

BASIC ENVIRONMENTAL IMPACT ASSESSMENT

Proposed Consolidation, Rezoning, and Subdivision for the Establishment of a Residential Development on Erven 1469, 1470, 1471, 1473, and 1479, Vandyskbaai, Caledon RD

3 July 2025

Consultant:

Michelle Naylor | Env. Consultant | M.Sc., Pr. Sci. Nat., EAPASA cell: 083 245 6556 | Unit 5/1F, Hemel & Aarde Wine Village, Hermanus | michelle@lornay.co.za | www.lornay.co.za Lornay Environmental Consulting Pty Ltd | Reg 2015/445417/07



Department of Environmental Affairs and Development Planning

BASIC ASSESSMENT REPORT

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

APRIL 2024



Department of Environmental Affairs and Development Planning

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APRIL 2024

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

GENERAL PROJECT DESCRIPTION

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

CONSOLIDATION AND REZONING FOR PROPOSED RESIDENTIAL DEVELOPMENT
ON ERF 1469, ERF 1470, ERF 1471, ERF 1473 AND ERF 1479, VAN DYKSBAAI,
CALEDON RD

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

- 1. **The purpose** of this template is to provide a format for the Basic Assessment report as set out in Appendix 1 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended) in order to ultimately obtain Environmental Authorisation.
- 2. The Environmental Impact Assessment ("EIA") Regulations is defined in terms of Chapter 5 of the National Environmental Management Act, 19998 (Act No. 107 of 1998) ("NEMA") hereinafter referred to as the "NEMA EIA Regulations".
- 3. Submission of documentation, reports and other correspondence:

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

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

DEADPEIAAdmin@westerncape.gov.za

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

DEADPEIAAdmin.George@westerncape.gov.za

Directorate: Development Management (Region 3): Garden Route District Municipal area and Central Karoo District Municipal area

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

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

- 4. The required information must be typed within the spaces provided in this Basic Assessment Report ("BAR"). The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided.
- 5. All applicable sections of this BAR must be completed.
- 6. Unless protected by law, all information contained in, and attached to this BAR, will become public information on receipt by the Competent Authority. If information is not submitted with this BAR due to such information being protected by law, the applicant and/or Environmental Assessment Practitioner ("EAP") must declare such non-disclosure and provide the reasons for believing that the information is protected.
- 7. This BAR is current as of **April 2024**. It is the responsibility of the Applicant/ EAP to ascertain whether subsequent versions of the BAR have been released by the Department. Visit this Department's website at http://www.westerncape.gov.za to check for the latest version of this BAR.

- 8. This BAR is the standard format, which must be used in all instances when preparing a BAR for Basic Assessment applications for an environmental authorisation in terms of the NEMA EIA Regulations when the Western Cape Government Department of Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority.
- 9. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this BAR must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this Report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.
- 10. This BAR must be duly dated and originally signed by the Applicant, EAP (if applicable) and Specialist(s) and must be submitted to the Department at the details provided below.
- 11. The Department's latest Circulars pertaining to the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must be taken into account when completing this BAR.
- 12. Should a water use licence application be required in terms of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA"), the "One Environmental System" is applicable, specifically in terms of the synchronisation of the consideration of the application in terms of the NEMA and the NWA. Refer to this Department's Circular EADP 0028/2014: One Environmental Management System.
- 13. Where Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA") is triggered, a copy of Heritage Western Cape's final comment must be attached to the BAR.
- 14. The Screening Tool developed by the National Department of Environmental Affairs must be used to generate a screening report. Please use the Screening Tool link https://screening.environment.gov.za/screeningtool to generate the Screening Tool Report. The screening tool report must be attached to this BAR.
- 15. Where this Department is also identified as the Licencing Authority to decide on applications under the National Environmental Management: Air Quality Act (Act No. 29 of 2004) ('NEM:AQA"), the submission of the Report must also be made as follows, for-Waste Management Licence Applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (Tel: 021-483-2728/2705 and Fax: 021-483-4425) at the same postal address as the Cape Town Office.

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

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

MAPS

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	map (see below) as Appendix A1 to this BAR that shows the location of the proposed development
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.
	site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all
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 <u>must</u> 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): Watercourses / Rivers / Wetlands Flood lines (i.e., 1:100 year, 1:50 year and 1:10 year where applicable); Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"): 0 Cultural and historical features/landscapes; Areas with indigenous vegetation (even if degraded or infested with alien species). Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted. North arrow A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas. Site photographs Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as Appendix C. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites. **Biodiversity** 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**. Overlay Map: activities GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek Linear or development 94 WGS84 co-ordinate system. and multiple Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm properties 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 \checkmark (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)				
	Maps						
Appendix A:	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 Map with the GPS co-ordinates for linear					
	Appendix A3:	activities					
	Appendix B1:	Site development plan(s)	✓				
Appendix B:	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	✓				
	Permit(s) / license(s) / exemption notice, agreements, comments from State Department/Organs of state and service letters from the municipality.						
	Appendix E:	Final comment/ROD from HWC	✓				
	Appendix:	Copy of comment from Cape Nature	Pending				
	Appendix	Final Comment from the DWS	N/A				
Appendix E:	Appendix	Comment from the DEA: Oceans and Coast	N/A				
	Appendix	Comment from the DAFF	N/A				
	Appendix:	Comment from WCG: Transport and Public Works	N/A				
	Appendix:	Comment from WCG: DoA	Pending				
	Appendix:	Comment from WCG: DHS	N/A				

	Appendix:	Comment from WCG: DoH	N/A
	Appendix:	Comment from DEA&DP: Pollution Management	N/A
	Appendix:	Comment from DEA&DP: Waste Management	N/A
	Appendix:	Comment from DEA&DP: Biodiversity	
	Appendix:	Comment from DEA&DP: Air Quality	N/A
	Appendix:	Comment from DEA&DP: Coastal Management	N/A
	Appendix:	Comment from the local authority	Pending
	Appendix:	Confirmation of all services (water, electricity, sewage, solid waste management)	Pending
	Appendix:	Comment from the District Municipality	Pending
	Appendix:	Copy of an exemption notice	N/A
	Appendix:	Pre-approval for the reclamation of land	N/A
	Appendix:	Proof of agreement/TOR of the specialist studies conducted.	
	Appendix:	Proof of land use rights	
	Appendix:	Proof of public participation agreement for linear activities	N/A
Appendix F:	Public participation I&APs, the commen advertisements and required.	√	
Appendix G:	Specialist Report(s) APPENDIX G1 – TERF APPENDIX G2 – AQU APPENDIX G3 – HERF APPENDIX G4 – PALA APPENDIX G5 – AGR APPENDIX G6 – ARC APPENDIX G7 – SER	✓	
Appendix H:	EMPr		✓

Appendix I:	APP 11- SCREENING TOOL REPORT APP 12 – SSVR	✓
Appendix :	The impact and risk assessment for each alternative	
Appendix :	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

	CAPE TOWN O	FFICE: REGION	GEORGE OFFICE: REGION 3						
Highlight the Departmental Region in which the intended application will fall	(City of Cape Town, West Coast District	(Cape Wir Distric Overberg	t &	(Central Karoo District & Garden Route District)					
Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:	JP Gemert Testamentary Trust and Kathryn Jayne McMahon								
Name of contact person for Applicant/Proponent (if other):	Kathryn Jayne McMa	Kathryn Jayne McMahon							
Company/ Trading name/State Department/Organ of State:	JP Gemert Testamen	tary Trust							
Company Registration Number: Postal address:	IT11507/2010	·m ont							
Postal dadress:	18 fulmar street, Ver Hermanus	mont	Postal co	de: 7200					
Telephone:	()			556 6644					
E-mail:	kathrynmcmahon7@	icloud.com	Fax: ()						
Company of EAP:	Lornay Environment	al Consulting							
EAP name:	Michelle Naylor								
Postal address:	Unit 5/1 F, Hemel an	d Aarde Win							
Talanhana	Hermanus		Postal co						
Telephone: E-mail:	michalla@larnay.co	72	Fax: ()	245 6556					
Qualifications:	michelle@lornay.co. MSC (Rhodes Univer		rax. ()						
EAP registration no:	EAPASA 2019/698	31(4)							
	E/11/13/12013/030								
	Owner of Erf 1479 a	nd Erf 1473							
Duplicate this section where there is more than one landowner Name of landowner:	Kathryn Jayne McMa	ahon							
Name of contact person for landowner (if other):									
Postal address:	18 Fulmar street, Ve	rmont,							
	Hermanus	_	Postal co	de: 7200					
Telephone:	()		Cell: 084	556 6644					
E-mail:	kathrynmcmahon7@	icloud.com	Fax: ()						
	Owner of Erf 1469, E	Erf 1470 & Erf	f 1471						
Duplicate this section where there is more than one landowner Name of landowner:	Gavin Frank Hasenbr	oek							
Name of contact person for landowner (if other):	Kathryn Jayne McMa	ahon							
Postal address:	As above								
Telephone: E-mail:									

	Name of Person in control of	As above								
	the land:									
	Name of contact person for person in control of the land:									
	Postal address:									
				Postal coc	e:					
	Telephone:	()		Cell:						
	E-mail:			Fax: ()						
	Duplicate this section where there is more than one Municipal Jurisdiction									
	Municipality in whose area of jurisdiction the proposed activity will fall:	Overstrand Municip	ality							
	Contact person:	Chester Arendse								
	Postal address:	PO Box 20, Hermanı	JS							
				Postal cod	le: 7200					
	Telephone	028 384 8320		Cell:						
	E-mail:	carendse@overstran	nd gov za	Fax: ()						
	2111411.	<u> </u>		()					J	
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	Longitude (E)	<u>o</u>	<u>4</u>	<u>"</u>								
	Middle-point co-ordinates for all alternatives											
	Latitude (S)	<u>o</u>	<u> </u>	<u>"</u>								
	Longitude (E)	<u>o</u>	<u>4</u>	<u>"</u>								
	End point co-ordinates fo	or all alternatives										
	Latitude (S)	<u>o</u>	<u> </u>	<u>"</u>								
	Longitude (E)	<u>o</u>	<u> </u>	<u>"</u>								
Note	: For Linear activities or dev	velopments longer than 500m, a map	indicating the co-ordinates for eve	ry 100m along the route must be								

Note: For Linear activities or developments longer than 500m, a map indicating the co-ordinates for every 100m along the route must be attached to this BAR as Appendix A3.

4.	Other developments	
4.1.	Property size(s) of all proposed site(s):	 → Erf 1469: 18331 m² → Erf 1470: 24464 m² → Erf 1471: 24760 m² → Erf 1473: 19770 m² → Erf 1479: 20501 m² Total: 107 826 m² (10.7 ha)
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):	0 m²
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:	82 000 m ² (8.2 ha)
4.4.	Provide a detailed description of the proposed development buildings, structures, infrastructure, storage facilities, sewage	ent and its associated infrastructure (This must include details of e.g. e/effluent treatment and holding facilities).

The five subject properties are situated adjacent to Dyer Street, but they are however not all directly adjacent to one another, as a public open space separates three of the properties from the remaining two. This open space is proposed to be landscaped and will form part of the larger open space provision within the development. A formal agreement will be established with the

Erven 1469, 1470, 1471, 1473 & 1479 Van Dyksbaai (hereafter referred to as the subject properties) has a combined extent of 10,7 ha and is currently zoned as Agricultural Zone 1: Agriculture.

municipality to ensure the ongoing maintenance and use of the open space for the benefit of the entire community.



Figure 1a: Overview of the location of the subject properties.

The proposed development involves the consolidation, subdivision, and rezoning of five residential properties: Erf 1469, Erf 1470, Erf 1471, Erf 1473, and Erf 1479, located in Van Dyskbaai, near Kleinbaai and Franskraal within the Overstrand Local Municipality. The intention is to establish a well-planned residential area that includes internal access roads, individual housing erven, and public open space, in line with the Overstand municipality's forward planning and environmental policies. The required development footprint to support the development is approximately 8.2 ha, while an area of 2.7 ha will be retained as a No-go development area.

The layout and design of the development have been carefully considered to ensure that the project fits into the natural surroundings, protects sensitive environmental features, and promotes a liveable residential area. The proposal includes the following development components:

Residential erven

- → The development will consist of approximately 123 residential erven (plots).
- → The total land area designated for residential erven is approximately 67,400 m² (6.74 ha).

Proposed Access Roads

- → These erven will be supported by essential infrastructure such as internal roads, water supply lines, stormwater systems, and sewer pipelines.
- → 5 internal access roads will be developed to provide access to the erven as well as allowing residents and service vehicles to move safely and efficiently through the area.
- → The total area designated for internal access roads and associated infrastructure is approximately 13 782 m² (1.37 ha).
- → The minimum internal road reserve will be a minimum of 8.0m wide.

Open space

→ 5 newly subdivided erven will be set aside specifically for open space purposes. These areas will not be developed with any buildings or infrastructure. Instead, they will be retained in their natural state and rehabilitated to preserve the site's environmental value and contribute to the overall quality of life for future residents.

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RESIDENTIAL = ±6,72 Ho
OPEN SPACE = ±2.65 Hg

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→ The total area allocated to open space is approximately 26,665 square metres (2.7 ha).

Figure 1b: Proposed site development plan.

The subject properties are currently vacant. As the properties are being split by the open space, the properties will be consolidated with two of the five being consolidated with each other and the remaining three will be consolidated. The proposal is to have both sides of the development gain access from Bosbok Street to ensure smooth traffic flow.

This new road will be constructed using three sections of the three properties to ensure the accessibility to these developments are secured and aligned with future development trends.



Figure 1c: Proposed internal access locations.

Services

Electricity

The construction activities will include connection of essential to the Overstrand Municipality's (OM) existing networks. The implementation of the development is not expected to have any negative impact on the current service levels in the area.

Water and Sewage

The proposed development will connect to the existing water and sewage networks provided by the Overstrand Municipality. Property owners will be required to pay a bulk services contribution to the municipality, which will be used to fund necessary upgrades to the surrounding bulk infrastructure:

- → It is therefore proposed that link services item OGW3.3 (730 m x 160 mm Ø New supply pipe) is constructed along the entire eastern and northern boundary of the proposed development, refer to **Figure 1d &1e** for illustration.
- → Kleinbaai is currently not serviced by a formal sewer reticulation system, except for 3 small areas in Kleinbaai which gravitate to conservancy tanks. It is proposed that the internal sewer system for the proposed development area gravitates towards one of these drainage areas located to the south of the development, i.e. the "Kleinbaai Conservancy Tank no. K3" drainage area.
 - There is sufficient capacity in the sewer reticulation system if the Conservancy Tank no. K3 drainage area to accommodate the proposed development.
 - o 110 m x 160 mm Ø New outfall sewer link services item will, however, be required to connect the internal reticulation network of the proposed development to the existing sewer system, see **Figure 1f**.

To verify the availability of sufficient water and sewage capacity, refer to the GLS Report attached in **Appendix G7**. These upgrades will be implemented and financed through the abovementioned bulk services contributions.

Solid waste

The proposed development will include designated refuse areas that comply with Section 17.4 of the OMLUS. The solid waste will be transferred to the Overstrand Refuse Disposal site.

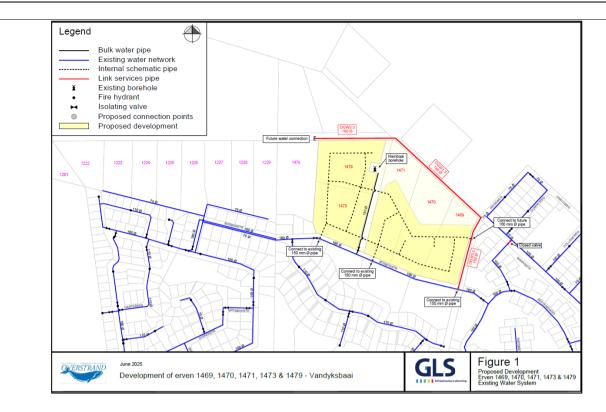


Figure 1d: View of the proposed pipeline to connect to the new pipeline (red).

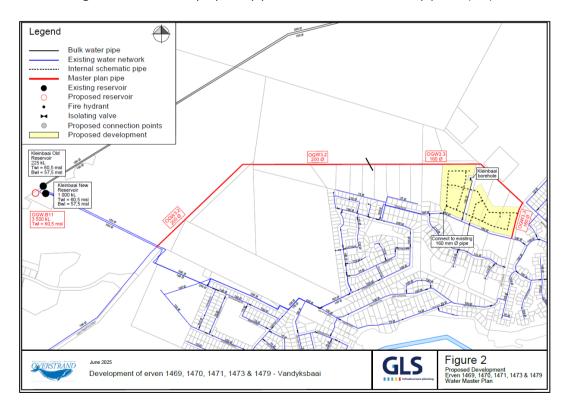


Figure 1e: Overview of the proposed pipeline.

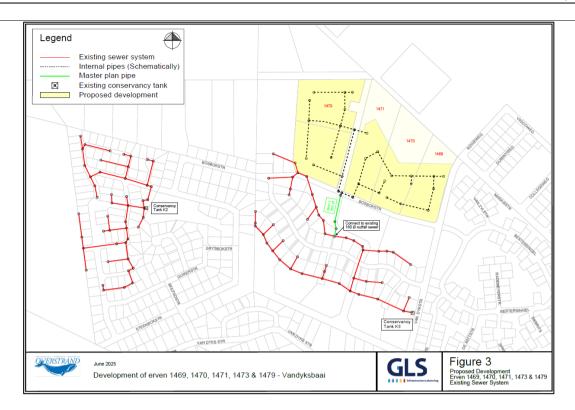


Figure 1f: Proposed sewer pipeline (green).

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

The existing access roads abutting the site, namely Van Dyk Road and Bosbok Street will be utilised to connect the proposed private roads onsite.

4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:																					
	ERF 1469	С	0	1	3	0	0	2	2	0	0	0	0	1	4	6	9	0	0	0	0	0
	ERF 1470	С	0	1	3	0	0	2	2	0	0	0	0	1	4	7	0	0	0	0	0	0
	ERF 1471	С	0	1	3	0	0	2	2	0	0	0	0	1	4	7	1	0	0	0	0	0
	ERF 1473	С	0	1	3	0	0	2	2	0	0	0	0	1	4	7	3	0	0	0	0	0
	ERF 1479	С	0	1	3	0	0	2	2	0	0	0	0	1	4	7	9	0	0	0	0	0
	Coordinates of the	e pro	opose	ed site	(s) fo	or all alt	ernati	ives:														
	ERF 1469																					
4.7.	Latitude (S)							34°				36'					34.18"					
	Longitude (E)							19°					21'					51.56"				
	ERF 1470																					
	Latitude (S)						34°					36'					32.38"					
	Longitude (E)							19°					21'					48.47"				
	ERF 1471																					

Latitude (S)	34°	36'	34.18"
Longitude (E)	19°	21'	51.56"
ERF 1473			
Latitude (S)	34°	36'	34.18"
Longitude (E)	19°	21'	51.56"
ERF 1479			
Latitude (S)	34°	36'	34.18"
Longitude (E)	19°	21'	51.56"

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

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

1			•
	Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes,	VEC	NO x
	include a copy of the exemption notice in Appendix E18.	TES	NO X

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 x
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 E .	YES x	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 x
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 x
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	YES	NO x
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	YES	NO x
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	YES	NO x
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 x

3. Other legislation

List any other legislation that is applicable to the proposed activity or development.		
N/A		

4. Policies

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

Western Cape Provincial Spatial Development Framework (2014)

To ensure the proposed residential development is in line with the Provincial settlement policy objectives within the PSDF, the proposed development was evaluated in terms of the policy objectives:

- Protect and enhance sense of place and settlement patterns
- Improve accessibility at all scales
- Promote an appropriate land use mix and density in settlements
- Ensure effective and equitable social services and facilities

Alignment of the proposal with the policy objectives

Protect and enhance sense of place and settlement patterns

The proposed development will be situated between existing, recently developed properties and will enhance the sense of place by filling in the remaining undeveloped land. This approach aligns with the area's densification strategy. Integrating the development into the existing urban fabric of Van Dyksbaai was essential to ensure that future residents have convenient access to the amenities and services already available in the area.

This objective has been achieved by carefully selecting a location that supports integration and accessibility. Furthermore, the development places a strong emphasis on quality of life and community wellbeing by establishing a thoughtfully planned new residential neighbourhood that complements and strengthens the existing urban environment.

Improve accessibility at all scales

The subject property boasts sufficient accessibility through the main distributor routes in the area. The proposed development was designed to seamlessly integrate with the Van Dyksbaai area, forming part of the extended town and allowing for easy access to larger towns and cities such as, Gansbaai, Hermanus, and Cape Town.

Promote an appropriate land use mix and density in settlements

The primary land use of the proposed development is residential, and it has been designed with a focus on providing access to nature through a strategically placed open space.

Ensure effective and equitable social services and facilities

With Hermanus being a regional service centre as indicated by the PSDF, it is important to ensure adequate access to the area. There are adequate road networks between the proposed development and Hermanus that were recently upgraded.

Overstrand Municipality Spatial Development Framework (2020)

The OMSDF is guided by national, provincial, and municipal planning legislation, policies, and plans. These include SPLUMA, LUPA, the Municipal By-law, the PSDF, and the IDP. The OMSDF aims to provide clear direction on appropriate spatial development, land uses, and growth within the urban edge. It was drafted following consultation

with state departments and the public, and it reflects a shared spatial vision that development proposals should align with.

To ensure compliance with the principles and objectives of the PSDF and the National Development Plan, the OMSDF was developed in alignment with these broader policy frameworks. The proposed residential development aligns with the OMSDF to ensure that policy objectives are met. The OMSDF specifically addresses the increasing pressure to provide adequate housing options for a growing population, which includes the Van Dyksbaai area. Refer to the tables in Section 4 above for population growth data across the Overstrand.

The OMSDF defines Van Dyksbaai as part of the Greater Gansbaai area. On page 219, the following is stated:

"The implementation of the above proposal will ensure that the sensitive areas surrounding the built-up Kleinbaai/Franskraal area are developed in a careful sensitive manner but also make provision to respect and protect the Danger Point Conservancy Area. The predominant areas of densification as well as the proposals for the nodal intensification will contribute to a more compact, denser and efficient sustainable urban form. The civil infrastructure will simultaneously have to be upgraded to accommodate the existing as well as the proposed developments in a safe sustainable manner. Such investment will create an enabling structure for an efficient and equitable urban system and positive living environment."

Additionally, the OMSDF states:

"New Urban Development

No new development areas are proposed. In order to accommodate the housing need for Franskraal & Birkenhead, densification should take place in accordance with the OGMS."

This highlights the need for new development to occur within the existing urban footprint by applying densification measures to meet rising housing demand. The current proposal is in line with this objective, by providing 123 additional dwelling units within the designated urban edge. The need for these units is supported by the population growth data presented in Table 2.7 on page 25 of the OMSDF.

While the 123 dwelling units may represent a relatively small contribution to the total housing need across the Overstrand, it is critical to begin addressing this demand now. Delaying development risks placing undue pressure on municipal resources in the future and may deter valuable external investment opportunities that typically accompany population growth. Proactive development is therefore essential to support a resilient, inclusive, and economically sustainable Overstrand region.

The proposed increase in residential opportunities aligns with the broader vision of sustainable urban development. It promotes the efficient use of available land, limits further urban sprawl, and contributes to the formation of compact, vibrant communities. Furthermore, the development supports population growth in a way that balances environmental sensitivity with responsible urban planning, fully aligned with the spatial intentions set out in the OMSDF.

Overstrand Draft Environmental Management Overlay Zone Regulations (2016)

The subject property is located within the Urban Conservation Environmental Management Overlay Zone (EMOZ). The purpose of this overlay zone is to protect and manage undeveloped, conservation-worthy, publicly owned land within Overstrand's urban edge and adjacent buffer areas. It also aims to promote the retention of viable, priority ecological corridors in areas earmarked for development, thereby supporting an integrated approach to conservation and development that enhances living conditions for the communities of the Overstrand.

