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PRE-APPLICATION BASIC ASSESSMENT REPORT

PROPOSED RESIDENTIAL DEVELOPMENT AND ASSOCIATED INFRASTRUCTURE ON A PORTION OF ERF 1180, KEURBOOMSTRAND, PLETTENBERG BAY

Date: November 2025

Compiled by: Samantha Teeluckdhari (2023/6443)

EAP Signature: S. Teeluckdhari

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STATEMENT OF INDEPENDENCE

I, **Samantha Teeluckdhari** of Eco Route Environmental Consultancy, in terms of section 33 of the NEMA, 1998 (Act No. 107 of 1998), as amended, hereby declare that I provide services as an independent Environmental Assessment Practitioner (EAPASA Reg: **2023/6443**) and receive remuneration for services rendered for undertaking tasks required in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment Regulations, 2014 (as amended). I have no financial or other vested interest in the project.

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.

NOVEMBER 2025

BASIC ASSESSMENT REPORT

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

NOVEMBER 2025

(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)

Erf 1180 (to be registered as a portion of Erf 1236), originally Erf 155, is located within Keurboomstrand, primarily characterized as a resort town within Plettenberg Bay, Western Cape. See below locality map and coordinates for the property boundary.

The proposal is to develop 2x group dwelling units on the eastern portion (referred to as "Erf 1180") of Erf 1236. Approximately 2000m² of the 5 000m² subject site is earmarked for development. The property remains vacant and untransformed.

The preferred development proposal entails the construction of two (2) double-storey residential units with double garage and a shared swimming pool.

Town Planning: the proposal is to subdivide a portion (±5000m²) off from Erf 1180, and to rezone this portion from "Open Space Zone 2" to "Open Space Zone 3" for "Nature conservation area" to allow for the two dwelling units and a swimming pool. Please consult the Specialist Planning Report for NEMA Purposes report in Appendix G.

Access: the property is entitled to a 7m wide right of way servitude across Erf 391. The proposed driveway width into the development is 4m, curved around mature trees of conservation value.

Figure 1: Locality of the Application Area, courtesy of the Specialist Planning Report compiled by Marike Vreken Urban & Environmental Planners, August 2025

Property boundary GPS coordinates:

34° 0'13.29"S, 23°27'14.28"E
34° 0'15.29"S, 23°27'14.47"E
34° 0'13.03"S, 23°27'18.15"E
34° 0'14.55"S, 23°27'18.27"E

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.

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); o Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"): o Ridges; o Cultural and historical features/landscapes; o 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**	
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;**	✓
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**	
	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**	
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:	**Specialist Report(s)**		✓
Appendix H:	**EMPr**		✓
Appendix I:	**Screening tool report**		✓
Appendix J:	**The impact and risk assessment for each alternative**		Within report
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**		Within report
Appendix…..	**Any other attachments must be included as subsequent appendices**		

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:	Ferpa (Pty) Ltd	
Name of contact person for Applicant/Proponent (if other):	Louis van der Watt	
Company/ Trading name/State Department/Organ of State:		
Company Registration Number:	2002/021101/07	
Postal address:	PO Box 35097	
	Menlopark	Postal code: 0102
Telephone:	( )	Cell: +27(0) 83 263 9901
E-mail:	louis@atterbury.co.za	Fax: ( )
Company of EAP:	Eco Route Environmental Consultancy	
EAP name:	Samantha Teeluckdhari	
Postal address:	P.O. Box 1252	
	Sedgefield	Postal code: 6573
Telephone:		Cell: 072 773 5397
E-mail:	samantha@ecoroute.co.za	Fax: N/A
Qualifications:	BSS Geography & Environmental Management	
EAP registration no:	2023/6443	
Duplicate this section where there is more than one landowner Name of landowner:	Mare Nostrum (Pty) Ltd Reg. No. 1977/003530/07	
Name of contact person for landowner (if other):	Eugéne Schoeman	
Postal address:	53 Van Der Merwe Crescent, Blomvlei	
	Bellville	Postal code: 7530
Telephone:	(021) 913 2158	Cell: 082 228 8303
E-mail:	csms@mweb.co.za	Fax: N/A
Name of Person in control of the land:	Celesté van der Watt	
Name of contact person for person in control of the land:	Celesté van der Watt	
Postal address:	PO Box 35097, Menlo Park	
		Postal code: 0102
Telephone:	N/A	Cell: +27 71 874 9249
E-mail:	N/A	Fax: N/A

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:	Anjé Taljaard	
Postal address:	Private Bag X1002	
	Plettenberg Bay	Postal code: 6600
Telephone	(044) 501 3000	Cell: NA
E-mail:	ataljaard@plett.gov.za	Fax: (044) 533 3485

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 property is currently undeveloped.					
3.	**For Linear activities or developments**				
3.1.	Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:				
Erf 391 and Erf 1180					
3.2.	Development footprint of the proposed development for all alternatives.				Approx. 28 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.				
7m long and 4m wide right of way servitude.					
3.4.	Indicate how access to the proposed routes will be obtained for all alternatives.				
Right of way servitude over Erf 391					

3.5.	SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives	C	0	3	9	0	0	0	4	0	0	0	0	0	3	9	1	0	0	0	0	0
		C	0	3	9	0	0	0	4	0	0	0	0	1	2	3	6	0	0	0	0	0

3.6.	**Starting point co-ordinates for all alternatives – Approximate co-ordinates**			
	Latitude (S)	34°	0‘	11.88“
	Longitude (E)	23°	27‘	16.28“
	Middle point co-ordinates for all alternatives			
	Latitude (S)	34°	0‘	12.48“
	Longitude (E)	23°	27‘	16.25“
	End point co-ordinates for all alternatives			
	Latitude (S)	34°	0‘	13.09“
	Longitude (E)	23°	27‘	16.24“

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):	+/- 5000 m²
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):	N/A m²
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:	2000 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 site is located in Keurboomstrand, a resort town near Plettenberg Bay in the Western Cape, under the jurisdiction of the Bitou Municipality.

The subject site is undeveloped, containing no existing buildings, services or infrastructure (with one exception being some decommissioned water pipelines and associated infrastructure). It is offset from the nearest road (Main Street) by the 27m width of the adjoining public place (Erf 391), which shares its northern boundary. Its southern boundary is delineated by the 25m wide road servitude set out for Main Road 394, which is the main access and entrance road for the whole of the Keurboomstrand town.

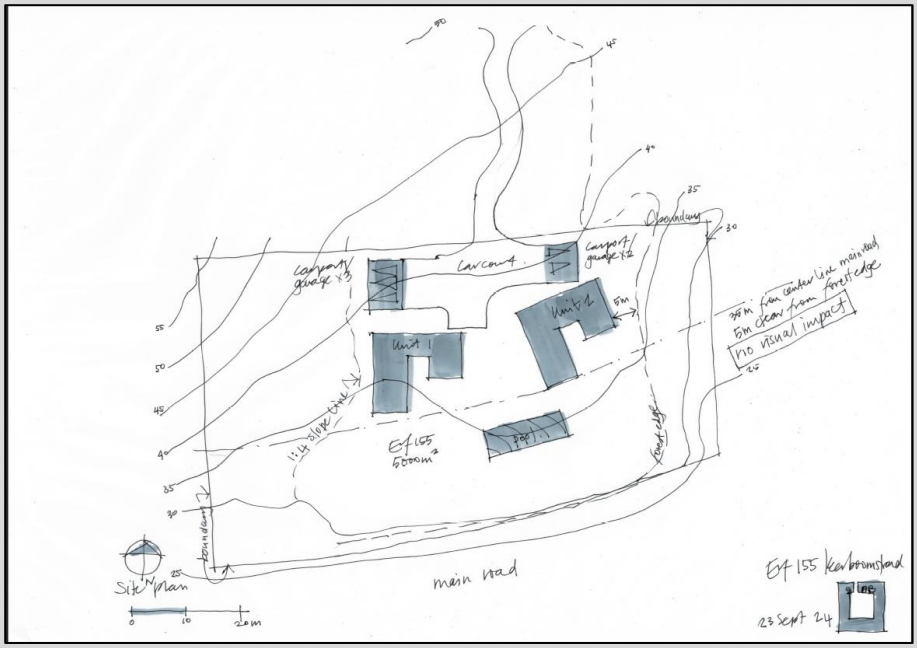
The proposal is to develop 2x group dwelling units on the eastern portion (referred to as “Erf 1180”, previously Erf 155) of Erf 1236. Approximately 2000m² of the 5 000m² subject site is earmarked for development.

The preferred development proposal entails the construction of two (2) double-storey residential units with double garage and a shared swimming pool.

Town Planning: the proposal is to subdivide a portion (±5000m²) off from Erf 1180, and to rezone this portion from "Open Space Zone 2" to "Open Space Zone 3" for "Nature conservation area" to allow for the two dwelling units and a swimming pool.

Access: the property is entitled to a 7m wide right of way servitude across Erf 391. The proposed driveway width into the development is 4m, curved around mature trees of conservation value.

A 35m scenic route setback was put in place by the visual impact specialist for all alternatives. This is to provide a reduced visual intrusion along a scenic route into and out of Keurboomstrand and the town of Plettenberg Bay. The units will incorporate low-pitched roofing and earth-toned colours. In addition, botanical sensitive areas have been marked as no-go areas and provided an additional 5m buffer offset from the proposed development.



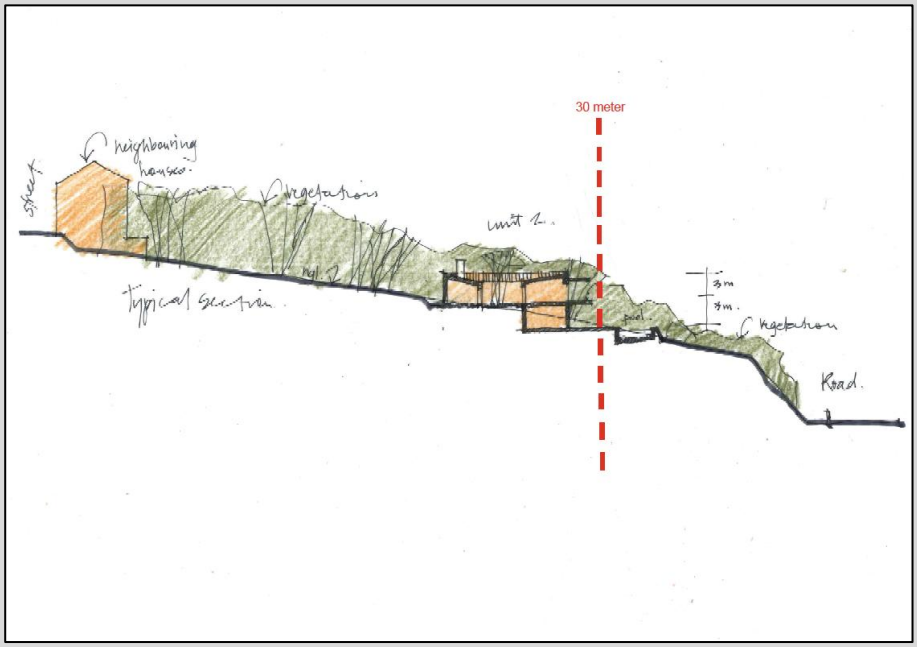


Plate 1: Provided hand drawn SDP and GIS overlay of proposed dwellings

Water Supply

Water will be supplied to the development from the existing Keurboomstrand reservoir. The proposed connection point for the development is at the existing 75mm water main in adjacent park Erf 691. It is proposed that a 75 mm bulk meter connection be made to the municipal mains.

An alternative method of water supply would be the harvesting of rainwater. However, rainwater should be considered as a supplementary supply for non-potable use, unless treated.

Sewerage

In terms of the Municipal Sewer Masterplan and already approved developments there is no spare capacity for the proposed development in various sections of the sewer network and upgrades are required to accommodate this development.

Due to capacity constraints an alternative to the municipal connection has been proposed by the engineer. An interim alternative will be to provide a combined 24 000 litre conservancy tank. The municipal approved conservancy tank is to be constructed at an approved position to allow municipal and or private tanker access.

Electricity

The electricity supplier is Bitou Municipality. The development will need to be linked to the existing municipal infrastructure.

Solid Waste Management

The development will be incorporated into the Bitou Municipal solid waste stream. Regular waste collection at the proposed site is of utmost importance to prevent the degradation of the overall environment; as well as to prevent scavenging by fauna and indigent communities. Recycling of waste will be implemented for the lifespan of the proposed project.

A services agreement will be negotiated with the Bitou Municipality by the developer.

ALTERNATIVE 2

The Alternative development proposal is to rezone the application area to "General Residential Zone I" for group housing, for three (3x) group housing units.
The sizes of the three (3x) group housing units will be:

Unit 1 = 316m²
Unit 2 = 385m²
Unit 3 = 385m²

Total area = 1086m²

The proposed alternative development proposal entails the development of three sectional title group housing units, with a swimming pool in a north-south orientation, as shown in the figure below:

Figure 2: Alternative Design

4.5.	Indicate how access to the proposed site(s) will be obtained for all alternatives.

The property is entitled to a 7m wide right of way servitude across Erf 391. The proposed driveway width into the development is 4m, curved around mature trees of conservation value.

4.6.	SG Digit code(s) of the proposed site(s) for all alternatives: *At present	C	0	3	9	0	0	0	4	0	0	0	0	1	2	3	6	0	0	0	0	0

4.7.	Coordinates of the proposed site(s) for all alternatives:			
	Latitude (S)	34°	0′	11.89″
	Longitude (E)	23°	27′	16.21″

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.
1. National Forestry Act, 1998 - Forestry license will be required. 2. Outeniqua Sensitive Coastal Area Extension Regulations, 1998 - OSCAER permit will likely be required – to be confirmed by Bitou Municipality.

4. Policies

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

1. National Environmental Management Act (NEMA, Act 107 of 1998) and EIA Regulations (2014, as amended)

Policy Intent:

To promote sustainable development through the application of environmental management principles that ensure activities are socially, environmentally, and economically responsible.

Compliance and Response:

A Basic Assessment Report (BAR) has been compiled in terms of the NEMA EIA Regulations.

The project adheres to the mitigation hierarchy (avoid, minimise, rehabilitate, offset) to manage potential impacts.

The Best Practicable Environmental Option has been selected through specialist input, ensuring minimal impact on sensitive areas.

The development upholds NEMA's Section 2 principles by balancing ecological integrity, economic benefit, and community well-being.

2. National Environmental Management: Biodiversity Act (NEM:BA, Act 10 of 2004)

Policy Intent:

To conserve South Africa's biodiversity and ensure the sustainable use of indigenous species and ecosystems.

Compliance and Response:

The site includes small portions of Endangered Southern Cape Dune Fynbos and Thicket Mosaic vegetation.

Sensitive vegetation and fauna habitats have been identified and demarcated as no-go areas in the site layout.

The development footprint lies within low-sensitivity zones, consistent with the Western Cape Biodiversity Spatial Plan (WCBSP), which allows limited development in CBA 2 and ESA 1 areas under strict mitigation.

Rehabilitation and alien-clearing plans are incorporated to enhance biodiversity persistence.

3. National Water Act (Act 36 of 1998)

Policy Intent:

To ensure sustainable management and protection of water resources.

Compliance and Response:

No watercourses, wetlands, or estuaries occur on the site.

The project includes a Sustainable Drainage System (SuDS) and the EAP requests for a Stormwater Management Plan to be implemented to prevent erosion and pollution.

Rainwater harvesting and greywater reuse are incorporated to reduce dependence on municipal potable supply in this water-scarce region.

No direct abstraction or discharge to surface water will occur; thus, no Water Use Licence is required.

4. National Environmental Management: Waste Act (NEM:WA, Act 59 of 2008)

Policy Intent:

To promote waste minimisation, reuse, recycling, and responsible disposal.

Compliance and Response:

The development applies the waste hierarchy by prioritising reduction, reuse, and recycling before disposal.

Construction and operational waste will be separated onsite, with recyclables sent to licensed facilities and hazardous waste handled by authorised contractors.

No burning or burying of waste will occur.

5. National Energy Efficiency Strategy (2020) and SANS 10400-XA (Energy Usage in Buildings)

Policy Intent:

To reduce national energy consumption and carbon emissions through efficient building design and renewable-energy integration.

