Eco Route
ENVIRONMENTAL CONSULTANCY
REGISTRATION NO. 1998/031976/23

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PRE-APPLICATION BASIC ASSESSMENT REPORT

PROPOSED RESIDENTIAL DEVELOPMENT AND ASSOCIATED INFRASTRUCTURE ON A PORTION OF RE/155, KEURBOOMSTRAND, PLETTENBERG BAY

Pre-application reference: 16/3/3/6/7/1/D1/6/0126/20 **August 2022**

Western Cape Government
Environmental Affairs and Development Planning

FORM NO. BAR10/2019

BASIC ASSESSMENT REPORT

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

AUGUST 2022

(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)

RE/155 (56 615,4m² in extent) is located within Keurboomstrand, primarily characterized as a resort town within Plettenberg Bay, Western Cape. The proposal is to subdivide and rezone RE/155 from Open Space Zone II (private open space) to Residential Zone II to enable the development of private grouped dwelling houses on the eastern portion of RE/155. Approximately 3 250m² of the 5 000m² subject site is earmarked for the development of three (3) residential units and a shared swimming pool.

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, 1998 (Act No. 107 of 1998) ("NEMA") hereinafter referred to as the "NEMA EIA Regulations".

3. 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.

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

5. 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.

6. This BAR is current as of **November 2019**. 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/eadp to check for the latest version of this BAR.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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: REGION 1 and REGION 2 **(Region 1: City of Cape Town, West Coast District)** **(Region 2: Cape Winelands District & Overberg District)**	**GEORGE OFFICE: REGION 3** **(Central Karoo District & Garden Route District)**
BAR must be sent to the following details: Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1 or 2) Private Bag X 9086 Cape Town, 8000 Registry Office 1st Floor Utilitas Building 1 Dorp Street, Cape Town Queries should be directed to the Directorate: Development Management (Region 1 and 2) at: Tel: (021) 483-5829 Fax (021) 483-4372	BAR must be sent to the following details: Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530 Registry Office 4th Floor, York Park Building 93 York Street George Queries should be directed to the Directorate: Development Management (Region 3) at: Tel: (044) 805-8600 Fax (044) 805 8650

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**		Included in this 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**	✓
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:		GEORGE OFFICE:
	REGION 1 (City of Cape Town, West Coast District	REGION 2 (Cape Winelands District & Overberg District)	REGION 3 (Central Karoo District & Garden Route District)

Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:		
Name of contact person for Applicant/Proponent (if other):		
Company/ Trading name/State Department/Organ of State:		
Company Registration Number:		
Postal address:		
Telephone:		
E-mail:		
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	
EAPASA registration no:		
Duplicate this section where there is more than one landowner Name of landowner:		
Name of contact person for landowner (if other):		
Postal address:		
Telephone:		
E-mail:		
Name of Person in control of the land:		
Name of contact person for person in control of the land:		
Postal address:		
Telephone:		
E-mail:		

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.				
Greenfield site with existing municipal services.					
3.	**For Linear activities or developments** N/A				
3.1.	Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:				
3.2.	Development footprint of the proposed development for all alternatives.				m²
3.3.	Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.				
3.4.	Indicate how access to the proposed routes will be obtained for all alternatives.				
3.5.	SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives				
3.6.	**Starting point co-ordinates for all alternatives**				
	Latitude (S)	°	‘	“	
	Longitude (E)	°	‘	“	
	Middle point co-ordinates for all alternatives				
	Latitude (S)	°	‘	“	
	Longitude (E)	°	‘	“	
	End point co-ordinates for all alternatives				
	Latitude (S)	°	‘	“	
	Longitude (E)	°	‘	“	
Note: For Linear activities or developments longer than 500m, a map indicating the co-ordinates for every 100m along the route must be attached to this BAR as Appendix A3.					
4.	**Other developments**				
4.1.	Property size(s) of all proposed site(s):				56 615.4m²
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):				0m²
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:				+/- 4000m²
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. RE/155, Keurboomstrand (56 615,4m² in extent) contains large areas of undeveloped coastal forest vegetation as well as developed areas that are part of a share block resort abutting the western end of the Keurboomstrand residential neighbourhood (some of which are located on Erf 151, alongside).

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 eastern and western boundaries are shared with Erf 152 and Erf 155, respectively.

The proposal is to subdivide a portion of roughly 5 000m² located directly abutting and between Keurboomstrand residential erven (15, 20 and 565) and public place (Erf 391) off the private open space and to use approximately 3 250m² for the construction of three dwelling houses with a shared swimming pool in a sectional title development, zoned Residential Zone II.

Three development alternatives were assessed in the visual impact assessment report. 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. However, all development alternatives occur within the buffer area.