The EMOZ is divided into various categories:

• Category A: Pristine Ecosystems

Category B: Semi-Modified Ecosystems

Category C: Modified Ecosystems

Category D: Private Property

All five of the subject properties fall under Category D: Private Property, which refers to private land located within priority conservation-worthy ecological corridors extending from mountain to coast, and/or crossing identified priority conservation areas as determined by the Overstrand Environmental Management Framework.

To ensure that the proposed development is appropriately aligned with the objectives of the EMOZ and does not compromise the ecological integrity of the area, a Terrestrial Biodiversity Impact Assessment was undertaken. This assessment identified key environmental sensitivities, including the presence of Overberg Dune Strandveld (Southwestern Strandveld), (an Endangered vegetation type) and confirmed the likely occurrence of several Species of Conservation Concern (SCCs).

The findings from the assessment have directly informed the development layout, which has been revised to avoid high-sensitivity areas and ecological corridors. Mitigation measures, such as the retention of vegetated open space, search and rescue operations for SCCs, the use of permeable fencing, and the management of alien invasive species, have been integrated into the Environmental Management Programme (EMPr).

Overstrand Municipal Spatial Growth Management Strategy (2010)

On 27 May 2020 the Municipal Council adopted the OMSDF, (Overstrand Spatial Development Framework, 2020) and in the same instance rescinded the following:

• Overstrand Municipal Spatial Growth Management Strategy, 2010;

The OGMS was rescinded in 2020 and, although it no longer holds legal standing, the Overstrand Municipality's Town Planning Department continues to utilise the document as a guiding framework. The subject property is located within Planning Unit 4, which comprises a narrow strip of properties along Dyer Street and is situated between Planning Units 1 and 5. Refer to Figure 6 below:

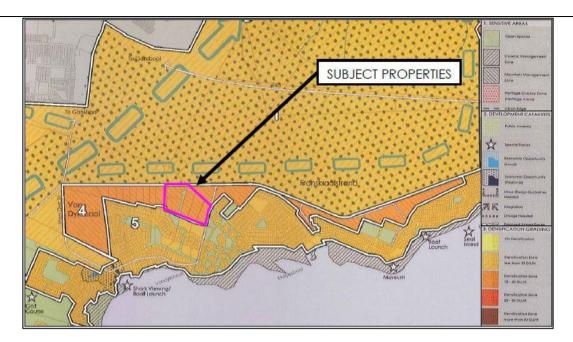


Figure 2: Extract of the OGMS (Kleinbaai).

The proposal aims to align the subject property and the proposed development with the surrounding properties that have already been approved and / or developed. The primary intention is not to increase the overall density of the area arbitrarily, but rather to reflect and match the existing development pattern, thereby ensuring cohesion with the established neighbourhood character.

According to the Overstrand Municipality's spatial planning guidelines, the area has been designated as a densification zone, where a residential density of between 10 to 20 dwelling units per hectare is encouraged. The proposed development falls within this prescribed density range, demonstrating compliance with the Municipality's vision for responsible and sustainable urban growth. By adhering to this policy, the development contributes towards more efficient land use, supports the optimisation of existing infrastructure and services, and promotes a compact urban form, in line with the broader objectives of the Overstrand Municipal Spatial Development Framework (OMSDF) and the Overstrand Municipal Spatial Growth Management Strategy.

Planning Principles

Chapter 2 of SPLUMA contains 5 uncompromisable planning principles by which each development application must be guided by. Policy proposals in SPLUMA which are pertinent to this proposal are recorded:

Spatial Justice

Spatial justice, within the context of land use planning, refers to redressing historic spatial inequalities and promoting equitable access to land, housing, and urban opportunities. The proposed development supports the principle of spatial justice as it seeks to provide additional, well-located housing opportunities within Van Dyksbaai, an area situated within the existing urban fabric of the Greater Gansbaai region.

Unlike spatial patterns established under apartheid planning, this proposal does not promote segregation or exclusion but instead supports inclusive urban growth. The site is located in close proximity to existing residential areas and essential services, allowing for equal access for all community members, regardless of socio-economic status. This accessibility contributes to an integrated and inclusive urban environment.

Spatial Sustainability and Efficiency

Spatial sustainability and efficiency are achieved by promoting compact urban growth, maximising the use of existing infrastructure, and supporting economically viable communities. The proposed development within Van Dyksbaai adheres to these principles by enabling infill development on a site already located within the urban edge and designated for residential expansion.

The development will generate both short- and long-term economic benefits, including construction employment, increased rates revenue for the Overstrand Municipality, and enhanced consumer spending in the local economy. By making optimal use of the available land and aligning with the densification objectives set out in the OMSDF, the development discourages urban sprawl and protects valuable natural and agricultural land elsewhere in the municipality. Furthermore, its proximity to existing road networks and services ensures minimal environmental disruption and efficient infrastructure use, enhancing the long-term sustainability of the Van Dyksbaai area.

Spatial Resilience

Spatial resilience involves ensuring that land use proposals can adapt to environmental, economic, and social challenges over time. The proposed development in Van Dyksbaai is aligned with the spatial policies and planning frameworks adopted by the Overstrand Municipality, including the OMSDF and the environmental management overlay provisions applicable to the site.

The application is supported by environmental and specialist input (as referenced in Section 9), ensuring that the design responds sensitively to environmental constraints. This alignment with policy and legislation contributes to a resilient spatial structure that is capable of adapting to future demands and risks.

Good Administration

The Overstrand Municipality has consistently demonstrated a transparent and participatory planning process, in line with the principle of good administration. The land use application for this proposed development will undergo a formal public participation process, during which affected and interested parties will have the opportunity to comment on or object to the proposal.

This participatory approach allows for the identification of potential issues, the incorporation of constructive feedback, and the opportunity to address concerns through appropriate planning responses. All comments received during this process will be reviewed and considered before a decision is made, ensuring that the application reflects both community interests and sound planning principles.

5. Guidelines

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

Guideline on Need and Desirability (DEA, 2017)

The Department of Environmental Affairs' Guideline on Need and Desirability was applied to evaluate the alignment of the proposed development with broader strategic planning frameworks and local socio-economic objectives. A detailed motivation is presented in Section (E12), demonstrating how the proposed residential development responds to housing demand in the area of Overstand municipality while ensuring that environmental sustainability and municipal planning are maintained.

Guideline on Alternatives (March 2013)

The Guideline on Alternatives was applied to ensure that the design options for the proposed development were thoroughly considered in relation to environmental sensitivities, spatial constraints, and biodiversity planning priorities. Three layout alternatives were explored during the site planning process, each with varying implications for biodiversity and ecosystem services:

Alternative 1 (Option A)

This layout proposes the development of approximately 152 erven with a total development footprint of ±9.6 ha. The design would result in the loss of approximately 9.6 ha of Overberg Dune Strandveld (Southwestern Strandveld), equivalent to 0.02% of its remaining extent. This alternative places development within mapped Critical Biodiversity Areas (CBAs), Ecological Support Areas (ESAs), and Other Natural Areas (ONAs), with only small fragmented open space areas retained within the ESA and ONA portions. This alternative option sets aside only a small percentage of the land to open space area.

Alternative 2 (Option B)

This layout includes 151 residential erven and with a larger footprint, with approximately 10.2 ha of Overberg Dune Strandveld (Southwestern Strandveld) vegetation being transformed representing 0.03% of the remaining extent. Like Alternative 1, this option encroaches on ecologically sensitive areas, including CBAs, and fails to meaningfully incorporate landscape-level conservation considerations into the design.

Alternative 3 (Option C): Preferred

This option incorporates a more sustainable layout with much lower ecological impacts involving the loss of 8.2 ha, while avoiding development in the CBA located in the northern section of the site and setting this area aside as part of an open space system to be conserved in perpetuity. Development is confined largely to the MAPPED Other Natural Areas (ONAs) and Ecological Support Areas (ESA1) areas, consistent with the guidance provided in the Western Cape Biodiversity Spatial Plan (WCBSP) Handbook and Guidelines (2023). The selected footprint minimises transformation of critical habitats and supports ecosystem functionality by retaining a large (2.7 ha), connected open space system. While some habitat loss within ESA1 and ONA areas is inevitable and acknowledged, the design seeks to avoid undermining the biodiversity objectives of the site and aligns with the broader ecological recommendations for these land categories as well as following recommendations provided by the specialist team.

Guideline for the Review of Specialist Input in the EIA Process (June 2005)

This guideline ensured that all specialist contributions including terrestrial biodiversity, agricultural compliance statement, aquatic biodiversity compliance statement, heritage, and palaeontological assessments were undertaken in line with clear terms of reference. It further guided the EAP to verify that reports were concise, comprehensible, and effectively informed the impact assessment process.

Guideline for Environmental Management Plans (June 2005)

The Environmental Management Programme (EMPr) accompanying this Draft Basic Assessment was structured in accordance with this guideline to provide a clear implementation framework. It outlines mitigation measures, monitoring responsibilities, and compliance mechanisms across construction, operational, and post-construction phases, thereby promoting environmental accountability throughout the project lifecycle.

Guideline for Determining the Scope of Specialist Involvement in the EIA Process (June 2005)

This guideline was utilised as a key decision-support tool in the early stages of the Basic Environmental Impact Assessment process for the proposed residential development on the subject properties. It guided the Environmental Assessment Practitioner (EAP) in identifying which specialist inputs were required based on the environmental sensitivities and the legal triggers applicable to the site. The site is located within a biodiversity-rich coastal landscape, with mapped areas falling within Critical Biodiversity Areas (CBAs), Ecological Support Areas (ESAs), and Other Natural Areas (ONAs) as per the Western Cape Biodiversity Spatial Plan (WCBSP, 2023). These features required careful consideration of ecological connectivity, vegetation condition, and species conservation requirements.

The guideline assisted in ensuring that the scope and timing of specialist studies were aligned with the potential for significant environmental impacts, particularly in relation to terrestrial biodiversity, freshwater ecosystems, heritage resources, and archaeological resources. Early commissioning of the specialists' assessments allowed for an integrated and iterative planning approach. This facilitated early identification of 'no-go' or high-sensitivity areas.

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

Agricultural Theme - High Sensitivity - The property is located within the demarcated urban edge, and the surrounding land use is designated for residential zoning. An Agricultural Compliance Statement was undertaken by Soil ZA, which disputes the high sensitivity classification assigned by the screening tool. The area is instead rated as medium agricultural sensitivity with a land capability classification of 6, based on its agricultural production potential and current land use. The assessment concludes that the proposed development is acceptable, as it results in a negligible loss of future agricultural production potential.

Animal Species Theme - High Sensitivity - An Animal Species theme was covered in the Terrestrial Biodiversity Impact Assessment. The project area is considered near-intact Overberg Dune Strandveld (now known as Southwestern Strandveld) fragmented by firebreaks with a portion in the northwest infested with alien invasive trees (Acacia cyclops). The property is bordered by roads on three sides and a house and vacant small holding on the other. The northern boundary, Dyer Street, is a busy road that separates the project area from the natural habitat to the north. The near-intact habitat likely hosts various lizard, snake and tortoise species, terrestrial amphibians, small antelope and carnivores (Genets, Mongoose, caracal) and various rodents. During the field survey, the following species were either observed or evidence thereof, the Common Duiker (individual and midden), Cape Molerat (mounds and skull), Mongoose (burrows), Cape Porcupine (burrows and foraging sites), Yellow-throated Plated Lizard, Red-sided Skink, Angulate Tortoise (shells) and 20 species of bird. The DFFE Screening Tool Report identified the project area as having a high sensitivity due to the likely occurrence of four bird SCC and one reptile SC. Based on the findings from the field survey, only the Southern Adder (VU) and Cape Dwarf Chameleon (NT) have a high likelihood of occurrence in the project area.

Aquatic Biodiversity Theme - Very High Sensitivity – According to the Department of Forestry, Fisheries, and the Environment (DFFE) national web-based environmental screening tool report generated for the study area, the Combined Aquatic Biodiversity Theme Sensitivity is classified as "Very High" (DFFE, 2024). The classification trigger is the location of mapped Western Cape Biodiversity Spatial Plan (WCBSP, 2017) aquatic Ecological Support Areas 1 (ESAs) within the area.

Given that the study area may have potential aquatic biodiversity constraints, Delta Ecology was appointed by to undertake an aquatic biodiversity assessment with the aim of (1) verifying the site sensitivity with regards to aquatic biodiversity; and (2) clarify aquatic biodiversity constraints within the study area.

During the desktop assessment, it was determined that there were no mapped rivers, or natural / artificial wetlands within the proposed study area, or within 500 m thereof, according to the National Wetland Map Version 5 (NWM5) (SANBI, 2018), the National Freshwater Ecosystem Priority Area (NFEPA) spatial data (CSIR, 2011), as well as the NGI topographical and watercourse information. According to the WCBSP (2017), the study area overlays an aquatic Ecological Support Area (ESA) 1 and 2 due to a "Coastal Corridor, Watercourse".

After the field assessment, it was determined that there were no watercourse conditions present within the study area, i.e. no topographical (riverbed/channel or banks), hydric soils, hydrophytic or riparian vegetation. No criteria used to identify a watercourse as per the National Water Act (NWA) (Act 36 of 1998) were present within the study area.

Soil samples taken from various locations within the study area indicated well-drained, light brown to greyish sand. Dominant vegetation consisted of terrestrial species *Searsia lucida* (Blinktaaibos), *Searsia glauca* (Blue Kunirhus), *Satyrium carneum* (Pink Satyre), *Agathosma capensis* (Cape Buchu) and *Helichrysum patulum* (Honey Everlasting) among others. The alien invasive *Acacia cyclops* (Rooikrans Wattle) was also present within the study area.

The study area was deemed to be of "Low" aquatic sensitivity given the lack of watercourses present.

Archaeological and Cultural Heritage Theme - Low Sensitivity - A Notice of Intent to Develop (NID) was submitted to Heritage Western Cape, and the correspondence received confirmed that a Heritage Impact Assessment (HIA) that satisfies the provisions of Section 38 (3) of the NHRA be submitted. Following this, a Heritage Impact Assessment covering the archaeological and Heritage Impact Assessment was undertaken by Agency for Cultural Resource Management (ACRM). The assessment highlights that there are fragments of marine shellfish associated with dune mole rat burrowing were encountered in the southwestern portion of the proposed site indicating the possible presence of sub surface archaeological deposits. No cultural remains such as pottery, ostrich eggshell, or any stone tools or flakes were found. Furthermore, no other archaeological occurrences that were encountered across the proposed development site.

Therefore, the archaeological resources have been graded as having Low (Grade IIIC) local significance, subject to test excavations to establish the presence/absence of sub-surface deposits.

According to Pether (2024), the proposed development site is on vegetated dunes of the Holocene Strandveld Formation which overlie older calcified dunes of the mid to late Quaternary Waenhuiskrans Formation. Along the South Coast (i.e. the Project Area), the Strandveld Fm. is UNCLASSIFIED, but according to Pether (2024) a MODERATE rating is applicable close to the coast where subfossil bones in archaeological sites occur. The subfossil bones are expected to be of Quaternary/later Holocene age (less than about 7000 years old) and are likely to be mainly members of the extant, modern fauna, but unexpected species which do not belong to the modern/historical fauna may occur, due to fluctuations in the prehistoric palaeo-climate of the region.

As it is likely that only a relatively small volume of Waenhuiskrans Formation deposits will be affected by the proposed development, the anticipated impact is assigned a MODERATE rating.

The only building on the site is a ruined, modern, breeze block borehole structure on Erf 1479. No graves were encountered during the field assessment. Therefore, the indications are that the proposed Van Dyksbaai housing

development on Erven 1469, 1470, 1471, 1473, & 1479 does not pose a significant threat to local archaeological and palaeontological heritage resources.

Civil Aviation Theme - High Sensitivity - The proposed development is situated within the urban edge and is in line with the existing residential erven in the vicinity. No additional impacts are expected under this theme, and no further assessment is required.

Defence Theme - Low Sensitivity - The proposed development is consistent with the existing developments in the area, and no significant impacts are anticipated. Therefore, no further assessment is necessary.

Palaeontology Theme - Very High Sensitivity - The site is situated on vegetated Holocene Strandveld dunes overlying Waenhuiskrans Formation deposits. Although the Screening Tool classifies the sensitivity as "Very High," the Palaeontological Impact Assessment concluded that the expected impact is moderate. Fossil finds, if any, would be of late Quaternary origin and likely consist of extant fauna. Due to limited excavation depth and dune sands overlying fossiliferous layers, the palaeontological risk is low but still warrants monitoring during earthworks.

Plant Species Theme - Medium Sensitivity – The DFFE Screening Tool Report classified the plant species theme of the project area as MEDIUM due to the possible occurrence of forty-eight (48) sensitive plant species. The plant species theme was covered in the Terrestrial Biodiversity Impact Assessment conducted by Biodiversity Africa. It is indicated in the assessment that of the 48 species, four (4) sensitive plant species were confirmed to occur within the project area including three (3) VU species (*Lampranthus fergusoniae, Cynanchum zeyheri, and Athanasia quinquedentata subsp. rigens*), and one (1) NT species (*Asparagus lignosus*). Furthermore, three (3) SCC have a VERY HIGH likelihood of occurrence and three (3) have a HIGH likelihood of occurrence within the project area as they have been recorded on adjacent properties. As such, the specialist disagrees with the MEDIUM sensitivity rating of the Plant Species Theme as per the DFFE Screening Tool Report and suggests that the plant species theme sensitivity of the Overberg Dune Strandveld and Degraded Areas is reclassified as HIGH due to the confirmed occurrence of SCC, but that the Plant Species Theme Sensitivity of the Acacia Woodland should remain medium.

Terrestrial Biodiversity Theme - Very High Sensitivity - The desktop assessment and field survey confirmed that the project area occurs within Overberg Dune Strandveld. This vegetation type is listed as EN due to its narrow distribution and evidence of ongoing biotic disruption from invasive alien plant species (DFFE, 2022). Despite being listed as EN, 93% (323.2 km2) currently remains intact. The SEI of the Overberg Dune Strandveld was determined to be HIGH. However, it should be noted that portions of Overberg Dune Strandveld within the project area have been modified and degraded due to the establishment of alien invasive plant species and the creation of fire breaks which has resulted in the fragmentation of vegetation.

Table 1: Specialist Assessments Identified as per the Screening Tool

	Specialist Assessments	Status/Notes
	Landscape/Visual Impact Assessment:	The specialist assessment is not required as per HWC
		correspondence.
	Archaeological and Cultural Heritage Impact	The Heritage Impact Assessment was undertaken and is
	Assessment	attached as Appendix G3
	Palaeontological Impact Assessment	This specialist assessment was undertaken and is attached
		as Appendix G4.
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	Terrestrial Biodiversity Impact Assessment	This specialist assessment was undertaken and is attached
		as Appendix G1.

Aquatic Biodiversity Impact Assessment:	This specialist assessment was undertaken and is attached
	as Appendix G2.
Socio-Economic Impact Assessment:	This assessment was not undertaken as the subject properties lie within the urban edge with residential settlements situated on the east, west and south of the subject properties.
Plant Species Assessment:	This specialist assessment is covered in the Terrestrial Biodiversity Impact Assessment attached as Appendix G1 .
Animal Species Assessment:	This specialist assessment is covered in the Terrestrial Biodiversity Impact Assessment attached as Appendix G1 .

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.
27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for— (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	The proposal involves the clearance of approximately 6.72 hectares of indigenous vegetation
28	Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;	The site is located within an urban edge, as defined by the Overstrand Municipality Spatial Development Framework (SDF), but it lies outside the built-up area. The land is currently zoned as Agricultural Zone 1, though it has never been used for farming. The proposed development will span more than 1 hectare on a property that exceeds 5 hectares in total size
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; (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.	The proposal includes the construction of internal roads and these will be a minimum of 8.0m.
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;	The proposed development will involve the clearance of more than 300 square of indigenous vegetation with an endangered ecosystem type.

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.

Lising Notice 1; Activity 45: The expansion of infrastructure for the bulk transportation of water or storm water where the existing infrastructure— (i) has an internal diameter of 0,36 metres or more; or (ii) has a peak throughput of 120 litres per second or more; and (a) where the facility or infrastructure is expanded by more than 1 000 metres in length; or (b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more; excluding where such expansion— (aa) relates to transportation of water or storm water within a road reserve or railway line reserve; or (bb) will occur within an urban area:

This activity is not triggered because the proposed expansion involves the installation of a 730-metre-long pipeline with an internal diameter of 0.16 metres.

Listing Notice 1 Activity 46: The expansion and related operation of infrastructure for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes where the existing infrastructure — (i) has an internal diameter of 0,36 metres or more; or (ii) has a peak throughput of 120 litres per second or more; and (a) where the facility or infrastructure is expanded by more than 1 000 metres in length;

This activity is not triggered because 110 m x 0.16 mm Ø New outfall sewer will be required to connect the internal reticulation network of the proposed development to the existing sewer system.

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

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

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

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

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1. Provide a description of the preferred alternative.

The consolidation, rezoning, and subdivision of the five subject properties that are situated adjacent to Dyer Street, is proposed.

Erven 1469, 1470, 1471, 1473 & 1479 Van Dyksbaai (hereafter referred to as the subject properties) has a combined extent of 10,8 ha (107 826 m²) and is currently zoned as Agricultural Zone 1: Agriculture. The proposed development will consist of the following:

- → **Rezoning** of Erven 1469, 1470, 1471, 1473 & 1479 Van Dyksbaai, from Agricultural Zone 1: Agriculture to Subdivisional Area Zone (SA);
- → Consolidation of Erven 1473 and 1479 to create a Consolidated Erf 1 (±4,0271 ha) and Erf 2 (±6,7555 ha), refer to Figure 3.
- \rightarrow **Subdivision** of Erven 1469, 1470, 1471, 1473 & 1479 for the establishment of 123 residential erven (67400 m²), internal roads (13 800 m²), and 5 open space erven (26 665 m²).

Components of the development

Residential erven

- → The development will consist of approximately 123 residential erven (plots)
- → These erven will be supported by essential infrastructure such as internal roads, water supply lines, stormwater systems, and sewer pipelines.
- → The total land area designated for residential erven is approximately 67,400 m² (6.74 ha).

Proposed Access Roads

- → 5 internal access roads will be developed to provide access to the erven as well as allowing residents and service vehicles to move safely and efficiently through the area.
- → The total area designated for internal access roads is approximately 13 782 m² (1.37 ha).
- → The minimum internal road reserve will be a minimum of 8.0m wide

Open space

- → 5 erven will be set aside specifically for open space purposes. These areas will not be developed with any buildings or infrastructure. Instead, they will be retained in their natural state to preserve the site's environmental value and contribute to the overall quality of life for future residents.
- \rightarrow The total area allocated to open space is approximately 26,665 square metres (2.7 ha).

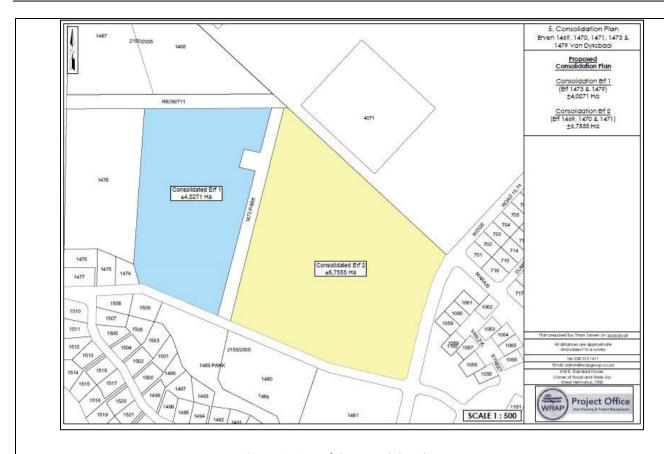


Figure 3: View of the consolidated erven.