Compliance and Response:

The design incorporates passive solar orientation, insulation, cross-ventilation, and energy-efficient fittings.

Solar water heaters and photovoltaic (PV) panels are included to reduce grid dependence.

Compliance with SANS 10400-XA is achieved through high-performance glazing and efficient building envelopes.

6. Western Cape Provincial Spatial Development Framework (WCPSDF, 2014, reviewed 2023)

Policy Intent:

To promote spatial efficiency, resilience, and sustainable settlement patterns while conserving biodiversity and ecosystem services.

Compliance and Response:

The project represents infill development within an existing residential node, aligning with the WCPSDF principle of compact and contained growth.

Sensitive ecological areas are avoided, and landscape character is maintained.

The development supports climate-resilient design and resource-efficient land use, in line with provincial sustainability objectives.

7. Bitou Municipality Spatial Development Framework (SDF, 2022)

Policy Intent:

To guide land-use decisions in the municipal area toward sustainable urban growth and environmental protection.

Compliance and Response:

Erf 1180 is located within the Urban Edge of Keurboomstrand, in a zone earmarked for low-density residential infill.

The proposal conforms to the SDF's desired spatial pattern and does not represent urban sprawl.

The development supports local economic development, employment, and rates income while preserving environmental integrity.

8. Bitou Municipal Integrated Development Plan (IDP, 2022–2027)

Policy Intent:
To improve service delivery, housing quality, and economic resilience within the municipality.

Compliance and Response:

The development contributes to private-sector housing investment aligned with municipal infrastructure availability.

All engineering services (water, sewer, electricity) will comply with municipal capacity and standards.

The project will create short-term construction jobs and enhance municipal revenue, supporting IDP objectives.

9. National Climate Change Response Policy (2011) and Western Cape Climate Change Response Strategy (2018)

Policy Intent:

To promote low-carbon development and climate resilience through adaptation and mitigation.

Compliance and Response:

The development integrates rainwater harvesting, solar energy, energy-efficient design, and sustainable stormwater systems to reduce vulnerability to drought and flooding.

Indigenous, drought-resistant landscaping supports climate adaptation.

The project demonstrates resilience and mitigation alignment with national and provincial climate policies.

10. Coastal Management Framework and Integrated Coastal Management Act (ICMA, Act 24 of 2008)

Policy Intent:

To ensure coastal development is sustainable and does not compromise coastal ecosystems or public access.

Compliance and Response:

The site is outside the Coastal Management Line and not exposed to sea-level rise or storm-surge risk.

Development will not obstruct public access or interfere with coastal processes.

Visual and ecological buffers maintain the coastal character and integrity of the area.

11. Heritage Western Cape and National Heritage Resources Act (Act 25 of 1999)

Policy Intent:

To identify, protect, and manage heritage resources.

Compliance and Response:

A Heritage Impact Assessment found no significant heritage resources on site.

A chance-find protocol will be implemented during construction, in compliance with Heritage Western Cape guidelines.

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.

1. Guideline on Need and Desirability (DEA&DP, 2017)

Purpose:

Provides a framework for assessing whether a proposed development is appropriate within its social, economic, and environmental context.

Influence on the Proposal:

Guided the assessment of how the project aligns with local planning frameworks (Bitou SDF and IDP).

Confirmed that the development constitutes appropriate infill within an existing residential node, thereby avoiding urban sprawl.

Informed motivation for the project's socio-economic desirability, including job creation and sustainable land use.

2. Guideline on Alternatives (DEA&DP, 2013)

Purpose:

To ensure consideration of feasible site, layout, and technology alternatives during the EIA process.

Influence on the Proposal:

Led to the evaluation of three options:

Preferred Alternative: Two dwellings within the low-sensitivity portion of the site;

Alternative 2: Larger, higher-impact three-unit layout;

No-Go Option: No development.

The preferred layout was selected because it best balances development potential with environmental protection, avoiding steep slopes and sensitive vegetation.

3. Guideline on the Interpretation of Listed Activities (DEA&DP, 2010)

Purpose:

Clarifies which activities trigger environmental authorisation under the EIA Regulations.

Influence on the Proposal:

Assisted the EAP in identifying applicable listed activities relevant to vegetation clearance, earthworks, and residential development.

Ensured the correct Basic Assessment process was followed rather than a full Scoping and EIA, given the limited scale and low significance of impacts.

4. Western Cape Guideline on Public Participation (DEA&DP, 2013)

Purpose:

Sets out minimum standards for public consultation during EIA processes.

Influence on the Proposal:

Guided the stakeholder engagement plan, including early notification of Interested and Affected Parties (I&APs), state departments, and the municipality.

Ensures that public participation was inclusive, transparent, and compliant with regulatory requirements.

Influenced the use of electronic and written communication channels appropriate to the local community context.

5. Guideline for Environmental Management Plans (EMPr) (DEA&DP, 2013)

Purpose:

Provides a framework for preparing effective and implementable EMPrs.

Influence on the Proposal:

Shaped the structure of the EMPr for this project, ensuring clear objectives, performance indicators, and monitoring responsibilities.

Promoted inclusion of construction-phase and operational-phase mitigation measures, with ECO oversight and compliance monitoring.

Ensured that environmental commitments are practical, measurable, and enforceable by the competent authority.

6. Western Cape Biodiversity Spatial Plan (WCBSP, 2017, updated 2022)

Purpose:

Provides biodiversity priority mapping (Critical Biodiversity Areas and Ecological Support Areas) and land-use guidelines for sustainable development.

Influence on the Proposal:

Identified portions of the site as CBA 2 and ESA 1, guiding the design to avoid sensitive thicket and forest zones.

Directly influenced the position of the building footprints within the least sensitive area of the property.

Informed no-go areas, vegetation buffers, and rehabilitation requirements included in the EMPr.

7. Western Cape Guideline for Landscape and Visual Impact Assessment (2013)

Purpose:

Provides methodology for assessing and mitigating visual impacts.

Influence on the Proposal:

Guided the Visual Impact Assessment, confirming the need for a 35 m scenic route setback along MR394.

Informed the architectural guidelines for the development, including earth-tone finishes, non-reflective materials, and low-pitched roofs.

Ensured the design respects the coastal sense of place and visual integrity of the Keurboomstrand area.

8. Guideline on Transitional Coastal Setback Lines (DEA&DP, 2011)

Purpose:

Provides direction for development near coastal environments to protect ecological and visual resources.

Influence on the Proposal:

Confirmed that the site lies outside the coastal management line and therefore not directly exposed to storm-surge or sea-level rise risk.

Nonetheless, the design maintains natural vegetation buffers to preserve coastal ecosystem functioning and scenic quality.

9. Bitou Municipality Environmental Management Framework (EMF, 2014)

Purpose:

Identifies environmental opportunities and constraints within the municipal area to guide sustainable land use.

Influence on the Proposal:

Reinforced the need to concentrate development within existing urban edges and protect sensitive vegetation outside these areas.

Supported the project's classification as low-impact infill development compatible with the EMF's desired environmental management zones.

10. National Waste Management Strategy (2020)

Purpose:

Promotes the waste management hierarchy — reduce, reuse, recycle — and aims to reduce reliance on landfill disposal.

Influence on the Proposal:

Shaped construction-phase waste management, requiring onsite separation, recycling, and prohibition of burning or burying waste.

Informed the inclusion of household-level recycling facilities and municipal waste collection coordination in the operational phase.

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
Please see attached SSVR – Appendix I

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.
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	More than 300 square metres of indigenous vegetation will be cleared from the property. Erf 1180 Keurboomstrand is zoned as Open Space Zone 2.

	section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; ii. Within critical biodiversity areas identified in bioregional plans; iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; **iv. On land, where, at the time of the coming into effect of this Notice or 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.	
15	The transformation of land bigger than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, such land was zoned open space, conservation or had an equivalent zoning, on or after 02 August 2010. f. Western Cape i. Outside urban areas, or **ii. Inside urban areas:** **(aa) Areas zoned for conservation use or equivalent zoning, on or after 02 August 2010;** (bb) A protected area identified in terms of NEMPAA, excluding conservancies; or (cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act as adopted by the competent authority.	Erf 1180 Keurboomstrand is zoned as Open Space Zone 2. The residential development proposed for this property will be approximately 2000 square metres in size.

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 development proposal entails the construction of two (2) residential units and a shared swimming pool. The units are to be positioned as to have minimal visual effect, mainly to passers-by on the MR394 (main route in and out of Keurboomstrand). A 35m scenic route setback has been put in place by the visual impact specialist for this development. This is to provide a reduced visual intrusion along a scenic route into and out of Keurboomstrand and the town of Plettenberg Bay. The units will incorporate low-pitched roofing and earth-toned colours. In addition, botanical sensitive areas have been marked as no-go areas and provided a 5m buffer from the proposed development.	
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.
The proposed development is not in line with existing land use rights. A town planning application is proposed to subdivide a portion (±5000m²) off from Erf 1180, and to rezone this portion from "Open Space Zone 2" to "Open Space Zone 3" for "Nature conservation area" to allow for the two dwelling units and a swimming pool.	
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.
As above	
4.	Explain how the proposed development will be in line with the following?
4.1	The Provincial Spatial Development Framework.

As per the Specialist Planning Report for Nema Purposes, August 2025:

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

The recent shift in legislative and policy frameworks have clearly outlined the roles and responsibility of provincial and municipal spatial planning and should be integrated towards the overall spatial structuring plan for the province to create and preserve the resources of the province more effectively through sustainable urban environments for future generations. This shift in spatial planning meant that provincial inputs are in general limited to provincial scale planning.
The proposed development compliments the sdf spatial goals that aim to take the western cape on a path towards:

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

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

POLICY R1: PROTECT BIODIVERSITY & ECO-SYSTEM SERVICES

POLICY STATEMENT	DEVELOPMENT'S RESPONSE
This policy reflects on securing fragmental natural habitats, it is necessary to prevent further intrusion of agricultural activity or urban expansion into key Critical Biodiversity Areas and ecological support areas. This policy helps to prevent any development in these unique environments, to preserve and protect the natural habitat.	• *This proposal realises the importance of the environment and did take into account the CBA areas and all other sensitive areas, the proposed development strives to be as sustainable and eco-sensitive as possible. The proposed layout of the two dwellings, stayed clear of the protected areas, thus indicating the commitment of the development to comply with any environmental constraints.*

POLICY R5: SAFEGUARD CULTURAL AND SCENIC ASSETS

POLICY STATEMENT	DEVELOPMENT'S RESPONSE
2. Protect heritage and scenic assets from inappropriate development and land use change.	• *The rezoning to a nature conservation area, and the development of two dwellings on the proposed subdivided portion, will safeguard the application area form further development in future, whilst raising capital for ongoing maintenance of the remaining portion on natural area.*
4. Strategies towards achieving adequate legislation to *protect scenic resources*, as well as towards establishing more detailed classification of landscape and scenic typologies are required. Conservation strategies and guidelines are also particularly important in the effective management of scenic landscape quality and form. They must *describe the qualities of an area and the nature of development that is likely to be permitted*, thus preventing wasteful expenditure, misunderstanding and conflict on the part of owners, developers, architects and the local authority. They can also ensure that the local authority is consistent in its management of the area in terms of the maintenance and enhancement of the public realm and in terms of development control.	• *A Visual Impact Assessment is being undertaken, and the VIA will assess the new preferred development proposal. The image as shown in Figure 7:* Preferred Alternative - Invisible Proposal with only Two (2x) Units*shows insignificant visual impact.*

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

POLICY STATEMENT	DEVELOPMENT'S RESPONSE
1. Prevent settlement encroachment into agricultural areas, scenic landscapes and biodiversity priority areas, especially between settlements, and along coastal edges and river corridors.	• *A Visual Impact Assessment is being undertaken, and the VIA will assess the new preferred development proposal. The image as shown in Figure 7:* Preferred Alternative - Invisible Proposal with only Two (2x) Units*shows insignificant visual impact.* • *The proposed layout of the two dwellings, stayed clear of the protected areas, thus indicating the commitment of the development to comply with any environmental constraints.* • *The given the sensitive argitectural design, the proposal will not ipact negatively on any scenic assets.*

POLICY S4: ENSURE BALANCED & COORDINATED DELIVERY OF FACILITIES AND SOCIAL SERVICES

1. Balance sustainable service delivery and equitable access to education and health services to improve equitable access to social services such as health and education across the province.
4. Rationalise and balance the regional distribution of health and educational service centres around a coherent hierarchy of services and only invest in places where people can easily access these services.

Development response: the proposed two residential dwellings on the proposed nature conservation area will not require any additional health or educational facilities.

PLANNING IMPLICATION:

The Western Cape Spatial Development Framework has a strong emphasis on revitalising urban spaces creating an urban living environment which is more convenient, efficient and aesthetically pleasing to residents. The proposal is consistent with strategic objectives as set out by the western cape spatial development framework, for the following reasons:

- The proposal will not have any negative visual impact on the scenic Keurboomstrand road;
- The proposed two dwellings will be constructed on disturbed areas.
- The proposed rezoning to conservation area and the protection of the identified sensitive natural environment will be consistent with the WCPSDF.
- The layout design was informed by the biophysical informants of the site: slopes, vegetation, orientation, etc.

4.2	The Integrated Development Plan of the local municipality.

As per the Specialist Planning Report for Nema Purposes, August 2025:

BITOU INTEGRATED DEVELOPMENT PLAN (2022-2027)

The IDP is a municipal planning instrument that drives the process to address the socio-economic challenges as well as the service delivery and infrastructure backlogs experienced by communities in the municipality's area of jurisdiction.

Bitou municipality approved the 5th generation IDP during June 2022 council resolution number: c/6/23/05/17. According to this IDP, the municipality's vision is "…to be the best together…"

Bitou municipality has adopted seven strategic objectives to deliver on its vision and to help realize the objectives of the district economic development, provincial strategic goals and national development plan which eventually will contribute to the globally sustainable development goals. Strategic objectives relevant to the proposal are:

STRATEGIC OBJECTIVE	
SO1	Provide Excellent Service Delivery to the residents of Bitou Municipality.
SO2	Re-establish, grow and expand tourism within the municipality.
SO3	Put relevant control measures in place to ensure efficiency and excellence.
SO4	Provide basic service delivery to informal settlements and the poor.
SO5	Facilitate growth, jobs and empowerment of the people of Bitou.
SO6	To ensure the safety of residents and visitors of Bitou municipality
SO7	To build institutional and financial sustainability.

FIGURE 16: BITOU MUNICIPALITY – STRATEGIC OBJECTIVES

The application area is located in Ward 1 of the Bitou Municipality. No detailed development proposals have been made for this area. The Ward 1 priorities for Keurboomstrand relate to infrastructure services:

Water and sanitation	• Water security at Game St reservoir • Sewerage reticulation
Roads and stormwater	• Storm water outlet onto main beach • Upgrade boardwalk at main beach
Electricity	• Electricity feed upgrade for greater Keurbooms • Soft street lightning in village

FIGURE 17: BITOU MUNICIPALITY – WARD 1 PRIORITIES

PLANNING IMPLICATION:

The IDP is a municipal planning tool to integrate municipal planning and allocate municipal funding to achieve strategic objectives that will contribute to the overall municipal vision. Although this application is not considered to be an important strategic objective it can be motivated that the development of the land supports important municipal interventions amongst others creating economic jobs within the ward. Further to the above the proposed development will contribute to the economic expenditure in the area, providing housing opportunities, create employment and the make use of existing services network.

4.3.	The Spatial Development Framework of the local municipality.

As per the Specialist Planning Report for Nema Purposes, August 2025:

The updated Bitou Spatial Development Framework (SDF) was approved by the Bitou Municipal Council during 2021. The SDF is, therefore, the primary spatial tool for guiding development within the municipal area.

The SDF is the primary spatial tool for guiding development within the municipal area. The SDF echoes the principles laid down by the provincial SDF including densification, the importance of compact settlements and walkability and the promotion of a mixture of uses in close proximity to one another.

The figure below shows an extract of the Bitou Municipal SDF for this area, and the figure shows the application area as being included inside the urban edge for Plettenberg Bay.