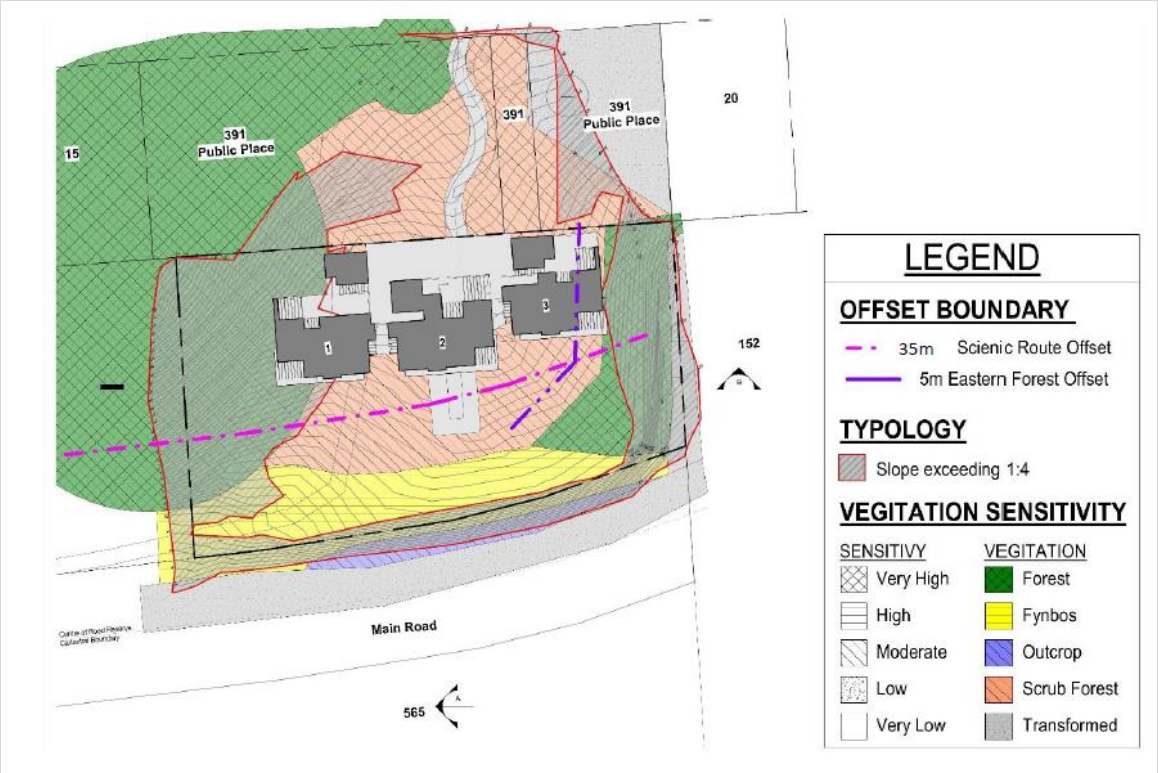


Figure 1: Alternative 1 showing botanical sensitivity, geotechnical and visual sensitivity no-go areas and setbacks/offsets (van der Merwe, 2021)

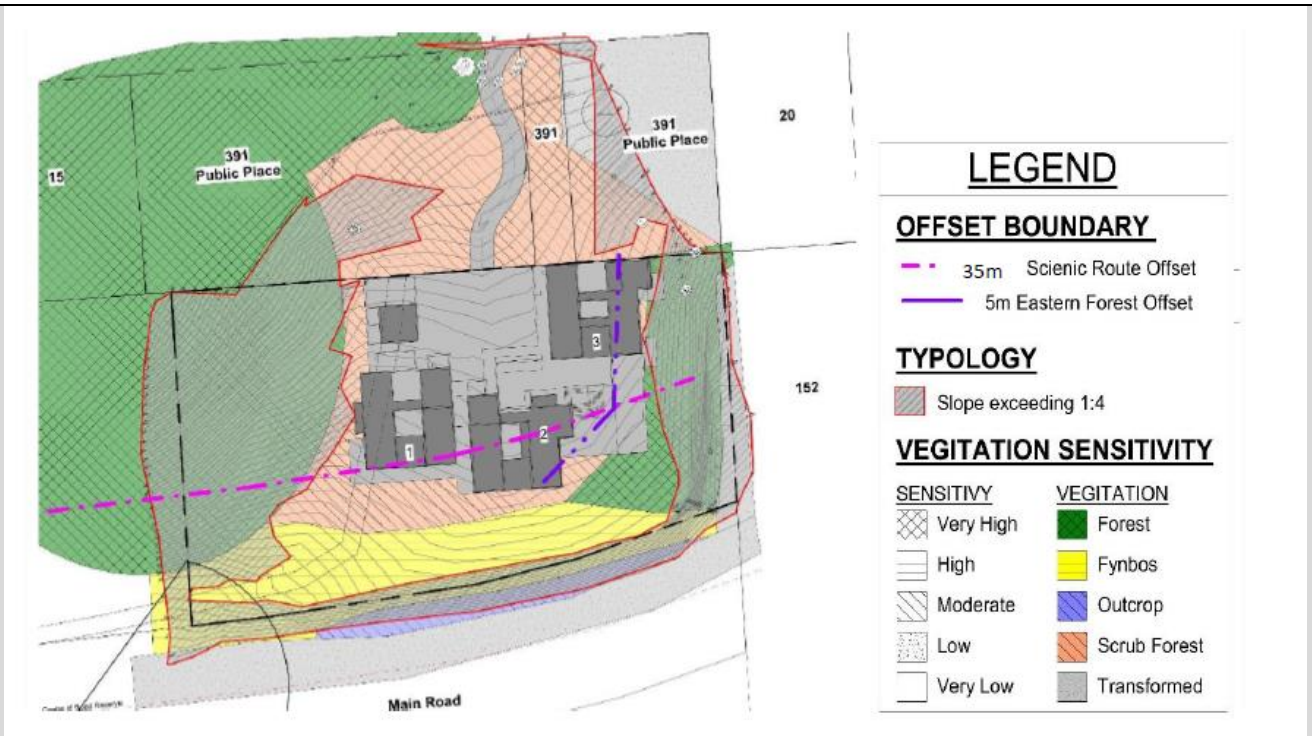


Figure 2: Alternative 2 showing botanical sensitivity, geotechnical and visual sensitivity no-go areas and setbacks/offsets (van der Merwe, 2021)