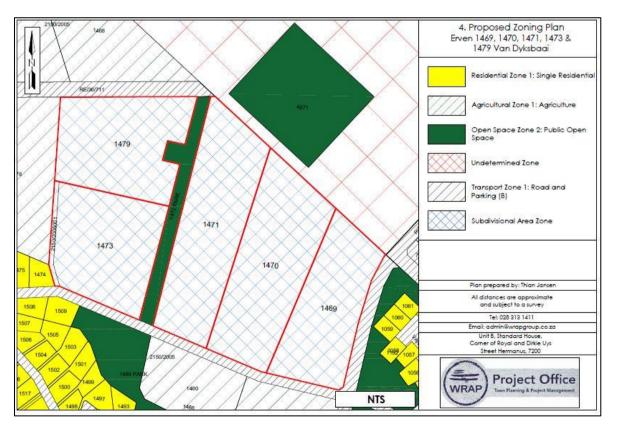


Figure 4: Proposed zoning.

The subject properties are currently vacant. The 2 consolidated sections described above are split by an existing municipal open space. The proposal is to have both sides of the development gain access from Bosbok Street as illustrated in **Figure 1c** to ensure smooth traffic flow.

This new road will be constructed using three sections of the three properties to ensure the accessibility to these developments are secured and aligned with future development trends.

The rezoning and subdivision of the subject property will align with the current development trend in Van Dyksbaai by introducing a mix of smaller, entry level homes for first tie buyers.

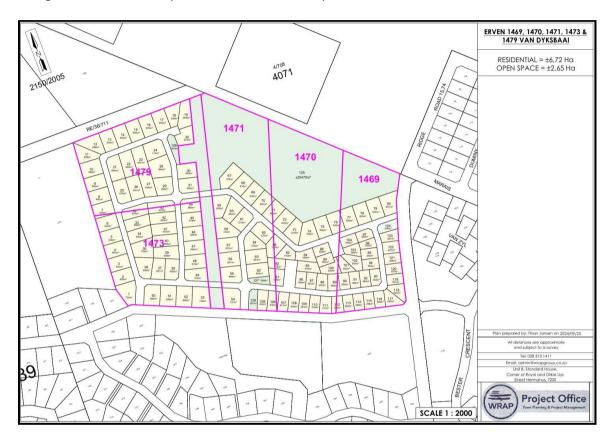


Figure 5a: Preferred Site development plan.

The OMSDF contains calculations on the projected population growth for the Greater Gansbaai area at different occasions in the past and the most recent calculation included projections up until 2031. It is however difficult to determine the individual need of Van Dyksbaai from this information. The OMSDF states that the methodology used to calculate the population growth were based on the Statistics South Africa Census, 2011 and a 2016 community survey, which was used as the baseline population in 2016 (OMSDF, p28).

Tables 2 and 3 indicate the total number of dwelling units that the entire Overstrand Municipal area will require in conjunction with the number of additional developable land required. The difference between **Table 2** and **3** is the density being proposed. The higher the density, the less land is required.

Table 2: Housing Need and estimated land area required (15du/ha).

Year	Total dwelling units (du) required	Estimated land area required
2011	6679	446
2016	9198	613
2021	12 231	815
2026	15 627	1042
2031	19 278	1285

Table 3: Housing Need and estimated land area required (20du/ha).

Year	Total dwelling units (du) required	Estimated land area required
2011	6679	336
2016	9198	460
2021	12 231	612
2026	15 627	781
2031	19 278	964

No additional land was included into the urban edge within the Van Dyksbaai area when the 2020 OMSDF was reviewed, which means that densification was proposed to occur within the existing urban edge. The proposed development will have a density of only 11,41 dwelling units per ha, maximising on the allowable density and aligning with the proposed density that requires less land for development as identified in **Table 3**.

The proposed development will introduce 123 new residential properties that will be designed and managed together within a gated development.

The layout of the development (Refer to **Figure 5**) follows the shape of the property as well as a specific placement of the open space to ensure that the open space is easily accessible to all residents in the surrounding area and that the existing flora be preserved in the existing proposal.

The layout was designed to ensure that the development fits into the surrounding area's development framework while also creating efficient, easily accessible developable properties by also considering future development in the immediate area. The main determining factor of the development was the open space placement to ensure the existing endemic flora is preserved in the area as it was identified as being sensitive. The proposal aims to allow each property to accommodate a free-standing dwelling unit with front and back gardens offering views of the mountains,

while also being relatively close to the open space. The proposed open space will be managed effectively, maintained, and open to the development for their enjoyment.

Services

Electricity

The proposed development of the subject properties will include connection to the existing Overstrand Municipality's (OM) networks. The implementation of the development is however not expected to have any negative impact on the current service levels in the area.

Water and Sewage

The proposed development will connect to the existing water and sewage networks provided by the Overstrand Municipality. Property owners will be required to pay a bulk services contribution to the municipality, which will be used to fund necessary upgrades to the surrounding bulk infrastructure:

- → It is proposed that link services item OGW3.3 (730 m x 160 mm Ø New supply pipe) is constructed along the entire eastern and northern boundary of the proposed development, refer to **Figure 1d &1e** for illustration.
- → Kleinbaai (Van Dyksbaai) is currently not serviced by a formal sewer reticulation system, except for 3 small areas in Kleinbaai which gravitate to conservancy tanks. It is proposed that the internal sewer system for the proposed development area gravitates towards one of these drainage areas located to the south of the development, i.e. the "Kleinbaai Conservancy Tank no. K3" drainage area.
 - There is sufficient capacity in the sewer reticulation system if the Conservancy Tank no. K3 drainage area to accommodate the proposed development.
 - 110 m x 160 mm Ø New outfall sewer link services item will, however, be required to connect the internal reticulation network of the proposed development to the existing sewer system, see Figure
 1f

To verify the availability of sufficient water and sewage capacity, refer to the GLS Report attached in **Appendix G7**. These upgrades will be implemented and financed through the abovementioned bulk services contributions.

Solid waste

The proposed development will include designated refuse areas that comply with Section 17.4 of the OMLUS.

Waste Collection Process:

Each dwelling house will store its solid waste on-site and place it in the designated refuse area on collection days for municipal refuse removal.

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 in consideration is not in line with the land use rights of the properties, since they are currently zoned as Agricultural Zone 1 and therefore does not align with the intent of this application which involves the construction of single residential erven. However, their location within the demarcated urban edge of the

Overstrand Municipality makes them qualify for future residential development. Additionally, the proposal also intends to rezone the subject properties into Subdivisional Area.

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.

None that the EAP is aware of.

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

The Western Cape Provincial Spatial Development Framework, (2014)

The proposed development was evaluated in terms of the policy objectives;

- Protect and enhance sense of place and settlement patterns
- Improve accessibility at all scales
- Promote an appropriate land use mix and density in settlements
- ensure effective and equitable social services and facilities

Alignment of the proposal with the policy objectives.

The proposed development will be situated between existing, recently developed properties and will enhance the sense of place by filling in the remaining undeveloped land. This approach aligns with the area's densification strategy. Integrating the development into the existing urban fabric of Van Dyksbaai was essential to ensure that future residents have convenient access to the amenities and services already available in the area.

This objective has been achieved by carefully selecting a location that supports integration and accessibility. Furthermore, the development places a strong emphasis on quality of life and community wellbeing by establishing a thoughtfully planned new residential neighbourhood that complements and strengthens the existing urban environment.

The subject property boasts sufficient accessibility through the main distributor routes in the area. the proposed development was designed to seamlessly integrate with the Van Dyksbaai area, forming part of the extended town and allowing for easy access to larger towns and cities such as, Gansbaai, Hermanus, and Cape Town.

The primary land use of the proposed development is residential, and it has been designed with a focus on providing access to nature through a strategically placed open space.

With Hermanus being a regional service centre as indicated by the PSDF, it is important to ensure adequate access to the area. there are adequate road networks between the proposed development and Hermanus that were recently upgraded.

4.2 The Integrated Development Plan of the local municipality.

The proposed residential development on erven 1469, 1470, 1471, 1473, and 1479 in Van Dyksbaai is aligned with the objectives and strategic priorities of the Overstrand municipality's integrated development plan (IDP). The IDP identifies sustainable human settlements, infrastructure development, and spatial transformation as key developmental priorities, particularly in response to growing urbanisation, housing demand, and the need for inclusive, well-planned communities.

This project directly supports the IDP's focus on expanding access to formal housing by proposing the establishment of 123 residential erven within the existing urban edge of Van Dyksbaai. It is consistent with the municipality's goal of promoting infill development on underutilised land that is strategically located in close proximity to existing services and infrastructure. The development will contribute to addressing the housing backlog in the region while stimulating local employment and economic opportunities during construction and service installation phases.

Furthermore, the proposed development aligns with the IDP's principles of environmentally responsible planning. The layout under alternative 3 has been guided by specialist input to avoid critical biodiversity areas (CBA1) and retain key ecological corridors, ensuring that development proceeds without compromising the natural resource base. The provision of internal infrastructure and the proposed road network also supports the IDP's emphasis on infrastructure-led growth and improved accessibility within urban areas.

4.3. The Spatial Development Framework of the local municipality.

The OMSDF defines Van Dyksbaai as part of the Greater Gansbaai area. on page 219, the following is stated:

"The implementation of the above proposal will ensure that the sensitive areas surrounding the built-up Kleinbaai/Franskraal area are developed in a careful sensitive manner but also make provision to respect and protect the danger point conservancy area. The predominant areas of densification as well as the proposals for the nodal intensification will contribute to a more compact, denser and efficient sustainable urban form. The civil infrastructure will simultaneously have to be upgraded to accommodate the existing as well as the proposed developments in a safe sustainable manner. Such investment will create an enabling structure for an efficient and equitable urban system and positive living environment."

Additionally, the OMSDF states:

"New Urban Development

No new development areas are proposed. In order to accommodate the housing need for Franskraal & Birkenhead, densification should take place in accordance with the OGMS."

This highlights the need for new development to occur within the existing urban footprint by applying densification measures to meet rising housing demand. The current proposal is in line with this objective, by providing 123 additional dwelling units within the designated urban edge. The need for these units is supported by the population growth data presented in Table 2.7 on page 25 of the OMSDF.

While the 123 dwelling units may represent a relatively small contribution to the total housing need across the Overstrand, it is critical to begin addressing this demand now. Delaying development risks placing undue pressure on municipal resources in the future and may deter valuable external investment opportunities that typically accompany population growth. Proactive development is therefore essential to support a resilient, inclusive, and economically sustainable Overstrand region.

The proposed increase in residential opportunities aligns with the broader vision of sustainable urban development. It promotes the efficient use of available land, limits further urban sprawl, and contributes to the formation of compact, vibrant communities. Furthermore, the development supports population growth in a way that balances environmental sensitivity with responsible urban planning, fully aligned with the spatial intentions set out in the OMSDF.

4.4. The Environmental Management Framework applicable to the area.

The subject property is located within the Urban Conservation Environmental Management Overlay Zone (EMOZ). The purpose of this overlay zone is to protect and manage undeveloped, conservation-worthy, publicly owned land within Overstrand's urban edge and adjacent buffer areas. It also aims to promote the retention of viable, priority ecological corridors in areas earmarked for development, thereby supporting an integrated approach to conservation and development that enhances living conditions for the communities of the Overstrand.

The EMOZ is divided into various categories:

- Category A: Pristine Ecosystems
- Category B: Semi-Modified Ecosystems
- Category C: Modified Ecosystems
- Category D: Private Property

All five of the subject properties fall under Category D: Private Property, which refers to private land located within priority conservation-worthy ecological corridors extending from mountain to coast, and/or crossing identified priority conservation areas as determined by the Overstrand Environmental Management Framework. Furthermore, the properties are situated within the Urban Conservation Environmental Management Overlay Zone (EMOZ). Importantly, no ecological corridors are mapped within the boundaries of the subject properties. As such, the proposed development will not result in the loss or fragmentation of any mapped ecological corridors. The proposed layout has been designed to align with the objectives of the EMOZ and is not anticipated to compromise the ecological integrity of the area.

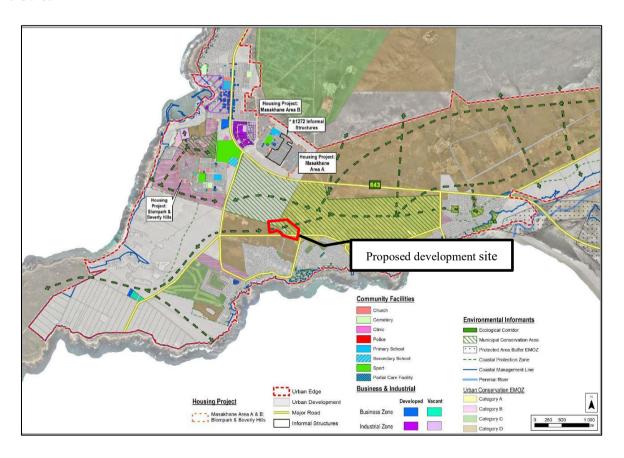


Figure 6: Map showing the Environmental Overlay Zones for the area of Gansbaai. Source: (OMSDF, 2020)

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

The comments will be included after the first round of public participation.

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

A Notice of Intent to Submit an Application (NOI) was submitted to the Department of Environmental Affairs and Development Planning (DEADP) on 22 October 2024, which outlined the required specialist assessments for the proposed development. The NOI and the planning process including the identification of specialist studies were initiated prior to the promulgation of the 2023 Western Cape Biodiversity Spatial Plan (WCBSP) and were therefore based on the Western Cape Biodiversity Spatial Plan (2017).

According to the 2017 WCBSP, the majority of the project area is situated within areas classified as Other Natural Areas (ONAs) and Ecological Support Areas (ESAs), with the northern portion of the site falling within a Critical Biodiversity Area (CBA). According to the WCBSP Handbook and Guideline (2023), ESA are areas that are not essential for meeting biodiversity targets but play a role in supporting the Protected Areas (PAs) and CBA areas, therefore they should be maintained in a functional or near-natural state. The handbook further highlights that some habitat loss in these areas is acceptable, provided that the underlying biodiversity objectives and ecological functioning are not compromised. Other Natural Areas(ONA) on the other hand are areas that have not been identified as a priority in the current systematic biodiversity plan, and the designed management objective is to minimise habitat and species loss, and it offers flexibility in a permissible land-uses.

The proposed components of development under the preferred alternative option (Alternative 3) requiring a development footprint of 8.2 ha with 123 residential erven, and 5 internal roads as well as associated infrastructure will be situated within areas mapped as ONA and ESA, excluding the CBA mapped area to the north, which will only be designated as a no-go open space area. By excluding the CBA area the development is focused on maintaining the overall natural area around this boundary and ensuring that this area is a no-go and the proposed development will not encroach in this area. On the other hand, Both Alternative 1 (Option A) and Alternative 2 (Option B) will contribute to the complete loss of this CBA area through construction of residential erven and roads.

However, the new updated WCBSP (2023) maps the whole site as a CBA. As mentioned above, it is important to note that the Terrestrial Biodiversity Assessment only utilised WCBSP (2017) for the assessment.

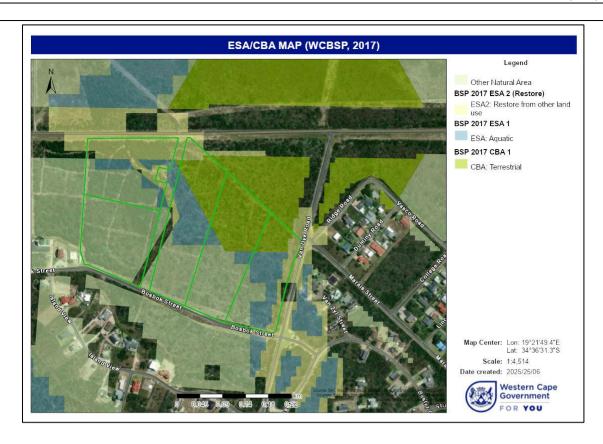


Figure 7a: Map of the CBAs within the project area (2023 BSP)



Figure 7b: Map of the CBAs within the project area (2023 BSP)

- 7. Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.
- N/A. The property is not located within the relevant zones defined in the ICMA.
- 8. Explain whether the screening report has changed from the one submitted together with the application form. The screening report must be attached as Appendix I.

The Screening Report has not changed from the one submitted with the NOI.

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

The proposed residential development optimizes vacant land within an existing urban edge, alongside the urban area of Van Dyksbaai by consolidating and repurposing five properties currently zoned as Agricultural Zone 1 into a subdivisional area, for residential development use. This strategic land-use transformation maximises the efficient use of underutilized land, aligning with the Overstrand urban planning principles that promote sustainable growth and the reduction of urban sprawl.

Currently, the five properties are zoned for agricultural use under Agricultural Zone 1, which typically restricts development to farming-related activities. However, their location within the urban edge of Van Dyksbaai, which is evidenced by existing development to the east, west, and south as noted in the Terrestrial Biodiversity Impact Assessment suggests that these parcels are vacant and not actively utilized for agriculture, nor are they suitable or considered to be agricultural viable. By consolidating these properties and rezoning them from Agricultural Zone 1 to a residential zoning, the development unlocks their potential for urban use. This rezoning process enables the subdivision of the consolidated land into single residential erven, creating multiple residential plots that can accommodate housing within an established urban area.

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

The proposed residential development optimizes the use of existing resources and infrastructure by leveraging the site's location within an established urban area and repurposing underutilized land in a way that integrates with the town's current services and facilities. The development involves consolidating five properties, currently zoned as Agricultural Zone 1, and rezoning them for the construction and subdivision of single residential erven. This approach ensures efficient use of existing urban resources and infrastructure while minimising the need for costly new extensions.

Firstly, the site's position within the urban edge of Van Dyksbaai as demarcated by the Overstrand Municipality, and being surrounded by existing development to the east, west, and south, as noted in the Terrestrial Biodiversity Impact Assessment means it is already proximate to established infrastructure. This includes existing road networks, water supply systems, sewage treatment facilities, and electricity grids that serve the surrounding residential areas. By developing within this urban footprint, the project can connect to and utilize these existing systems rather than requiring the construction of entirely new infrastructure, which would be necessary if the development were located in a peripheral or undeveloped area outside the existing urban edge. This integration reduces both financial and environmental costs, optimizing the use of resources already in place.

Secondly, consolidating the five properties into a single development plan enhances the efficient use of land as a resource. Currently the properties are zoned for agricultural use, vacant and underutilised given their urban context. Rezoning and subdividing them into subdivisional area for single residential erven this transforms the underutilised land into productive residential space, maximising its utility potential without depleting additional natural resources beyond the urban boundary. The compact nature of the development focused on residential erven also allows for efficient planning of the proposed internal infrastructure, such as access roads and utility connections, which can tie

seamlessly into the broader existing municipal network. Additionally, the development optimises social and economic resources by providing housing within an existing community.

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).

Refer to GLS Report attached under **Appendix G7**.

The developer of the proposed development on erven 1469, 1470, 1471, 1473 & 1479, Kleinbaai may be liable for the payment of a Development Contribution (as calculated by the Overstrand Municipality) for bulk water and sewer infrastructure as per Council Policy.

There is sufficient capacity in the existing water reticulation network to accommodate the proposed development to comply with the pressure and fire flow criteria as set out in the master plan.

It is, however, proposed in the water master plan for Kleinbaai that a new "ring main" (master plan items OGW3.2 & OGW3.3) is implemented for Kleinbaai to accommodate the proposed future development areas on erven 1201, 1222 to 1229 and 1478 (to the west of the proposed development and to the south of Dyer Street), as well as the proposed development on erven 1469, 1470, 1471, 1473 & 1479.

It is therefore proposed that link services item OGW3.3 (730 m x 160 mm \emptyset New supply pipe) is constructed along the entire eastern and northern boundary of the proposed development to form the first section of the proposed "ring main" for Kleinbaai.

The existing Kleinbaai reservoirs have insufficient storage capacity to accommodate the development of existing vacant stands in the Kleinbaai reservoir zone as well as the proposed development. Master plan item OGW.B11 will be required to provide sufficient reservoir storage capacity at the Kleinbaai reservoir site.

Kleinbaai is currently not serviced by a formal sewer reticulation system, except for 3 small areas in Kleinbaai which gravitate to conservancy tanks. It is proposed that the internal sewer system for the proposed development area gravitates towards one of these drainage areas, i.e. the "Kleinbaai Conservancy Tank no. K3" drainage area to the south of the development.

Sewage from the conservancy tanks is pumped out and transported to the Gansbaai Wastewater Treatment Plant (WWTP) via municipal sewage trucks.

There is sufficient capacity in the sewer reticulation system if the Conservancy Tank no. K3 drainage area to accommodate the proposed development. Link services item 1 (110 m x 160 mm \emptyset New outfall sewer) will however be required to connect the internal sewer reticulation network of the development to the existing sewer system.

In the sewer master plan for Kleinbaai a new bulk sewer PS is proposed for the Kleinbaai, Franskraal, Romansbaai and Birkenhead areas at the intersection of Lord Roberts, Dyer and Van Dyk Streets, that discharges directly at the Gansbaai WWTP via a new 355 mm diameter rising main.

It is proposed that sewage from the existing conservancy tanks in Kleinbaai is re-directed to this bulk PS once implemented.

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.

Need and desirability

The need and desirability of the approval and implementation of this proposal in accordance with section 66 (1) (c) of the Overstrand Municipality by-law can be illustrated as follow:

The need for the land use application was a result of addressing all the land use requirements and ensuring the property may meet the development requirements which the property owners are proposing.

Socio-Economic Impact

The proposed development offers several positive socio-economic benefits for Van Dyksbaai and the broader Overstrand region, contributing to economic growth, community upliftment, and environmental stewardship.

Job Creation and Economic Stimulation

Construction Phase Employment

The development will generate numerous job opportunities during the construction phase. These will include roles for architects, engineers, construction workers, landscapers, and various subcontractors. The employment opportunities will provide a vital boost to the local economy, as wages earned will circulate within the community, supporting households and local businesses. Additionally, the demand for construction materials and services will benefit suppliers and contractors within the Overstrand region.

Long-term Employment Opportunities

Beyond construction, the ongoing management, maintenance, and security of the residential development will create sustained employment opportunities, supporting local livelihoods over the long term.

Housing and Community Development

Improved Living Standards:

The development aims to provide a well-designed and sustainable residential environment that enhances the quality of life for current and future residents. Features such as thoughtfully planned green spaces, recreational areas, and sustainable energy initiatives will promote healthier lifestyles and foster a sense of community. This will also help to address housing demand by offering a mix of smaller, more affordable residential units alongside standard-sized properties, thereby increasing access to housing within Van Dyksbaai.

Social Integration and Cohesion

By creating inclusive communal spaces and promoting community interaction, the development can strengthen social cohesion and contribute to a safer, more connected community.

Environmental Benefits

Conservation and Biodiversity

The development incorporates measures to protect and integrate the existing fauna and natural veld within the design. This approach supports the preservation of local biodiversity and natural habitats, ensuring that the ecological integrity of Van Dyksbaai is maintained alongside urban growth.

Environmentally sensitive planning reduces the ecological footprint of development and aligns with national environmental regulations.

Support for Local Businesses and Economic Diversification

Local Procurement and Economic Support:

During both the construction and operational phases, the project will prioritize sourcing materials and services from local businesses wherever possible. This strategy will stimulate local commerce, support business growth and encourage entrepreneurship within the Overstrand region. The development is expected to diversify the local economy by attracting new residents and increasing demand for goods and services.

Tourism and Service Industry Boost:

Given Van Dyksbaai's coastal location and appeal, residential growth may also have positive spin-offs for the local tourism and service industries, as increased population can support restaurants, shops, and recreational services.

Compatibility with surrounding uses

The proposal to establish a residential development in this area is highly compatible with the existing land uses and surrounding activities. The subject properties are situated within a predominantly residential context, and the proposed development will serve as a natural extension of the established urban fabric of Van Dyksbaai.