The Bitou SDF lists the following spatial objectives in the SDF:

- **Expansion** of the urban footprint should be **directed to strategically located priority** development areas which will contribute towards the overall consolidation of the currently fragmented urban footprint of the municipality.
- The development of a **diverse range of housing typologies** for all income groups, at low, medium and higher densities and offering a variety of tenure alternatives should be a priority. This applies to housing for permanent residents and for holiday accommodation.
- Protect and enhance agricultural lands and secure these as a productive land base for food security, employment, etc.

The SDF makes the following statements for the Keurboomstrand Area:

> *A strong holiday/resort character predominates the area. It is fairly homogenously developed with residential and resort uses, wedged between sea and the coastal plateau slopes. Altering its character by permitting commercial and other non-residential development could detract from the area's attraction. The theme should thus be a low density residential one.*

- The fringes of the river and the coast should be protected as Core 2SPCs. The alignment of this SPC can be determined by a fresh water ecologist;
- The road to Keurboomstrand, the first section of the road to Keurboom beach as well as the old N2, should be declared as scenic routes;
- This does not necessarily mean that they are converted to treed avenues but rather that their view and scenic quality is protected from inappropriate urban development. This can be achieved by preparing a visual resource management corridor along the routes for which guidelines are prepared for development within this corridor
- No development on slopes steeper than 1:4
- Development can only be allowed

- Extensions of existing urban development where development is contiguous (i.e. abutting) to existing municipal infrastructure services;
- Low density Resort Zone (Resort Zone 1 and 2) developments in proximity (within 1 kilometre) of urban areas; and, specific resort and industrial developments outside of the Urban Edge where, by prior arrangement, such service provision can be feasibly provided.
- It is accepted that any new developments cannot be implemented if the necessary services infrastructure and capacities are not in place or cannot be duly provided. The greener, more environmentally friendly services methods are promoted.

FIGURE 15: EXTRACT OF BITOU SDF KEURBOOMSTRAND AREA

The application area is earmarked as conservation management area, and located inside the demarcated urban edge for Keurboomstrand. The proposal to rezone the land to a nature conservation area, is consistent with the conservation designation of the application area, and the fact that the application area is located inside the urban edge, confirms the consistency of the proposed two dwellings that will be located on disturbed areas inside the urban edge.

4.4.	The Environmental Management Framework applicable to the area.

EMF Guideline Theme	**Proposed Development Response / Alignment**
Ecological & Vegetation Protection	Avoids high-value vegetation; implements rehabilitation and alien-clearing.
Topography & Erosion Control	Located below dune crest; slope stabilisation and erosion prevention integrated.
Visual & Sense of Place	Building form and finishes blend with natural landscape; height and bulk limited.
Water & Coastal Systems	Maintains natural drainage and buffers; promotes water reuse and stormwater filtration.
Sustainable Land Use	Compact footprint on already disturbed land; low-impact residential activity.
Environmental Governance	Aligns with EMF, NEMA, NEM:BA, and local SDF frameworks for decision-making.

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

Comments from authorities and specialist input has resulted in the preferred alternative.

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

1. Site Selection and Layout Planning

The WCBSP directly informed the delineation of development and no-go areas on the Erf.

The proposed dwellings and associated infrastructure were confined to the least sensitive portion of the site — the disturbed zone.

This approach ensures that the ecological connectivity of the surrounding vegetation and fauna corridors is maintained.

(2) Mitigation and Management Measures

Following the WCBSP Handbook guidelines, the design applies the mitigation hierarchy (avoid → minimise → rehabilitate → offset).

Sensitive indigenous vegetation areas will be demarcated as conservation / rehabilitation zones in the site's Environmental Management Programme (EMPr).

During construction, no-go fencing will prevent disturbance of adjacent thicket and fynbos.

Post-construction, indigenous species rehabilitation will be implemented to restore disturbed edges and maintain ecological functionality.

An alien vegetation control plan has been incorporated to prevent the spread of invasive species, consistent with the WCBSP's ecosystem management recommendations.

(3) Land-Use Compatibility

The WCBSP Handbook identifies low-impact residential development as potentially compatible within ESA 1 areas, provided that:

The disturbance footprint is minimised;

Vegetation loss is offset or rehabilitated; and

No disruption occurs to ecological corridors or drainage lines.

The proposed development complies with these criteria.

By locating the built form within already disturbed land, the project aligns with the "compatible land use" classification for ESA 1 under the WCBSP.

(4) Integration into the EMPr and Environmental Controls

The WCBSP Handbook recommends the integration of biodiversity protection measures into the Environmental Management Programme (EMPr).

Accordingly, the project EMPr includes:

- Requirements for ECO monitoring,
- Vegetation protection and rehabilitation measures,
- Alien species removal schedules, and
- Long-term post-construction monitoring to ensure vegetation establishment and slope stability.

(5) Support of Provincial and Municipal Conservation Targets

The WCBSP contributes to achieving provincial biodiversity conservation targets by maintaining the ecological integrity of mapped CBAs and ESAs.

The proposed development supports these targets by:

- Avoiding direct disturbance of CBA habitat;
- Maintaining ESA connectivity; and
- Implementing on-site rehabilitation and alien-clearing as compensatory ecological enhancement.

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

The proposed development will fall just outside of the 100 HWM of the sea; therefore, does not trigger the relevant zones as per the ICMA.

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.

No changes have occurred from the NOI submission.

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

The proposed development will utilise a portion (approx.2000m^2) of vacant land which totals 56 615m2. This will allow majority of the land undeveloped and remain an ecological corridor.

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

The property has existing municipal infrastructure for the proposed development.

Natural vegetation will provide natural screening for the development, decreasing visual impacts – provided mitigation measures are followed.

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).

As per the GLS Consulting report dated 10 November 2016:

The developer of Erf 155 in Keurboomstrand will be liable for the augmentation and transportation fees (as calculated by the Bitou Municipality) as a contribution towards water infrastructure and the augmentation and transportation fees (as calculated by the Bitou Municipality) as a contribution towards sewer infrastructure.

Accommodation of the development in the present reticulation system will require no upgrading of the existing reticulation system to comply with the pressure and fire flow criteria as set out in the master plan.

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.

The concept of "Need and Desirability" forms a central part of environmental decision-making under the national environmental management act (NEMA).

As per the DEA&DP (2013) guideline, "need" refers to the time-bound necessity or demand for the proposed activity, while "desirability" addresses the spatial appropriateness and suitability of the activity in relation to the receiving environment. Together, they ensure that new development is socially justified, environmentally responsible, and spatially sustainable.

The proposed activity entails the construction of two residential dwellings on erf 1180, Keurboomstrand, within the Bitou Local Municipality, Western Cape.

Need for the proposed development

1. Local housing and land-use demand

Keurboomstrand is a well-established coastal settlement with growing demand for permanent and holiday residential accommodation.

The proposal provides infill development within the existing urban edge, responding to a demonstrated market demand for low-density, environmentally sensitive housing in the area.

The development optimises the use of already serviced land, avoiding the need to extend municipal infrastructure into undeveloped areas.

2. Economic and municipal need

The construction phase will create short-term local employment (estimated 10–15 jobs) and stimulate local economic activity through procurement of materials and services.

The development will generate additional municipal revenue through property rates and service charges, supporting local infrastructure maintenance and service delivery.

It aligns with the Bitou Integrated Development Plan (IDP 2022–2027) objective of promoting private-sector investment that is environmentally sustainable.

3. Need for efficient land utilisation

The Erf lies within a designated residential zone under the Bitou Zoning Scheme and is currently underutilised.

Developing the site as proposed supports efficient land use, consistent with the Western Cape Provincial Spatial Development Framework (WCPSDF) objective of densifying existing nodes rather than expanding into rural or natural areas.

Summary of need:

The proposed development responds directly to local housing demand, municipal growth objectives, and spatial-efficiency principles, providing sustainable residential use within an existing serviced and planned area.

Desirability of the proposed development

The desirability of the project has been evaluated in terms of the DEA&DP Guideline (2013), which considers both spatial planning alignment and environmental compatibility.

1. Spatial appropriateness

The site is located within the Keurboomstrand urban edge, identified in the Bitou Spatial Development Framework (2022) as suitable for low-density residential infill.

The proposal therefore represents a logical consolidation of the existing settlement pattern, consistent with spatial efficiency and compact growth principles promoted by the WCPSDF.

No rezoning or deviation from the municipal land-use vision is required.

2. Environmental compatibility

The layout has been informed by specialist biodiversity, visual, and heritage studies, ensuring that development occurs in the least environmentally sensitive portion of the site.

Sensitive fynbos-thicket vegetation and slope areas have been designated as no-go zones and will remain undisturbed.

The design integrates Sustainable Drainage Systems (SuDs), solar energy, rainwater harvesting, and indigenous landscaping, minimising the ecological footprint and ensuring climate resilience.

The proposal aligns with NEMA's section 2 environmental management principles, promoting sustainable use of natural resources and avoidance of significant impacts.

3. Socio-economic and visual desirability

The development will enhance the character of the existing residential area through context-sensitive architectural design, scale, and materials.

The visual impact assessment confirmed that, with the recommended 35 m scenic-route setback and muted colour palette, the proposal will not compromise the visual quality or sense of place.

The project contributes to the local economy, improves property values, and supports long-term economic stability in the region without compromising environmental integrity.

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 fully complied with in application phase.

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

   All State Departments and Organs of State mentioned in the NOI have been included in the I&AP register and consulted with.

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

   N/A

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

   N/A

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 Draft 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.		
N/A			
1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.		
N/A			
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.		
N/A			

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.		
Upstream Consulting – Debra Fordham			
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.		
No watercourses and/or wetlands are present on the property.			

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.		
N/A			
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.		

Erf 1180 Keurboomstrand is situated within the broader coastal management area but is outside the demarcated Coastal Protection Zone and Coastal Management Line as adopted by the Bitou Municipality and the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP). Although the site is not located directly within coastal public property, it falls within the influence area of the coast, and therefore Section 63 applies.

Accordingly, all relevant Section 63 considerations were reviewed and incorporated into the project design and assessment process.

(a) Protection of the Coastal Public Property and Ecosystems

ICMA Requirement:

Development must not compromise the ecological integrity, natural processes, or scenic value of the coastal public property.

Project Response and Influence:

The development footprint has been restricted to the least-sensitive portion of the site, outside areas supporting coastal thicket and dune fynbos.

No-go areas and vegetation buffers have been demarcated to protect coastal ecosystem functions and prevent encroachment into natural vegetation.

Indigenous landscaping will be used to maintain local biodiversity and stabilise soils.

(b) Public Access to the Coast

ICMA Requirement:

Development must not impede or restrict public access to and along the coastal public property.

Project Response and Influence:

The site is privately owned and located inland of existing public access routes to Keurboomstrand beach.

The proposed dwellings do not block or alter any existing access points or servitudes.

The development retains all public rights-of-way and does not require any coastal servitude alterations.

(c) Avoidance of Coastal Hazards and Risk

ICMA Requirement:

Developments must be located and designed to avoid exposure to coastal erosion, storm surges, flooding, or sea-level rise.

Project Response and Influence:

The site is located well above the 1:100-year coastal flood level and outside the coastal risk zone identified by the DEA&DP Coastal Management Line.

Topographical and geotechnical assessments confirmed stable slopes and no exposure to erosion or undermining processes.

A stormwater plan must ensure infiltration on-site, reducing concentrated discharge toward lower coastal slopes.

(d) Maintenance of Coastal Visual and Scenic Quality

ICMA Requirement:

Development must respect the coastal landscape character and avoid visual intrusion in scenic coastal settings.

Project Response and Influence:

A Visual Impact Assessment informed the layout, recommending a 35 m scenic-route setback from MR 394.

The buildings will use low-reflective, natural materials, earth-tone colours, and low-pitched roofs to blend with the coastal backdrop.

Vegetation buffers will screen the structures from public viewpoints without obstructing natural vistas.

(e) Compatibility with Surrounding Land Use and Character

ICMA Requirement:
Development must be compatible with the existing and planned character of the coastal settlement and surrounding environment.

Project Response and Influence:

The site lies within the existing Keurboomstrand residential node identified in the Bitou Spatial Development Framework and EMF.

The proposal represents low-density, single-residential use consistent with adjacent land uses.

Architectural and landscaping guidelines ensure visual and scale compatibility with surrounding dwellings and the coastal setting.

(f) Promotion of Sustainable Coastal Development

ICMA Requirement:

Encourage sustainable resource use and minimise cumulative impacts on coastal systems.

Project Response and Influence:

The design incorporates energy-efficient systems (solar geysers, PV panels), rainwater harvesting, and greywater reuse to reduce environmental load.

Construction and operation will follow an approved EMPr with waste-reduction, erosion-control, and rehabilitation measures.

The project demonstrates sustainability and low cumulative impact consistent with the ICMA's objectives.

3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.
N/A	
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.
The site falls outside the Coastal Management Line and the Coastal Protection Zone. Vegetation removal, erosion control and pollution protection are considered key factors during design, construction and operation.	

4. Biodiversity

4.1.	Were specialist studies conducted?	**YES**	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		
Terrestrial Biodiversity Assessment – Jamie Pote (SACNASP Professional Natural Scientist: Ecological Science; Pr.Sci.Nat. 115233). Vegetation Sensitivity Analysis – Ken Coetzee (Conservation Management Services)			
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.		

1. SANBI: VegMap 2018
2. Western Cape Biodiversity Spatial Plan 2017: Critical Biodiversity Areas 1 and 2
3. Western Cape Biodiversity Spatial Plan 2017: Environmental Support Areas 1 and 2
4. Western Cape Biodiversity Spatial Plan 2017: Ecosystem Threat Status
5. National Geo-spatial Information (DRDLR): Rivers (NGI)
6. Western Cape Biodiversity Spatial Plan 2017: Protected Areas
7. CSIR: Wetland Freshwater Priority Areas (FEPAs)

The initial screening of the site informed the development proposal by identifying relevant specialists and allowed the applicant and EAP to identify the initial development area. Thereafter, specialists have referred to these maps and ground-truthing to identify the best practicable site to develop on.

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.

Specialists had ground-truthed the site with the objectives and management guidelines of the BSP in mind. Outcomes of the specialist assessments after ground-truthing has influenced the proposed development.

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.

According to the Western Cape Biodiversity Spatial Plan (WCBSP 2022), the site is classified primarily as an Ecological Support Area 1 (ESA 1). Earlier mapping (WCBSP 2017) indicated a Critical Biodiversity Area 1 (CBA 1) edge designation; however, subsequent ground-truthing by Jamie Pote (Pr.Sci.Nat.) confirmed that the footprint occurs within ESA 1—not CBA 1—because the remaining vegetation in the erf represents secondary, partially disturbed dune thicket and thicket-forest mosaic that provides connectivity rather than core biodiversity habitat.

The ESA 1 category is defined as land not essential to achieving biodiversity targets, but that supports the ecological functioning of adjacent CBAs and Protected Areas by maintaining natural corridors, hydrological processes, and ecosystem services. The management objective for ESA 1 is to maintain ecological functionality in a near-natural state, allowing for limited, well-mitigated, low-impact development.

The biodiversity assessment identified the following key ecological characteristics:

Feature	**Description / Ecological Role**
Vegetation type	Intermediate **Dune Thicket** with elements of **Southern Cape Dune Forest** and residual **coastal fynbos**. Dominant species include *Pterocelastrus tricuspidatus*, *Schotia afra*, *Sideroxylon inerme*, *Tarchonanthus littoralis*, and *Azima tetracantha*.
Habitat condition	Moderately disturbed; previous clearing and garden areas evident on the lower bench. Vegetation along steep southern slopes remains intact and natural.
Faunal use	Small and transient mammals (e.g. bushbuck, rodents), common avifauna, and reptiles. No Red-Listed or threatened species were recorded within the development footprint.
Ecological function	Provides **corridor connectivity** between dune thicket and coastal forest patches and contributes to local **soil stabilisation and erosion control** on the dune slopes.

Anticipated Impacts on Biodiversity Features and Function

The biodiversity specialist concluded that:

Direct impacts will be limited to ±2 500 m² of the 5 000 m² subdivision area, located within already disturbed portions of the Erf.