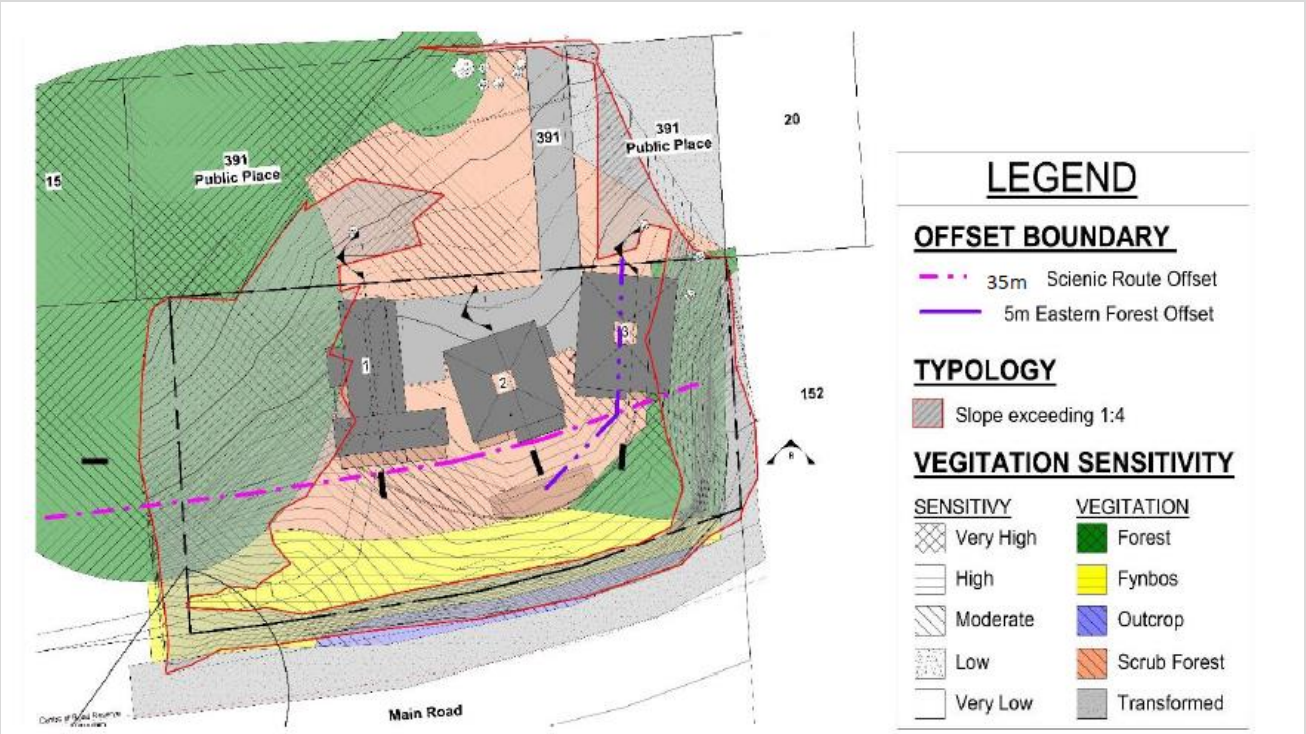


Figure 3: Alternative 3 showing botanical sensitivity, geotechnical and visual sensitivity no-go areas and setbacks/offsets (van der Merwe, 2021)

Water Supply

Water will be supplied to the development from the existing Keurboomstrand reservoir. The proposed connection point for the development on RE/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.

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.

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

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.

4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:	C	0	3	9	0	0	0	4	0	0	0	0	0	1	5	5	0	0	0	0	0

4.7.	Coordinates of the proposed site(s) for all alternatives:			
	Latitude (S)	34°	0‘	13.66“
	Longitude (E)	23°	27‘	16.57“

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.
Bitou Spatial Development Framework, 2013; spatial information used to contextualise the proposed residential development.

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. DEA (2017), Guideline on Need and Desirability – the need to ensure that the development is ecologically sustainable and socially and economically justifiable influenced the preferred proposal. 2. DEA&DP (2010) Guideline on Public Participation -this document has informed the Public Participation Process. 3. Guideline for Involving a Specialist in EIA Processes, June 2005 – to involve specialists to assess the receiving environment and provide sustainable mitigation measures for optimal conservation. 4. Guideline on Alternatives, March 2013 - The general objective of integrated environmental management is, *inter alia*, to "*identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management*" set out in NEMA. 5. Fynbos Forum Ecosystem Guidelines for Environmental Assessment in The Western Cape – to provide sustainable development whilst conserving the receiving environment. 6. Guideline for the Review of Specialist Input in the EIA process (June 2005). 7. Guideline for Environmental Management Plans (June 2005). 8. Guideline for involving biodiversity specialists in the EIA process, June 2005. 9. Guideline for the Management of Development on Mountains, Hills and Ridges of The Western Cape, 2002

6. Protocols

Explain how the proposed activity or development complies with the requirements of the protocols referred to in the NOI and/or application form
The following protocols are relevant to this development: 1. Part A: General Requirements for Undertaking an Initial Site Sensitivity Verification Where No Specific Assessment Protocol Has Been Identified. 2. Protocol for The Assessment and Reporting of Environmental Impacts on Terrestrial Biodiversity. All required specialist assessments were informed by desktop studies and screening of the development site. The specialist reports have provided assessment and reporting of impacts on the receiving environment.

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.
19A	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from— (i) the seashore; (ii)the littoral active zone, an estuary or **a distance of 100 metres inland of the high-water mark of the sea** or an estuary, whichever distance is the greater; or (iii) the sea; — but excluding where such infilling, depositing , dredging, excavation, removal or moving— (f) will occur behind a development setback; (g) is for maintenance purposes undertaken in accordance with a maintenance management plan; (h)falls within the ambit of activity 21 in this Notice, in which case that activity applies; (i)occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.	The construction phase will entail the infilling or depositing of material of more than 5 cubic metres, and the excavation, removal, moving of soil, sand, shells and/or rock in order to construct the three dwellings and a swimming pool. Portions of construction will be within a distance of 100 metres inland of the high-water mark of the sea.
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.
4	The development of a road wider than 4 metres with a reserve less than 13,5 metres. i. Western Cape **i. Areas zoned for use as public open space or equivalent zoning;** ii. Areas outside urban areas; (aa) Areas containing indigenous vegetation;	An access road of a minimum of 5,5m wide will be constructed once a landuse application is accepted for access to the development via a seven-meter-wide servitude right of way access over Erf 391(zoned as public open space).

	(bb)Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or iii. Inside urban areas: (aa) Areas zoned for conservation use; or (bb)Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.	
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 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.	More than 300 square metres of indigenous vegetation will be cleared from the property. The property is zoned as an Endangered ecosystem, occurs within a CBA and is partially within 100 metres inland from the high water mark of the sea. RE/155 Keurboomstrand is zoned as Private Open Space.
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.	RE/155 Keurboomstrand is zoned as Private Open Space. The residential development proposed for this property will be approximately 3250 square metres in size.

	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.**	

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.
N/A		

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.
N/A		

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1.	Provide a description of the preferred alternative.
The preferred development proposal entails the construction of three (3) 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. However, all development alternatives occur within the buffer area.	
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 within the existing land use rights of the property.	
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.
The site is currently zoned as Open Space Zone II (private open space). According to the Bitou municipality Zoning Scheme Regulations in terms of Section 8 of the Land-Use Planning Ordinance 15 of 1985, Open Space Zone II has the following restrictions: 3.22.2 No structure shall be erected or use practised except such as is compatible with "private open space", as defined.	

3.22.3 The provisions contained in a relevant guide plan that is in force in terms of section 6A of the Physical Planning Act, 1976 (Act 88 of 1976), shall mutatis mutandis apply as additional land use restrictions in this zone.

The above-mentioned ordinance defines "Private open space" as: any land which has been set aside in this scheme for utilization primarily as a private site for sports, play, rest or recreational facilities or as an ornamental garden or a pleasure garden and includes public land which is or will be leased on a long-term basis and a cemetery, whether public or private.