The introduction of a planned residential development aligns with the existing character of the area, which is primarily made up of single residential dwellings. The development will complement and enhance the surrounding neighborhood by providing a greater variety of housing options, including smaller, more affordable units that cater to a broader segment of the population. This approach supports the municipality's broader goals of promoting sustainable densification without disrupting the existing suburban character.

Furthermore, the proposed development will retain compatibility in terms of scale, design, and function, ensuring that it does not negatively impact the surrounding properties. The inclusion of internal private roads, open spaces, and landscaped areas will contribute to a cohesive neighbourhood atmosphere and enhance the overall visual and spatial quality of the area.

Overall, the development will integrate well with its surroundings, reinforcing the area's residential identity while introducing modern infrastructure and a more efficient land use pattern that meets current housing and spatial planning needs.

Impact on safety, health and wellbeing of the surrounding community

The proposed residential development is not anticipated to have any negative impact on the safety, health, or wellbeing of the surrounding community. On the contrary, the proposal has the potential to contribute positively to the broader Van Dyksbaai area through a number of indirect and long-term benefits.

The introduction of a well-designed and managed residential environment can enhance neighbourhood safety through increased passive surveillance, improved lighting, and the presence of a more active and stable community. A greater

residential presence typically fosters a sense of ownership and care for the area, which may deter unlawful activities and contribute to a safer public realm.

In terms of public health and wellbeing, the development incorporates green spaces and areas for recreation, which can promote physical activity and social interaction among residents. These elements contribute to a healthier lifestyle and improve the overall quality of life for both new residents and those in the surrounding community.

Furthermore, by increasing the local population, the development has the potential to stimulate future growth and service provision in the area. A larger population base can justify the expansion of infrastructure and public amenities, such as healthcare and education, which benefits the wider community in the long term.

In summary, the proposed development is likely to support, not compromise, the safety, health, and wellbeing of the local population and may serve as a catalyst for future community upliftment and investment.

Impact on heritage

The subject property is not listed in the OM Heritage Register. A Notice of Intent to Develop (NID) was submitted to Heritage Western Cape and a Full Heritage Impact Assessment and associated studies have been completed. The findings of these studies concluded that the proposed development does not pose any significant threat to heritage resources.

Impact on views, sunlight and character of the area

When reviewing the context of the subject properties and surrounding environment, it is evident that the area predominantly consists of residential properties, many of which are characterised by standard single residential zoning. The spatial direction for Van Dyksbaai however indicates an intention to promote sustainable residential expansion and densification, particularly within the existing urban edge. The proposed development, comprising 123 residential erven, consolidated into two gated residential areas, aligns with this policy direction and provides a logical and appropriate extension to the existing built environment.

Views

The site is not located on an elevated slope or along a sensitive ridgeline, nor does it obstruct any major public view corridors. Given that the development will be limited to the height and coverage parameters set out in the OMLUS for Single and General Residential zones, the construction of units will remain modest in scale and integrated into the surrounding topography.

While the development may introduce additional built form into currently open or underutilised spaces, this change is not expected to result in a substantial loss of view from adjacent properties. The effect on private views will be minor and localised, and it should be noted that protection of private views is not a guaranteed right in planning law. In contrast, the development may offer new residents enhanced outlooks toward the surrounding landscape, including open space corridors and coastal vegetation, thereby enhancing the visual quality of the internal environment.

Sunlight

All structures within the proposed development will conform to the building line, height, and bulk restrictions applicable to the Single & General Residential zones, ensuring that overshadowing impacts are mitigated. Given the orientation of the erven and the extent of the erven, it is not anticipated that neighbouring properties will experience significant loss of sunlight or unreasonable shading as a result of the development.

The majority of surrounding properties are currently undeveloped, and when developed, will be subject to the same development parameters. As such, the overall design will promote equitable access to daylight and ensure a comfortable and healthy living environment for all future occupants and neighbours.

Character

Care has been taken to ensure that the proposed development complements and strengthens the character of the broader Van Dyksbaai area. Although the development introduces new residential areas, the built form remains low-rise and retains a residential typology that is consistent with surrounding developments. Importantly, the design incorporates generous landscaping, internal green space, and architectural guidelines to maintain a cohesive visual identity that respects the existing coastal vernacular and low-key character of the area.

Furthermore, the development proposes controlled access, internal private roads, and carefully considered building placement that reflects an orderly and integrated extension of the town's existing urban footprint. The commitment to design integrity is further underlined by the adoption of a design code that ensures variation, visual interest, and compatibility with surrounding properties, thereby preventing any perception of the development being intrusive or out of place.

Economic impact

The proposed development is expected to have a significant positive economic impact on both the surrounding Van Dyksbaai area and the broader Overstrand Municipality, in both the short and long term.

Short-Term Impact – Job Creation

During the construction phase, the development will generate employment opportunities for local residents, particularly those residing in Van Dyksbaai and Gansbaai. This includes work for contractors, subcontractors, labourers, suppliers, and professionals such as architects and engineers. The income earned by these individuals will circulate within the local economy, supporting small businesses and contributing to increased economic activity.

Long-Term Economic Contribution

In the long term, the development will yield ongoing financial benefits through the payment of property rates and taxes to the Overstrand Municipality. These additional revenues will strengthen the Municipality's income base, enabling it to improve and expand public services and infrastructure in the region.

Population Growth and Local Spending

Based on a conservative estimate of three persons per dwelling unit, the proposed development will accommodate approximately 369 new residents. This population growth will increase the demand for goods and services in Van Dyksbaai and Gansbaai, supporting existing local businesses and potentially encouraging the establishment of new enterprises. Residents will spend locally on essentials such as groceries, petrol, restaurants, repairs, and personal services, further boosting the local economy.

In summary, the proposed development will support short-term job creation, provide long-term municipal revenue, and promote local economic stimulation through population growth and increased consumer spending. These benefits align with the Overstrand Municipality's broader objectives for sustainable growth and improved economic resilience in the region.

Opportunity cost

An opportunity cost in the context of land use planning refers to a development proposal which leads to the devaluation or foregoing valued land use rights of interested and affected parties when an application is approved.

The proposed development is however not expected to negatively impact on any surrounding landowners. In fact, the development is aligned with the plans for the new urban area and is seen as a starting point for future expansion. By meeting the projected housing demand, the development will enable the local municipality to fulfil its obligations and ensure that the needs of the community are met.

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.

Exclusively for linear activities: Indicate what PPP was agreed to by the competent authority. Include proof of this agreemer in Appendix E22.	۱t
N/A	

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

To be included after the first round of Public Participation 1.

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

DEADP: Land Use

Cape Nature

Department of Agriculture

Overstrand Municipality

Overberg District Municipality

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

N/A

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

N/A		

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

To be included after PPP.			

Note:

A register of all the I&AP's notified, including the Organs of State, <u>and</u> 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:
 - o 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);
 - o 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);
 - o if a facsimile was sent, a copy of the facsimile Report;
 - o if an electronic mail was sent, a copy of the electronic mail sent; and
 - o 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 x							
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 your proposed development.	explain how this	has influenced					
N/A								
1.4.	Indicate the depth of groundwater and explain how the depth of groundwate influenced your proposed development.	er and type of aqu	uifer (if present) has					
N/A								

2. Surface water

2.1.	Was a specialist study conducted?	YES x	NO				
2.2.	Provide the name and/or company who conducted the specialist study.						
	Kimberley van Zyl and Robyn Morton of Delta Ecology – no watercourse or wetlands present and no further impact assessment required.						
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.						

Based on the generated screening tool report for the proposed site, the aquatic biodiversity theme was classified as "Very High" for the site, which may have potential aquatic biodiversity constraints (refer to **Figure 8**). In response to this sensitivity classification, Lornay Environmental Consulting initially conducted a desktop analysis using Cape Farm Mapper, which indicated no visible watercourses or wetlands on the site. To verify these findings and confirm the presence of watercourses and / wetlands on site, a Freshwater Ecologist was appointed to undertake a specialist investigation. The study results show that there are no watercourses or wetland present on site. It was concluded that there are no mapped rivers, or natural / artificial wetlands within the proposed study area, or within 500 m thereof, according to the National Wetland Map Version 5 (NWM5) (SANBI, 2018), the National Freshwater Ecosystem Priority Area (NFEPA) spatial data (CSIR, 2011), as well as the NGI topographical and watercourse information.

The specialist made reference to the WCBSP (2017) which indicated the study area as mapped as aquatic Ecological Support Areas 1 (ESA) and aquatic ESAs 2, both demarcated due to "Coastal Corridor, Watercourse" (refer to Figure 9). However, it is of crucial importance to note that this report was done prior to the new now referenced mapping WCBSP (2023) which is utilised, however, this does not affect the findings of the specialist since a field investigation was initiated and involved soil samples taken within the study area that indicated well-drained, light brown to greyish sand, refer to Photo 1 and Photo 2 (van Zyl & Morton 2024). Dominant vegetation consisted of terrestrial species Searsia lucida (Blinktaaibos), Searsia glauca, Satyrium carneum (Pink Satyre), Agathosma capensis (Cape Buchu), and Helichrysum patulum (Honey Everlasting) among others. The study also confirmed that no watercourse conditions were present

within the study area, i.e. no topographical (riverbed/channel or banks), hydric soils, hydrophytic or riparian vegetation (van Zyl & Morton 2024). The alien invasive *Acacia cyclops* (Rooikrans Wattle) was also present within the study area.

The study area was deemed to be of "Low" aquatic sensitivity given the lack of watercourses present, with no further assessment required as confirmed by the specialist.



Figure 8: Aquatic Biodiversity Sensitivity according to the DFFE Screening Tool.



Figure 9: CBAs and ESAs (WCBSP, 2017) indicated within study area and 500 m thereof.



Photo 1. Brown, sandy terrestrial soil within the study area.



Photo 2. Greyish sandy terrestrial soil within the study area.

3. Coastal Environment

3.1.	Was a specialist study conducted?	YES	NO x					
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 taker influenced your proposed development.	n into account a	nd explain how this					
N/A								
3.4.	Explain how estuary management plans (if applicable) has influenced the prop	osed developme	ent.					
N/A								
3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral zones, have influenced the proposed development.	active zone and	estuarine functional					

N/A

4. Biodiversity

4.1.	Were specialist studies conducted?	YES x	NO				
4.2.	4.2. Provide the name and/or company who conducted the specialist studies.						
Nicole	Nicole Dealtry, Tarryn Martin and Amber Jackson – Biodiversity Africa						
4.3.	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 proposed development has been informed by a range of systematic conservation planning tools and biodiversity datasets to ensure that land-use decisions align with national and provincial conservation priorities and avoid unacceptable ecological impacts. Key informants consulted include the Western Cape Biodiversity Spatial Plan (WCBSP, 2017 and 2023 update), the South African National Vegetation Map (2024), the National Freshwater Ecosystem Priority Areas (NFEPA, 2011) dataset, and relevant elements of the National Spatial Biodiversity Assessment (NSBA, 2011 and updated versions where applicable).

According to the WCBSP (2017), the subject properties mostly fall within Ecological Support Area (ESA1&2), Other Natural Areas (ONAs) and a mapped northern portion within the Critical Biodiversity Area (CBA). These classifications reflect the site's ecological significance as a contributor to regional biodiversity persistence, ecological connectivity, and ecosystem functioning. It is important to note that the WCBSP (2017) was consulted by the specialist team and assessments were undertaken prior to promulgation of the WCBSP (2023), which has now mapped the whole subject properties as a CBA. Regarding the vegetation cover occurring in the subject properties, the SA Vegetation Map (2024) further identifies the dominant vegetation type as Overberg Dune Strandveld (now known as Southwestern Strandveld), which is listed as Endangered and has a restricted distribution range along the southern Cape coast. These datasets informed the specialist Terrestrial Biodiversity Assessment, which confirmed the conservation value of the site's natural vegetation and recommended avoidance of the CBA area.

In response to the findings of these biodiversity informants, the layout of the proposed development was revised to reduce ecological impact. The preferred alternative, Alternative 3 (Option C), avoids the mapped CBA1 area identified in the WCBSP (2023) and incorporates a 2.7-hectare open space corridor to support ecological connectivity and the conservation of sensitive habitats. This layout confines the development footprint to degraded, near-intact, and alien-invaded portions of the site, thereby reducing the loss of high-value biodiversity features. In contrast, Alternative 1 (Option A) and Alternative 2 (Option B) would have resulted in significant ecological impacts due to encroachment into the CBA and loss of natural vegetation.

Additional datasets, including the NFEPA and National Wetland Map 5 (NWM5), were consulted to assess the presence of freshwater ecosystems. These sources confirmed the absence of mapped wetlands or freshwater features on or near the development site, a conclusion supported by the Aquatic Biodiversity Compliance Statement.

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

The Biodiversity Spatial Plan (BSP) for the Western Cape, developed by CapeNature, serves as a vital framework for balancing biodiversity conservation with sustainable development. Its core objectives are to identify and protect biodiversity priority areas namely Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) while integrating these considerations into land-use planning processes. The BSP's management guidelines aim to minimize environmental impacts by ensuring that CBAs are maintained in a natural or near-natural state, with no further habitat

loss, and that only low-impact, biodiversity-sensitive land uses are permitted. Degraded areas within CBAs should also be rehabilitated to support ecological integrity. In the context of the proposed development, these objectives and guidelines have been applied to assess the site's biodiversity value and have significantly shaped the planning process.

Initially, the Terrestrial Biodiversity Specialist team utilized the Western Cape Spatial Biodiversity Spatial Plan (2017) to overlay the preferred site development plan. According to this earlier version, the site comprised a mix of Other Natural Areas, Ecological Support Areas, and Critical Biodiversity Areas, with the CBAs and ESAs concentrated in the northeast of the property. To align with the BSP's objectives of protecting these priority areas, the plan strategically avoided development in the mapped CBA area by designating an open space in this portion (2019 WCBSP). This approach demonstrated the use of the BSP as a tool to guide development away from ecologically sensitive areas, thereby adhering to the management guidelines that prioritize habitat preservation in CBAs and ESAs.

However, the Western Cape Biodiversity Spatial Plan (2023) introduced a significant update, reclassifying the entire study area as a CBA; Terrestrial, due to the presence of Southwestern Strandveld vegetation (previously known as Overberg Dune Strandveld, classified as Critically Endangered in the SA Vegetation Map 2017, though its threat status is unknown, as per the SA Vegetation Map (2024). This reclassification, was not yet in effect during the initiation of this project as well as the site inspection and initial reporting, conducted by the specialist team. Under the updated WCBSP (2023), the entire site is now mapped as CBA1.

The application of the BSP's objectives and guidelines has, nonetheless, has substantial influence on the proposed development and planning. First, the initial reliance on the WCBSP (2017) allowed the development team to allocate the residential erven and the proposed access roads within areas mapped as Other Natural Areas (ONA) and Ecological Support Areas (ESA 1 & 2) on site (**Figure 10 and 11**), resulting to a loss of approximately 2.27 ha of indigenous vegetation within areas mapped as ESA. Based on the updated Western Cape Spatial Biodiversity Spatial Plan Handbook and Guidelines (2023), ESA are areas that are not essential for meeting biodiversity targets but play an important role in supporting the functioning of Protected Areas and Critical Biodiversity Areas. The Handbook further outlines that some habitat loss in these areas is acceptable, provided that the underlying biodiversity objectives and ecological functioning are not compromised. For this project, it is important to note, as indicated in the Terrestrial Biodiversity Assessment that the project area does not occur within or near to a protected area or a conservation area as shown in (**Figure 12**) and is located within the municipal urban edge.

Plant Species of Conservation Concern

The project area is situated within the Walker Bay Key Biodiversity Area (KBA), which is 322 km² in extent and the proposed residential development occurs within a small portion (0.11 km²) and on the edge, of this KBA. The specialists find that the project may contribute to the loss of some habitat that support sensitive plants species of conservation concern identified by the Screening Tool. The project area falls within the Cape Florisitic Region (CFR), a biodiversity hotspot containing over 9000 species of flowering plants, of which more than 70% are endemic. According to the Terrestrial Biodiversity Assessment conducted onsite, about four (4) plant species of conservation concern (SCC) were identified onsite (Table 4) below, which includes Athanasia quinquedentata rigens (VU), Lampranthus fergusoniae (VU), Cynanchum zeyheri (VU) and Asparagus lignosus (NT). The report also notes that there are three plant SCC having a Very High likelihood of occurrence and three have High likelihood occurrence within the project are, as they were recorded on adjacent properties. In addition to the findings of the specialist, it is highlighted that about twelve (12) SCC have a moderate likelihood of occurrence within the project area.

Protected Plant Species

The Terrestrial Biodiversity Assessment notes that about 20 protected plant species were recorded in the project area (**Table 5**), all of which are protected in terms of Schedule 4 of the Western Cape Nature Conservation Laws Amendment Act, 2000. Permits for the removal, destruction, or translocation of these protected species, as well as any threatened

species, will need to be obtained from Cape Nature. No protected trees were recorded during the field survey and no species recorded within the project area are protected in terms of the National Environmental Management: Biodiversity Act (NEM:BA).

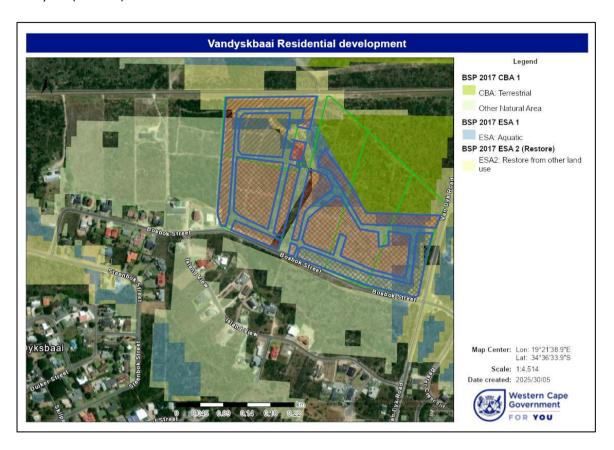


Figure 10: Overlay of the preferred site development plan onto the Western Cape Biodiversity Spatial Plan (BSP, 2017), indicating the layout of residential erven (shown in red) situated within mapped Other Natural Areas (ONAs) and Ecological Support Areas (ESAs 1 & 2).

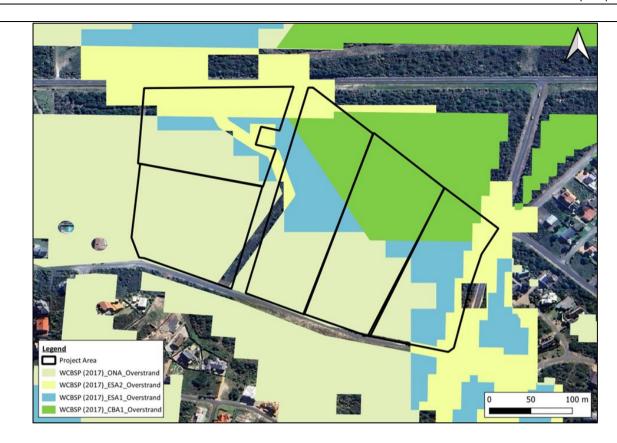


Figure 11: CBA,ONA and ESA mapped onsite.



Figure 12: Key Biodiversity Areas.

 Table 4: Plant Species of Conservation Concern identified for the project area

Species	Common Name	Threat Status	Habitat	Likelihood of Occurrence	Recorded within the project area
Athanasia quinquedentata rigens		VU B1ab(iii,v)	This species is known from less than 10 locations and a maximum range of 1250 km². Its habitat includes coastal lowlands, on alkaline sands and occasionally on acid-alkaline ecotones in Canca Limestone Fynbos and Hartenbos Dune Thicket (Raimondo, 2007). Within the project area, three (3) individuals were recorded.	Confirmed	Yes
Lampranthus fergusoniae		VU B1ab(ii,iii,iv ,v)	This species is known from five locations, with an EOO of 7700 km². Its habitat includes calcareous soils often associated with limestone dunes in Overberg Dune Strandveld, Agulhas Limestone Fynbos and Hartenbos Dune Thicket (Helme et al., 2018). Within the project area, one (1) individual was recorded.	Confirmed	Yes
Cynanchum zeyheri	Sprawling Buckhorn	VU B2ab(ii,iii,iv ,v)	This is a widespread species with an uncertain extent of occurrence (EOO), estimated to be between 12 579 - 21 422 km². It is however very rare, with an area of occupancy (AOO) of only 56 km². Its habitat includes flats and lower slopes in renosterveld, strandveld and limestone fynbos (von Staden, 2018). Within the project area, one (1) individual was recorded.	Confirmed	No Recorded within the project area by Nick Helme in April 2024.
Asparagus lignosus	Fire Asparagus	NT A2c	A fairly widespread species that has declined significantly across its range. EOO of 63 262 km ² . Its habitat includes coastal flats and rocky lower slopes in strandveld, fynbos, Renosterveld and Thicket (Burrows and von Staden, 2018). Within the project area, two (2) individuals were recorded.	Confirmed	Yes
Capnophyllum lutzeyeri		VU D2	This is a rare, localised and easily overlooked species, known from fewer than five locations. Its habitat includes Sandy slopes in Overberg Dune Strandveld. Information on its EOO and AOO is not available. (van Staden, 2012).	Very high Recorded 80 m north of the project boundary.	NO
Pterygodium vermiferum	Worm Bonnet	VU D2	This is a highly localised species with a small EOO of 12 km². It is currently only known from four locations. Its habitat includes well-drained sandy soil on coastal limestone within Overberg Dune Strandveld and Agulhas Limestone Fynbos (von Staden, 2012).	Very high Recorded <100 m north of the project area.	NO
Silene burchellii burchellii	Cape Catchfly	NT B1ab(iii,v)	This species has an EOO of 9200 km². It is known from an estimated 10 to 15 locations. Its habitat includes shale or loamy soils in renosterveld, as well as sandstone and limestone fynbos (von Staden, 2014).	Very high Recorded 400 m northeast of the project area.	NO
Heliophila linearis reticulata	Hairy Needle Sunspurge	VU B1ab(ii,iii,v)	This species has an EOO of <3500 km² and is known from eight locations. Its habitat includes coastal sands in Blombos Strandveld, Overberg Dune Strandveld, and Hartenbos Dune Thicket (Helme and Raimondo, 2007).	High Recorded 465 m southeast of the project area.	NO
Roepera fuscata	Coast Twinleaf	VU B1ab(iii,v)	This is a range restricted species with an EOO of 3805 km². It is known from less than 10 locations. Its habitat includes coastal flats at 0-300 m in Overberg Dune Strandveld (Raimondo <i>et al</i> , 2016).	High Recorded 260 m southeast of the project area.	NO
Ixia micrandra	Minimal Kalossie	NT B1ab(i,ii,iii,i v,v)	A range-restricted (EOO 4078 km²), but still fairly common species, occurring at between 15 and 20 locations. Its habitat includes lower sandstone slopes in sandstone Fynbos (von Staden, 2014).	High Recorded 480 m southeast of the project area.	NO