Approximately 70 % (± 4 ha) of the Erf—including the steeper western slopes and intact thicket—will remain undeveloped and conserved, ensuring retention of ecological linkages.

The development will not fragment intact CBA habitat, as the ESA 1 vegetation primarily serves a supporting, not core, function.

Edge effects (noise, lighting, trampling, and alien invasion) are expected to be localised and of low significance with mitigation.

No measurable loss of ecosystem services (e.g., erosion control, pollination, micro-climate regulation) is anticipated, provided vegetation buffers and rehabilitation are implemented.

Residual risks relate mainly to clearing disturbance, temporary faunal displacement, and potential erosion on exposed soils, all of which are addressed through mitigation measures in the EMPr.

Influence of the Biodiversity Spatial Plan on the Proposed Development

The WCBSP categorisation and specialist findings directly influenced the development planning as follows:

- Avoidance and Footprint Design

Development was confined to previously disturbed, low-sensitivity areas on the flatter central portion of the Erf.

High-sensitivity thicket and forest vegetation on steeper slopes were excluded from the footprint and designated as no-go conservation zones.

- Buffers and Connectivity

A 10–20 m ecological buffer between the built footprint and the natural slope was incorporated, maintaining ecological linkages across the site and alignment with ESA 1 guidelines.

- Scale and Intensity

Only two low-density residential dwellings are proposed, ensuring minimal transformation and compliance with the ESA 1 land-use compatibility matrix.

- Rehabilitation and Alien-Control Measures

Rehabilitation of disturbed edges with indigenous species is required post-construction.

An Alien Vegetation Management Plan will be implemented to prevent spread of invasive plants.

- Stormwater and Soil Management

Sustainable Drainage Systems (SuDS) and erosion-control structures (e.g. diversion berms, silt traps, vegetation retention) will maintain hydrological function and prevent sedimentation of adjacent natural areas

- Faunal and Floral Protection

Flora and Fauna Search-and-Rescue operations will precede vegetation clearing, and relevant permits will be obtained for the relocation of protected geophytes and fauna.

Significance of Residual Impact

After application of the above mitigation hierarchy (avoid → minimise → rehabilitate), the specialist rated the residual impact significance as "Low" to "Very Low" both locally and regionally.

The ecological support function of the ESA 1 category—maintaining connectivity between the Keurbooms coastal dune systems—will remain intact, as more than two-thirds of the Erf will be preserved under natural vegetation.

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.

N/A

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

The findings of the faunal assessments have directly influenced and improved the environmental design of the proposed development.

By locating construction within disturbed areas, retaining natural vegetation corridors, and implementing fauna-sensitive design and operational practices, the development ensures that:

- Faunal habitat integrity and movement are maintained;
- No species of conservation concern are negatively affected; and
- The ecological support function of the site within the Keurboomstrand biodiversity network remains fully functional.

5. Geographical Aspects

Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.
Geological features on southern extent will not be affected; development is away from unstable features along southern extent of the site.

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.		
Heritage Input – Dr. Peter Nilssen Desktop study: Palaeontological Heritage Assessment – John E. Almond (Natura Viva cc) Heritage Impact Assessment – Emmylou Rabe Bailey (Hearth Heritage)			
6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development.		
There are no areas of sensitive heritage resources on site.			

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.
There are no historically significant elements identified on the property at the moment.

8. Socio/Economic Aspects

8.1.	Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.
Mostly residential landowners with a few small private businesses.	
8.2.	Explain the socio-economic value/contribution of the proposed development.
Approx. R15 million contribution to local economy through construction. The project provides investment into the local economy and job creation, predominantly during the construction phase (estimated 3 to 5-year duration, with uncertainty).	
8.3.	Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.
Job creation through design, construction, and operation phases.	
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.
1. Noise pollution – will be limited to the construction phase. 2. Visual character & sense of place – due to the area being urban, the sense of place will not be impacted on. Visual impacts are to be minimally expected; however, these have been mitigated against as best as possible by the visual specialist.	

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.	
Erf 1180 is located within Keurboomstrand, primarily characterized as a resort town within Plettenberg Bay, Western Cape. The property occurs within a Least Threatened ecosystem. The property remains vacant and untransformed.	
Provide a description of any other property and site alternatives investigated.	
No other property or site alternatives were considered.	
Provide a motivation for the preferred property and site alternative including the outcome of the site selectin matrix.	

The property is the only property which the applicant would like to develop. The specific development footprint was chosen due to the slope gradient being less than 1:4. The remainder of Erf 1180 has a slope greater than 1:4.

Provide a full description of the process followed to reach the preferred alternative within the site.

The area of least sensitivity on slopes of acceptable gradient has informed the placement and design of the preferred alternative. Initially, three development options had been proposed by the developer (Development options A, B and C), which were previously assessed in a Pre-Application BAR in 2022.

At the time of the first draft of the VIA, Development option C was identified as the Preferred option (or Preferred proposal) to be assessed for Visual Impact, as per the specialist brief. However, during the course of the VIA two additional alternative proposals were developed by the project architects after receiving input from the environmental specialists.

After the comments received in the initial pre-application public participation process, the applicant had amended the design/layout of the proposal to decrease the size and change positioning to be more favourable in terms of the environmental constraints and visual impact. The amendment has led us to this pre-application BAR where there are only two Alternatives being assessed.

Provide a detailed motivation if no property and site alternatives were considered.

No property or site alternatives have been identified, due to the fact that the applicant is solely interested in developing the identified site. Although the property is quite large; due to the presence of steep slopes (greater than 1:4) the remainder of the property cannot be utilised for development.

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

Positive Impacts

Impact Theme	Description of Positive Impact	Applicable Alternative(s)
Efficient Land Use	Optimises use of an already serviced erf within the Keurboomstrand urban edge, preventing sprawl into natural or agricultural areas.	Preferred Alternative
Economic Stimulation	Creates short-term local employment during construction (±10–15 jobs) and long-term municipal revenue through property rates and services.	Preferred & Alternative 2
Socio-Economic Benefit	Enhances local property values and supports sustainable residential investment consistent with the Bitou IDP and SDF.	Preferred & Alternative 2
Environmental Stewardship	Retains and rehabilitates 70% of the erf as a natural conservation area, contributing to local biodiversity connectivity.	Preferred Alternative
Energy and Water Efficiency	Incorporates solar energy, rainwater harvesting, and water-wise landscaping, reducing long-term environmental footprint.	Preferred Alternative
Landscape Management	Rehabilitation of disturbed areas and alien plant control improves the ecological integrity of the site.	Preferred Alternative
Conservation Awareness	Promotes sustainable building within a biodiversity-sensitive coastal environment, aligning with the Garden Route EMF.	Preferred Alternative
No Disturbance to Natural Habitat	Natural ecosystem remains intact and ecological processes continue undisturbed.	No-Go Alternative

Negative Impacts

Impact Theme	Description of Negative Impact	Applicable Alternative(s)	Mitigation / Management Measures
Vegetation Loss	Clearance of ±2 000 m² of secondary thicket and garden vegetation.	Preferred & Alt 2	Restrict disturbance to demarcated footprint; rehabilitate disturbed edges with indigenous plants.
Habitat Disturbance / Faunal Displacement	Temporary disturbance and displacement of small mammals, reptiles, and avifauna.	Preferred & Alt 2	Implement search-and-rescue; retain vegetation buffers; restrict pets post-construction.
Erosion and Stormwater Runoff	Disturbance of sandy soils during construction may increase erosion risk.	Alt 2 > Preferred	Apply erosion-control measures, stormwater infiltration, and phased site clearing.
Visual Impact	Potential change in local landscape character and visual exposure from the scenic route.	Alt 2 > Preferred	Maintain 35 m scenic-route setback, use natural colours, retain vegetation screening.

Noise and Dust	Temporary construction-related disturbance to neighbours and fauna.	Preferred & Alt 2	Limit work hours, suppress dust, maintain contractor control.
Water Demand	Increased domestic water use associated with new dwellings.	Preferred & Alt 2	Install rainwater harvesting, low-flow fittings, and greywater reuse.
Cumulative Impact	Incremental transformation of coastal vegetation if uncontrolled future infill occurs.	Preferred & Alt 2	Maintain no-go conservation areas; monitor compliance through EMPr.
Loss of Ecosystem Function	Potential minor reduction in ecological corridor functionality if buffers not maintained.	Alt 2 > Preferred	Retain vegetated corridors; prohibit encroachment or terracing.
Opportunity Cost	No economic or social benefits if property remains undeveloped.	No-Go	N/A (Environmental integrity maintained but no utilisation).

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 a residential development.

Provide a description of any other activity alternatives investigated.

No alternative activity alternatives have been investigated.

Provide a motivation for the preferred activity alternative.

The preferred activity (residential development) aligns with land use on the surrounding properties.

Provide a detailed motivation if no activity alternatives exist.

The applicant is solely interested in the residential development of the identified site.

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

Positive Impacts

Impact Theme	Description of Positive Impact	Applicable Activity Alternative(s)
Efficient Land Use	Promotes utilisation of an existing serviced erf within the Keurboomstrand urban edge, avoiding urban sprawl.	Preferred & Alt 2
Socio-Economic Benefit	Generates short-term employment during construction and long-term municipal revenue through property rates and services.	Preferred & Alt 2
Biodiversity Stewardship	Retains ±70% of erf as natural conservation area, maintaining ecological corridors.	Preferred
Environmental Rehabilitation	Removal of alien invasive species and rehabilitation of disturbed edges with indigenous vegetation.	Preferred
Energy and Water Efficiency	Incorporates solar energy, rainwater harvesting, greywater reuse, and low-flow fittings.	Preferred
Stormwater Management	Integrates Sustainable Drainage Systems (SuDS) to reduce erosion and improve infiltration.	Preferred
Visual Integration	Dwellings designed with low profiles and natural colours to blend with the landscape.	Preferred
Environmental Protection (No-Go)	No disturbance to existing vegetation or fauna; natural ecosystem remains intact.	No-Go Alternative

Negative Impacts

Impact Theme	Description of Negative Impact	Applicable Activity Alternative(s)	Mitigation / Management Measures
Vegetation Loss	Clearance of ±2 500 m² of secondary thicket and disturbed vegetation under Preferred; ±3 500–4 000 m² under Alt 2.	Preferred & Alt 2	Restrict footprint to low-sensitivity area; rehabilitate disturbed edges with indigenous vegetation.

Habitat Disturbance / Faunal Displacement	Temporary disturbance and displacement of small mammals, reptiles, and birds.	Preferred & Alt 2	Conduct fauna search-and-rescue; retain vegetated buffers; restrict pets post-construction.
Soil Erosion and Stormwater Runoff	Disturbance of sandy soils during construction; greater erosion risk with larger cumulative footprint.	Alt 2 > Preferred	Apply erosion control (silt fences, phased clearing, stormwater infiltration).
Visual Impact	Increased visual exposure from the scenic route with more built form and cumulative bulk.	Alt 2 > Preferred	Maintain 35 m scenic-route setback; use muted, natural finishes; retain vegetation screening.
Noise and Dust	Temporary construction disturbance to nearby residents and fauna.	Preferred & Alt 2	Limit working hours; use dust suppression; implement contractor management plan.
Water Demand	Increased domestic water demand from additional dwellings.	Alt 2 > Preferred	Incorporate rainwater harvesting, low-flow fittings, and greywater reuse.
Waste Generation	Construction and operational waste increase with more units.	Alt 2 > Preferred	Implement waste minimisation and recycling plan.
Cumulative Impact	Incremental habitat transformation and visual clutter from additional infill.	Alt 2 > Preferred	Retain conservation areas; enforce EMPr controls.
Opportunity Cost	No socio-economic or land-use benefits realised if development is halted.	No-Go	N/A (Environmental integrity maintained).

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 alternative is the development of 2 residential units, with associated infrastructure (access, water, sewerage, electricity, and stormwater design).

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

Alternative 2 is the construction of three dwelling units in a sectional title development.

Provide a motivation for the preferred design or layout alternative.

The preferred design has taken into account previous input from the last public participation. Alternative 1 (sans the swimming pool) remains the most responsive to the visual sensitivities of the site; is the least visible from the surrounding receiving environment; and will impact minimally on key aspects of Landscape Character and Sense of Place.

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

N/A

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

Positive:

- A scenic route setback has been implemented to decrease visual impact.
- Only landscaping for privacy is permitted. This will preserve indigenous vegetation by restricting manicured lawns.
- Neighbouring properties will not have their views interrupted by the development.
- Improved socio-economic impact through local investment related to property development.
- The sense of place and landscape character will be minimally impacted.

Negative:

- Indigenous vegetation loss – loss of sensitive vegetation.
- Increased risk of soil erosion due to steep gradient of the site and the need for extensive cut and fill.
- There is a need to minimize the physical disturbance and footprint, through well placed elements and ground-truthing. This is especially relevant to the inclusion of a swimming pool. Conditions set in the visual

	impact assessment need to be implemented in order for this development to be compliant with visual sensitivity parameters.
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:

Rainwater harvesting will be implemented; however, this would serve as supplementation where needed due to possible contamination.

Provide a description of any other technology alternatives investigated.

The following energy saving measures should be considered for implementation where possible:

- The use of solar geysers or heat pumps to heat water instead of electric heater elements.
- The electricity used to heat water to be reduced by reducing the amount of hot water used by fitting low-flow faucet aerators.
- Thermal insulation of geysers (geyser blankets) and hot water pipes.
- Load management systems to limit load in buildings, i.e., geyser control relays to switch off geysers during peak periods, load control relays to prevent geysers and other high load appliances in buildings from operating simultaneously, etc.
- Heating, ventilation and air conditioning generally use the most electricity in a building. Through efficient operational management of these systems, the demand can be reduced by at least 15%.
- The use of LPG gas for heating and cooking.
- Energy efficient lighting design, making use of LED lighting and motion / photo detectors to switch off lighting in un-used sections of buildings and to automatically adjust lighting levels according to the amount of natural lighting in buildings, etc.
- The installation of energy efficient appliances and electronic devices, i.e., refrigerators, motors, pumps, fans, etc.
- Consideration will also be given to install a rooftop Photo Voltaic (PV) installation to reduce electricity consumption from the municipal grid, and to supplement the supply as necessary.

Provide a motivation for the preferred technology alternative.

The preferred technology is the norm in South Africa; however, additional energy efficient technology alternatives are recommended to be implemented.

Provide a detailed motivation if no alternatives exist.

N/A

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

Positive: reduced resource demand regarding water supply and electricity supply.
Negative: alternative energy methods can be expensive in South Africa.

1.5.	Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred operational alternative.

Limitation of operational footprint equating to the design footprint location and extent, with no-go areas established.

Provide a description of any other operational alternatives investigated.

Typically, residential development involves the establishment of gardens, and these have been eliminated from consideration. A 'no garden area' policy is recommended through mitigation measures, to avoid disturbance to remaining sensitive vegetation.

Provide a motivation for the preferred operational alternative.

Limitations must be set to minimise the disturbance by the design footprint.

Provide a detailed motivation if no alternatives exist.

N/A

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

Positive: no disturbance outside of the design footprint.
Negative: disturbance is unavoidable within the design footprint.

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 assumes that no development takes place on Erf 155 Keurboomstrand.
Under this scenario, the site would remain in its current, partially disturbed state, with no construction, rehabilitation, or active management interventions.

Although this option would avoid any new environmental disturbance, it must be evaluated in terms of its environmental, social, and economic consequences and its consistency with local spatial planning frameworks.

While the No-Go Option would prevent direct construction impacts, it would also forego positive environmental interventions proposed under the preferred development scenario.
Specifically:

No active management or restoration of the ecological corridor or vegetation buffers would occur, meaning the property would not contribute to biodiversity enhancement envisaged in the Western Cape Biodiversity Spatial Plan (WCBSP 2022).

Unmanaged vacant land in the area is prone to informal disturbance, erosion, and alien plant colonisation, reducing long-term ecological value.

Thus, although the No-Go Option initially avoids new impacts, it provides no mechanism for ecological improvement or maintenance and does not achieve the "avoid–minimise–rehabilitate" intent of the mitigation hierarchy.