The proposal is to subdivide and rezone RE/155 from Open Space Zone II (private open space) to Residential Zone II to enable the development of private grouped dwelling houses on the eastern portion of RE/155. This will be resolved through the Land Use Planning Application.

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

As per the Western Cape PSDF 2014: Provincial Spatial Policies; the below policies are relevant to this development -

Policy E3 Revitalise and Strengthen Urban Space Economies as the Engine of Growth-

The WPSDF 2014 recognizes that "urban centres are the main driving force in the Western Cape's economy."

"The Western Cape Provincial Spatial Development Framework (PSDF) focuses strongly on densification of urban areas as a means to achieve its desired outcomes." (Virdus Works (Pty) Ltd - Motivation in Support of Land Development Application document, dated 30 June 2021).

However, the WCPSDF also states the following Spatial implications listed for scenic landscapes of high significance:

- Protect the overall natural and cultural landscape, and the layered pattern of settlements in response to the natural landscape over time;
- Retain the essential character and intactness of wilderness, rural and urban areas (i.e.: protect landscape integrity in the face of fragmentation through unstructured urbanization);
- Retain the continuity, connectivity and interconnectedness of wilderness and agricultural landscapes including ecological corridors and green linkages;
- Maintain the role of the natural landscape as a 'container' within which settlements are embedded (the landscape providing the dominant setting or backdrop – landscape setting);
- Recognize the intrinsic characteristics and suitability of the landscape and its influence on land use, settlement and movement patterns, in response to geology, topography, water, soil types and microclimate.

4.2	The Integrated Development Plan of the local municipality.

The development services will be supplied by the Bitou Municipality; however, at present the municipality's sewage system will require upgrading to manage to the additional volume – the upgrade to the sewage system in the Keurbooms area has been included in the current IDP waste water programme.

4.3.	The Spatial Development Framework of the local municipality.

According to the Bitou Municipal SDF 2017 Land Development Objectives, Keurboomstrand is described as follows:

6.3 Keurboomstrand and Keurbooms River

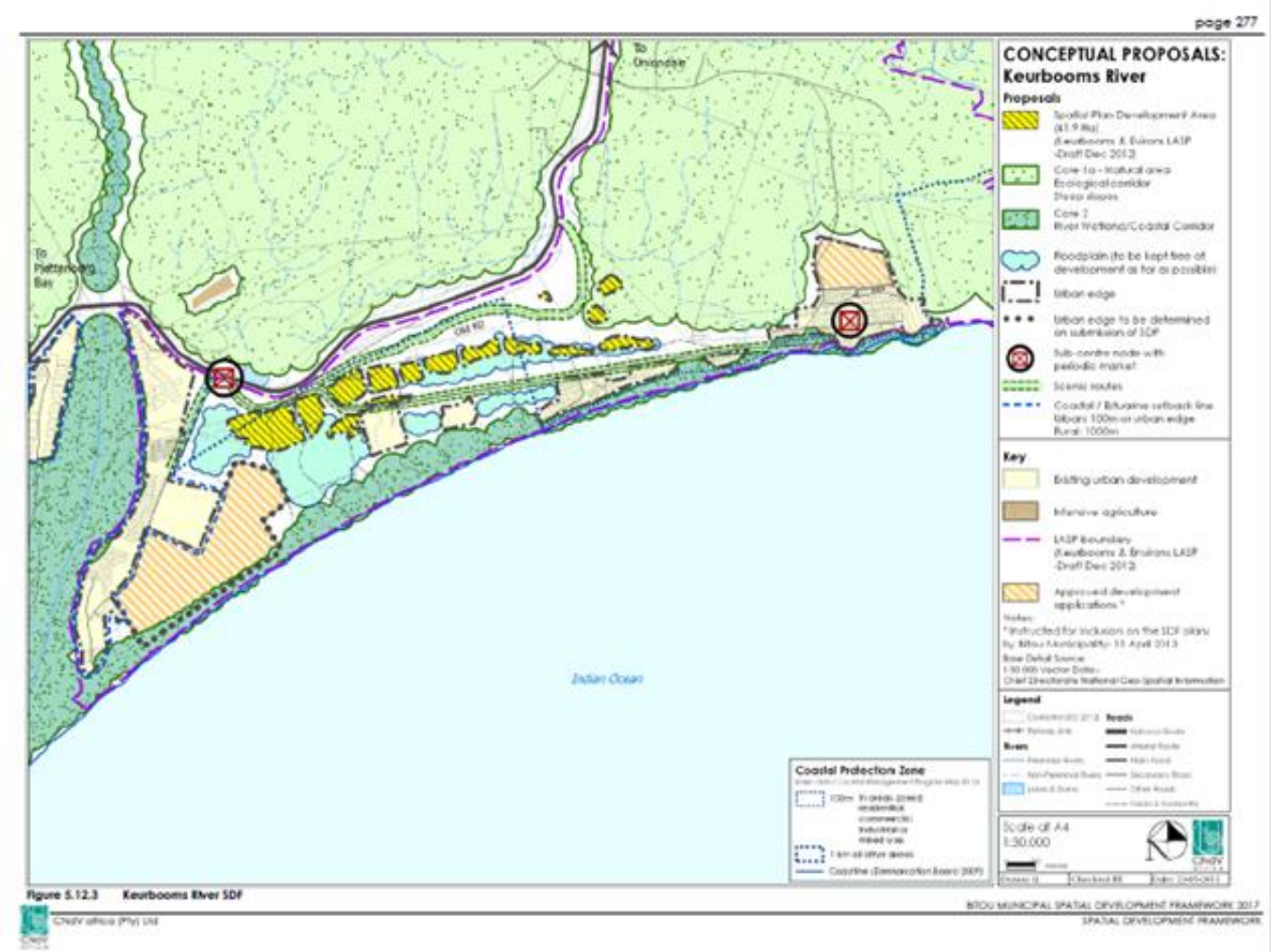
A strong holiday/resort character predominates the area. It is fairly homogenously developed with residential and resort uses, wedged between sea and the coastal plateau slopes. Altering its character by permitting commercial and other non-residential development could detract from the area's

attraction. The theme should thus be a low density residential one. Land between these two settlements will be considered to be outside of the Urban Edge and therefore all services should be off-grid.