Leucospermum pedunculatum	White-trailing Pincushion	NT B1ab(iii) +2ab(iii)	This species has a limited distribution range, with an Extent of Occurrence (EOO) of 948 km², and an Area of Occupancy (AOO) of 444 km². Although declining, it is still common, occurring at more than 10 locations. Its habitat includes deep sandy soils on lower slopes (0-600 m) in coastal flats in Overberg Dune Fynbos (Rebelo <i>et al.</i> , 2019).	Only one observation of this species has been recorded within the Vandyksbaai area which is located further inland from the coast (1.65 km northeast of the project area, iNat).	NO
Mesembryanthemum vanrensburgii	Sea Preenfig	NT B1ab(ii,iii,v) +2ab(ii,iii,v)	This species has an extent of occurrence (EOO) of 128 km² and an area of occupancy (AOO) of less than 128 km². Fifteen (15) locations are declining. Its habitat includes coastal sands associated with limestone and sandstone in Fynbos (Raimondo and Turner, 2007).	Most observations of this species have been recorded closer to the coast/shoreli ne. The nearest observation of this species is <1km south of the project area.	NO
Amellus asteroides mollis		VU B1ab(ii,iii,iv ,v)	This species has an EOO of 1260 km² and is known from seven to 10 locations. Its habitat includes coastal dunes in Overberg Dune Strandveld (Trinder-Smith and Raimondo, 2008).	Most observations of this species have been recorded closer to the coast/shoreli ne. Nearest observation of this species is along the coast, <500 m from the project area.	NO
Psoralea repens	Creeping Fountainbush	NT B2ab(iii)	This species has a wide distribution range, with an extent of occurrence (EOO) of 92 291 km², and an area of occupancy (AOO) of 460 km². It occurs on coastal foredunes in Strandveld, Fynbos and Thicket (Stirton et al., 2021).	Moderate Recorded along the coast <500 m from the project area.	NO
Agathosma geniculata		NT B1ab(iii,v) +2ab(iii,v)	This is a range restricted species with an EOO 182 km². It is known from 15-20 locations. Its habitat includes limestone outcrops near the coast in Overberg Dune Strandveld, Canca Limestone Fynbos, Agulhas Limestone Fynbos (Trinder-Smith and von Staden, 2018).	Recorded along the coast <500 m from the project area. (depends if there are limestone outcrops on site).	NO

Diosma demissa	Fiverank Bitterbuchu	VU B1ab(i,ii,iii,i v,v) +2ab(i,ii,iii,i v,v)	This species has an EOO of 573 km², between five and nine locations remain in two disjunct areas. Its habitat includes small sandy pockets in Overberg Dune Strandveld/ Cape Flats Dune Strandveld in tertiary limestone which overlies sandstone along coastal cliffs (Raimondo and Zikishe, 2012).	Moderate Recorded along the coast <500 m from the project area.	NO
Delosperma guthriei		EN B1ab(i,ii,iii,i v,v) +2ab(i,ii,iii,i v,v)	This species has an EOO 134 km². It is known from five (5) locations which continue to decline. Its habitat includes coastal Sands along rocky shores in Overberg Dune Strandveld, Overberg Sandstone Fynbos, Hangklip Sand Fynbos (von Staden and Raimondo, 2015).	Recorded along the coast <500 m from the project area. Most observations of this species are recorded nearer to the coastline.	NO
Babiana nana nana	West Late Bobbejaantjie	EN	This species has an EOO of 5453 km², and an area of occupancy (AOO) of 248 km². Its habitat includes sand plain fynbos and dune strandveld, sandy coastal flats and dunes (von Staden and Patel, 2021).	Moderate Recorded along the coast <500 m from the project area.	NO
Muraltia pappeana		NT B1ab(iii) +2ab(iii)	This species is known from 10-15 locations and an EOO 1100 km², AOO <1100 km². Its habitat includes limestone pavements in low shrubby fynbos (Raimondo, 2007).	Recorded less than 1 km west of the project area. However, no limestone pavements were recorded during the field survey.	NO
Aspalathus globulosa		EN B1ab(i,ii,iii,i v,v) +2ab(i,ii,iii,i v,v	This species has an EOO ranging from 3140-3459 km², an AOO of 56 km² and the population is severely fragmented. Its habitat includes coastal fynbos on marine sand in Overberg Dune Strandveld (van der Colff, 2016).	Moderate Recorded 7.4 km west of the project area.	NO
Lebeckia gracilis		EN A2bc; B1ab(ii,iii,iv ,v)	This species is known from between two and five locations within an EOO of 4000 km². Its habitat includes deep, sandy soils below 300 m in coastal fynbos, renosterveld and strandveld (Raimondo and le Roux, 2020).	Moderate This species has been recorded 14 km northeast of the project area.	NO
Leucadendron coniferum		NT B1b(iii,v) +2b(iii,v)	This is a range restricted species with an EOO of 10 446-10 500 km², and an area of occupancy (AOO) of 892-896 km². It occurs on lowlands in sand fynbos, sometimes bordering strandveld (Rebelo <i>et al.</i> , 2020).	Moderate Recorded 3 km east of the project area.	NO

Table 5: List of protected plant species recorded within the project area.

Family	Scientific Name	Common Name	Threat Status	WC NCL, 2000	NEM:BA 2004	List of Protected Trees (2024)
		Strandveld			-	-
Aizoaceae	Jordaaniella dubia	Beachfig	LC	Schedule 4		
Aizoaceae	Lampranthus bicolor	Twocolour Brightfig	LC	Schedule 4	-	-
Aizoaceae	Lampranthus fergusoniae	Limestone Brightfig	VU	Schedule 4	-	-
Aizoaceae	Mesembryanthemum canaliculatum	Beach Dropfig	LC	Schedule 4	-	-
Aizoaceae	Ruschia macowanii	Beach Tentfig	LC	Schedule 4	-	-
Aizoaceae	Tetragonia fruticosa	Sprawling Seacoral	LC	Schedule 4	-	-
Aizoaceae	Carpobrotus acinaciformis	Sally-my- handsome	LC	Schedule 4	-	-
Amaryllidac eae	Brunsvigia orientalis	candelabra lily	LC	Schedule 4	-	-
Amaryllidac eae	Haemanthus coccineus	Spotted Bloodlily	LC	Schedule 4	-	-
Hyacinthace ae	Lachenalia variegata	Spotty Viooltjie	LC	Schedule 4	-	-
Iridaceae	Chasmanthe aethiopica	Cobra Lily	LC	Schedule 4	-	-
Iridaceae	Gladiolus cunonius	Red Pypie	LC	Schedule 4	-	-
Iridaceae	Micranthus alopecuroides	Swordleaf Combflower	LC	Schedule 4	-	-
Iridaceae	Moraea fugax	Sweet Tulp	LC	Schedule 4	-	-
Iridaceae	Romulea sp.	Froetangs		Schedule 4	-	-
Iridaceae	Moraea collina	Cape Tulip	LC	Schedule 4	-	-
Orchidaceae	Disperis villosa	Granny's-bonnet	LC	Schedule 4	-	-
Orchidaceae	Satyrium carneum	Pink Satyre	LC	Schedule 4	-	-
Rutaceae	Agathosma capensis	Cape Buchu	LC	Schedule 4	-	-
Scrophularia ceae	Diascia sp.	Twinspurs		Schedule 4	-	-

Alien plant species

There are ~ 11 alien plant species recorded during field survey, of which three are listed in terms of Conservation of Agricultural Resources Act of 1983 and/NEM:BA National List of invasive Species 2004 and 2020. Under the NEM: BA act, Category 1b species must be eradicated and must be prohibited from spreading further and under CARA, Category 1 and 2 plant species must be removed & destroyed immediately. No trade in these plants is permitted. Permits are required for any activity involving a species listed in terms of Category 3 of the NEM:BA. Further planting, propagation, or trade of Category 3 species is prohibited.

Fauna species distribution in relation to the project area

According to Terrestrial Biodiversity specialist the broader project area falls within the known range of approximately 22 amphibian species, 55 reptile species, 108 mammal species, and 312 bird species, as per IUCN data (2022). More locally, 12 amphibians, 22 reptiles, and 28 mammals have been documented within the same Quarter Degree Square (QDS 3419CD) in which the site is located, while 199 bird species have been observed in the same bird monitoring pentad (3435_1920) (FitzPatrick, 2023; iNaturalist, 2023) (see **Figure 13 below**).

The QDS 3419CD covers a land area of roughly 57,191 hectares, and Pentad 3435_1920 spans around 7,124 hectares. Although these datasets indicate which species could potentially be found in the general vicinity, their presence on the site itself is unlikely without suitable habitat. Many of the species listed may occur elsewhere within these mapping units but are not expected within the proposed area of influence due to limited or absent habitat features required by those species. As a result, the actual number of species that may be present on the site is expected to be significantly lower than the broader species range data might suggest.

The vegetation on site consists mostly of near-intact Overberg Dune Strandveld, although it is interrupted by firebreaks and an invasive Acacia cyclops (Rooikrans) infestation in the northwest corner. The site is bounded by roads on three sides and by a house and an undeveloped plot on the remaining side. A key feature is Dyer Street, a busy road along the northern boundary that acts as a barrier between the site and the adjacent natural habitat to the north.

Given the relatively undisturbed condition of the habitat, it is likely that the area supports a range of terrestrial fauna, including lizards, snakes, tortoises, small antelope, rodents, and medium-sized carnivores such as genets, mongooses, and potentially caracal. Species directly observed during the site visit or confirmed through signs such as tracks, burrows, or remains include the Common Duiker (individual and midden), Cape Molerat (mounds and skull), Mongoose (burrows), Cape Porcupine (burrows and foraging sites), Yellow-throated Plated Lizard, Red-sided Skink, Angulate Tortoise (shells) and 20 species of bird.



Figure 13: QDS 3419CD (orange) and pentad 3435_1920 (green) in relation to the project area (red).



Figure 14: Faunal species observed during the field survey. **Top left to bottom right**: Cape Mole-rat Mound and Skull, Yellow-throated Plated Lizard, Angulate Tortoise shell and Red-sided Skink.

Faunal Species of Conservation Concern (SCC)

The DFFE Screening Tool Report was consulted and identified 5 animal SCC which have a likelihood to occur onsite. This includes, four bird SCC and one reptile SCC. Additionally, the Cape Dwarf Chameleon (*Bradypodion pumilum*), a Near Threatened faunal species is identified to be distributed in the area and is likely to occur in the project area. However, the specialist findings suggests that only the Southern Adder (VU) and Cape Dwarf Chameleon (NT) have a high likelihood of occurrence in the project area.

Table 6: Faunal SCC with a distribution that includes the project area and the likelihood of occurrence within the project area.

Species	Threat Status	Distribution includes or partly includes the project area	Preferred habitat available in project area	Species records SABAP2/ ReptileMAP (FitzPatrick, 2023)	Likelihood of Occurrence*	Justification				
BIRDS	BIRDS									
Black Harrier Circus maurus	EN	√	1	√	Moderate Foraging	The project area falls within the known distribution range of this species and there are records of this species within the broader project area (Pentad 3435_1920). Given the current disturbance level of the site (fire breaks, roads and pedestrians) it is unlikely the Black Harrier				
Black I	2.1	v		V	Low Breeding	uses the project area for breeding. It is possible that the Black Harrier uses the project area for hunting, however, there is ample intact habitat in the surrounding areas for this species to forage in as such, the likelihood of occurrence is Moderate.				
Denham's Bustard Neotis denhami	VU	√	√	х	Moderate	Although the project area falls within the known distribution this species and the project area contains its preferred habitat, this species has not been recorded within the broader project area. As such, the likelihood of occurrence is moderate.				
Southern Black Korhaan Afrotis afra	VU	√	√	x	Moderate	Although the project area falls within the known distribution range of this species and the project area contains its preferred habitat, there are no records of this species within the broader project area. As such, the likelihood of occurrence is moderate.				
Marsh Harrier Circus ranivorus	EN	√	х	√	Low	Although the project area falls within the known distribution range of this species and there are records within the broader project area, the preferred habitat of this species to breed is not present. If present, this species may use the project area, amongst others, for foraging. As such, the likelihood of occurrence is low.				
REPTILES	REPTILES									
Southern Adder Bitis armata	VU B1ab(I,iii ,iv,v)	√	✓	X	High	The project area falls within the known distribution range of this species and its preferred habitat type is present. However, this species has not previously been recorded within broader project area. This is likely due to the cryptic nature of this species which makes it difficult to find. The likelihood of occurrence within the project area is considered high.				

Cape Dwarf Chameleon Bradypodion pumilum	NT	✓	✓	х	High	The project area falls within the known distribution range of this species and its preferred habitat type is present. However, this species has not previously been recorded within broader project area. This is likely due to the cryptic nature of this species which makes it difficult to find. The likelihood of occurrence within the project area is considered high.
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Site Ecological Importance (SEI)

Botanical SEI

According to the assessment conducted onsite, the SEI was determined for the vegetation types / land classes recorded in the project area:

- Overberg Dune Strandveld / Southwestern Strandveld (EN) = HIGH
- Degraded areas (including firebreaks) = MEDIUM
- Acacia Woodland = VERY LOW

Faunal SEI

Based on the assessment findings, it was concluded that the SEI of the project area habitats for the faunal SCC with a high likelihood of occurrence is as follows:

- The SEI of the project area Overberg Dune Strandveld to the Southern Adder (VU) was found to be **MEDIUM**.
- The SEI of the project area Overberg Dune Strandveld to the Cape Dwarf Chameleon (NT) was found to be **MEDIUM**.
- The SEI of the Degraded areas to the Cape Dwarf Chameleon (NT) was found to be MEDIUM.

Overall combined SEI

Table 7: Overall combined SEI.

Habitat / Species	Botanical SEI	Faunal SEI	Overall combined SEI	
Overberg Dune Strandveld (Southwestern Strandveld)	HIGH	MEDIUM	нібн	
Degraded	MEDIUM	MEDIUM	MEDIUM	
Acacia Woodland	VERY LOW	MEDIUM	MEDIUM	

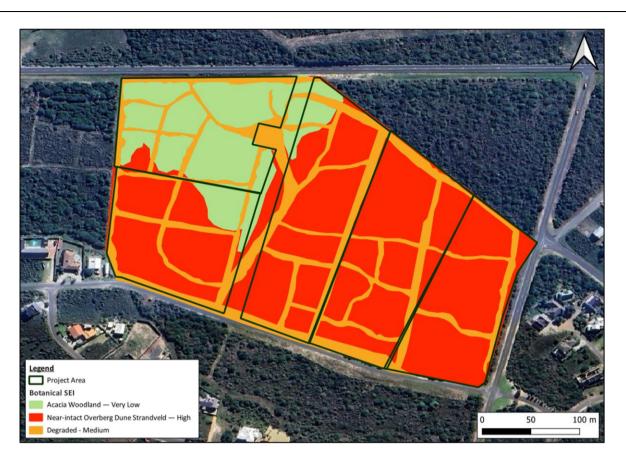


Figure 15: Map of the combined SEI of the project area.

Impact Assessment

Construction phase impacts

- Loss of Overberg Dune Strandveld (EN)
- Loss of Plant SCC
- Fragmentation of Vegetation and Disruption of Ecosystem Processes
- Introduction and Spread of Weeds and Alien Plant Species
- Loss of a Portion of The Walker Bay Key Biodiversity Area
- Loss of a Portion of CBA: Terrestrial
- Loss of Faunal Habitat
- Loss of Faunal SCC
- Disturbance to Faunal Species and their Livelihood due to Project Related Activities
- Mortality of Faunal Species due to Earthworks, Roadkill and Persecution

Operational/ post-construction phase impacts:

- Spread of Weeds and Alien Plant Species.
- Disturbance to Faunal Species and their Livelihood due to Project Related Activities

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.

The proposed residential development on Erven 1469, 1470, 1471, 1479, and 1473, Van Dyksbaai, Western Cape, as detailed in the Terrestrial Biodiversity, Plant and Animal Species Impact Assessment Report conducted by Biodiversity Africa (2025), will impact the site-specific features and functions of the Biodiversity Spatial Plan (BSP) category; specifically the Ecological Support Area (ESA1):

Impacts on site Specific features and function of Biodiversity Spatial Plan:

According to the Western Cape Biodiversity Spatial Plan (2017) the project area falls within ESA 1& 2 as well as the Critical Biodiversity Area, which is located on the northern area of the project site. However, the development area is outside the mapped CBA area. Due to the site location identified to be significantly located within the Overberg Dune Strandveld vegetation (SA Vegetation Map, 2018), which is listed as Endangered ecosystem type and its role in supporting biodiversity and ecological processes. This vegetation type has now been renamed as Southwestern Strandveld vegetation type in the updated SA Vegetation Map (2024); however, its threat status still remains unknown. Additionally, the site is part of the Walker Bay Key Biodiversity Area (KBA), which meets international significance thresholds for four criteria. The site-specific features and their associated ecological functions, as identified in the report, include:

Vegetation (Overberg Dune Strandveld)

The majority of the project area comprises near-intact Overberg Dune Strandveld, an Endangered ecosystem due to its narrow distribution and ongoing biotic disruption from invasive alien plant species. Despite this status, 93% of this vegetation type remains intact, with a conservation target of 36%. The site also includes degraded areas for firebreaks and Acacia Woodland dominated by the invasive *Acacia cyclops*. The development will result in the loss of a portion of the Overberg Dune Strandveld, specifically ±8.2 ha under Option C (Alternative 3), representing 0.02% of the total remaining extent.

Plant Species of Conservation Concern

Four plant species of conservation concern were confirmed in the project area, which includes three Vulnerable (VU) species (*Lampranthus fergusoniae, Cynanchum zeyheri, Athanasia quinquedentata subsp. rigens*) and one Near Threatened (NT) species (*Asparagus lignosus*). The development, particularly during the construction phase, will result in the loss of individual plant SCC. This could reduce local populations of these species, affecting the biodiversity pattern targets of the CBA, as these species contribute to the area's high ecological value.

Faunal Habitat and Species of Conservation Concern

The project area provides habitat for two faunal SCC with a high likelihood of occurrence: the Southern Adder (VU) and Cape Dwarf Chameleon (NT). The faunal habitat is primarily within the near-intact Overberg Dune Strandveld, with a Site Ecological Importance (SEI) of MEDIUM for these species. The development will cause loss of faunal habitat and potential loss of individual faunal SCC. Construction activities, including earthworks and road development, may lead to mortality of these species. Operational phase activities, such as increased human presence, may disturb faunal species.

Walker Bay Key Biodiversity Area (KBA)

The project area occupies 0.11 km² of the 322 km² Walker Bay Key Biodiversity Area, located in its edge adjacent to existing residential developments. The development will result in the loss of a small portion of the KBA, potentially increasing habitat fragmentation and affecting sensitive species within this internationally significant area.

Alien Invasive Plants

The northwestern portion of the site is dominated by Acacia Woodland (Acacia cyclops), an alien invasive species, which has a VERY LOW SEI. The development may facilitate the spread of alien invasive species during construction and operational phases, potentially further degrading the CBA's ecological integrity.

Influence on the proposed development

The proposed residential development in Van Dyksbaai will result in the loss of 8.2 ha of Overberg Dune Strandveld, and potential loss of plant and faunal SCC, impacting the CBA's functions of conserving biodiversity patterns, supporting ecological processes, and maintaining connectivity within the Walker Bay KBA. However, these impacts are minimized in Option C (Alternative 3), which has a lower development footprint of approximately 8.2 ha, while designating a 2.7 ha Open Space as a no-go area. Additionally, search and rescue for animal and plant SCC will be undertaken prior to construction. The CBA 1 designation, as per the WCBSP (2023), significantly influenced the development by prioritizing Option C (Alternative 3), which aligns with conservation objectives by preserving ecological connectivity and reducing residual impacts to predominantly LOW significance, negating the need for a biodiversity offset.

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

The project site is not located in a protected area.

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

The Department of Forestry, Fisheries and the Environment (DFFE) Screening Tool Report identified HIGH sensitivity for two bird SCC and MEDIUM sensitivity for two additional bird SCC and one reptile SCC, but only two animal species such as the Southern Adder (*Bitis armata*) (VU) and Cape Dwarf Chameleon (*Bradypodion pumilum*) (NT) were confirmed to have a high likelihood of occurrence based on the field survey. The Site Ecological Importance (SEI) for these species in the near-intact Overberg Dune Strandveld and degraded areas (firebreaks) was rated as MEDIUM, while the Acacia Woodland (dominated by invasive *Acacia cyclops*) was rated lower due to its reduced ecological value.

5. Geographical Aspects

Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.

Geographical Aspects Affected and Influence on the Proposed Development

The proposed development will affect several key geographical aspects, including the landscape character, ecological integrity, and sense of place associated with the subject properties. The project area spans approximately 10.7 ha, primarily comprising near-intact Overberg Dune Strandveld, a vegetation type Endangered (EN) ecosystem status and recently updated to "Southwestern Strandveld" in the 2024 SA Vegetation Map.

Landscape Transformation

The preferred layout (Alternative 3 / Option C) will entail the clearance of approximately 8.2 ha of indigenous vegetation to accommodate approximately 123 single residential erven, internal roads, and associated infrastructure. Although portions of the site are already degraded such as areas with firebreaks and invasive *Acacia cyclops* stands in the northwest the remaining Strandveld contributes significantly to the site's natural aesthetic and ecological character. The transformation from a natural landscape to a formal residential environment introduces built structures, hardened surfaces, and altered vegetation, thereby modifying both the visual and ecological landscape.

The Western Cape Biodiversity Spatial Plan (WCBSP, 2017) was used at the time of assessment to identify Biodiversity Priority Areas and to evaluate the extent and potential impacts of the proposed development. According to the WCBSP (2017), the majority of the area proposed for development is mapped as Other Natural Areas (ONA), with additional portions falling within Ecological Support Areas (ESA) 1 and ESA 2. The remaining 2.7 ha portion of the site, which has been excluded from development and designated as open space under the preferred layout (Alternative 3), is mapped as a Critical Biodiversity Area 1 (CBA1) and will be conserved. The overall impacts associated with the preferred site development plan include the removal of indigenous vegetation within the ESA 1 and ESA 2 portions that fall inside the development footprint, resulting in the transformation of currently vegetated natural areas into a formal built environment.

Sense of Place

The proposed development will bring a thoughtful and structured change to the existing sense of place, transitioning from an underutilised natural parcel to a well-integrated residential area within the existing urban fabric. While the site currently retains elements of a natural, "wild" coastal landscape, it is also bordered by existing development on multiple sides and lies within the designated urban edge. The development has been carefully planned to preserve a significant portion (CBA1) of the natural vegetation as open space, thereby retaining a sense of ecological character and visual continuity.

Importantly, the proposed layout aligns with the Overstrand Growth Management Strategy (2010) for the Kleinbaai area, which encourages responsible densification, compact development, and efficient land use within designated growth areas. The development also supports the goals of the Overstrand Municipal Spatial Development Framework (OMSDF, 2020), which promotes sustainable settlement patterns, integrated development, and the containment of urban sprawl through development within the urban edge. These frameworks collectively support well-located residential growth that complements the existing character of settlements, improves access to services, and enhances economic opportunities.

Ecological Integrity and Habitat Fragmentation

The ecological impacts include the loss of natural habitat within an Endangered ecosystem and the potential disturbance or displacement of Species of Conservation Concern (SCC) such as the Southern Adder (*Bitis armata*, VU) and the Cape Dwarf Chameleon (*Bradypodion pumilum*, NT). These species have a high likelihood of occurrence on-site due to the presence of suitable habitat. The development will fragment existing vegetation, disrupt ecological processes, and potentially reduce the viability of local faunal populations and biodiversity corridors.

Influence on the Proposed Development

Recognition of the above geographical and ecological sensitivities has substantially influenced the design of the proposed development. The preferred Alternative (Potion C/Alternative 3) incorporates a 2.7 ha Open Space Area in the northern section of the site to maintain a portion of the near-intact Strandveld and ecological connectivity with adjacent

natural areas. This area aligns with the CBA boundary identified in the 2017 Western Cape Biodiversity Spatial Plan and serves as a mitigation measure to limit high-impact transformation.

6. Heritage Resources

6.1.	Was a specialist study conducted?	YES x	NO					
6.2.	Provide the name and/or company who conducted the specialist study.							
Heritage Impact Assessment: Jonathan Kaplan – Agency for Cultural Resources Management.								
6.3.	Explain how greas that contain sensitive heritage resources have influenced the proposed development.							

Heritage Impact Assessment

A Heritage Impact Assessment (HIA) was undertaken by Jonathan Kaplan of the Agency for Cultural Resource Management (ACRM) in accordance with Section 38(3) of the National Heritage Resources Act (No. 25 of 1999). The assessment considered archaeological and palaeontological sensitivities associated with the proposed development of Erven 1469, 1470, 1471, 1473, and 1479 in Van Dyksbaai, Gansbaai.