Socio-Economic and Planning Implications:

As per the Specialist Planning Report for NEMA Purposes, August 2025 –

According to the current Bitou SDF, the application area is inside the demarcated urban edge and highlights the importance to balance the attention between the urban and rural areas, to protect the rural areas from unwanted development and urbanisation into the rural areas that would impact the character of the area.

There is a need for housing and more affordable, long term residential accommodation near community facilities such as the Plettenberg Bay Primary School. It is the considered opinion that there is indeed a need now for this type of development.
The Western Cape SDF requires compliance with the guidelines namely Rural Development Guidelines that categories areas and appropriate land uses within these areas and guidelines for implementation. The intended land use on the application area is consistent with the spatial planning policies and proposals of the Bitou, Eden and Provincial SDF.

The Eden SDF emphasises sustainable development and protecting the environment which is the economy of the unique Eden area…

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

Another defining factor when considering the desirability specifically for the proposal is in the public interest. The criteria as set out in the Relevant Considerations: Provincial Support Document covers the aspects to consider when determining whether a proposal is in the public interest or not.

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

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.

As discussed in point 1.1

1.8.	Provide a concluding statement indicating the preferred alternatives, including the preferred location of the activity.

The Preferred Activity Alternative is the development of two low-density residential dwellings and associated infrastructure on a portion of Erf 1180, Keurboomstrand.

This alternative represents the Best Practicable Environmental Option (BPEO) as it:

- Balances environmental protection with responsible land use by confining development to already disturbed, low sensitivity areas;
- Retains and rehabilitates natural vegetation on the steeper southern and western slopes, ensuring that ecological corridors and biodiversity functions are maintained.
- Implements energy- and water-efficient design through solar energy, rainwater harvesting, and sustainable stormwater management; and
- Aligns fully with the Western Cape Biodiversity Spatial Plan (2022), Garden Route Environmental Management Framework (EMF), Bitou Spatial Development Framework (2022), and NEMA's sustainable development principles.

The preferred location of the proposed development is on the central, previously disturbed portion of Erf 1180, Keurboomstrand — the lowest-sensitivity area as confirmed by the Terrestrial Biodiversity Assessment (J. Pote, 2025).

This location was selected because it:

- Avoids direct disturbance of intact thicket and forest vegetation mapped as Ecological Support Area (ESA 1) under the WCBSP.
- Lies below the dune crest, minimising visual intrusion from the scenic route and maintaining the natural skyline;
- Ensures stable topography and minimal erosion risk, as identified through the site's slope analysis and stormwater assessment; and
- Allows for logical connection to existing municipal infrastructure (access road, water, and electricity).
- The southern and western portions of the erf, containing natural dune thicket vegetation, will be formally designated as no-go and conservation zones under the site-specific Environmental Management Programme (EMPr).

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).
Dune-thicket along the eastern slope - 34° 0'13.88"S 23°27'17.53"E Fynbos pocket on the southern portion - 34° 0'14.56"S 23°27'12.54"E Forest-thicket due on the north-western side of the site - 34° 0'15.06"S 23°27'9.40"E

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.
There are mainly three categories of environmental impacts: Direct Impacts: These impacts are caused by the development itself for example the clearing of vegetation for a development. Indirect Impacts: These impacts are usually linked closely with the project and may have more profound results than the direct impacts for example the degradation of surface water due to soil erosion emanating from the site where vegetation clearance has taken place. Cumulative Impacts: These impacts can be defined as the ability of natural and social environments to incorporate cumulative stresses placed on them and the likelihood of negative synergistic effects. Cumulative impacts also arise when existing future development rights set a precedent in an area. The process of cumulative impacts may arise from any of the following four events: • A single large event • Multiple interrelated events • Sudden or catastrophic events

- Incremental change

Definition of key terminology:

Nature of the impact

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

Extent of the impact

Describe whether the impact will be: local extending only as far as the development site area; or limited to the site and its immediate surroundings; or will have an impact on the region or will have an impact on a national scale or across international borders.

Duration of the impact

The specialist should indicate whether the lifespan of the impact would be short term (0-5 years), medium term (5-15 years), long term (16-30 years) or permanent.

Intensity

The specialist should establish whether the impact is destructive or benign and should be qualified as low, medium or high. The specialist study must attempt to quantify the magnitude of the impacts and outline the rationale used.

Probability of occurrence

The specialist should describe the probability of the impact actually occurring and should be described as improbable/unlikely (low likelihood), probable (distinct possibility), highly probable (most likely) or definite (impact will occur regardless of any prevention measures).

Reversibility

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

Describes the degree to which resources will be irreplaceably lost due to the proposed activity. It can be no loss of resources, marginal loss, significant loss or complete loss of resources.

Cumulative effect

An effect which in itself may not be significant but may become significant if added to other existing or potential impacts that may result from activities associated with the proposed development. The cumulative effect can be:

- Negligible – the impact would result in negligible to no cumulative effect
- Low – the impact would result in insignificant cumulative effects
- Medium – the impact would result in minor cumulative effects
- High – the impact would result in significant cumulative effects

Significance

Significance of impacts are determined through a synthesis of the assessment criteria and is described as –

- Low negative– where it would have negligible effects and would require little or no mitigation
- Low positive – the impact will have minor positive effects
- Medium negative – the impact will have moderate negative effects and will require moderate mitigation
- Medium positive – the impact will have moderate positive effects
- High negative – the impact will have significant effects and will require significant mitigation measures to achieve an accepted level of impact
- High positive – the impact will have significant positive effects
- Very high negative – the impact will have highly significant effects and are unlikely to be able to be mitigated adequately
- High positive – the impact will have highly significant positive effects

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.

Alternative: PREFERRED ALTERNATIVE	
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	
Nature of impact:	**Impact on biodiversity (flora and fauna)**
Extent and duration of impact:	**Local, short-term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**High**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**
Degree to which the impact can be reversed:	**Low**
Indirect impacts:	**Negligible, loss of 0.0003 percent of vegetation unit that is already well protected and exceeds conservation target of 19 %.**
Cumulative impact prior to mitigation:	**Low**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium**
Degree to which the impact can be avoided:	**High**
Degree to which the impact can be managed:	**High**
Degree to which the impact can be mitigated:	**Medium**
Proposed mitigation:	**Most sensitive areas are excluded from development footprint. Dwelling should not extend into the fynbos on the south, the dune forest-thicket on the north-west and a band of dune thicket-forest along the slope on the eastern boundary.**
Residual impacts:	**Negligible**
Cumulative impact post mitigation:	**Negligible, loss of 0.0003 percent of vegetation unit that is already well protected and exceeds conservation target of 19 %.**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

Alternative: PREFERRED ALTERNATIVE	
CONSTRUCTION PHASE	
Potential impact and risk:	
Nature of impact:	**Impact on biodiversity (flora and fauna)**
Extent and duration of impact:	**Local, short-term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**High**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**
Degree to which the impact can be reversed:	**Low**
Indirect impacts:	**Negligible, loss of 0.0003 percent of vegetation unit that is already well protected and exceeds conservation target of 19 %.**
Cumulative impact prior to mitigation:	**Low**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium**
Degree to which the impact can be avoided:	**High**

Degree to which the impact can be managed:	**High**
Degree to which the impact can be mitigated:	**Medium**
Proposed mitigation:	**Most sensitive areas are excluded from development footprint. Dwellings should not extend into the fynbos on the south, the dune forest-thicket on the north-west and a band of dune thicket-forest along the slope on the eastern boundary.**
Residual impacts:	**Minor**
Cumulative impact post mitigation:	**Negligible, loss of 0.0003 percent of vegetation unit that is already well protected and exceeds conservation target of 19 %.**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

Alternative: PREFERRED ALTERNATIVE	
CONSTRUCTION PHASE	
Potential impact and risk:	
Nature of impact:	**Stormwater runoff and erosion**
Extent and duration of impact:	**Local , long-term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**High**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**
Degree to which the impact can be reversed:	**Medium with mitigation**
Indirect impacts:	**Low – medium: dependant on severity of runoff and erosion without mitigation measures in place**
Cumulative impact prior to mitigation:	**Medium**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium**
Degree to which the impact can be avoided:	**High**
Degree to which the impact can be managed:	**High**
Degree to which the impact can be mitigated:	**High**
Proposed mitigation:	• **During construction the contractor must ensure that stormwater and erosion prevention methods are used. SuDs methods should be utilised. These include the use of sandbags and silt traps to be installed where the natural flow of water has been pre-determined prior to construction.** • **The contractor must ensure that the site has been properly stabilised once vegetation has been removed.** • **Continuous monitoring for erosion impacts must occur during the construction phase.** • **The developer must ensure that a specialist is contracted to compile a stormwater management plan and implement a reliable stormwater drainage system. Continuous stormwater and erosion monitoring and maintenance must occur during the operational phase of the project.** • **No unnecessary land clearance must take place.** • **Hardened structures should be kept to a minimal.**
Residual impacts:	**Low**
Cumulative impact post mitigation:	**Low**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

Alternative: PREFERRED ALTERNATIVE	
CONSTRUCTION PHASE	
Potential impact and risk:	
Nature of impact:	**Visual impact / Sense of place**
Extent and duration of impact:	**Local, short-term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**Highly probable**
Degree to which the impact may cause irreplaceable loss of resources:	**None**
Degree to which the impact can be reversed:	**None**
Indirect impacts:	**Low**
Cumulative impact prior to mitigation:	**Medium**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium**
Degree to which the impact can be avoided:	**Low**
Degree to which the impact can be managed:	**Medium**
Degree to which the impact can be mitigated:	**Medium**
Proposed mitigation:	• **Screening and hoarding must be placed around the construction footprint.** • **Location and management of site access must be proactively manged to decrease visual clutter.** • **Storage on site must be kept to a minimal.** • **The design of the dwelling must consider the design parameters of the neighbourhood and follow suit.** • **Reconsideration must be given to the location of the swimming pool in order to provide a low visual impact.** • **It is recommended that earth-tones be used when picking paint colours for the roof and exterior walls.** • **Down lights should be used as much as possible.** **Refer to the Architectural Guidelines report in Appendix G for building guidelines.**
Residual impacts:	**Low**
Cumulative impact post mitigation:	**Low**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

Alternative: PREFERRED ALTERNATIVE	
CONSTRUCTION PHASE	
Potential impact and risk:	
Nature of impact:	**Noise pollution**
Extent and duration of impact:	**Local, short-term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**Highly probable**
Degree to which the impact may cause irreplaceable loss of resources:	**None**
Degree to which the impact can be reversed:	**Irreversible – impact will only be experienced during the construction phase**
Indirect impacts:	**Negligible**
Cumulative impact prior to mitigation:	**None**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low - Medium**
Degree to which the impact can be avoided:	**Low**
Degree to which the impact can be managed:	**Low**
Degree to which the impact can be mitigated:	**Low**

Proposed mitigation:	• **Construction may only occur during weekdays from 07:00am – 17:00pm.** • **Staff must be instructed to keep noise levels at a minimum.** • **Where necessary, machines must be fitted with silencers to reduce noise impacts.**
Residual impacts:	**Negligible**
Cumulative impact post mitigation:	**Low - Medium**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

Alternative: PREFERRED ALTERNATIVE	
CONSTRUCTION PHASE	
Potential impact and risk:	
Nature of impact:	**Socio-economic – Job creation**
Extent and duration of impact:	**Local, short-term**
Consequence of impact or risk:	**Positive**
Probability of occurrence:	**Definite**
Degree to which the impact may cause irreplaceable loss of resources:	**N/A**
Degree to which the impact can be reversed:	**N/A**
Indirect impacts:	**Economic contribution to the local municipality**
Cumulative impact prior to mitigation:	**N/A**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**N/A**
Degree to which the impact can be avoided:	**N/A**
Degree to which the impact can be managed:	**N/A**
Degree to which the impact can be mitigated:	**N/A**
Proposed mitigation:	**N/A**
Residual impacts:	**Minor**
Cumulative impact post mitigation:	**N/A**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low positive**

Alternative: PREFERRED ALTERNATIVE	
CONSTRUCTION PHASE	
Potential impact and risk:	
Nature of impact:	**Cultural – historic impacts**
Extent and duration of impact:	**Local, short term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**Low**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**
Degree to which the impact can be reversed:	**Low**
Indirect impacts:	**Low – medium, if cultural/historic artefacts are uncovered.**
Cumulative impact prior to mitigation:	**Low**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium – High**
Degree to which the impact can be avoided:	**High**
Degree to which the impact can be managed:	**High**
Degree to which the impact can be mitigated:	**Low – medium**
Proposed mitigation:	**An archaeologist must be on site during ground clearing activities.** **Should any remains or artefacts be uncovered during the construction phase, all works must be halted with**

	immediate effect and Heritage Western Cape must be contacted.
Residual impacts:	**Low**
Cumulative impact post mitigation:	**Low/ negligible**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

OPERATIONAL PHASE	
Potential impact and risk:	
Nature of impact:	**Visual impact / Sense of place**
Extent and duration of impact:	**Local, long-term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**Probable**
Degree to which the impact may cause irreplaceable loss of resources:	**N/A**
Degree to which the impact can be reversed:	**Irreversible**
Indirect impacts:	**Low - Medium**
Cumulative impact prior to mitigation:	**Low - Medium**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium**
Degree to which the impact can be avoided:	**Low**
Degree to which the impact can be managed:	**Medium**
Degree to which the impact can be mitigated:	**Medium**
Proposed mitigation:	• **The design of the dwelling must consider the design parameters of the neighbourhood and follow suit.** • **Reconsideration must be given to the location of the swimming pool in order to provide a low visual impact.** • **It is recommended that earth-tones be used when picking paint colours for the roof and exterior walls.** • **Down lights should be used as much as possible.** **Refer to the Architectural Guidelines report in Appendix G for building guidelines.**
Residual impacts:	**Low – Medium**
Cumulative impact post mitigation:	**Low**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	
Nature of impact:	**Impact on biodiversity (flora and fauna)**
Extent and duration of impact:	**Local, short term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**Low**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**
Degree to which the impact can be reversed:	**High**
Indirect impacts:	**Negligible**
Cumulative impact prior to mitigation:	**Low**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**
Degree to which the impact can be avoided:	**High**
Degree to which the impact can be managed:	**High**
Degree to which the impact can be mitigated:	**Medium**
Proposed mitigation:	**Retained natural vegetation must not be cleared (recommend incorporating into title deed)**

Residual impacts:	**Negligible**
Cumulative impact post mitigation:	**Negligible, loss of 0.0003 percent of vegetation unit that is already well protected and exceeds conservation target of 19 %.**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very low**

ALTERNATIVE 2:

Alternative: ALTERNATIVE 2	
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	
Nature of impact:	**Impact on biodiversity (flora and fauna)**
Extent and duration of impact:	**Local, short-term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**High**
Degree to which the impact may cause irreplaceable loss of resources:	**Medium**
Degree to which the impact can be reversed:	**Irreversible**
Indirect impacts:	**Low-Medium**
Cumulative impact prior to mitigation:	**Low-Medium**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High**
Degree to which the impact can be avoided:	**Medium**
Degree to which the impact can be managed:	**High**
Degree to which the impact can be mitigated:	**Medium**
Proposed mitigation:	**Most sensitive areas are excluded from development footprint. However, Alternative 2 has a larger footprint than Alternative 1 = increased vegetation removal.**
Residual impacts:	**Low**
Cumulative impact post mitigation:	**Low**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

Alternative: ALTERNATIVE 2	
CONSTRUCTION PHASE	
Potential impact and risk:	
Nature of impact:	**Impact on biodiversity (flora and fauna)**
Extent and duration of impact:	**Local, short-term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**High**
Degree to which the impact may cause irreplaceable loss of resources:	**Medium**
Degree to which the impact can be reversed:	**Irreversible**
Indirect impacts:	**Low-Medium**
Cumulative impact prior to mitigation:	**Low-Medium**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High**
Degree to which the impact can be avoided:	**Medium**
Degree to which the impact can be managed:	**High**
Degree to which the impact can be mitigated:	**Medium**
Proposed mitigation:	**Most sensitive areas are excluded from development footprint. However, Alternative 2 has a larger footprint than Alternative 1 = increased vegetation removal.**
Residual impacts:	**Low**

Cumulative impact post mitigation:	**Low**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