In addition, the Bitou Municipal SDF states the following: "*The municipality has embarked on a number of planning projects, amongst the others, the Coming Together Project, the Keurboomstrand Area Local Structure Plan, and an Integrated Coastal Management Plan. The abovementioned plans are prepared in more detail than the envisaged Bitou SDF and must*
therefore inform the Bitou SDF as detailed plans. The planning boundaries for each need to be spatially reflected on the SDF with suitable annotations to indicate that the provisions of the local, more detailed plans will prevail."

However, the development location on the property has been excluded from the urban edge of the current SDF and the town planner motivates that it should be included due to the fact that it falls within an area where residential development occurs on surrounding erven.

According to the Keurbooms River: Draft Spatial Development Framework conceptual proposals, RE/155 is included within the urban edge; therefore, the Bitou SDF will need to be amended accordingly-



4.4.	The Environmental Management Framework applicable to the area.
No intersections with EMF areas found.	

5.	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.
Authority comments outstanding. Biodiversity specialists have provided the least sensitive area for development on the site, as well as the specific placement of the dwellings and infrastructure.	

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

RE/155 is within a Critical Biodiversity Area: Terrestrial. The objective of a CBA is to "maintain in a natural or near-natural state, with no further loss of natural habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land uses are appropriate."

The development cannot avoid intersecting with the CBA as the whole property falls into this category; however, the biodiversity specialists have provided the least sensitive area for development on the site, as well as the specific placement of the dwellings and infrastructure.

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

The site falls within the Coastal Protection Zone as it falls within 100m of the High Water Mark of the sea.

The coastal protection zone is established to manage, regulate and restrict the use of land that is adjacent to coastal public property, or that plays a significant role in the coastal ecosystem. More specifically, the coastal protection zone aims:

- To protect the ecological integrity, natural character, and the economic, social and aesthetic value of the neighbouring coastal public property;
- To avoid increasing the effect or severity of natural hazards;
- To protect people, property and economic activities from the risks and threats which may arise from dynamic coastal processes such as wave and wind erosion, coastal storm surges, flooding and sea-level rise;
- To maintain the natural functioning of the littoral active zone;
- To maintain the productivity of the coastal zone; and
- To allow authorities to perform rescue and clean-up operations.

The proposed development design has taken care to limit vegetation removal, control erosion and provide protection against potential pollution to surrounding areas. The proposed development will not infringe on the functioning of the coastal ecosystem or compromise the ecological integrity, natural character, and the economic, social and aesthetic value of the neighbouring coastal public property.

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

The screening report has not changed.

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

The proposed development will utilise a portion (approx.3250m^2) of vacant land which totals 56 615m^2. 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.
Please see attached document (Appendix K) - *Motivation in Support of Land Development Application For: Erf 155, Keurboomstrand* provided by Virdus Works.	

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.

This is a Pre-Application BAR. PPP will be confirmed in the Draft BAR.

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

This is a Pre-Application BAR. PPP will be confirmed in the Draft BAR.

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

This is a Pre-Application BAR. PPP will be confirmed in the Draft BAR.

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

This is a Pre-Application BAR. PPP will be confirmed in the Draft BAR.

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

This is a Pre-Application BAR. PPP will be confirmed 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.		
N/A			
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.		
N/A			

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.		
N/A			
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 within 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.		
The following conservation and biodiversity informants were used during desktop screening: 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.

As per the Biodiversity Impact Assessment:

- The site falls within a designated WC BSP designated Critical Biodiversity Area, on the eastern extremity of a band that corresponds to an extensive band of forest-thicket to the west of the site situated on steep, but undevelopable slopes.
- Fragmentation of CBA, as a result of the development will be limited to the footprint, and generally within areas that already have disturbance, relating to the proposed dwellings and infrastructure requirements.
- The activities fall outside of the recommended land use parameters for the category. Dwellings are generally not acceptable within CBA 1 areas within the recommended land-use guidelines.
- Impacts to intact CBA will however be minimal with majority of impact occurring within previously disturbed areas of the site.
- A large portion of the Erf to the west, outside of the potential development footprints are likely to never be developed due to slope constraints and vegetation in these areas is intact and natural.

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 - no protected area is implicated.

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

As per the Biodiversity Impact Assessment: *the habitats and microhabitats present on the project site are not unique and are widespread in the general area, hence the local impact associated with the footprint would be of low significance if mitigation measures are adhered to.*

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.

As per the HIA, June 2022(Hearth Heritage):

The proposed development will not have a negative impact on archaeological and palaeontological heritage resources within the Keurbooms 155 development site or on identified heritage resources in the surrounding area.

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 heritage perspective. There are no further concerns or objections to the proposed development on Erf 155. The archaeological observations noted all corroborate existing information about the archaeological sensitivity identified in reports from the wider area, noting that archaeological visibility is notoriously limited in the area due to the dense vegetation.

As indicated above, 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. In the event of important fossil material being identified during excavations, the HWC Fossil Finds Procedure must be implemented.

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.
As per the HIA, June 2022 (Hearth Heritage): 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.

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 alternative.

RE/155 (56 615,4m² in extent) is located within Keurboomstrand, primarily characterized as a resort town within Plettenberg Bay, Western Cape. The property is categorised as a CBA and occurs within an Endangered 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 RE/155 is 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).

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 and later the findings of the first draft of this report.

a. The first of these alternatives (Alternative 2) was tabled prior to the completion of the VIA and was therefore generally unresponsive to visual and aesthetic considerations.
b. One further alternative proposal (Alternative 3) was then tabled in December 2021, after the draft VIA had been issued and Architectural Guidelines had been developed that incorporated the findings of all the specialist recommendations to date.

Development option C (previously referred to as the Preferred proposal) will now be referred to as Alternative 1. Alternative 2 and Alternative 3 are titled to in order of chronology.

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 RE/155 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.

No property or site alternatives were identified.

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.

No activity alternatives were identified.

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 3 residential units, with associated infrastructure (access, water, sewerage, electricity, and stormwater design).

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

Alternative 1 (Preferred Alternative):

The proposed development is for the subdivision and rezoning of a portion of Erf 155 to enable the construction of three dwelling units in a sectional title development. A registered servitude right of way over public place Erf 391 alongside will provide access to the development through the establishment of a 4m driveway. However, the proposal is to move the right of way servitude to accommodate a driveway that will be established within a new 7m servitude right of way. The architect's proposal is for the new driveway to be curved to accommodate sensitive vegetation on site and minimise clearing.