Archaeology

The project site is situated near the Gansbaai coastline, a region recognised for its high archaeological sensitivity due to the abundance of Later Stone Age (LSA) sites. The rocky shoreline of this area historically supported rich shellfish communities, which attracted LSA hunter-gatherer groups as reliable food sources (Kaplan, 2024). Over 140 archaeological sites predominantly shell middens have previously been documented in the Gansbaai region, including in the vicinity of Van Dyksbaai and Kleinbaai.

During the field survey conducted on 30 October 2024, fragments of marine shellfish were observed in the southwestern portion of the proposed site (Point 058), likely brought to the surface by dune mole rat activity. While no artefacts such as pottery, ostrich eggshell, or stone tools were recorded, the presence of marine shell remains suggests the potential for sub-surface archaeological deposits. Accordingly, this area has been assigned low (Grade IIIC) local heritage significance, and test excavations are recommended prior to construction to confirm the presence or absence of cultural material.

The specialist concludes that an unmarked Khoisan burial and shell midden deposits may be uncovered or intercepted during excavations for building foundations and services (water, stormwater, sewage, etc.).

Palaeontology

The proposed development area is underlain by Holocene Strandveld Formation dunes over older Waenhuiskrans Formation calcified dunes, which are known to yield occasional fossil remains. According to Pether (2024), the area has a moderate palaeontological sensitivity, particularly close to the coast, where subfossil remains (e.g., ostrich eggshell, tortoise bones, and rodent remains) are likely to occur within archaeological contexts. The deeper Waenhuiskrans Formation, while rated very high on the SAHRIS palaeo-sensitivity map, is unlikely to be significantly impacted given the limited excavation depth expected in this development.

The specialist asserts that any fossil heritage resources will more than likely to occur in an archaeological context. This includes the large bones of elephants, rhino, and hippo who died in the Strandveld Fm. dunes have occasionally been

uncovered during sand quarrying and developments but are apparently rare finds. It is therefore concluded that, the minimal excavation works into the calcreted Waenhuiskrans Fm. is unlikely to generate any fossil heritage.

Built Environment

The only building on site is a ruined, modern, breeze block borehole structure on Erf 1479.

Influence on the Development Design and Mitigation Measures

Although no heritage resources of high or medium significance were identified on the site, the findings have directly influenced the planning of the development in the following ways:

- → Test Excavations will be required in the south-eastern portion of Erf 1473 prior to construction, to ensure that potential sub-surface heritage deposits are not disturbed.
- → A walk-down survey must be conducted following vegetation clearing, allowing archaeologists to visually inspect areas previously obscured by dense alien vegetation.
- → The Environmental Management Plan (EMP) must include a Fossil Finds Procedure (FFP) and a Chance Finds Protocol for both archaeological and palaeontological materials, outlining steps to be taken should any unexpected heritage materials be uncovered during construction.
- → Any unmarked human remains uncovered must be reported immediately, and work must cease in the affected area until specialist assessment is undertaken (Kaplan, 2024).

HWC Final Comment and Endorsement

Heritage Western Cape issued a final comment on 8 April 2025, **endorsing the HIA** as having met the provisions of Section 38(3) of the NHRA. In addition to the above recommendations, HWC has included the following conditions in the permit:

- → Archaeological monitoring should occur during vegetation clearing as there might be surface remains that are impacted during the clearing. A work Plan must be submitted for the Archaeological monitoring to HWC for the endorsement.
- → Test excavations in the southeastern corner of Erf 1473 must be conducted to establish the presence/absence of any sub surface archaeological deposits, prior to construction excavations commencing.
- → A walk down survey of the development site must be conducted after the site has been cleared of vegetation.
- → If any unmarked human remains are uncovered or exposed during excavations, work must stop, and the finds reported to the Environmental Control Officer and the contracted archaeologist (Jonathan Kaplan 082 321 0172) [and Heritage Western Cape. Human remains must not be removed or disturbed without required approvals from the heritage authority].
- → A protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), must be included in the Environmental Management Plan (EMP) for the proposed development. The Fossil Finds Procedure provides guidelines to be followed in the event of fossil bone finds in the excavations.

Conclusion

The Heritage Impact Assessment notes that indications are that a proposed housing development on 1469, 1470, 1471, 1473, & 1479 in Van Dyksbaai, near Gansbaai does not pose a significant threat to local Stone Age archaeological and palaeontological heritage resources.



Figure 16: Track path in blue and waypoint of archaeological find (058).

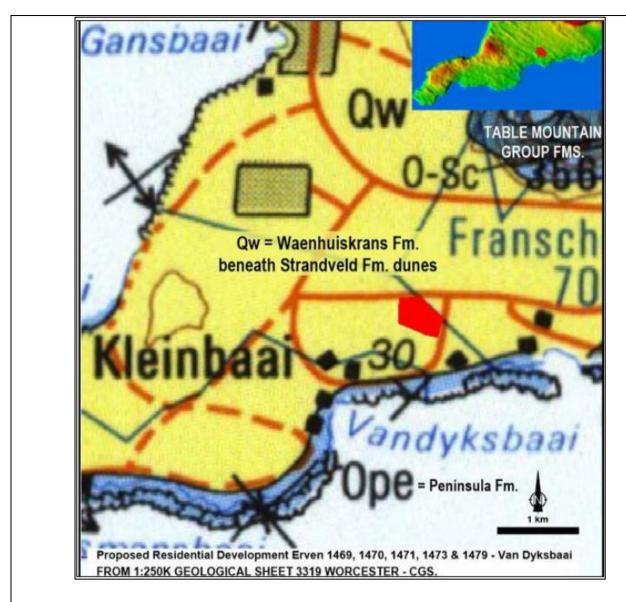


Figure 17: Geological context of the proposed development at Van Dyksbaai.



Figure 18: Palaeontological sensitivities of formations in the Van Dyksbaai area.



Figure 19: Existing structure in the study area.

7. Historical and Cultural Aspects

Explain whether there are any culturally or historically significant elements as defined in Section 2 of the NHRA that will be affected and how has this influenced the proposed development.

There are no cultural or historically significant elements as defined in section 2 of the NHRA.

8. Socio/Economic Aspects

8.1. Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.

Social Characteristics

The community around Van Dyksbaai and Gansbaai is diverse and shaped by its coastal location and historical roots as a fishing village. As of the 2011 census, Gansbaai had a population of approximately 11 598 people, and this diversity likely extends to nearby areas like Van Dyksbaai. The population breakdown showed 45% identifying as Black African, 30% as Coloured, and 24% as White, with linguistic diversity reflecting this mix: 53% spoke Afrikaans, 40% Xhosa, and 3% English as their first languages. This suggests a multilingual, multicultural community with a blend of cultural influences.

Socially, the area is characterized by a tight-knit, working-class ethos tied to its fishing heritage, though it has evolved with the growth of tourism. Suburbs like Van Dyksbaai, De Kelders, and Kleinbaai (all part of the broader Gansbaai area) include residential zones with a mix of permanent residents and holiday homeowners, reflecting a seasonal fluctuation in population. The presence of three public primary schools and a high school indicates a community with families and a focus on education, though resources may be modest given the rural coastal setting. Communities like Masakhane Township (predominantly Black African) and Blompark (predominantly Coloured) near Gansbaai highlight socioeconomic stratification, with some areas facing challenges like limited infrastructure compared to wealthier, tourism-driven zones.

The social fabric is also influenced by tourism-related activities, such as shark cage diving and whale watching, which attract both local and international visitors. This has fostered a community that is increasingly outward-looking and service-oriented, though tensions may exist between traditional fishing lifestyles and the newer tourism economy. Initiatives like the African Penguin and Seabird Sanctuary and conservation efforts (e.g., Reforest Fest in Platbos Forest) suggest a growing environmental awareness, potentially bridging diverse community segments through shared ecological goals.

Economic Characteristics

Economically, the Gansbaai area, including Van Dyksbaai, is a blend of traditional and modern influences. Historically, the economy was anchored by fishing, with a cooperative established in the mid-20th century that remains a key employer, including a significant fish meal factory and canning operation. This industry continues to provide jobs, particularly for lower-skilled workers, and supports a local supply chain of fishmongers and restaurants.

However, tourism has become a dominant economic driver since the 1990s, particularly due to Gansbaai's reputation as the "Great White Shark Capital of the World." Activities like shark cage diving, whale watching, and eco-tours (e.g., Marine Dynamics' offerings) draw thousands of visitors annually, making it one of South Africa's top tourism draws after Kruger National Park. This shift has spurred growth in hospitality, with accommodation options ranging from luxury lodges (e.g., Grootbos Private Nature Reserve) to self-catering homes and B&Bs, many of which are likely present in or

near Van Dyksbaai given its coastal appeal. Local restaurants cater to tourists with diverse offerings, from fine dining to casual seafood eateries, boosting small business activity.

Despite this, economic benefits are unevenly distributed. Studies suggest that while tourism contributes significantly to the regional economy (e.g., 8.6% to South Africa's GDP nationally, with local impacts likely higher in Gansbaai), much of the spending occurs outside the immediate area, as 82% of shark cage diving visitors are day-trippers staying in Cape Town or other nearby hubs. Only 18% stay overnight in Gansbaai, limiting local revenue retention. The majority of tourism-related jobs such as guiding, hospitality, and retail—are low-skill and seasonal, aligning with the area's labour force, where most shark cage diving participants surveyed earned R40,001–R50,000 monthly and held full-time employment elsewhere.

Van Dyksbaai itself, being a smaller enclave, likely relies on Gansbaai's economic ecosystem, with residents possibly commuting to central Gansbaai for work or running small-scale tourism ventures (e.g., holiday rentals). The area's proximity to nature reserves and beaches supports a leisure-based economy, but poverty and unemployment remain challenges, particularly in township areas like Masakhane, where access to tourism wealth is limited. Conservation and community projects, such as those by Marine Dynamics and Greenpop, aim to create sustainable livelihoods, though their scale is modest compared to the broader tourism and fishing sectors.

8.2. Explain the socio-economic value/contribution of the proposed development.

The proposed development offers several positive socio-economic benefits for Van Dyksbaai and the broader Overstrand region, contributing to economic growth, community upliftment, and environmental stewardship.

Job Creation and Economic Stimulation

Construction Phase Employment:

The development will generate numerous job opportunities during the construction phase. These will include roles for architects, engineers, construction workers, landscapers, and various subcontractors. The employment opportunities will provide a vital boost to the local economy, as wages earned will circulate within the community, supporting households and local businesses. Additionally, the demand for construction materials and services will benefit suppliers and contractors within the Overstrand region.

Long-term Employment Opportunities:

Beyond construction, the ongoing management, maintenance, and security of the residential development will create sustained employment opportunities, supporting local livelihoods over the long term.

Housing and Community Development

Improved Living Standards:

The development aims to provide a well-designed and sustainable residential environment that enhances the quality of life for current and future residents. Features such as thoughtfully planned green spaces, recreational areas, and sustainable energy initiatives will promote healthier lifestyles and foster a sense of community. This will also help to address housing demand by offering a mix of smaller, more affordable residential units alongside standard-sized properties, thereby increasing access to housing within Van Dyksbaai.

Social Integration and Cohesion:

By creating inclusive communal spaces and promoting neighbourly interaction, the development can strengthen social cohesion and contribute to a safer, more connected community.

Environmental Benefits

Conservation and Biodiversity:

The development incorporates measures to protect and integrate the existing fauna and natural veld within the design. This approach supports the preservation of local biodiversity and natural habitats, ensuring that the ecological integrity of Van Dyksbaai is maintained alongside urban growth.

Environmentally sensitive planning reduces the ecological footprint of the development and aligns with national environmental regulations.

Support for Local Businesses and Economic Diversification

Local Procurement and Economic Support:

During both the construction and operational phases, the project will prioritise sourcing materials and services from local businesses wherever possible. This strategy will stimulate local commerce, support business growth and encouraging entrepreneurship within the Overstrand region. The development is expected to diversify the local economy by attracting new residents and increasing demand for goods and services.

Tourism and Service Industry Boost:

Given Van Dyksbaai coastal location and appeal, residential growth may also have positive spin-offs for the local tourism and service industries, as increased population can support restaurants, shops, and recreational services.

8.3. Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.

N/A

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

The proposed residential development is not anticipated to have any negative impact on the safety, health, or wellbeing of the surrounding community. On the contrary, the proposal has the potential to contribute positively to the broader Van Dyksbaai area through a number of indirect and long-term benefits.

The introduction of a well-designed and managed residential environment can enhance neighbourhood safety through increased passive surveillance, improved lighting, and the presence of a more active and stable community. A greater residential presence typically fosters a sense of ownership and care for the area, which may deter unlawful activities and contribute to a safer public realm.

In terms of public health and wellbeing, the development incorporates green spaces and areas for recreation, which can promote physical activity and social interaction among residents. These elements contribute to a healthier lifestyle and improve the overall quality of life for both new residents and those in the surrounding community.

Furthermore, by increasing the local population, the development has the potential to stimulate future growth and service provision in the area. A larger population base can justify the expansion of infrastructure and public amenities, such as healthcare and education, which benefits the wider community in the long term.

In summary, the proposed development is likely to support, not compromise, the safety, health, and wellbeing of the local population and may serve as a catalyst for future community upliftment and investment.

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.

The proposed residential development is located on Erven 1469, 1470, 1471, 1473, and 1479 in Van Dyksbaai, within the Overstrand Local Municipality, Western Cape. These five properties collectively cover an area of approximately 107,771.3 m² (10.78 hectares). Currently, all erven are zoned as Agricultural Zone I but fall within the designated urban edge, rendering the site suitable for urban infill development in accordance with the Overstrand Spatial Development Framework (SDF) and broader municipal planning policies. Under the preferred Alternative 3, the development footprint has been confined to approximately 8.2 hectares, allowing for the preservation of high ecological sensitivity areas.

To facilitate the proposed land use, the properties will undergo consolidation, rezoning, and subdivision to establish 123 residential erven, along with supporting internal access roads, stormwater infrastructure, and service networks. The layout has been strategically designed to minimise environmental impacts, particularly by avoiding mapped Critical Biodiversity Areas (CBA1) and retaining a dedicated 2.7-ha open space area to ensure ecological connectivity. This integrated approach not only supports environmental sustainability but also provides socio-economic benefits through improved housing supply, local employment opportunities during construction, and infrastructure investment aligned with long-term spatial development goals for the Van Dyksbaai area.

Key Development Components

Residential Erven

A total of approximately 67,200 m² (6.72 ha) will be allocated for residential erven.

Proposed Access Roads

5 internal roadways will provide access to all erven and will connect to the existing road network. Road design will adhere to municipal engineering standards to ensure safety and serviceability.

The rads will have a minimum width of 8m.

Open Space Provision

Approximately 26,665 m² (2.7 ha) has been reserved for public open space. These areas will remain undeveloped and are intended to retain natural character and support ecological functions.

Associated Infrastructure

Electricity

The proposed development of the subject properties will include connection to the existing Overstrand Municipality's (OM) networks. The implementation of the development is however not expected to have any negative impact on the current service levels in the area.

Water and Sewage

The proposed development will connect to the existing water and sewage networks provided by the Overstrand Municipality. Property owners will be required to pay a bulk services contribution to the municipality, which will be used to fund necessary upgrades to the surrounding bulk infrastructure:

- → It is therefore proposed that link services item OGW3.3 (730 m x 160 mm Ø New supply pipe) is constructed along the entire eastern and northern boundary of the proposed development, refer to **Figure 1d &1e** for illustration.
- → Kleinbaai is currently not serviced by a formal sewer reticulation system, except for 3 small areas in Kleinbaai which gravitate to conservancy tanks. It is proposed that the internal sewer system for the proposed development area gravitates towards one of these drainage areas located to the south of the development, i.e. the "Kleinbaai Conservancy Tank no. K3" drainage area.
 - There is sufficient capacity in the sewer reticulation system if the Conservancy Tank no. K3 drainage area to accommodate the proposed development.
 - o 110 m x 160 mm Ø New outfall sewer link services item will, however, be required to connect the internal reticulation network of the proposed development to the existing sewer system, see **Figure 1f**.

To verify the availability of sufficient water and sewage capacity, refer to the GLS Report attached in **Appendix G7**. These upgrades will be implemented and financed through the abovementioned bulk services contributions.

Solid waste

The proposed development will include designated refuse areas that comply with Section 17.4 of the OMLUS.

Waste Collection Process:

Each dwelling house will store its solid waste on-site and place it in the designated refuse area on collection days for municipal refuse removal.

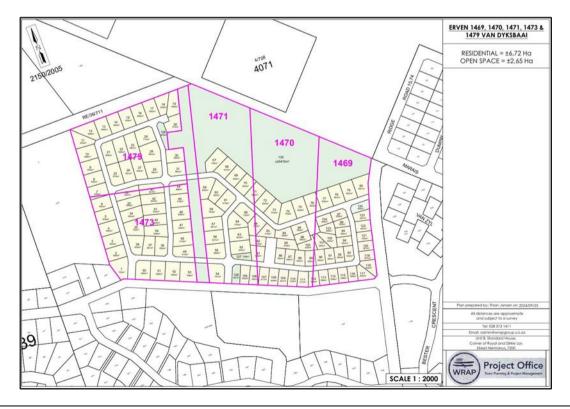


Figure 20: Preferred Site development plan.

Provide a description of any other property and site alternatives investigated.

No other properties or site alternatives were investigated as part of this proposal. The development is confined to Erf 1469, Erf 1470, Erf 1471, Erf 1473, and Erf 1479 within Van Dyksbaai, which collectively form the preferred and only site considered.

Provide a motivation for the preferred property and site alternative including the outcome of the site selectin matrix.

The proposed development is to take place on Erf 1469, Erf 1470, Erf 1471, Erf 1473, and Erf 1479 in Van Dyksbaai, which collectively form the preferred and only site considered for the establishment of a residential development. These properties are owned by the applicant, which significantly strengthens the feasibility and practicality of the proposed development and are located within the demarcated urban edge flagged for residential development.

The primary motivation for selecting these properties lies in their strategic location, situated adjacent to established residential erven to the east and south of the subject area. This positioning enables logical urban infill and promotes spatial integration with the existing built environment, rather than contributing to urban sprawl. The site lies within the urban edge of the Overstrand Municipality and will be established along the existing municipal infrastructure and services.

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

A thorough and iterative planning process was undertaken to evaluate development alternatives and identify a layout that balances environmental protection with spatial development needs. Three design layouts were considered for the proposed residential development, namely Option A (Alternative 1), Option B (Alternative 2), and Option C (Alternative 3). These alternatives were informed by specialist input, site constraints, biodiversity sensitivity mapping, and municipal spatial planning frameworks.

Option A (Alternative 1) proposed the highest development yield, with approximately 152 residential erven and a total development footprint of ±9.6 ha. However, this option significantly encroaches on environmentally sensitive areas, including the mapped Critical Biodiversity Areas (CBA1) and Ecological Support Areas (ESA1) (2017). Similarly, Option B (Alternative 2) proposed 151 erven over a footprint of ±10.2 ha, with even greater impact on intact Overberg Dune Strandveld vegetation and ecological corridors. Both options posed high residual impacts on biodiversity, would have required offset measures, and failed to adequately respond to specialist recommendations or ecological constraints on site.

In contrast, Option C (Alternative 3) was developed in direct response to the findings of the Terrestrial Biodiversity Assessment, spatial sensitivity constraints, and site-specific ecological data. This option sees the reduction of the development footprint to ± 8.2 ha, with approximately 123 erven proposed, and a 2.7 ha open space area within the CBA1, thereby maintaining ecological connectivity and avoiding irreversible loss of high-priority biodiversity features. Option C concentrates development in already degraded, near-intact, or alien-invaded portions of the site while preserving sensitive Overberg Dune Strandveld and facilitating compliance with national and provincial biodiversity conservation guidelines.

The preferred layout, Option C (Alternative 3), represents the Best Practicable Environmental Option (BPEO). It avoids development in the mapped CBA1, reduces direct and cumulative ecological impacts, and aligns with the Western Cape Biodiversity Spatial Plan (WCBSP 2017), Overstrand Spatial Development Framework (SDF), and recommendations from the appointed ecological and heritage specialists. It also ensures that the proposed open space erven are retained in perpetuity as no-go areas for development, supporting both biodiversity conservation and sustainable land use planning.

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

No alternative properties or locations were considered for the proposed residential development, and the assessment focused solely on layout alternatives within the identified site.

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

Option A (Alternative 1)

Positive Impacts:

- → Slightly smaller ecological footprint than Option B.
- → Avoids the most degraded portion of the site (Acacia Woodland), which has lower ecological value.

Negative Impacts:

- → Loss of ±9.6 ha of Overberg Dune Strandveld, an Endangered ecosystem.
- → Development footprint overlaps with Critical Biodiversity Area (CBA), Ecological Support Areas (ESA), and Other Natural Areas (ONA).
- → High residual impact on faunal and plant Species of Conservation Concern (SCC).
- ightarrow Habitat fragmentation and disruption of ecosystem processes.
- → Would likely require a biodiversity offset due to residual medium significance impacts.

Option B (Alternative 2)

Positive Impacts:

→ Reduces pressure slightly on some ESA portions due to revised layout (though not significantly better than Option A).

Negative Impacts:

- → Largest footprint: loss of ±10.2 ha of Overberg Dune Strandveld (0.03% of the remaining extent).
- → Overlaps with high-sensitivity areas including CBA1, further increasing habitat loss.
- → Significant impact on the Walker Bay Key Biodiversity Area (KBA) and connectivity of ecological corridors.
- → Like Option A, would require biodiversity offset due to six residual medium significance impacts post-mitigation.

Option C (Alternative 3 - Preferred)

Positive Impacts:

- ightarrow Lowest overall environmental impact of the three alternatives.
- → Avoids development within the CBA1 area by setting aside ±2.7 ha as open space.
- → Maintains ecological connectivity and supports species movement corridors.
- → No biodiversity offset required if open space is protected and maintained.
- → Enables a balanced trade-off between development and conservation objectives.

Negative Impacts:

- \rightarrow Will still result in the loss of ± 8.2 ha of Overberg Dune Strandveld (0.02% of the remaining extent).
- → Some residual impacts on plant and faunal SCC remain (though lower in significance).

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

Provide a description of the preferred activity alternative.

No preferred activity alternatives exist.

Provide a description of any other activity alternatives investigated.

No other activity alternatives have been investigated or proposed by this application other than the construction of the single residential development.

Provide a motivation for the preferred activity alternative.

The activity involves the construction of the development

Provide a detailed motivation if no activity alternatives exist.

N/A

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

N/A

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.

Alternative 3 (Option C)

This Alternative design option incorporates the construction of 123 residential development erven, 5 private roads as well as the 5 open space erven which will be set aside for conservation and will remain undeveloped. This option utilises the approximately 8.2 ha of areas mapped as Other Natural Areas (ONA) as well as the Ecological Support Areas (ESA1) for the development footprint and therefore, excluding the 2.7 ha Critical Biodiversity Area (CBA) mapped in the northern portion of the proposed subject site.

The WCBSP Handbook and Guidelines, (2023) identify ONAs as areas that have not been identified as a priority in the current systematic biodiversity plan but retain much of their natural character and perform a range of biodiversity and ecological infrastructure functions. It is further stated that development in these areas should minimise habitat and species loss and ensure ecosystem functionality through strategic landscape planning. On the other hand the ESA 1 and ESA 2, are identified as areas that should be maintained in a functional, near-natural state, and that development should minimise impact on ecological infrastructure functioning and further alludes that some habitat loss is acceptable provided that the underling biodiversity objectives and ecological functioning are not compromised.

<u>Preference of Option C (Alternative 3)</u>

The WCBSP (2017) was utilised in the assessment of the proposed development and evolution of the preferred design layout (Option C/Alternative 3), this was undertaken prior to the adoption of WCBSP (2023) in December 2024.

The proposal, under Option C (Alternative 3) will result to approximately 8.2 ha loss of natural, near-intact, degraded Overberg Dune Strandveld vegetation in ONA and ESA areas to accommodate the proposed development. This also ensures that the area of approximately 2.7 ha which is mapped as CBA is excluded from the development and will be designated as open space.