Alternative: ALTERNATIVE 2	
CONSTRUCTION PHASE	
Potential impact and risk:	
Nature of impact:	**Stormwater runoff and erosion**
Extent and duration of impact:	**Local , long-term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**High**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**
Degree to which the impact can be reversed:	**Medium with mitigation**
Indirect impacts:	**Low – medium: dependant on severity of runoff and erosion without mitigation measures in place**
Cumulative impact prior to mitigation:	**Medium**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium**
Degree to which the impact can be avoided:	**High**
Degree to which the impact can be managed:	**High**
Degree to which the impact can be mitigated:	**High**
Proposed mitigation:	• **During construction the contractor must ensure that stormwater and erosion prevention methods are used. These include the use of sandbags and silt traps to be installed where the natural flow of water has been pre-determined prior to construction.** • **The contractor must ensure that the site has been properly stabilised once vegetation has been removed.** • **Continuous monitoring for erosion impacts must occur during the construction phase.** • **The developer must ensure that a specialist is contracted to compile a stormwater management plan and implement a reliable stormwater drainage system. Continuous stormwater and erosion monitoring and maintenance must occur during the operational phase of the project.** • **Rainwater tanks must be implemented to collect stormwater from the roof of dwellings.** • **No unnecessary land clearance must take place.** • **Hardened structures should be kept to a minimal.**
Residual impacts:	**Low**
Cumulative impact post mitigation:	**Low**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

Alternative: ALTERNATIVE 2	
CONSTRUCTION PHASE	
Potential impact and risk:	
Nature of impact:	**Visual impact / Sense of place**
Extent and duration of impact:	**Local, short-term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**Highly probable**
Degree to which the impact may cause irreplaceable loss of resources:	**None**
Degree to which the impact can be reversed:	**None**

Indirect impacts:	**Medium**
Cumulative impact prior to mitigation:	**Medium**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium-High**
Degree to which the impact can be avoided:	**Low**
Degree to which the impact can be managed:	**Medium**
Degree to which the impact can be mitigated:	**Medium**
Proposed mitigation:	• **Screening and hoarding must be placed around the construction footprint.** • **Location and management of site access must be proactively manged to decrease visual clutter.** • **Storage on site must be kept to a minimal.** • **The design of the dwelling must consider the design parameters of the neighbourhood and follow suit.** • **It is recommended that earth-tones be used when picking paint colours for the roof and exterior walls.** • **Down lights should be used as much as possible.** **Refer to the Architectural Guidelines report in Appendix G for building guidelines.**
Residual impacts:	**Low**
Cumulative impact post mitigation:	**Low**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

Alternative: ALTERNATIVE 2	
CONSTRUCTION PHASE	
Potential impact and risk:	
Nature of impact:	**Noise pollution**
Extent and duration of impact:	**Local, short-term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**Highly probable**
Degree to which the impact may cause irreplaceable loss of resources:	**None**
Degree to which the impact can be reversed:	**Irreversible – impact will only be experienced during the construction phase**
Indirect impacts:	**Negligible**
Cumulative impact prior to mitigation:	**None**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low - Medium**
Degree to which the impact can be avoided:	**Low**
Degree to which the impact can be managed:	**Low**
Degree to which the impact can be mitigated:	**Low**
Proposed mitigation:	• **Construction may only occur during weekdays from 07:00am – 17:00pm.** • **Staff must be instructed to keep noise levels at a minimum.** • **Where necessary, machines must be fitted with silencers to reduce noise impacts.**
Residual impacts:	**Negligible**
Cumulative impact post mitigation:	**Low – Medium**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

Alternative: ALTERNATIVE 2

CONSTRUCTION PHASE	
Potential impact and risk:	
Nature of impact:	**Socio-economic – Job creation**
Extent and duration of impact:	**Local, short-term**
Consequence of impact or risk:	**Positive**
Probability of occurrence:	**Definite**
Degree to which the impact may cause irreplaceable loss of resources:	**N/A**
Degree to which the impact can be reversed:	**N/A**
Indirect impacts:	**Economic contribution to the local municipality**
Cumulative impact prior to mitigation:	**N/A**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**N/A**
Degree to which the impact can be avoided:	**N/A**
Degree to which the impact can be managed:	**N/A**
Degree to which the impact can be mitigated:	**N/A**
Proposed mitigation:	**N/A**
Residual impacts:	**Minor**
Cumulative impact post mitigation:	**N/A**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low positive**

Alternative: ALTERNATIVE 2	
CONSTRUCTION PHASE	
Potential impact and risk:	
Nature of impact:	**Cultural – historic impacts**
Extent and duration of impact:	**Local, short term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**Low**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**
Degree to which the impact can be reversed:	**Low**
Indirect impacts:	**Low – medium, if cultural/historic artefacts are uncovered.**
Cumulative impact prior to mitigation:	**Low**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium – High**
Degree to which the impact can be avoided:	**High**
Degree to which the impact can be managed:	**High**
Degree to which the impact can be mitigated:	**Low – medium**
Proposed mitigation:	**An archaeologist must be on site during ground clearing activities.** **Should any remains or artefacts be uncovered during the construction phase, all works must be halted with immediate effect and Heritage Western Cape must be contacted.**
Residual impacts:	**Low**
Cumulative impact post mitigation:	**Low/ negligible**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

OPERATIONAL PHASE	
Potential impact and risk:	
Nature of impact:	**Visual impact / Sense of place**
Extent and duration of impact:	**Local, long-term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**Definite**

Degree to which the impact may cause irreplaceable loss of resources:	**N/A**
Degree to which the impact can be reversed:	**Irreversible**
Indirect impacts:	**Medium**
Cumulative impact prior to mitigation:	**Medium**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium**
Degree to which the impact can be avoided:	**None**
Degree to which the impact can be managed:	**N/A**
Degree to which the impact can be mitigated:	**Low**
Proposed mitigation:	**Alternative 2 increased visibility of the proposed development overall, but especially from the scenic route and recreational areas, increasing the number of sensitive receptors.** **No mitigation measures are possible for this alternative unless it is redesigned.**
Residual impacts:	**Low – Medium**
Cumulative impact post mitigation:	**Low**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**

DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	
Nature of impact:	**Impact on biodiversity (flora and fauna)**
Extent and duration of impact:	**Local, short term**
Consequence of impact or risk:	**Negative**
Probability of occurrence:	**Low**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**
Degree to which the impact can be reversed:	**High**
Indirect impacts:	**Negligible**
Cumulative impact prior to mitigation:	**Low**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**
Degree to which the impact can be avoided:	**High**
Degree to which the impact can be managed:	**High**
Degree to which the impact can be mitigated:	**Medium**
Proposed mitigation:	**Retained natural vegetation must not be cleared (recommend incorporating into title deed)**
Residual impacts:	**Negligible**
Cumulative impact post mitigation:	**Negligible, loss of 0.0003 percent of vegetation unit that is already well protected and exceeds conservation target of 19 %.**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very low**

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.

1. Terrestrial Biodiversity Assessment – Jamie Pote 19/05/2025

- The vegetation is not considered to be under any imminent threat at a national level, nor at a regional level and can withstand further development without compromising conservation target significantly.
- No-go areas include the following:

- ❖ dune-thicket along the eastern slope
- ❖ the fynbos pocket on the southern portion
- ❖ forest-thicket due on the north-western side of the site

- No cumulative impacts of significance are expected because of the development of the dwellings, providing recommendation and mitigation measures are adhered to, due to the limited disturbance of intact vegetation and concentration within an already urbanised context.
- Within the Erf 155 (±5.6 Ha), a portion of vegetation will be removed and the remaining natural, near natural and degraded Dune Thicket and Forest Thicket will not be developed within the greater Erf.
- The proposed ~2 500 m2 footprint accounts for a nominal 0.0003 percent of the total Goukamma Dune Thicket occurring nationally, hence the proposed activity will not pose any risk to conservation targets.
- It is reiterated that around 70 % of the site will not be developed and is unlikely to be developed due to slope, which far exceeds the conservation target of 19 %, within a vegetation unt where conservation targets are already exceeded in designated protected areas.
- All impacts are assessed to be of low significance before mitigation and can be reduced to low or very low with the implementation of the mitigation measures.
- All development alternatives are similar in extent and location within the site and hence impact significance). The preferred (linear) option should be adjusted to ensure that the dwellings do not extend into the dune on the north-western side of the site.
- Under status quo conditions it is likely that the disturbed areas will develop into Dune Thicket in time and the dune fynbos patch may develop into Dune Thicket also, if fire and other disturbance is excluded. It is likely that species diversity may decrease due to lack of disturbance.
- The findings of this report are aligned with the findings of a previous assessment undertaken for the site in 1018, 'Keurbooms River: Erf 155: Vegetation Sensitivity Analysis' (Conservation Management Services, October 2018).

Recommendations:

- It is the conclusion of this terrestrial biodiversity assessment that the limited footprint site and associated infrastructure, including pipeline, sewer and other services can be constructed within acceptable terrestrial biodiversity impact limits.
- The portions of intact vegetation should be retained as per the recommendation of this report, including the dune-thicket and scrub forest-thicket along the eastern slope, the fynbos pocket on the southern portion and the forest-thicket due on the north-western side of the site.
- Vegetation that will not require direct clearing for the dwellings to be constructed should be retained as far as possible, in order to fit in with the surrounding developed landscape.
- The undeveloped portions of Erf 155 have limited development potential due to the steep slope. These areas have good representation of dune thicket and forest-thicket as well as some fynbos patches at the base (between the dune base and the road). It is unlikely that these will be developable due to slope and should thus be retained. In this regard, development of the 2 500 m2 within the dwelling footprints will only be 50 % of the proposed subdivision area (5 000 m2. In conjunction with the reminder of Erf 155 that will not be developed (± 4 Ha of Dune Thicket and Dune Forest, excluding some coastal vegetation and beach that falls on the south of the road but within the erf boundary), the footprint is well within regional and national conservation targets, even tho situated within a CBA area.
- It is noted that around 70 % of the site will not be developed and is unlikely to be developed due to slope, which far exceeds the conservation target of 19 %, within a vegetation unt where conservation targets are already exceeded in designated protected areas.

2. Geotechnical Report – Outeniqua Geotechnical Services

Earthworks: The presence of shallow rock may hamper earthworks and deep excavations but will generally provide a highly stable and suitable founding medium. Excavations deeper than 0.5m can be provisionally classified as "hard", requiring mechanical wedging and splitting (e.g. jackhammer/hydraulic pecker). No blasting is likely to be permitted in this residential area. It proposed that the proposed dwellings are designed and positioned in a manner which will take into account the terrain and underlying geotechnical conditions, such that minimal earthworks or terracing will be necessary (i.e. split levels or suspended structures).

The insitu soil and weathered rock is suitable for use as general fill material under surface beds and around foundations, less any oversize rock fragments and boulders >100mm.

No earthworks or development is recommended on slopes steeper than 1:4, unless special engineering solutions are developed, and no development is recommended within a buffer zone of 5m from the top of slopes which exceed a gradient of 1:2 (most notably along the southern boundary).

Foundations & floors: Single and/or double storey masonry or timber structures can be founded on conventional strip/pad foundations on clean, tight bedrock at a minimum depth of 0.5m below GL. Light reinforcement of strip footings is recommended to span across irregular rock/ soil ground conditions that may occur in linear trenches. A safe design bearing pressure on very soft, highly weathered bedrock is 250kPa. But since foundations may span across rock and soil, bearing pressures should be kept to max 150kPa. The engineer should inspect foundations before casting to ensure suitable founding conditions and no undetected problems or areas where no rock was encountered in trenches. Specialist geotechnical advice should be sought in cases where the conditions encountered in foundation trenches differ vastly from that reported in the investigations.

Fill material supporting ground floor concrete surface beds must be minimum G7 quality, compacted to 95% MDD and tested for approval by the engineer. Suspended floor slabs should be considered where fill heights are excessive to minimise importation of fill.

Driveway & parking areas: The subgrade conditions along the access road are likely to be good (gravelly) and will suffice as a selected layer. The access road should be cut with adequate camber for side drains to a roadbed level of approximately NGL-350mm, compacted to 93%MDD, and an imported G5 subbase layer of 150mm thick placed and compacted to 95%MDD. Cement/clay brick pavers can be placed on 20mm bedding sand.

Drainage: Vertical infiltration of stormwater will be restricted due to shallow rock, resulting in a significant percentage of run-off from the site. Effective stormwater drainage systems are recommended to collect, handle and discharge stormwater across the site such that it does not cause erosion on slopes or undermining of structures. Subsoil drains are required behind any retaining walls as standard practice.

Conclusions:
The investigation indicates generally favourable geotechnical conditions for the proposed development and the site is considered generally suitable in terms of these conditions but there are some constraints that may require consideration from the designers.

Influence on development:
The development site and layout were chosen in accordance with the acceptable ground conditions stipulated by the specialist. Construction will need to further comply with the mitigation measures and recommendations made by the specialist.

3. Heritage Impact Assessment – Emmylou Rabe Bailey (Hearth Heritage)

Archaeology and palaeontology

According to the specialist reports, there is no evidence of historic or prehistoric occupation of the site. Consequently, the site is regarded to be of low to negligible sensitivity from an archaeological and palaeontological heritage perspective and there are no objections to the proposed residential development on Erf 155 on condition that:

1. Due to the dense vegetation and limited archaeological visibility, a suitably qualified archaeologist should do a foot survey of the site intermittently during clearing of vegetation and once vegetation has been finally cleared before any earthworks are to commence.
2. Although unlikely, there may be buried or currently hidden archaeological material, including human remains, present on site and should these be uncovered or exposed during excavations or vegetation clearing, HWC should be notified immediately and all development work on site (preconstruction included) should be halted until these finds are investigated by HWC (Att: Ms Waseefa Dhansay 021 483 9685).
3. No negative impact to significant palaeontological heritage is anticipated as the palaeontological sensitivity of the geology of the development area is considered to be very low and there are no objections on palaeontological heritage grounds. In the event of important fossil material being identified during excavations, the HWC Fossil Finds Procedure must be implemented.

Visual and landscape character

Key conditions and mitigation measures that should be noted (in summary) include:

13. No structures, including a swimming pool, may be sited and constructed within the no-go areas, within the 35m scenic route setback line or the 5m botanical/slope sensitivity setback line. Except for the absolutely necessary linear infrastructure, no areas outside of the approximately 1448m² "developable area" may be disturbed.
14. The building envelope, including chimneys, must not protrude above the 8m height restriction (this VIA recommends that the existing ground level (NGL) is the base level from which maximum height permitted is measured so that the height restriction slopes parallel to the existing ground level);
15. The colour palette for materiality and finishes must draw on the colouring of the natural environment, preferencing mid-tone to darker colouring to blend with forest vegetation. If natural material such as stone is used, the stone must be locally sourced and match the colouring (and, if possible, the geological origins) of the site and receiving environment. Materials and finishes may not consist of bright colours, highly reflective surfaces or gratuitous use of glass. Curtain walls, windows, skylights and other glazing features must be shaded/set back under overhangs or similar to prevent glare, especially in the direction of sensitive receptors identified. The use of exposed metal must be kept to a bare minimum, and any potentially shiny or reflective surfaces must be avoided altogether, or covered with matte, non-reflective finishes.
16. All construction activities must be limited to the approved building footprint and a 2m offset buffer zone all around the building footprint.
a. Limited and appropriate soft landscaping may extend further than the 2m offset around the buildings within the Moderate and Low sensitivity areas (refer to the Sensitivity map), but should avoid the protected forest and fynbos vegetation areas (High and Very high sensitivity).
17. The Landscape Plan must include a Vegetation protection methodology to manage Construction phase impacts on vegetation (before, during and after), including guidelines on the re-establishment, replacement and/or rehabilitation of vegetation per vegetation type in the case of disturbance.
18. No fence or wall should be permitted adjacent to and/or within view of the Scenic route, or within the 35m setback area as indicated on the Visual Sensitivity map. All fencing must be visually permeable and no post top lighting, flood lights, peripheral/boundary security lights or uncovered luminaires of any kind should be allowed.
19. All exterior lighting shall be located and controlled so as to avoid direct illumination, glare or reflection onto any adjoining property or the scenic drive; provide precisely directed illumination to reduce light "spillage" beyond the immediate surrounds of the light source, and should preferably be movement activated.
20. The Landscape plan at SDP stage must show screening and softening of the building edges on the southern side of the buildings. The aim is to visually screen the first storey of the proposed development from the Scenic route views up the slope (the expectation is not that the building will be hidden, but rather that the screening vegetation allows the buildings to blend into the visual context more easily by reducing the starkness of new built features; especially where these meet the surrounding landscape).
21. Prior to the beginning of the Construction phase, sensitive vegetation must be marked clearly and the rootzones of protected species and areas must be demarcated and made off limits to prevent compaction of soil and damage to the root zones.
22. Please refer to Item 7.2.5 for mitigation measures to be included in the EMPr.