The buildings are double storey with flat roofs throughout, with a total height of 7,1m measured from top of finished floor level. All the buildings are proposed on the same height, which will require cut and fill to create what is essentially one platform for all three structures. This total height is exceeded in six places by the chimney stacks, which measure 8,1m in height. The three buildings are separate from one another, and arranged in a straight line across the widest part of the site facing the sea (an east/west axis), parallel to the contours in the central, more gently sloping portion of the site. The building sizes, features and footprints vary (two having separate garages, and one including a swimming pool), but in the author's understanding, the architectural treatment, construction methods and material finishes will be identical for all three. The driveway proposal indicates hard landscaping that will be continuous with patio and other accessible outdoor areas around the buildings.

Figure 4: Site Layout - Alternative 1 (Slee Architects, 2020)

Alternative 2:

Alternative 2 is similar to Alternative 1 in that it is a 3-unit scheme of double storey dwellings, but with slightly larger building footprints and an interior courtyard for each. The buildings are arranged in a u-shape, as opposed to the linear configuration, which more effectively avoids impacts on the botanical and geotechnical no-go areas.

However, units 1 and 2 are moved forward considerably, with both floors of unit 2 extending to the position of the swimming pool in Alternative 1. There is a central driveway area providing parking and one freestanding garage structure, the driveway areas appearing to be continuous with hard landscaping that surrounds the units. The swimming pool is smaller, on ground floor, and built along the eastern side of the buildings.

There is also the addition of a retaining wall structure that edges the swimming pool and wraps around the front of the buildings in a semi-circle. The total footprint is 1917 m², including the driveway. This configuration would result in a minimum total vegetation clearing of 1785 m² (which equates to 36% of the vegetation on Erf 155).

Overall, the buildings respond to site contours – previous development options were all on one level, and did not step down with the sloping site. The overall building height is the same as Alternative 1, but the building is cut into the landscape slightly more: proposing a Ground floor and semi-basement, as opposed to a Ground floor and First floor. Because the Alternative proposal is more responsive to site-specific slope conditions (better balance between cut and fill), it is more likely that this approach will result in less vegetation disturbance than Alternative 1.

Figure 5: 3D model showing Alternative 2 from a bird's eye view (van der Merwe, 2021)

Alternative 3:

Alternative 3 is similar to the other two Alternatives in that it proposes a 3-unit scheme of double storey dwellings in a sectional title development. The servitude right of way over Erf 391 will provide access via a 3,2m driveway, which is continuous with a central paved area on the northern side of the proposed buildings. The buildings have very gently sloped (almost flat) roofs throughout, and total building heights are all under the 8m height restriction, with only the chimney stacks exceeding it.

Unit 1 is an L-shaped building, while Units 2 and 3 are blocks, with courtyards that appear to function as lightwells. The buildings are arranged on the site in a linear configuration, with slight variation in alignment. The buildings will be cut into the natural topography on individual platforms, and maintain the responsiveness to slope that was established in Alternative 2 – stepping down from ground floor to basement level as the ground falls away to the south. The swimming pool and retaining wall have been retained in the proposal for Alternative 3. The pool is located slightly below Basement level, and on the southernmost edge of the curved retaining wall.

Figure 6: Site plan of Alternative 3 (Slee Architects, 2021)

Provide a motivation for the preferred design or layout alternative.

According to the VIA, Feb 2022 (Fillia Visual):

Alternative 1 (excluding the swimming pool) is expected to have **Low** visual impact overall, with Low to Medium visual impact on the scenic route.
• Impact on sensitive receptors: **Low** neutral (14).
• Impact on important views and view corridors: **Low** negative (6)
• Effect on protected landscapes & scenic resources (scenic route): **Low to Medium** negative (27)
• Effect on the visual character and sense of place: **Low** negative (16)

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:

- Alien invasive vegetation will be removed from the site and eradication will be maintained due to the development.
- 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:

The development will be constructed from brick and mortar and will be tied into existing municipal infrastructure. 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, energy efficient technology alternatives are recommended.

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: standard brick & mortar construction has a relatively higher carbon footprint; however, alternative construction 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 would result in the property remaining undeveloped. This may result in the property being overrun with Alien Invasive Plants and increase illegal dumping. In addition, the No-Go Option provides no economic incentive to the landowner/applicant.

The site is currently zoned as Open Space Zone II (private open space). According to the Bitou municipality Zoning Scheme Regulations in terms of Section 8 of the Land-Use Planning Ordinance 15 of 1985, Open Space Zone II has the following restrictions:

3.22.2 No structure shall be erected or use practised except such as is compatible with "private open space", as defined.

3.22.3 The provisions contained in a relevant guide plan that is in force in terms of section 6A of the Physical Planning Act, 1976 (Act 88 of 1976), shall mutatis mutandis apply as additional land use restrictions in this zone.

The above-mentioned ordinance defines "Private open space" as: any land which has been set aside in this scheme for utilization primarily as a private site for sports, play, rest or recreational facilities or as an ornamental garden or a pleasure garden and includes public land which is or will be leased on a long-term basis and a cemetery, whether public or private. Therefore, some level of development on this property is currently permitted.

1.7.	Provide an 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.

Other alternatives to avoid negative impacts include site-specific ground-truthing and onsite placement of elements of the proposal.

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

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.

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. 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: 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 inclusion 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 precise 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 inclusion 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 precise 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:	**Low**
Degree to which the impact can be reversed:	**Irreversible**
Indirect impacts:	**Low**
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:	**Low**
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:	**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:	**Low**
Degree to which the impact can be reversed:	**Irreversible**
Indirect impacts:	**Low**
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:	**Low**
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:	**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:	**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.** • **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 precise 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 the 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**

ALTERNATIVE 3:

Alternative: **ALTERNATIVE 3**	
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 - Medium**
Degree to which the impact can be reversed:	**Irreversible**
Indirect impacts:	**Low – development footprint extends into the sensitive dune-thicket forest along the slope on the eastern boundary.**
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:	**Low**
Degree to which the impact can be mitigated:	**Low**
Proposed mitigation:	**No mitigation exists without redesigning the development. The development footprint currently extends into the sensitive dune-thicket forest along the slope on the eastern boundary.**
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 3	
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 - Medium**
Degree to which the impact can be reversed:	**Irreversible**
Indirect impacts:	**Low – development footprint extends into the sensitive dune-thicket forest along the slope on the eastern boundary.**
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:	**Low**
Degree to which the impact can be mitigated:	**Low**
Proposed mitigation:	**No mitigation exists without redesigning the development. The development footprint currently extends into the sensitive dune-thicket forest along the slope on the eastern boundary.**
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 3	
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**
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 the 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 3	
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:	**Low**
Indirect impacts:	**Neglible**
Cumulative impact prior to mitigation:	**Neglible**

