Environmental Assessment Practitioner ("EAP") (if not exempted from this requirement) which:
  - meets all the requirements in terms of Regulation 13 of the NEMA EIA Regulations; or
  - meets all the requirements other than the requirement to be independent in terms of Regulation 13 of the NEMA EIA Regulations, but a review EAP has been appointed who does meet all the requirements of Regulation 13 of the NEMA EIA Regulations;

- I will provide the EAP and any specialist, where applicable, and the Competent Authority with access to all information at my disposal that is relevant to the application;

- I will be responsible for the costs incurred in complying with the NEMA EIA Regulations and other environmental legislation including but not limited to –
  - costs incurred for the appointment of the EAP or any legitimately person contracted by the EAP;
  - costs in respect of any fee prescribed by the Minister or MEC in respect of the NEMA EIA Regulations;
  - Legitimate costs in respect of specialist(s) reviews; and
  - the provision of security to ensure compliance with applicable management and mitigation measures;

- I am responsible for complying with conditions that may be attached to any decision(s) issued by the Competent Authority, hereby indemnify, the government of the Republic, the Competent Authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which I or the EAP is responsible in terms of the NEMA EIA Regulations and any Specific Environmental Management Act.

Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

09 / 09 / 2024

Signature of the Applicant: Date:

Name of company (if applicable):

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

I Michael Bennett, EAP Registration number 2021/3163 as the appointed EAP hereby declare/affirm the correctness of the:

- Information provided in this BAR and any other documents/reports submitted in support of this BAR;
- The inclusion of comments and inputs from stakeholders and I&APs;
- The inclusion of inputs and recommendations from the specialist reports where relevant; and
- Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties, and that:
- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
  - am not independent, but another EAP that meets the general requirements set out in Regulation 13 of NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review EAP must be submitted);
- In terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- I have disclosed, to the Applicant, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I have ensured that information containing all relevant facts in respect of the application was distributed or was made available to registered interested and affected parties and that participation will be facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments;
- I have ensured that the comments of all interested and affected parties were considered, recorded, responded to and submitted to the Competent Authority in respect of this application;
- I have ensured the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- I have kept a register of all interested and affected parties that participated in the public participation process; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations;

Signature of the EAP: Date: 9/9/2024

Sharples Environmental Services

Name of company (if applicable):

DECLARATION OF THE REVIEW EAP

I ……, EAP Registration number …….. as the appointed Review EAP hereby declare/affirm that:

- I have reviewed all the work produced by the EAP;
- I have reviewed the correctness of the information provided as part of this Report;
- I meet all of the general requirements of EAPs as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the specialist (if any), the review specialist (if any), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

Signature of the EAP: Date:

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I ……, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or

  - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);

- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;

- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and

- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

Signature of the EAP: Date:

Name of company (if applicable):

DECLARATION OF THE REVIEW SPECIALIST

I ……., as the appointed Review Specialist hereby declare/affirm that:

- I have reviewed all the work produced by the Specialist(s):
- I have reviewed the correctness of the specialist information provided as part of this Report;
- I meet all of the general requirements of specialists as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

Signature of the EAP: Date:

Name of company (if applicable):