4. Visual Impact Assessment – Fi Smit (Filia Visual Pty Ltd)

Key conditions and mitigation measures that should be noted (in summary) include:

1) No structures, including a swimming pool, may be sited and constructed within the no-go areas, within the 35m scenic route setback line or the 5m botanical/slope sensitivity setback line. Except for the absolutely necessary linear infrastructure, no areas outside of the approximately 1448m² "developable area" may be disturbed.

2) The building envelope, including chimneys, must not protrude above the 8m height restriction (this VIA recommends that the existing ground level (NGL) is the base level from which maximum height permitted is measured so that the height restriction slopes parallel to the existing ground level);

3) The colour palette for materiality and finishes must draw on the colouring of the natural environment, preferencing mid-tone to darker colouring to blend with forest vegetation. If natural material such as stone is used, the stone must be locally sourced and match the colouring (and, if possible, the geological origins) of the site and receiving environment. Materials and finishes may not consist of bright colours, highly reflective surfaces or gratuitous use of glass. Curtain walls, windows, skylights and other glazing features must be shaded/set back under overhangs or similar to prevent glare, especially in the direction of sensitive receptors identified. The use of exposed metal must be kept to a bare minimum, and any potentially shiny or reflective surfaces must be avoided altogether, or covered with matte, non-reflective finishes.

4) All construction activities must be limited to the approved building footprint and a 2m offset buffer zone all around the building footprint.
a. Limited and appropriate soft landscaping may extend further than the 2m offset around the buildings within the Moderate and Low sensitivity areas (refer to the Sensitivity map), but should avoid the protected forest and fynbos vegetation areas (High and Very high sensitivity).

5) The Landscape Plan must include a Vegetation protection methodology to manage Construction phase impacts on vegetation (before, during and after), including guidelines on the re-establishment, replacement and/or rehabilitation of vegetation per vegetation type in the case of disturbance.

6) No fence or wall should be permitted adjacent to and/or within view of the Scenic route, or within the 35m setback area as indicated on the Visual Sensitivity map. All fencing must be visually permeable and no post top lighting, flood lights, peripheral/boundary security lights or uncovered luminaires of any kind should be allowed.

7) All exterior lighting shall be located and controlled so as to avoid direct illumination, glare or reflection onto any adjoining property or the scenic drive; provide precisely directed illumination to reduce light "spillage" beyond the immediate surrounds of the light source, and should preferably be movement activated.

8) The Landscape plan at SDP stage must show screening and softening of the building edges on the southern side of the buildings. The aim is to visually screen the first storey of the proposed development from the Scenic route views up the slope (the expectation is not that the building will be hidden, but rather that the screening vegetation allows the buildings to blend into the visual context more easily by reducing the starkness of new built features; especially where these meet the surrounding landscape).

9) Prior to the beginning of the Construction phase, sensitive vegetation must be marked clearly and the rootzones of protected species and areas must be demarcated and made off limits to prevent compaction of soil and damage to the root zones.

10) Please refer to Item 7.2.5 for mitigation measures to be included in the EMPr.

Should the conceptual architectural proposal undergo significant change (especially in terms of height, siting, building envelope and massing, fencing, lighting and perimeter treatment or any feature that would constitute a change to the visual impact of the proposed development), a Visual statement must be prepared by a suitably qualified visual specialist to determine if the findings of this study remain unchanged.

5. Animal Species Compliance Statement – Adam Labuschagne (Capensis) September 2025

The study area has been identified as a site of medium sensitivity under the animal sensitivity category by the Screening Tool. The results of the site visit support this level of sensitivity. The majority of the site is covered by a dense Forest-thicket vegetation representative of Keurbooms Thicket Forest as described by Vlok et al., (2008), with a small area of dune thicket-fynbos vegetation, similar to fynbos habitats found within areas mapped as Goukamma Dune Thicket vegetation. Much of the site is deemed to be in an intact state, with small areas classified as semi-intact. These include areas of historic disturbance or areas where vegetation has recently been cleared. Faunal species detected at the site are listed in Appendices 1 & 2.

Three of species of conservation concern (SCC) were identified as potentially occurring at the site. These were flagged either by the National Screening Tool or from other records of species' presence (GBIF). The three species in question are Chlorotalpa duthiae (Duthie's Golden Mole), Sarophorus punctatus, and Sensitive Species 8. Despite suitable habitat for these three SCC, no evidence for any was found at the site. The Site Ecological Importance of the property is deemed to be high based on the following characteristics; (1) presence of habitat that could potentially host SCC, (2) good habitat connectivity, (3) and the presence of species that have a high likelihood of either persisting at the site during disturbance events or are likely to return to the site once disturbance has ceased. For sites with high ecological importance, proposed development must be of low impact. Given the small site footprint, abundance of similar vegetation in the surrounding landscape, and high likelihood of faunal species persisting in the environment even after the disturbance associated with the construction of the development, the proposed residence at ERF 155 is supported.

6. Engineering Services Report - Tuiniqua (Pty) Ltd

Water Supply

Water will be supplied to the development from the existing Keurboomstrand reservoir. The proposed connection point for the development on Erf 155 is at the existing 75mm water main in adjacent park Erf 691. It is proposed that a 75 mm bulk meter connection be made to the municipal mains.

An alternative method of water supply would be the harvesting of rainwater. However, rainwater should be considered as a supplementary supply for non-potable use, unless treated.

Sewerage

In terms of the Municipal Sewer Masterplan and already approved developments there is no spare capacity for the proposed development in various sections of the sewer network and upgrades are required to accommodate this development.

Due to capacity constraints an alternative to the municipal connection has been proposed by the engineer. An interim alternative will be to provide a combined 24 000 litre conservancy tank. The municipal approved conservancy tank is to be constructed at an approved position to allow municipal and or private tanker access.

Access

A landuse application will be made for access to the development via a seven-meter-wide servitude right of way access over Erf 391 (zoned as public place). The servitude will allow direct access to the site via Main Street.

The access road will be a minimum of 5,5m wide.

Recommendation

Subject to the requirements as listed in the report above, the proposed rezoning and development of the portion of erf 155 Keurboomstrand is recommended for the preferred option of 3 dwellings from a servicing point of view.

Influence on development:

The preferred option was chosen as it would have the least impact on municipal infrastructure and services.

7. Traffic Impact Statement – Innovative Transport Solutions

Based on the evaluation in this report, the conclusions and recommendations are as follows:

The existing traffic volumes along the surrounding road network in the site vicinity is low.
Trips generated by the proposed development will be less than 10 trips during the typical weekday peak hours, which is low.
The surrounding road network has sufficient capacity to accommodate the trips associated with the proposed development, even during the peak holiday periods.
The access spacing is acceptable and the available shoulder sight distance in both directions along Main Street is sufficient.
No public transport or NMT facilities are recommended for the development.
The proposed development will have a low negative significance in terms of the transport impact.
It is recommended that the development be approved from a transport impact perspective.

Influence on development:

The development will not have traffic impacts.

8. Agricultural Compliance Statement – SoilsZA (Johann Lanz & David Lakey, April 2025)

The overall conclusion of this assessment is that the proposed development is acceptable because it leads to no loss of future agricultural production potential.

The cropping potential of the site is limited by the combination of terrain constraints (steep slopes), and soil constraints (deep soils with low water and nutrient holding capacity). Because of these constraints, the site is unsuitable for viable rainfed crop production.

Furthermore, factors other than terrain, and soil capability also constrain the potential of the property to practically deliver agricultural produce and therefore influence its agricultural production potential.

These factors include:
• its location, leaves it surrounded largely by non-agricultural land uses
• municipal ownership of the land which would also discourage the necessary investment to establish cropland,
• the fact that land use planning in the spatial development framework designates the site for non-agricultural use,

For these reasons, the site will never be viably utilised for agricultural production and its potential is therefore assessed here as non-existent.

This assessment therefore disputes the high sensitivity classification of the site by the screening tool and verifies the entire site as being of low to medium agricultural sensitivity because of its assessed cropping potential.

An agricultural impact must by definition cause a change to the future agricultural production potential of land. If there is no change, there is no impact. In this case, the entire development footprint is considered to be below the threshold for needing to be conserved as agricultural production land because of the limitations that make it unsuitable as viable cropland. The proposed development on this land will result in no loss of future agricultural production potential in terms of national food security.

Due to the facts that the proposed development will not occupy scarce, viable cropland, the overall negative agricultural impact of the development (loss of future agricultural production potential) is assessed here as being of low significance and as acceptable.

From an agricultural impact point of view, it is recommended that the proposed development be approved. The conclusion of this assessment on the acceptability of the proposed development and the recommendation for its approval is not subject to any conditions.

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

All of the above will be included in the EMPr.

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.

N/A

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

1. Nature and Scale of the Development

The proposal involves the development of residential dwellings on Erf 155, Keurboomstrand. The area is already largely residential with small private businesses, so the new development is consistent with existing land use and scale.

2. Positive Socio-Economic Impacts

- Local economic contribution: The development represents an investment of approximately R15 million into the local economy, primarily through construction spending.
- Job creation: Employment opportunities will be created during the 3–5 year construction phase, benefitting local contractors and labourers.
- Municipal revenue: The project will contribute to the local municipality through service fees and rates, strengthening the local tax base.
- Skill and business stimulation: Indirect economic benefits include the stimulation of small businesses providing materials, transport, and services to the site.

Overall, the socio-economic impact is positive and rated as low positive after assessment and mitigation.

3. Potential Negative Impacts on the Community

Noise during construction: Temporary noise disturbances will occur but are restricted to weekdays (07:00 – 17:00) and mitigated by fitting machinery with silencers

Visual impact: The site is within an urbanised setting; therefore, changes to the visual character and sense of place will be minimal. Mitigation includes the use of earth-tone colours, screening vegetation, and adherence to architectural guidelines

Traffic and access: The traffic impact is low, with fewer than ten vehicle trips during peak hours, and the surrounding road network has sufficient capacity

Temporary inconvenience: During construction, some localised dust and vehicle movement may affect nearby residents but will be managed through standard construction-phase controls.

4. Community Health and Well-Being

The development will not significantly affect public health or well-being.

Noise and dust are limited to construction.

No odours or emissions are expected.

Sense of place remains largely unchanged because the project aligns with surrounding residential character

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.

1. Climate Change Risks Relevant to the Site

The Keurboomstrand area may be affected by:

- Increased rainfall intensity leading to higher risks of stormwater runoff, soil erosion, and slope instability.
- Prolonged dry periods affecting water supply and increasing reliance on municipal sources.
- Temperature rises increasing energy demand for cooling and impacting vegetation.
- Coastal processes such as shifting weather patterns, although the site is outside the coastal management line and not exposed to direct flooding or sea-level rise

2. Influence of Climate Risk on the Proposed Development

The project design and layout were informed by environmental and topographical sensitivities to reduce vulnerability to climate change impacts:

- The development footprint avoids high-sensitivity dune thicket and forest zones, which act as natural stabilisers against erosion and runoff.
- The site design integrates limited vegetation clearance and minimal hardened surfaces, which reduces surface runoff and heat island effects
- Slope and drainage patterns were key in determining the siting of buildings to prevent future erosion and flooding.

Measures to Address and Adapt to Climate Change

Several mitigation and adaptation strategies have been incorporated:

Stormwater and Erosion Control

A stormwater management plan will be prepared by a specialist to handle increased runoff due to potential heavier rainfall linked to climate variability.

SuDS (Sustainable Drainage Systems) such as sandbags, silt traps, and vegetated swales will be used to slow and filter runoff.

Continuous erosion monitoring will occur during construction and operational phases.

Land clearance is strictly limited to prevent destabilisation of slopes

Water Resource Efficiency

Rainwater harvesting will supplement non-potable water use, reducing pressure on municipal supplies during droughts

Water-efficient fixtures and low-flow fittings will be encouraged.

Energy and Emission Reduction

Solar geysers, PV panels, and energy-efficient lighting/appliances are recommended to minimise electricity demand and greenhouse gas emissions

Thermal insulation and energy management systems are to be installed to improve building energy efficiency and resilience to temperature changes.

Vegetation and Biodiversity Protection

Indigenous vegetation will be retained in no-go zones to act as carbon sinks and buffer zones against climate-related soil loss.

Landscaping will focus on climate-resilient indigenous species, reducing irrigation needs.

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

No material conflicts were identified between the specialist recommendations. Each specialist's findings were found to be mutually supportive and were successfully integrated into a single, coordinated development approach.

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 findings and recommendations of all the appointed specialists were integrated holistically to determine the most appropriate mitigation measures for the proposed residential development.

The integration process ensured that environmental sensitivities, visual quality, geotechnical stability, heritage protection, and infrastructure feasibility were all addressed within one coherent design.

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

The mitigation hierarchy — avoid, minimise, rehabilitate, and offset — was systematically applied to identify and refine the best practicable environmental option for the proposed development.

This process guided the design, siting, and management of the two proposed residential units on Erf 1180, ensuring that environmental sensitivity and sustainability were prioritised from the outset.

SECTION J: GENERAL

1. Environmental Impact Statement

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

1. Project Overview

Location: Erf 1180 (portion of Erf 1236), Keurboomstrand, Plettenberg Bay, Western Cape.

Proposal: Construction of two double-storey residential units with double garages and a shared swimming pool.

Footprint: ± 2 000 m² of the total 5 000 m² site.

Zoning Change: From Open Space Zone 2 to Open Space Zone 3 (Nature Conservation Area) to permit residential use.

Access: Via a 7 m right-of-way servitude over Erf 391.

2. Environmental Sensitivity and Site Context

The site lies within a Coastal Protection Zone but outside the Coastal Management Line.

Vegetation type: Southern Cape Dune Fynbos and Thicket Mosaic (Endangered ecosystem).

Portions of the property are designated as Critical Biodiversity Area (CBA 2) and Environmental Support Area (ESA 1) under the Western Cape Biodiversity Spatial Plan.

The property is undeveloped, with no existing infrastructure or significant disturbance.

3. Key Environmental Impacts Identified:

Impact Category	Key Finding	Residual Significance (after mitigation)
Biodiversity	Limited loss (< 0.0003 %) of an already well-protected vegetation unit; sensitive areas excluded from development footprint.	**Low**
Soils & Erosion	Potential erosion from slope disturbance; addressed via stormwater management and limited clearing.	**Low**
Water Resources	No wetlands or watercourses on site; stormwater plan ensures no off-site sedimentation or pollution.	**Low**
Visual / Sense of Place	Scenic route setback (35 m) and earth-tone building palette reduce visibility and maintain character.	**Low**
Noise & Air Quality	Temporary construction-phase disturbance only; controlled by working hours and dust suppression.	**Low**
Heritage	No significant heritage features; chance-find procedure in place.	**Negligible**
Socio-Economic	Positive: ± R15 million local investment; short-term job creation during 3–5 year build.	**Low-Positive**
Traffic & Services	Minimal vehicle trips; adequate municipal service capacity with conservancy tank for interim sewage storage.	**Low**
Climate Change	Low vulnerability; design includes rainwater harvesting, SuDS, and energy-efficient technologies.	**Low**

4. Mitigation and Management

The mitigation hierarchy (avoid → minimise → rehabilitate) was applied:

Avoidance: Siting restricted to low-sensitivity zone; steep slopes and dune thicket excluded.

Minimisation: Visual and stormwater design refined; strict footprint control; restricted construction hours.

Rehabilitation: Indigenous revegetation and invasive-alien control post-construction.