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:	**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.** • **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 precise building guidelines.**
Residual impacts:	**Low**
Cumulative impact post mitigation:	**Negligible**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**
Alternative: ALTERNATIVE 3	
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**
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 must 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:	**None**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**
Alternative: ALTERNATIVE 3	
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 3	
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:	**None**
Degree to which the impact can be mitigated:	**None without redesigning the development.**
Proposed mitigation:	**No mitigation exists without redesigning the development to alter the footprint.**
Residual impacts:	**Low – Medium**
Cumulative impact post mitigation:	**Low - Medium**
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low – Medium**
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.

Terrestrial Biodiversity Assessment – Jamie Pote

- 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 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 m^2 within the dwelling footprints will only be 50 % of the proposed subdivision area (5 000 m^2. 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 though 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 unit where conservation targets are already exceeded in designated protected areas.

Influence on development:

The development has been designed to remain within the identified sensitive area of least concern. The preferred option was chosen specifically due to the outcomes and recommendations made by the biodiversity specialist. The preferred option has the smaller development footprint of the three alternatives.

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.

Electrical Services Report – Clinkscales Maughan-Brown (South) (Pty) Ltd

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

The specialist has further recommended the following energy saving measures:

- 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 of 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.

Influence on development:

Energy saving measures will be incorporated into the development, where possible.

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.

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.

Heritage Impact Assessment – Emmylou Rabe Bailey (Hearth Heritage)

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.

Desktop study: Palaeontological Heritage Assessment – John E. Almond (Natura Viva cc)

The project area for the proposed residential development on a Portion of Remainder of Erf 155, Keurboomstrand, is underlain by Early Devonian marine to coastal sediments of the Baviaanskloof Formation (uppermost Table Mountain Group). Elsewhere along the Southern Cape coast dark, organic-rich mudrocks within this formation contain important, largely unstudied fossils of primitive land plants while a small range of shelly invertebrate and trace fossils occur within sandstone facies in parts of the Western Cape. The overlying Late Caenozoic superficial sediments (colluvium, coversands, soils etc) are probably largely or entirely unfossiliferous.

The DEFF Screening Tool does not highlight the potentially high palaeosensitivity of the Keurboomstrand residential development project area while this is assigned a MEDIUM sensitivity on the SAHRIS Palaeosensitivity Map. However, given (1) the demonstrated presence of dark grey mudrocks of the Baviaanskloof Formation, both at surface and within test pits within the project area, and (2) the potential of these mudrocks to contain scientifically valuable fossils, most notably primitive terrestrial plants, a precautionary approach is appropriate here. Pending a specialist palaeontological site visit, the bedrocks should be provisionally assigned a HIGH to VERY HIGH palaeosensitivity.

As a condition for Environmental Authorisation of the proposed development, it is recommended that a pre-construction site visit be made by a palaeontological specialist. This is to (1) record any

near-surface fossil material and its geological context, (2) assess the site's palaeosensitivity and potential impacts on fossil heritage posed by the development, and (3) make appropriate recommendations for any further palaeontological monitoring or mitigation measures (if any) to be taken in the pre-construction and / or construction phases. The specialist palaeontological field report should be submitted for comment to Heritage Western Cape.

Influence on development:

Due to the high palaeosensitivity on the development site, the EMPr will include instruction to conduct a pre-construction site visit by a palaeontologist. Construction may not begin prior to this site visit and report submission being undertaken.

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

Findings:

The findings of the Visual Impact assessment indicate that Alternative 1 will have the lowest visual impact overall. Alternative 2 will have higher visual impact on the scenic route, while Alternative 3 will most likely have higher visual impact on sensitive receptors (locals and neighbours). 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.

The Cumulative visual impact of all three Alternatives on sensate features, hills and ridgelines will be comparable; but Alternative 2 is the most visually intrusive, especially at the threshold of the town, along the scenic route. While a measure of urbanity that develops over time may be acceptable within the town proper, an entrance to what has been described as a resort town with a distinctive local character has a much lower tolerance for large, intrusive and visually dominant structures that are not embedded in the local forest and scrub forest vegetation.

The VIA does not support any one of the Alternatives outright, as none of the proposals comply substantially with both the recommendations of the Draft VIA and the visual sensitivity setbacks provided.

Conditions & Recommendations:

Visual Sensitivity parameters for all Alternatives

To augment the botanical and geotechnical sensitivity mapping, the following visual sensitivity parameters have been established and should be adhered to in the final proposal:

a) A **35m Scenic route setback (offset)** that delineates a no-go area for development on the site from the part of the receiving environment with the highest exposure and sensitivity;
b) Additional **5m offset** from the eastern ecological and slope sensitivity exclusion area, to ensure that the dense forest vegetation screening views of the proposed development from the east remains unaffected by development.
c) Adherence to the key parameters of the Architectural Guidelines, which includes:
• Adherence to the height restriction;
• Adherence to Single Residential II Zoning Scheme Regulations;
• Adherence to 1:4 slope no-go areas, the botanical and geotechnical development limitations;
• Offsets and restrictions described in the VIA (scenic route and slope/vegetation offsets)
• Specification of appropriate finishes (Material, colour and texture)
• Use of local materials, products and indigenous plants;
• Approach to site-wide design: buildings to be appropriately scaled and seen as an extension of the natural landscape; to be nestled within vegetation and natural sloping topography;
• Avoid large retaining structures, plinths and building platforms i.e.; a balanced approach towards cutting and filling of the site;

• Limit visual impact, visibility and light pollution in relation to neighboring properties;
• Limit the clearance of vegetation during construction phase and beyond;

Due to the high value and sensitivity of the receiving environment, landscape character and the visual receptors, it is extremely important that a responsible and enforceable design approach be taken for the planning, construction and operational phases of each dwelling unit and the development as a whole, taking care to minimize the visual impact wherever possible. The Site Development Plan (SDP) and building plans must demonstrate adherence to the recommendations of this report in order for visual impact to be managed successfully.