The vegetation type in the area is classified as an Endangered Ecosystem, and the project is situated within the urban edge, and has already been impacted by habitat fragmentation, alien vegetation, and is surrounded by networks off roads, with existing development situated to the east, west and south if the project site. The Terrestrial Biodiversity Impact Assessment highlights that this alternative option will result into lowest overall loss of the Overberg Dune Strandveld, now referred to as Southwestern Strandveld vegetation type, under the South African Vegetation Mapping (2024). Additionally, the overall impact assessment for the loss of vegetation and animal species identified twelve (12) impacts for the project site, with Option C (Alternative 3) having three (3) impacts classified as HIGH, four (4) impacts classified as MEDIUM, as well as five (5) impacts classified as LOW.

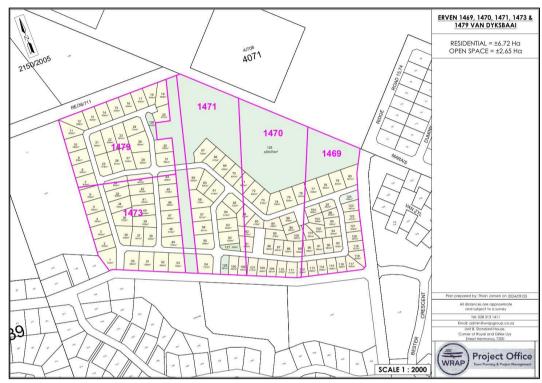


Figure 21: Preferred design layout alternative (Option C: Alternative 3).

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

Alternative 1 (Option A)

Alternative 1 represents the initial design layout proposed for the residential development. This alternative consists of approximately 152 erven, 5 private roads, and an open space resulting in a total development footprint of approximately 9.6 hectares.

This layout would result in the loss of approximately 9.6 ha of Overberg Dune Strandveld, an Endangered vegetation type, across areas identified as Other Natural Areas (ONA), Ecological Support Areas (ESA), and Critical Biodiversity Areas (CBA). Unlike the preferred layout (Option C), Alternative 1 does not prioritise the conservation of the CBA in the northern portion of the site. Instead, it places erven directly within this sensitive area, with only small fragmented open spaces retained in less sensitive ONA and ESA areas.

Due to the direct encroachment into the CBA, this layout poses a high residual impact on biodiversity, contributes to habitat fragmentation, and compromises ecological connectivity. It also conflicts with the objectives of the Western Cape Biodiversity Spatial Plan (WCBSP), which prioritises the avoidance of transformation within CBA areas. As a result, this

alternative is not supported from a biodiversity conservation perspective and would likely require a biodiversity offset if pursued.

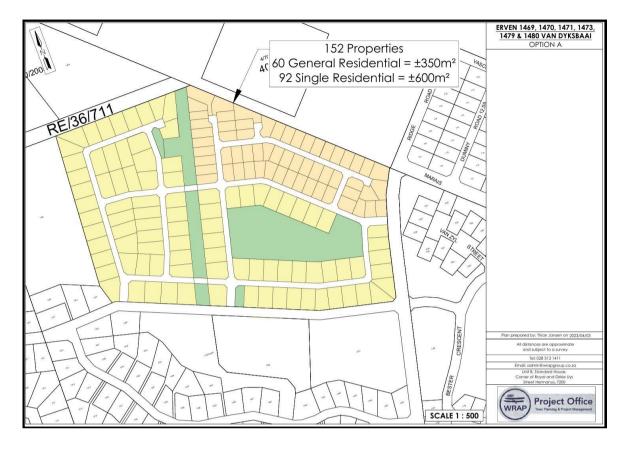


Figure 22: Design layout alternative (Option A; Alternative 1).

Alternative 2 (Option B)

Alternative 2 involves a slightly revised design consisting of 151 residential erven, also including both General Residential and Single Residential units. While this option reduces the number of erven by one compared to Alternative 1, it actually results in a larger development footprint and a greater ecological impact.

This layout will lead to the transformation of approximately 10.2 ha of Overberg Dune Strandveld, representing the largest extent of habitat loss among the three options assessed. The development footprint once again includes construction on large portions of the CBA, along with ESA and ONA areas. As with Alternative 1, the open space is situated within areas mapped as ONA does not provide meaningful conservation value or connectivity.

Alternative 2 performs worse than Option A in terms of vegetation loss and biodiversity impact. It affects the Walker Bay Key Biodiversity Area (KBA) and results in greater disruption of ecological processes. The high residual impacts and misalignment with the WCBSP make this alternative undesirable from both an environmental and planning standpoint.

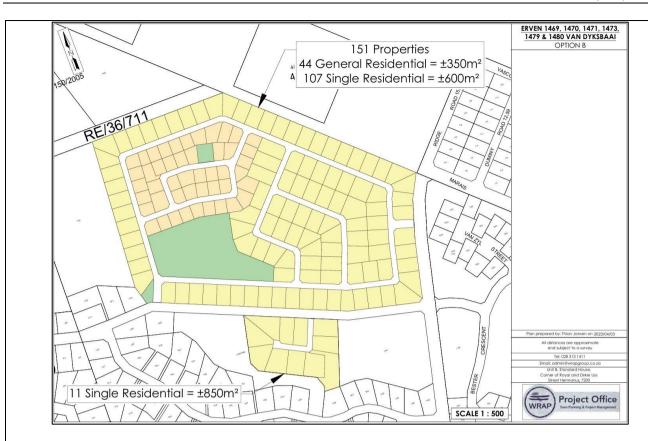


Figure 23: Design layout alternative (Option B; Alternative 2).

Provide a motivation for the preferred design or layout alternative.

The preferred design layout alternative (Option C; Alternative 3) has been selected based on its ability to achieve a balanced integration between development objectives and environmental protection priorities. This alternative positions the development footprint primarily in areas mapped as Other Natural Areas (ONA) and Ecological Support Areas (ESA1), while excluding the Critical Biodiversity Area (CBA1) located in the northern portion of the site.

Unlike Alternative 1 (Option A) and Alternative 2 (Option B), which propose development within the mapped CBA and incorporate fragmented open spaces within ONA and ESA areas, Option C prioritises the ecological integrity of the CBA by designating it as a conservation open space. This layout ensures the protection of approximately 2.7 ha of near-natural CBA vegetation, which will remain undeveloped and function as a biodiversity refuge and ecological corridor.

The proposed development under Option C will result in the loss of approximately 8.2 ha of Overberg Dune Strandveld, now referred to as Southwestern Strandveld under the (South African Vegetation Map, 2024). This transformation is limited to ONA and ESA1 areas, where some habitat loss is considered acceptable, provided that underlying biodiversity objectives are not compromised. The Western Cape Biodiversity Spatial Plan (WCBSP, 2023) supports limited development within ESA1 and ONA areas, with the necessary mitigation and retention of ecological functionality.

Provide a	detailed	motivation	if no	design	or lay	OLIT	alternatives	exist
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N/A

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

Alternative 1 (Option A)

Positive impacts

→ The layout alternative entails the construction of higher number of residential erven, approximately 152 erven to accommodate the projected population growth in the Overstrand Municipality.

Negative impact

- → The layout alternative entails the construction of large number of residential which will result in the loss of approximately 9.6 ha of Overberg Dune Strandveld, representing a loss of 0.02% of the total remaining extent of this vegetation type.
- → The clearance of vegetation for the construction of the proposed development will result in the loss of some individuals of plants species of conservation concern.
- → The proposed residential development will result into fragmentation of the project site, causing a reduction in the gene pool and a decrease in species richness and diversity, due to higher development footprint.
- → There are currently 11 alien plant species within the project area, therefore disturbance of the vegetation on site, if not managed will contribute to spread of alien invasive species.

Alternative 2 (Option B)

Positive impacts

→ The layout alternative entails the construction of higher number of residential erven, approximately 151 erven to accommodate the projected population growth in the Overstrand Municipality.

Negative impacts

- → The layout alternative entails the construction of large number of residential which will result in higher vegetation loss of approximately 10.2 ha of Overberg Dune Strandveld, representing a loss of 0.03% of the total remaining extent of this vegetation type.
- → The clearance of vegetation for the construction of the proposed development will result in the loss of some individuals of plants species of conservation concern.
- → The proposed residential development will result into fragmentation of the project site, causing a reduction in the gene pool and a decrease in species richness and diversity, due to higher development footprint.
- → There are currently 11 alien plant species within the project area, therefore disturbance of the vegetation on site, if not managed will contribute to spread of alien invasive species

Alternative 3 (Option C)

Positive impacts

- → The layout incorporates an open space in the area mapped as CBA, resulting to no further loss of habitat in this area.
- → The development footprint is reduced to approximately 123 residential erven resulting to lower impacts compared to the aforementioned design layout options.

Negative impacts

- → The clearance of vegetation for the construction of the proposed development will result in the loss of 8.2 ha of indigenous vegetation, however, the extent of the ecological impact is significantly lower.
- → The proposed residential development will result into fragmentation of the project site, causing a reduction in the gene pool and a decrease in species richness and diversity, due to higher development footprint.
- → There are currently 11 alien plant species within the project area, therefore disturbance of the vegetation on site, if not managed will contribute to spread of alien invasive species.
- 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:

No technology alternatives preferred for the proposal.

Provide a description of any other technology alternatives investigated.

N/A

Provide a motivation for the preferred technology alternative.

N/A

Provide a detailed motivation if no alternatives exist.

The project site preferred for the development is located within the urban edge, near established service infrastructure which will allow the development to be connected to the municipal available service infrastructure in the vicinity.

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

N/A

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

Provide a description of the preferred operational alternative.

N/A

Provide a description of any other operational alternatives investigated.

N/A

Provide a motivation for the preferred operational alternative.

N/A

Provide a detailed motivation if no alternatives exist.

The proposed development as concerned, involves the construction of the residential development that will be situated within the demarcated urban edge of the Overstrand Municipality. No operational alternatives exist, as the development relates to the establishment of the residential development which will located adjacent to the exiting residential development in the area.

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

No operational alternatives exist.

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 maintains status quo of the site and entails no development. The primary intent of the project is to establish residential erven within the designated urban edge of the Overstrand Municipality to accommodate the projected population growth in the Overberg region. The region is experiencing or anticipating an increase in population, which necessitates additional housing to meet the demand for residential accommodation. The 'No-Go' Option would maintain the current state of the site, leaving it undeveloped and failing to provide the necessary infrastructure to support this growth. This could exacerbate housing shortages, increase pressure on existing residential areas, and hinder the municipality's ability to plan for sustainable urban expansion.

1.7. Provide and explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist.

As part of the environmental planning process, three design layout alternatives were investigated to assess the potential for avoiding, minimising, or mitigating negative environmental impacts, as well as enhancing positive outcomes. These alternatives included:

- → Alternative 1 (Option A)
- → Alternative 2 (Option B)
- → Alternative 3 (Option C): Preferred

Both Alternative 1 and Alternative 2 present larger development footprints ±9.6 ha and ±10.6 ha, respectively which extend into areas mapped as Critical Biodiversity Area (CBA), Ecological Support Area (ESA), and Other Natural Area (ONA). Despite potential on-site mitigation, these layouts would result in the direct transformation of highly sensitive vegetation types, particularly the Overberg Dune Strandveld, an Endangered ecosystem.

The Terrestrial Biodiversity Impact Assessment determined that Alternatives 1 and 2 would lead to medium residual impacts, even after mitigation, particularly due to the loss of CBA area and fragmentation of faunal and floral habitat. These negative impacts cannot be fully avoided or feasibly offset, primarily due to the irreversibility of habitat transformation within high conservation priority areas.

By contrast, the preferred layout (Alternative 3 / Option C) demonstrates a measurable reduction in environmental impact. This option:

- → Limits the development footprint to approximately 6.72 ha;
- → Confines development to areas mapped as ONA and ESA, where habitat loss may be tolerated under specific conditions;
- → Avoids all development within the CBA, which is set aside as a 2.7 ha open space to retain ecological functionality and serve as a no-go conservation area.

Through this design approach, Alternative 3 effectively avoids irreversible impacts on biodiversity priority areas and reduces residual impacts to low significance, thus eliminating the need for a biodiversity offset, as confirmed by the Terrestrial Biodiversity Specialist.

In summary, the consideration and comparison of three feasible layout alternatives has ensured that reasonable efforts to avoid and minimise negative impacts were undertaken. Option C presents the only reasonable and feasible alternative that successfully meets the development's objectives while preserving the site's ecological integrity, aligning with the mitigation hierarchy, and ensuring long-term sustainability of both the development and the surrounding environment.

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

The preferred location and the layout design alternative prioritise undeveloped parcel of land situated within the demarcated urban edge of the Overstrand Municipality for the establishment of new residential area. The selected site is strategically positioned adjacent to established infrastructure services, facilitating efficient service delivery and minimising the need for extensive new infrastructure. This preferred location and layout design effectively balance the need for residential growth while maintaining environmental and spatial planning objectives.

The preferred alternative is Alternative 3 (Option C), reflects a more defined layout design aimed at minimising environmental impacts while achieving the objectives of the proposed development. This alternative has taken the consideration of the CBA that is mapped on the northern portion of the project site by incorporating an open space in this area to preserve ecological integrity and promote sustainable land use.

2. "No-Go" areas

Explain what "no-go" area(s) have been identified during identification of the alternatives and provide the co-ordinates of the "no-go" area(s).

The area mapped as a Critical Biodiversity Area (CBA) within the northern portion of the project site has been identified as a No-go area. This designation means that no development or construction activities will be permitted within this zone to protect its ecological value and maintain biodiversity integrity.

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.

An impact is any change to a resource or receptor brought about by a project component or through the execution of a project related activity. The evaluation of baseline data provides information for the process of evaluating and describing how the project could affect the biophysical and socio-economic environment.

Impact is described according to their nature or type, as follows:

Nature/ Type

Nature/ Type of impact	Definition
Positive	
	An impact that is considered to represent an improvement on the baseline or introduces a positive change.

Negative	An impact that is considered to represent an adverse change from the baseline, or introduces a new undesirable factor.
Direct	Impacts that result from a direct interaction between a planned project activity and the receiving environment/receptors (e.g. between occupation of a site and the pre-existing habitats or between an effluent discharge and receiving water quality).
Indirect	Impacts that result from other activities that are encouraged to happen as a consequence of the Project (e.g. in-migration for employment placing a demand on resources).
Cumulative	Impacts that act together with other impacts (including those from concurrent or planned future third-party activities) to affect the same resources and/or receptors as the Project.

Significance

Impacts are described in terms of significance. Significance is a function of the magnitude of the impact and the likelihood of the impact occurring:

Impact Magnitude	
	On site – impacts that are limited to the boundaries of the development site.
	Local – impacts that affect an area in a radius of 20 km around the Development site.
	Regional – impacts that affect regionally important environmental resources or are
Extent	experienced at a regional scale as determined by administrative boundaries, habitat
	type/ecosystem.
	National – impacts that affect nationally important environmental resources or affect an
	area that is nationally important/ or have macro-economic consequences
	Temporary – impacts are predicted to be of short duration and intermittent/occasional.
	Short-term – impacts that are predicted to last only for the duration of the construction
	period.
	Long-term – impacts that will continue for the life of the Project but ceases when the
	project stops operating
	Permanent – impacts that cause a permanent change in the affected receptor or resource
Duration	(e.g. removal or destruction of ecological habitat) that endures substantially beyond the
Burution	project lifetime
	BIOPHYSICAL ENVIRONMENT
	Negligible – the impact on the environment is not detectable.
	Low – the impact affects the environment in such a way that natural functions and
	processes are not affected.
	Medium – where the affected environment is altered but natural functions and processes
	continue, albeit in a modified way.
	High – where natural functions or processes are altered to the extent that they will
	temporarily or permanently cease
	SOCIO-ECONOMIC
	Negligible – there is no perceptible change to people's livelihood
Laka a site .	Low - people/communities are able to adapt with relative ease and maintain pre-impact
Intensity	livelihoods
	Medium – people/communities are able to adapt with some difficulty and maintain pre-
	impact livelihoods but only with a degree of support
	High - affected people/communities will not be able to adapt to changes or continue to
	maintain pre-impact livelihoods.
<u> </u>	

Likelihood- the likelihood that an impact will occur

Likelihood	
Unlikely	The impact is unlikely to occur
Likely	The impact is likely to occur under the most conditions.
Definite	The impact will occur

Once an assessment is made of the magnitude and the likelihood, the impact significance is rated through a matrix process:

Significance				
Magnitude		Unlikely	Likely	Definite
	Negligence	Negligible	Negligible	Minor
nitu	Low	Negligible	Minor	Minor
ıde	Medium	Minor	Moderate	Moderate
	High	Moderate	Major	Major

Definition of significance:

Negligible	An impact of negligible significance (or an insignificant impact) is where a resource or receptor (including people) will not be affected in any way by a particular activity, or the predicted effect is deemed to be 'negligible'.
Minor	An impact of minor significance is one where an effect will be experienced, but the impact magnitude is small (with and without mitigation) and within accepted standards, and/or the receptor is of low sensitivity/value.
Moderate	An impact of moderate significance is one within accepted limits and standards. The emphasis for moderate impacts is on demonstrating that the impact has been reduced to a level that is as low as reasonably practicable. This does not necessarily mean that 'moderate' impacts have to be reduced to 'minor' impacts, but that moderate impacts are managed effectively and efficiently.
Major	An impact of major significance is one where an accepted limit or standard may be exceeded, or large magnitude impacts occur to highly valued / sensitive resource / receptors. A goal of the EIA process is to get to a position where the Project does not have any major residual impacts.

Significance of an impact is then qualified through a statement of the degree of confidence. Degree of confidence is expressed as low, medium or high.

Significance colour scale (if applicable):

Negative	Positive
Negligible	Negligible
Minor	Minor
Moderate	Moderate
Major	Major

Negative	Positive	
Negligible	Negligible	
Low	Low	
Medium	Medium	
High	High	

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.

PLANNING, DESIGN AND DEVELOPMENT STAGE						
Potential impact & risk:	IMPACT 1: LOSS OF OVERBERG DUNE STRANDVELD (EN)					
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go		
Alternative	Option A will result in the loss of approximately 7.13 ha (0.0713 km²) of Overberg Dune Strandveld, representing a loss of 0.02% of the total remaining extent of this vegetation type	Option B will result in the loss of 10.6 ha (0.106 km²) of Overberg Dune Strandveld, representing a loss of 0.03% of the total remaining extent of this vegetation type.	Option C will result in the loss of 6.12 ha (0.0612 km²) of Overberg Dune Strandveld, representing a loss of 0.02% of the total remaining extent of this vegetation type. However, this alternative does allow for 2.7 ha of open space which maintains ecological connectivity with the natural, intact Overberg Dune Strandveld to the north.	The Overberg Dune Strandveld of the project area has already been impacted by fragmentation, alien invasive species, and is surrounded by a network of roads. Approximately 2.7 ha of Overberg Dune Strandveld has been modified due to the infestation of alien plant species and a further 2.6 ha has been modified due to the creation of fire breaks.		
Nature of impact:	Direct Negative	Direct Negative	Direct Negative	Negative		
Extent and duration of impact:	On site & Permanent	On site & Permanent	On site & Permanent	On site & Long Term		
Consequence of impact or risk:	Medium	Medium	Low	Low		
Probability of occurrence:	Definite	Definite	Definite	Definite		
Degree to which the impact may cause irreplaceable loss of resources:	Marginal Loss	Marginal Loss	Marginal Loss	Marginal Loss		
Degree to which the impact can be reversed:	Irreversible	Irreversible	Irreversible	Partly Reversible		

Indirect impacts:	Loss of habitat for plant SCC Loss of habitat for faunal species	Loss of habitat for plant SCC Loss of habitat for faunal species	Loss of habitat for plant SCC Loss of habitat for faunal species	Loss of habitat for plant SCC Loss of habitat for faunal species.
Cumulative impact prior to mitigation:	Low	Low	Low	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Low	Low
Degree to which the impact can be avoided:	Low	Low	Low	N/A
Degree to which the impact can be managed:	Low	Low	Low	
Degree to which the impact can be mitigated:	Low	Low	Low	
Proposed mitigation:	 → Topsoil (20 cm, where possible) must I rehabilitate impacted areas that are n → Only indigenous species must be used → Lay down areas must be located within to the north of the site. → Employees must be prohibited from m → The site must be checked regularly for action must be taken to remove them → Employees must be prohibited from c regular basis to ensure that no unlawf → If Option C (preferred Alternative) is a 	the project footprint and must not encroach in naking open fires during the construction phas the presence of alien invasive species. When a	erable) and medium sensitivity and used to e (e.g. laydown areas). Into the surrounding vegetation, particularly e to prevent uncontrolled run-away fires. Elien invasive species are found, immediate checks of pockets and bags are done on a edveld within the Open Space Area must be	
Residual impacts:	Medium	Medium	Low	

Cumulative impact post mitigation:	Medium	Medium	Low		
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Low		
Potential impact and risk:	IMPACT 2: LOSS OF PLANT SCC				
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go	
Alternative	Cynanchum zeyheri, and Athanasia quinqu	C were recorded including three (3) Vulnerab edentata subsp. rigens), and one Near Threate on of the proposed development will result in the	ened (NT) species (Asparagus lignosus). The	Under the no-go alternative, there will be no loss of plant Species of Conservation Concern (SCC), unless the firebreaks are widened.	
Nature of impact:	Direct Negative	Direct Negative	Direct Negative	N/A	
Extent and duration of impact:	On site & Permanent	On site & Permanent	On site & Permanent	N/A	
Consequence of impact or risk:	High	High	High	N/A	
Probability of occurrence:	Definite	Definite	Definite	N/A	
Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss	Marginal loss	Marginal loss	N/A	
Degree to which the impact can be reversed:	Reversible	Reversible	Reversible	N/A	
Indirect impacts:	Reduction in gene pool.			N/A	

Cumulative impact prior to mitigation:	HIGH	HIGH	HIGH	N/A	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	HIGH	HIGH	HIGH	N/A	
Degree to which the impact can be avoided:	Low	Low	Low	N/A	
Degree to which the impact can be managed:	Moderate	Moderate	Moderate		
Degree to which the impact can be mitigated:	Moderate	Moderate	Moderate		
Proposed mitigation:	 → Mitigation measures listed under Impact 1 above must be implemented. → Where populations of these species can't be avoided, a translocation plan to move these species must be implemented. This plan must identify the number of individuals that will be impacted and identify a suitable receiving environment where they can be moved. Included in this plan, must be a monitoring program to monitor the success of the translocation of these species. → If option C (preferred Alternative) is approved, SCC should be translocated into the designated Open Space Area. → Where translocation of plant species is required, this must be undertaken by a qualified botanist or horticulturalist. → Permits for all protected species must be obtained prior to construction commencing → A Search and Rescue Plan to move protected species must be drafted and implemented. → It is recommended that SCC and protected species that need to be moved are used as far as is feasible to rehabilitate areas impacted on during construction but not required during the operational phase. 				
Residual impacts:	Medium	Medium	Medium		
Cumulative impact post mitigation:	Medium	Medium	Medium		
Significance rating of impact after mitigation (e.g. Low, Medium,	Medium	Medium	Medium		

Medium-High, High, or Very-High)							
Potential impact and risk:	IMPACT 3: FRAGMENTATION OF VEG	IMPACT 3: FRAGMENTATION OF VEGETATION AND DISRUPTION OF ECOSYSTEM PROCESSES					
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go			
Alternative	Fragmentation is one of the most important impacts on vegetation as it creates breaks in previously continuous vegetation, causing a reduction in the gene pool and a decrease in species richness and diversity. This impact occurs when more and more areas are cleared, resulting in the isolation of functional ecosystems, which results in reduced biodiversity and reduced movement due to the absence of ecological corridors. Fragmentation can also prevent the continuation of important ecological processes and drivers such as seed dispersal. The Overberg Dune Strandveld of project area has already be impacted by fragmentation, all invasive species, and is surround by a network of road Approximately 2.7 ha of Overb. Dune Strandveld has been modified due to the infestation of alien plus species and a further 2.6 ha has been modified due to the creation of the breaks.						
Nature of impact:	Direct Negative	Direct Negative	Direct Negative	Negative			
Extent and duration of impact:	On site & Permanent	On site & Permanent	On site & Permanent	On site & Long term			
Consequence of impact or risk:	Medium	Medium	Low	Low			
Probability of occurrence:	Definite	Definite	Definite	Definite			
Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss	Marginal loss	Marginal loss	Marginal Loss			
Degree to which the impact can be reversed:	Irreversible	Irreversible	Irreversible	Partly Reversible			