Monitoring: Environmental Control Officer (ECO) oversight and compliance with the Environmental Management Programme (EMPr).

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)

Attached as Appendix B2.

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 Impacts

Impact Type	Description	Extent & Duration	Significance
Socio-economic development	±R15 million investment into the local economy through design and construction.	Local / short-term	**Low-Positive**
Employment creation	Temporary job opportunities (construction phase, 3–5 years).	Local / short-term	**Low-Positive**
Municipal revenue	Increased rates and service income for Bitou Municipality.	Local / long-term	**Low-Positive**
Improved land use efficiency	Utilisation of an undeveloped plot within an existing residential node, aligning with spatial planning policies.	Local / long-term	**Low-Positive**
Sustainable design elements	Incorporation of solar geysers, PV systems, rainwater harvesting, and low-impact architecture.	Site-specific / long-term	**Low-Positive**

Environmental rehabilitation	Alien species removal and indigenous landscaping will enhance ecological resilience.	Local / long-term	**Low-Positive**

Negative Impacts

Impact Type	Description	Extent & Duration	Pre-Mitigation Significance	Residual Impact (Post-Mitigation)
Biodiversity loss	Clearing of ±2 000 m² indigenous vegetation (Endangered Dune Fynbos/Thicket Mosaic).	Local / permanent	**Medium-Negative**	**Low-Negative** – footprint relocated to least-sensitive area; buffers and rehabilitation applied.
Soil erosion and stormwater runoff	Disturbance of slope and soil leading to potential erosion and sedimentation.	Local / medium-term	**Medium-Negative**	**Low-Negative** – SuDS, slope stabilisation, and erosion control to be implemented.
Visual and sense of place	Potential intrusion on scenic route MR394.	Local / long-term	**Medium-Negative**	**Low-Negative** – 35 m scenic setback, earth-tone colours, non-reflective finishes.
Noise disturbance	Construction noise from machinery and vehicles.	Local / short-term	**Low-Medium Negative**	**Low-Negative** – limited working hours (07:00–17:00), equipment silencers.
Traffic disruption	Minor increase in traffic during construction.	Local / short-term	**Low-Negative**	**Negligible** – access via existing servitude, low trip generation.
Waste management	Construction waste, potential littering.	Local / short-term	**Low-Negative**	**Negligible** – municipal waste removal and recycling required.
Cultural heritage	Chance finds during excavation.	Local / short-term	**Medium-Negative**	**Low-Negative** – chance-find protocol and heritage oversight in EMPr.
Climate-related risk	Heavy rainfall and drought may affect erosion and water use.	Regional / long-term	**Low-Negative**	**Low-Negative** – rainwater harvesting and stormwater control.

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

1. Biodiversity Conservation

Objective: Protect indigenous vegetation, prevent habitat loss, and maintain ecological connectivity.

Desired Outcomes:

- Development footprint restricted to the approved low-sensitivity area only.
- No-go areas (dune thicket and forest patches) remain intact and fenced off prior to construction.
- No unauthorised vegetation clearing or dumping in sensitive areas.
- All disturbed areas rehabilitated with locally indigenous plant species within 6 months of construction completion.
- Alien invasive species control programme implemented and maintained.

- Faunal protection measures (e.g., search-and-rescue before clearing, no night works, controlled lighting) applied effectively.

Outcome Indicators:

- 100% of no-go zones undisturbed.
- Vegetation re-established to ≥80% ground cover within one year post-construction.
- ECO confirms compliance with vegetation protection and rehabilitation standards.

2. Soil Conservation and Erosion Control

Objective: Prevent soil loss, erosion, and sedimentation during and after construction.

Desired Outcomes:

- Stormwater and erosion management plan (SuDS) implemented, including silt traps, sandbags, and vegetated swales.
- No visible evidence of soil erosion, gullying, or uncontrolled runoff leaving the site.
- Slopes stabilised with vegetation or engineered structures as required.

Outcome Indicators:

- Stormwater system operational and inspected monthly during construction.
- No sediment discharge beyond property boundaries.
- ECO inspection reports confirm compliance with erosion prevention standards.

3. Stormwater and Water Quality Management

Objective: Protect downstream environments from contamination and excessive runoff.

Desired Outcomes:

- Stormwater runoff rates and volumes equivalent to or less than pre-development conditions.
- Runoff managed through infiltration, attenuation, and filtration within the site.
- No discharge of contaminated water (cement wash, oil, or construction effluent) into stormwater systems or natural areas.
- All water storage and containment structures are leak-proof and maintained.

Outcome Indicators:

- No visible sedimentation or erosion at discharge points.
- Stormwater plan approved and implemented before site works begin.
- Monthly inspection records show functioning of control structures.

4. Visual and Sense-of-Place Protection

Objective: Minimise visual intrusion and maintain the scenic character of the Keurboomstrand area.

Desired Outcomes:

- Buildings constructed within the 35 m scenic route setback from MR394.
- Architectural design compliant with earth-tone colours, non-reflective finishes, and low-profile roofs.
- Landscaping with indigenous vegetation to screen structures from the public road and adjacent properties.
- Lighting designed to reduce glare and spill (downlighting only).
- Better placement of the swimming pool.

Outcome Indicators:

- ECO verifies compliance with architectural and landscaping specifications.
- No visual complaints recorded from adjacent landowners or the public.

5. Heritage Resource Management

Objective: Prevent loss or damage to heritage and archaeological resources.

Desired Outcomes:

- If any artefacts, fossils, or remains are discovered, all work stops immediately, and Heritage Western Cape is notified.
- Chance-find procedure included in contractor's environmental induction.
- All workers briefed on heritage protection obligations.

Outcome Indicators:

- No unreported heritage finds or damage.
- Compliance certificates maintained by the ECO and reported to the authority.

6. Noise and Air Quality Management

Objective: Limit nuisance from noise, dust, and emissions during construction.

Desired Outcomes:

- Construction confined to 07:00–17:00 weekdays only.
- Machinery fitted with silencers and maintained in good condition.
- Dust suppression (e.g., wetting or covering of stockpiles) implemented daily during dry conditions.

Outcome Indicators:

- No justified noise or dust complaints received.
- ECO site inspections confirm suppression measures are in place.

7. Waste and Pollution Control

Objective: Ensure proper waste handling, storage, and disposal.

Desired Outcomes:

- Waste separation at source (recyclables, general waste, hazardous waste).
- Construction waste transported to a licensed facility.
- No evidence of littering or illegal dumping.
- All hazardous substances stored in bunded areas away from stormwater.

Outcome Indicators:

- Waste collection records maintained.
- Site kept clean and free of contamination.
- Zero incidents of unauthorised waste disposal.

8. Socio-Economic Enhancement

Objective: Maximise local economic benefits and minimise community disruption.

Desired Outcomes:

- Prioritise local labour and contractors for construction activities.
- Maintain open communication channels with neighbours and stakeholders.
- Ensure safe site access and no obstruction to existing public routes.

Outcome Indicators:

- 30% of construction workforce sourced locally.
- No unresolved community complaints.
- Compliance with local employment and safety obligations.

9. Climate Change Adaptation and Sustainability

Objective: Ensure long-term resilience to climate variability and promote resource efficiency.

Desired Outcomes:

- Incorporate rainwater harvesting, solar energy systems, and energy-efficient design features.
- Landscaping uses drought-resistant indigenous plants to minimise irrigation.
- No infrastructure failures due to extreme weather events (flooding, erosion).

Outcome Indicators:

- Installed renewable systems operational before occupation.
- Water and energy consumption levels align with green-building standards.

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.

All recommendations made by specialists must be conditions of the authorisation to ensure minimal impact is experienced.

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.

The proposed development of two residential units on Erf 155, Keurboomstrand, has been assessed through a comprehensive Basic Assessment process, supported by specialist studies in biodiversity, vegetation, fauna, visual impact, heritage, traffic, geotechnical stability, and civil engineering.

The findings demonstrate that:

- The environmental sensitivities of the site were identified and avoided through informed design layout;
- All potential negative impacts can be mitigated to low or negligible significance; and
- The project will contribute positively to local socio-economic conditions without compromising ecological or visual integrity.

The activity is therefore considered consistent with the environmental management principles of Section 2 of the National Environmental Management Act (NEMA), the Western Cape Biodiversity Spatial Plan, and the Bitou Spatial Development Framework (SDF).

Summary of Key Findings Supporting Authorisation:

Aspect	**Finding / Outcome**
Biodiversity & Vegetation	Development footprint avoids high-sensitivity thicket and forest; only low-sensitivity vegetation affected (±0.0003% of regional unit). No-go zones and buffers included.
Soil & Erosion Risk	Stable slopes (<1:4) selected; erosion and runoff controlled via a stormwater management plan.

Visual & Sense of Place	Buildings located outside the 35 m scenic route setback and designed with earth-tone finishes, non-reflective materials, and indigenous screening vegetation.
Heritage	No significant heritage resources affected; chance-find protocol in place.
Traffic & Services	Minimal additional traffic (<10 peak-hour trips); existing municipal services and servitude access are sufficient.
Climate & Sustainability	Incorporates water-saving, rainwater harvesting, solar energy, and energy-efficient design. Low vulnerability to climate risks.
Socio-Economic Benefits	Positive local investment (~R15 million), job creation during construction, and contribution to municipal rates base.
Public Participation	No significant objections received; stakeholders engaged in accordance with NEMA EIA Regulations.

Compatibility with Planning and Policy Framework

The proposal aligns with the Bitou Municipal Spatial Development Framework (SDF), which supports infill residential development within existing nodes.

The site falls within an urban edge and is compatible with adjacent residential land uses.

The project supports principles of sustainable land use, compact urban form, and environmental stewardship.

Recommended Conditions of Authorisation:

A. Environmental and Design Conditions

- Development must be restricted to the approved layout and footprint (Preferred Alternative).
- All no-go areas, buffers, and scenic route setbacks must be clearly demarcated and maintained throughout construction.
- Buildings must comply with approved architectural guidelines, including non-reflective finishes, muted colours, and low roof profiles.
- A stormwater management plan must be implemented prior to site clearance and maintained thereafter.
- Indigenous vegetation must be retained and used in landscaping; alien invasive species must be eradicated and controlled in perpetuity.

B. Construction and Operational Management

- An Environmental Control Officer (ECO) must be appointed before construction begins to monitor compliance with the EMPr and authorisation conditions.
- The ECO must conduct monthly inspections and maintain a compliance register for submission to the competent authority upon request.
- Construction work may only occur between 07:00 and 17:00 on weekdays; no work on weekends or public holidays.
- Noise and dust suppression measures must be implemented at all times.
- All construction waste must be removed to a licensed disposal facility, and no waste may be buried or burned on site.

C. Heritage and Cultural Resource Protection

The chance-find procedure must be implemented: all work to stop immediately if archaeological or paleontological materials are discovered, and Heritage Western Cape must be notified.

D. Socio-Economic and Climate Adaptation Measures

- The contractor must prioritise local employment and procurement wherever possible.
- All dwellings must incorporate rainwater harvesting, solar energy, and energy-efficient fittings.
- Landscaping must use climate-resilient indigenous species requiring minimal irrigation.

E. Post-Construction Rehabilitation and Monitoring

- Rehabilitation of all disturbed areas must commence immediately after construction completion.
- A rehabilitation progress report must be submitted to the ECO six months after completion, confirming vegetation re-establishment.

If the above conditions and the approved EMPr are fully implemented, the proposed development on Erf 1180 Keurboomstrand will result in no significant residual negative impacts, while promoting responsible development, environmental protection, and community benefit.

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

Biodiversity and Ecological Assessments:

- Seasonal variation may have limited detection of certain geophytes, annual plant species, or cryptic fauna that appear only in spring.
- The long-term success of rehabilitation will depend on rainfall patterns, soil stability, and continued management of invasive species.
- Potential climate change effects (such as increased rainfall intensity or prolonged droughts) may alter future vegetation dynamics, beyond current model predictions.

Climate Change and Hydrology:

- The frequency and magnitude of extreme weather events under changing climate conditions cannot be precisely predicted.
- There may be site-specific micro-climatic effects influencing stormwater infiltration and erosion rates that were not captured in desktop modelling.
- The capacity of downstream drainage systems under future cumulative development scenarios has not been verified in detail.

Soils and Geotechnical Conditions:

- Localised variability in soil composition or compaction may affect construction performance and drainage efficiency.
- The response of soils to extreme rainfall or long-term vegetation removal may differ slightly from modelled expectations.

Visual and Heritage Assessments:

- Future vegetation changes or neighbouring developments could alter the visual context over time.
- Subsurface archaeological or paleontological remains may still be present but undetected during non-intrusive survey methods.

Socio-Economic Assessment:

- Broader economic fluctuations or construction delays could influence the timing and scale of local economic benefits.
- Potential cumulative socio-economic effects of similar developments in the area were not quantitatively assessed.

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.

It is recommended that the Environmental Authorisation (EA) be valid for a period of ten (10) years from the date of issue.

This timeframe is consistent with standard practice for residential developments and will allow sufficient time for:

- Completion of all planning, service approvals, and building plan processes;
- Phased construction of the two residential units and associated infrastructure; and
- Implementation of post-construction rehabilitation and monitoring commitments.

If construction has not commenced within the validity period, a formal extension of the EA should be applied for in terms of the National Environmental Management Act (NEMA) regulations.

Post-Construction Monitoring and Finalisation:

Post-construction environmental monitoring will focus on confirming the successful implementation and effectiveness of rehabilitation, erosion control, and stormwater management measures.

Monitoring Requirements:

The Environmental Control Officer (ECO) or appointed environmental specialist must conduct follow-up site inspections for a period of at least one (1) year following completion of construction.

Monitoring will assess:

- Establishment and survival of indigenous vegetation in rehabilitated areas;
- Stability of slopes and stormwater control structures;
- Absence of erosion or sedimentation; and
- Ongoing alien invasive species control.

A final post-construction environmental compliance report must be submitted to the competent authority upon completion of the monitoring period (anticipated by 2032).

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.
Measures to Avoid the Use of Potable Water During the Construction Phase: Non-potable water sources (e.g., rainwater, greywater, or treated municipal effluent, if available) will be used for activities such as: Dust suppression, Wheel and equipment washing, and Concrete curing or landscaping establishment. Water tankers or temporary onsite storage tanks will be used to supply non-potable water, ensuring no direct connection to municipal potable supply for bulk construction use. During the Operational Phase: Potable municipal water will only be used for essential domestic consumption (drinking, cooking, sanitation). All irrigation, cleaning, and non-domestic uses will rely on rainwater harvesting and greywater systems. Automatic irrigation systems will be fitted with rain sensors and timers to prevent unnecessary watering.

4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.
The proposed residential development on Erf 1180 Keurboomstrand is committed to the principles of the National Environmental Management: Waste Act (No. 59 of 2008) and the National Waste Management Strategy (2020), which promote the waste management hierarchy: avoid → reduce → reuse → recycle → recover → dispose (as a last resort).

Both the construction phase and operational phase will therefore incorporate targeted measures to minimise waste generation, encourage material recovery, and ensure lawful, responsible disposal of any unavoidable residues.

5. Energy Efficiency

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

Solar Water Heating

Each dwelling should be equipped with solar water heaters (geysers), reducing electrical demand for domestic hot water by approximately 60–70%.

Photovoltaic (PV) Power Generation

Roof-mounted PV panels will provide renewable electricity for lighting, small appliances, and potentially water-pumping systems.

Battery or grid-tied systems will allow energy storage or export, reducing reliance on Eskom's fossil-fuel-based supply.

Energy-Efficient Lighting and Appliances

All internal and external lighting will use LED or low-wattage luminaires with motion or daylight sensors in low-use areas.

Energy-rated appliances (Class A or better) are encouraged.

SECTION K: DECLARATIONS

DECLARATION OF THE APPLICANT

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

I, Louis van Watt, ID number 6706145129089 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.

Signature of the Applicant: Date: 11/11/2025

Name of company (if applicable): Fe-pan (Pty) Ltd.

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

I Samantha Teeluckdhari , EAP Registration number 2023/6443 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;

S. Teeluckdhari

10/11/2025

Signature of the EAP: Date:

Eco Route Environmental Consultancy

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 – TO BE ATTACHED IN FBAR

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):