Given that none of the Alternatives are compliant with the visual sensitivity parameters, the proposal should be revised to avoid biodiversity and visual impacts, by proposing buildings within the developable area only (indicated by the Botanical, Geotechnical and Visual sensitivity offsets and no-go areas).

Additional information required for SDP level approvals

As a condition of approval for the Rezoning and Subdivision Land use planning approval (this approval), this VIA recommends that the following documents and plans be submitted along with SDP and building plans to the local municipality for approval:

i. A Landscape Plan and Landscape Guidelines by a suitably experienced and qualified professional, registered with SACLAP;
ii. An Environmental Management Programme (EMPr) by a suitably experienced and qualified professional.

Potential impacts will be reduced by adherence to the management actions and mitigation measures outlined in Section 7, which are to be incorporated into either the Landscape Plan and Landscape Guidelines or the EMPr (or both). Please note that there are general architectural recommendations and mitigation measures that speak to (a) siting, layout of buildings and relationship to landscape features; (b) architectural features, and (c) materials and colours. These are reinforced in the August 2021 Architectural Guidelines.

These are followed by Landscape related recommendations and mitigation measures that speak to (a) the clearing of vegetation; (b) landscape/outdoor lighting; (c) fencing; (d) materials and finishes; (e) plant species and landscape installation; (f) alien control and management, and finally the relationship of the proposed development to the open space system and public realm.

Lastly, recommendations and mitigation measures to be incorporated into the EMPr are provided. The landscape guidelines and the EMPr should be mutually supportive, where guidelines set up by the Landscape Plan and Guidelines document are implemented or enabled by the EMPr, and vice versa.

Should the conceptual architectural proposal undergo significant change during further design processes, a visual impact statement must be issued by a suitably qualified specialist to re-assess the potential visual impact and determine if the findings of this study remain unchanged.

Architectural Guidelines – Rust van der Merwe

Adding to the general design approach consideration, the following should also be consisted and incorporated into the proposed development design.

The building form, elements and materiality should be conceived as an extension of the natural environment and landscape. This can be achieved by sharing building resources and requirements.

Examples:

- Parking, roof Terrance and landscaping to serve as rooftops (insulation, multi-purpose space, increase development potential, great visual response and approximations)
- The building can be cut into landscape to decrease visuality and increase building mass (insulation). It also has the potential to increase development bulk and potential with a limited visual impact. Basements can also be used and serve as retaining and building plinth structures.
- Use of environmental and climate resources to limit building operational, maintenance and service requirements.
- Climate resources such as water harvesting, passive cooling and heating, solar gain and shading, natural ventilation can assist in reducing the building services required (also reduce visuality and limit screening requirement for services) and building operational cost
- Vegetation can be used for shading, screening, visuality, landscaping, privacy, security and noise population reduction.

The development potential is limited due to sensitivity constrains posed by the site's natural sloping typography and vegetation/ plant species which has a direct impact on the site vegetation clearance area for the construction and development of the proposed. The development is also limited due to high visual resources and sensitivity of the site, scenic route and greater receiving environment.

It's also important to note that the development must not be intrusive on the it's surrounding context, especially due to its nature, location and potential impact on sensitive receptors. Privacy, visuality and noise- and light population is of importance so that the development is conceived as not to being occupied permanently and contribute to the local town's seasonal and vacation atmosphere.

Influence on development:

The development design and siting were influenced by the architectural guidelines. The construction phase will need to strictly follow the mitigation measures provided by the specialist in order for the conservation of indigenous vegetation, the visual impact to be low, and to decrease the extent of cut and fill required. These mitigation measures will be incorporated into the EMPr.

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

Impact management measures from all specialists 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.

The proposed development will cause visual/ sense of place impacts to the surrounding community as the property has been undeveloped. However, with mitigation measures strictly implemented, the development impacts should be low.

In contrast, the proposed development will provide temporary jobs during the construction phase and some permanent employment opportunities during the operational phase for locals. The development will positively contribute to the financials of the local municipality.

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.

The development is not within the High risk (20 years) to Low risk (100 years) areas predicted by coastal specialists and therefore, should not be at risk of coastal impacts due to climate change.

In addition, the development will make use of the green energy to reduce the demand on the grid.

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

N/A

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.

Although, several specialists have been contracted to undertake specialist studies, there have been no conflicting findings and all findings have complemented each other. All specialist recommendations were used to reach the final and preferred development proposal.

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

As mentioned above.

SECTION J: GENERAL

1. Environmental Impact Statement

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

The EIA at present found that the development proposal is acceptable in terms of zoning, landuse, and partially in terms of the development layout of the preferred alternative. However, the following impacts have been noted in terms of the preferred alternative:

- The proposed development footprint does not remain within the developable area identified by the specialists.
- The inclusion of a swimming pool alters the visual impact to a higher visual intrusion.
- The proposed development footprint extends into the 5m Eastern forest offset and the dune-forest thicket area on the western side.

The above impacts affect visual and biodiversity sensitivities.

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)
	This has been included in 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:

- Alien invasive vegetation will be removed from the site and eradication will be maintained due to the development.
- 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.
- Employment opportunities for the local community, especially during construction activities.

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.

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

***TO BE INCLUDED IN THE FINAL BAR**

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

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.
As mentioned previously, the development will make use of rainwater harvesting. However, due to contamination risks associated with this water use, the applicant will need to ensure that rainwater is treated for potable use.

4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.
The waste hierarchy will be followed during the construction and operational phase of the project. The re-use and recycling of waste is strongly encouraged.

5. Energy Efficiency

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

- Glass standards to conform to National Building Regulations and XA calculations for energy saving and efficiency
- External lighting should consist of a low-voltage and energy efficient bulb to avoid light pollution and nuisance.
- 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.

SECTION K: DECLARATIONS *TO BE INCLUDED IN FINAL BAR

DECLARATION OF THE APPLICANT

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

I……, ID number ……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:

Name of company (if applicable):

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

I ……, EAPASA Registration number …….. as the appointed EAP hereby declare/affirm the correctness of the:

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

Signature of the EAP: Date:

Name of company (if applicable):

DECLARATION OF THE REVIEW EAP

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

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

Signature of the EAP: Date:

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

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

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

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

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

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

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

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

Signature of the EAP: Date:

Name of company (if applicable):

DECLARATION OF THE REVIEW SPECIALIST

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

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

Signature of the EAP: Date:

Name of company (if applicable):