Indirect impacts:	Reduction in biodiversity / gene pool			
Cumulative impact prior to mitigation:	Medium	Medium	Low	LOW
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Low	LOW
Degree to which the impact can be avoided:	Low	Low	Low	N/A
Degree to which the impact can be managed:	Low	Low	Low	
Degree to which the impact can be mitigated:	Low	Low	Low	
Proposed mitigation:	→ Mitigation measures listed unde	r impact 1 above must be implemented.		
Residual impacts:	Medium	Medium	Low	
Cumulative impact post mitigation:	Medium	Medium	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Low	

Potential impact and risk:	IMPACT 4: INTRODUCTION AND SPREAD OF WEEDS AND ALIEN PLANT SPECIES			
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative	activities, such as ground disturbance and	t species within the project area, three (3) of equipment movement, could spread alien in ction could exacerbate the spread of invasive	vasive species, like <i>Acacia cyclops</i> , beyond	There are currently eleven alien plant species within the project area, three of which are invasive, and approximately 2.7 ha of the 11.4 ha project area is dominated by alien woodland of <i>Acacia cyclops</i> . Under the no-go alternative, these invasive species are likely to persist and spread, continuing to displace indigenous flora, degrade biodiversity, and disrupt ecosystem processes, further threatening the ecological integrity of the area without management intervention.
Nature of impact:	Direct Negative	Direct Negative	Direct Negative	Negative
Extent and duration of impact:	Local & Long-term	Local & Long-term	Local & Long-term	Local & Long-term
Consequence of impact or risk:	Medium	Medium	Medium	Medium
Probability of occurrence:	Probable	Probable	Probable	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss	Marginal loss	Marginal loss	Marginal Loss
Degree to which the impact can be reversed:	Reversible	Reversible	Reversible	Reversible

Indirect impacts:	Displacement and loss of indigenous plant			
Cumulative impact prior to mitigation:	Medium	Medium	Medium	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Medium	Medium
Degree to which the impact can be avoided:	High	High	High	N/A
Degree to which the impact can be managed:	High	High	High	
Degree to which the impact can be mitigated:	High	High	High	
Proposed mitigation:	 → The site must be checked regularly for immediate action must be taken to rer → Alien Invasive Plant Species and Weed Water Programme. → Any equipment brought onto site must → No exotic species are permitted to be preceded to the preceded of the pr			
Residual impacts:	Low	Low	Low	
Cumulative impact post mitigation:	Low	Low	Low	
Significance rating of impact after mitigation (e.g. Low, Medium,	Low	Low	Low	

Medium-High, High, or Very-High)				
Potential impact and risk:	IMPACT 5: LOSS OF A PORTION OF TH	IE WALKER BAY KEY BIODIVERSITY AREA		
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative	The proposed residential development will impact a small portion (0.11 km² = 0.03%) of the Walker Bay Key Biodiversity Area (KBA), located on its edge and adjacent to existing residential development. While the overall footprint of the development is minimal in relation to the KBA, the project may lead to habitat fragmentation, disturbance to local wildlife, and potential pressure on the surrounding natural areas.			The Overberg Dune Strandveld of the project area has already been impacted by fragmentation, alien invasive species, and is surrounded by a network of roads. Approximately 2.7 ha of Overberg Dune Strandveld has been modified due to the infestation of alien plant species and a further 2.6 ha has been modified due to the creation of fire breaks. As such, portions of the KBA within the project area have already been modified.
Nature of impact:	Direct Negative	Direct Negative	Direct Negative	Negative
Extent and duration of impact:	Regional & Permanent	Regional & Permanent	Regional & Permanent	Regional & Long Term
Consequence of impact or risk:	Medium	Medium	Low	Low
Probability of occurrence:	Definite	Definite	Definite	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Definite	Definite	Definite	Definite

1		1		
Degree to which the impact can be reversed:	Irreversible	Irreversible	Irreversible	Partly Reversible
Indirect impacts:	Loss of habitat for plant SCC Loss of habitat for faunal species. Loss of SCC	Loss of habitat for plant SCC Loss of habitat for faunal species. Loss of SCC	Loss of habitat for plant SCC Loss of habitat for faunal species. Loss of SCC	-
Cumulative impact prior to mitigation:	Low	Low	Low	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Low	Low
Degree to which the impact can be avoided:	Low	Low	Low	N/A
Degree to which the impact can be managed:	Low	Low	Low	
Degree to which the impact can be mitigated:	Low	Low	Low	
Proposed mitigation:	→ Refer to mitigation measures list	ed under Impact 1 & 2 above.		
Residual impacts:	Medium	Medium	Low	
Cumulative impact post mitigation:	Medium	Medium	Low	
Significance rating of impact after mitigation (e.g. Low, Medium,	Medium	Medium	Low	

Medium-High, High, or Very-High)				busic Assessment Report Nev 1		
Potential impact and risk:	IMPACT 6: LOSS OF A PORTION OF CB	IMPACT 6: LOSS OF A PORTION OF CBA: TERRESTRIAL				
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go		
Alternative	Overberg Dune Strandveld). The classificat assessed in impact 1 above. Development	ned that the entire project area falls within a tion of this area as a CBA is due to the preser within the project area will result in the loss bjectives of the CBA given the project area is Option B will result in the loss of 10.6 ha	nce of Overberg Dune Strandveld, which is sof a portion of this CBA but is unlikely to	Parts of the Overberg Dune Strandveld within the project area have already been modified due to the infestation of alien plant species, resulting in the loss of the original Overberg Dune Strandveld		
	approximately 7.13 ha (0.0713 km²) of a CBA 1.	(0.106 km²) of a CBA 1.	(0.0612 km²) of a CBA 1. However, this alternative does allow for 2.7 ha of open space which includes a portion of the CBA 1 which maintains ecological connectivity with the natural, intact habitat to the north.	ecosystem. Consequently, approximately 2.7 ha of the project area no longer meets the criteria for CBA status. However, the no-go alternative will not result in the additional loss of an area classified as a CBA.		
Nature of impact:	Direct Negative	Direct Negative	Direct Negative	Negative		
Extent and duration of impact:	Regional and Permanent	Regional and Permanent	Regional and Permanent	Regional and Permanent		
Consequence of impact or risk:	Medium	Medium	Low	Low		
Probability of occurrence:	Definite	Definite	Definite	Definite		
Degree to which the impact may cause irreplaceable loss of resources:	Definite	Definite	Definite	Definite		

			I	zacio i isoccomiente ricipor e met z
Degree to which the impact can be reversed:	Irreversible	Irreversible	Irreversible	Partly Reversible
Indirect impacts:	See Impacts 1-4 above.			
Cumulative impact prior to mitigation:	Medium	Medium	Low	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Low	Low
Degree to which the impact can be avoided:	Low	Low	Low	
Degree to which the impact can be managed:	Low	Low	Low	
Degree to which the impact can be mitigated:	Low	Low	Low	
Proposed mitigation:	→ Refer to mitigation measures list	ed under Impact 1 and 2 above		
Residual impacts:	Medium	Medium	Low	
Cumulative impact post mitigation:	Medium	Medium	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Low	

Potential impact and risk:	IMPACT 7: LOSS OF FAUNAL HABITAT				
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go	
Alternative	Option A will result in the permanent loss of habitat (7.13 ha of Overberg Dune Strandveld). The vegetation and soil provide habitat to faunal species that depend on it for shelter, breeding and foraging. The significance of this loss will be High to those faunal species.	Option B will result in the permanent loss of habitat (10.6 ha of Overberg Dune Strandveld). The vegetation and soil provide habitat to faunal species that depend on it for shelter, breeding and foraging. The significance of this loss will be High to those faunal species.	Option C will result in the permanent loss of habitat (6.12 ha of Overberg Dune Strandveld). The vegetation and soil provide habitat to faunal species that depend on it for shelter, breeding and foraging. The significance of this loss will be High to those faunal species. However, this alternative does allow for 2.7 ha of open space which maintains ecological connectivity with the natural, intact Overberg Dune Strandveld to the north providing habitat for any displaced faunal species.	Continued habitat degradation, 5.3ha has already been modified due to the infestation of alien plant species and fire breaks.	
Nature of impact:	Direct Negative	Direct Negative	Direct Negative	Negative	
Extent and duration of impact:	On site & Permanent	On site & Permanent	On site & Permanent	On site & Long Term	
Consequence of impact or risk:	Medium	Medium	Medium	Low	
Probability of occurrence:	Definite	Definite	Definite	Definite	
Degree to which the impact may cause irreplaceable loss of resources:	Marginal Loss	Marginal Loss	Marginal Loss	Marginal Loss	
Degree to which the impact can be reversed:	Irreversible	Irreversible	Irreversible	Partly Reversible	

Indirect impacts:		jacent habitat potentially causing displacemen mpetition for food, resources and breeding m		Reduction in habitat specific faunal population.
Cumulative impact prior to mitigation:	LOW	LOW	LOW	LOW
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	MEDIUM	MEDIUM	Low	LOW
Degree to which the impact can be avoided:	Low	Low	Low	N/A
Degree to which the impact can be managed:	Low	Low	Low	
Degree to which the impact can be mitigated:	Low	Low	Low	
Proposed mitigation:	 → All construction and construction relat approved project footprint and must represent the development footprough during induction. → Temporary infrastructure (laydown are provide habitat for faunal species. Roccideally, in previously disturbed areas of but must not disrupt adjacent habitat 			
Residual impacts:	Medium	Medium	Low	
Cumulative impact post mitigation:	Low	Low	Low	
Significance rating of impact after mitigation (e.g. Low, Medium,	Medium	Medium	Low	

Medium-High, High, or Very-High)				
Potential impact and risk:	IMPACT 8: LOSS OF FAUNAL SCC			
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative	=	Two SCC have a high likelihood of occurrence in the project area; the Southern Adder (VU) and Cape Dwarf Chameleon (NT). The clearance of vegetation for the construction of the proposed development may result in the loss of some individuals of these species.		
Nature of impact:	Direct Negative	Direct Negative	Direct Negative	N/A
Extent and duration of impact:	On site & Permanent	On site & Permanent	On site & Permanent	N/A
Consequence of impact or risk:	High	High	High	N/A
Probability of occurrence:	Possible	Possible	Possible	N/A
Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss	Marginal loss	Marginal loss	N/A
Degree to which the impact can be reversed:	Irreversible	Irreversible	Irreversible	N/A
Indirect impacts:	Reduction in gene pool.			N/A
Cumulative impact prior to mitigation:	High	High	High	N/A
Significance rating of impact prior to mitigation (e.g. Low, Medium,	High	High	High	N/A

Medium-High, High, or Very-High)				
Degree to which the impact can be avoided:	High	High	High	N/A
Degree to which the impact can be managed:	Moderate	Moderate	Moderate	
Degree to which the impact can be mitigated:	Low	Low	Low	
Proposed mitigation:	prior to construction. A permit first A clause must be included in consult wild animals will be hunted, kills transported in or through the property the development will be in possunless they have been appointed. In addition, a clause relating to above transgressions occur for S. The ECO should appoint a memoral clearance. Should any faunal spendarm's way prior to vegetation of the ECO must create a list with a prior to construction. This photomy is should any fauna SCC be encomphotographed, GPS co-ordinates. In the unlikely event that bird approaching nests of SCC is connestlings, fledglings) be discover. These must be reported to No construction activities.	nber of staff to walk ahead of construction nations be identified during the walk through, the clearance. ccompanying photographs of possible faunal SC guide must be used to determine if faunal SC countered during construction and operations taken) and information placed on iNaturalist SCC inhabit the site to breed, all site personsidered harmful to the success of breeding. Seed in or near construction areas prior to or during the site in the success of designations are specifically and information areas prior to or during the site in the success of designations.	this species. Sctors) working on site stating that: "no ll be imported into, exported from or onated and no person associated with thing manufactured from the carcass or Animal Relocation Plan." In must be included should any of the machinery directly prior to vegetation ese should be allowed to move out of CC that could occur in the project area C are encountered. In, these must be recorded (i.e. be connel are not to disturb them, even should an active breeding nests (eggs, ring the construction phase: Sound the nest. If uncertain on the size ice. must be monitored.	
Residual impacts:	Low	Low	Low	

Cumulative impact post mitigation:	Low	Low	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low	Low	Low	
Potential impact and risk:	IMPACT 9: DISTURBANCE TO FAUNAL	SPECIES AND THEIR LIVELIHOOD DUE TO	PROJECT RELATED ACTIVITIES	
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative	Faunal species may be disturbed during construction due to increased noise levels and vibrations from construction machinery. Night lighting disrupts nocturnal faunal species activities and may attract them to the construction site. Faunal Species that vacate the immediate area, may return following completion of construction or new individuals or species may inhabit the area.			The project area is within the urban edge with residential development to across the road to the east and south and a busy road to the north. Faunal species that inhabit the project area are likely habituated to some level of disturbance, lighting and noise.
Nature of impact:	Direct Negative	Direct Negative	Direct Negative	Negative
Extent and duration of impact:	On site & Short Term	On site & Short Term	On site & Short Term	On site & Long term
Consequence of impact or risk:	Medium	Medium	Medium	Low
Probability of occurrence:	Probable	Probable	Probable	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss	Marginal loss	Marginal loss	Marginal Loss

Degree to which the impact can be reversed:	Partly Reversible	Partly Reversible	Partly Reversible	Partly Reversible
Indirect impacts:	Displaced faunal species will move into ad competition for food and mates.	jacent habitat potentially causing a knock-on o	displacement of faunal species already i	nhabiting the area and increasing
Cumulative impact prior to mitigation:	Medium	Medium	Medium	LOW
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Medium	Low
Degree to which the impact can be avoided:	Low	Low	Low	N/A
Degree to which the impact can be managed:	Low	Low	Low	
Degree to which the impact can be mitigated:	Low	Low	Low	
Proposed mitigation:	area and methodically advancing natural area. → Dust suppression measures mus → All machinery, vehicles and earl industry minimum standards. e.g in the relevant noise control reg → No construction night lighting must and any external lights must be of the steep sided drains, gutters, candone	ion clearance takes place gradually, comments towards the western side to encourage the note that the implemented in the dry and/or windy most the moving equipment must be maintained as g. the sound generated by a machine must be ulations. Just be allowed. If required, minimise lighting in the down lights placed as low as possible and instants als and open pits/trenches must be covered wing stuck. No unnecessary structures that would be allowed.	novement of any faunal species to the nths. Ind the noise these create must meet below a certain decibel as prescribed open space areas within development allation of low UV emitting lights. With mesh (5mm x 5mm) or sloped to	

	 → Permeable internal and external fences/walls (after construction is completed) must be implemented to allow for the movement of small faunal species through the development, particularly fencing surrounding the Open Space Area. These must have ground level gaps of 10cm x 10cm at 10m intervals. These gaps must be kept free of obstructions, including plant growth and debris. → No night driving should be permitted, if unavoidable, this must be restricted, and speed limits adhered to. 			
Residual impacts:	Low	Low	Low	
Cumulative impact post mitigation:	Low	Low	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low	Low	Low	
Potential impact and risk:	IMPACT 10: MORTALITY OF FAUNAL S	L AND PERSECUTION		
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative		to mortality during the clearing of vegetation ace, this includes slow moving species (tortoise such as juvenile birds and rodents.		Status Quo remains
	The increase in vehicles entering and exiting	ng the area increases the chance of roadkill, es	specially at night.	
	Persecution of faunal species perceived as			
Nature of impact:	Direct Negative	Direct Negative	Direct Negative	-
Extent and duration of impact:	Local & Permanent	Local & Permanent	Local & Permanent	-
Consequence of impact or risk:	High	High	High	-
Probability of occurrence:	Probable	Probable	Probable	-

Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss	Marginal loss	Marginal loss	-
Degree to which the impact can be reversed:	Irreversible	Irreversible	Irreversible	-
Indirect impacts:	Reduction in faunal gene pool.			
Cumulative impact prior to mitigation:	Medium	Medium	Medium	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High	High	High	-
Degree to which the impact can be avoided:	High	High	High	N/A
Degree to which the impact can be managed:	High	High	High	-
Degree to which the impact can be mitigated:	High	High	High	-
Proposed mitigation:	 → Speed restrictions within the development for construction vehicles (40km/h is recommended) should be in place to reduce the incidence of faunal mortality on project roads. → A trained snake handler must be on call during construction to remove any snakes within construction areas. → A clause relating to fines, possible dismissal and legal prosecution must be included in all contracts for ALL personnel (i.e. including contractors) working on site should any speeding or persecution of animals occur. → Induction material must iterate safety to fauna and personnel through avoidance of wildlife. For example, snakes tend to only strike if threatened (cornered or attacked). 			-

	→ It is strongly recommended that rodenticides not be used at any the newly established buildings or around auxiliary infrastructure on the project site. While pest control of this nature may be effective, even so-called "environmentally friendly" rodenticides are toxic and pose significant secondary poisoning risk to predatory avifauna, especially owls.			
Residual impacts:	Low	Low	Low	-
Cumulative impact post mitigation:	Low	Low	Low	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	LOW	LOW	LOW	N/A
Potential impact and risk:	IMPACT 11: HERITAGE IMPACTS			
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative	Disturbance/destruction of archaeological excavations	(e.g., shell middens, Khoisan burials) and pala	eontological (e.g., subfossil/fossil bone	s) resources during vegetation clearing and
Nature of impact:	Negative	Negative	Negative	N/A
Extent and duration of impact:	Local; permanent	Local; permanent	Local; permanent	-
Consequence of impact or risk:	Moderate; larger footprint increases risk of disturbing heritage resources	Moderate; slightly reduced footprint lowers risk	Low to moderate; minimized footprint and open space reduce risk	-
Probability of occurrence:	Medium to high	Medium	Medium	-
Degree to which the impact may cause irreplaceable loss of resources:	Medium to high	Medium	Medium	-

				· · ·
Degree to which the impact can be reversed:	Irreversible	Irreversible	Irreversible	-
Indirect impacts:	Potential damage to cultural landscape and	d loss of contextual archaeological/palaeonto	logical information	-
Cumulative impact prior to mitigation:	Medium to high	Medium to high	Medium	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Medium	-
Degree to which the impact can be avoided:	Medium	Medium	Medium	-
Degree to which the impact can be managed:	High	High	High	-
Degree to which the impact can be mitigated:	High	High	High	-
Proposed mitigation:	 → Test pits in the southeastern corner of the proposed development site must be conducted to establish the presence/absence of any potentially important sub surface archaeological deposits, prior to construction excavations commencing → A walk down survey of the proposed development site must be conducted after the site has been cleared of vegetation. → If any unmarked human remains are uncovered or exposed during excavations, work must stop, and the finds reported to the Environmental Control Officer and the contracted archaeologist (Jonathan Kaplan 082 321 0172). Human remains must not be removed or disturbed until inspected by the archaeologist. → A protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), must be included in the Environmental Management Plan (EMP) for the proposed development. The Fossil Finds Procedure provides guidelines to be followed in the event of fossil bone finds in the excavations. 			-
Residual impacts:	Low			-

Cumulative impact post mitigation:	Low	Low	Low	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low	Low	Low	N/A
Potential impact and risk:	IMPACT 12: PALAEONTOLOGICAL IMP	PACTS		
Alternative	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Aitemative	Loss of fossil bones and archaeological ma	terial from excavations in the loose Strandvelo	Fm. dunes and upper Waenhuiskrans	Fm. aeolianite.
Nature of impact:	Negative	Negative	Negative	N/A
Extent and duration of impact:	Site and permanent	Site and permanent	Site and permanent	N/A
Consequence of impact or risk:	Permanent loss of material palaeontological heritage.	Permanent loss of material palaeontological heritage.	Permanent loss of material palaeontological heritage.	-
Probability of occurrence:	Probable, distinct possibility.	Probable, distinct possibility.	Probable, distinct possibility.	-
Degree to which the impact may cause irreplaceable loss of resources:	Significant loss may still occur.	Significant loss may still occur.	Significant loss may still occur.	-
Degree to which the impact can be reversed:	Irreversible.	Irreversible.	Irreversible.	-
Indirect impacts:	Enriched landscape geohistory.	Enriched landscape geohistory.	Enriched landscape geohistory.	-
Cumulative impact prior to mitigation:	Some fossils are rescued for posterity and available for scientific study.	Some fossils are rescued for posterity and available for scientific study.	Some fossils are rescued for posterity and available for scientific study.	-

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Medium	-
Degree to which the impact can be avoided:	Low. The locations of fossil bones in the coversands and aeolianites cannot be predicted.	Low. The locations of fossil bones in the coversands and aeolianites cannot be predicted.	Low. The locations of fossil bones in the coversands and aeolianites cannot be predicted.	-
Degree to which the impact can be managed:	Low. There is a high risk of valuable fossils being lost despite management actions to mitigate such loss.	Low. There is a high risk of valuable fossils being lost despite management actions to mitigate such loss.	Low. There is a high risk of valuable fossils being lost despite management actions to mitigate such loss.	-
Degree to which the impact can be mitigated:	Moderate.	Moderate.	Moderate.	-
Proposed mitigation:	 → The possible presence of fossils in the subsurface does not have an a priori influence on the decision to proceed with the proposed development. However, mitigation measures are essential. The potential impact has a moderate influence upon the proposed project, consisting of implemented mitigation measures recommended below, to be followed during the vegetation clearing and Construction Phases. → Although the inspection of construction excavations may be specified in the Archaeological Impact Assessment, it is not feasible for a specialist monitor to be continuously present during the Construction Phases, when fossils may be unearthed at any time. The rescue of fossil bones during earth works critically depends on spotting this material as it is uncovered during digging. → For successful mitigation, it is therefore crucial that earth works personnel must be involved in mitigation by watching for fossil bones as excavations are being made. → It is recommended that a protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the proposed development. → The Fossil Finds Procedure included as Appendix 2 provides guidelines to be followed in the event of fossil bone finds in the excavations. The works supervisor/foreman and workers involved in excavating the building foundations, infrastructure trenches and stormwater drainage must be informed of the need to watch for fossils and archaeological material. Workers seeing potential objects are to cease work at that spot and to report to the works supervisor who, in turn, will report to the Environmental Control Officer (ECO) and/or the Developer. The ECO/Developer will contact and liaise with Heritage Western Cape and the standby archaeologist or palaeontologist on the nature of the find and suitable 			N/A

	consequent actions such as immediat a work plan for the collection of the f → If a significant occurrence of fossil bo be appointed to collect them and to r stratigraphic context and sedimentar compilation of the report for distribut heritage interest groups. → A permit from HWC is required to ext for assessment, collection and reporti for a palaeontological permit with su			
Residual impacts:	Some fossils are rescued for posterity and	available for scientific study.		-
Cumulative impact post mitigation:	Some fossils are rescued for posterity and	available for scientific study.		-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Medium	N/A
Potential impact and risk:	IMPACT 13: SOCIOECONOMIC IMPACTS			
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative	Significant temporary employment oppo suppliers and contractors.	No construction, no jobs or material procurement, no economic injection		
Nature of impact:	Positive	Positive	Positive	Negative
Extent and duration of impact:	Local; short-term	Local; short-term	Local; short-term	N/A
Consequence of impact or risk:	Local jobs and stimulation of services			-
Probability of occurrence:	Definite	Definite	Definite	-

Degree to which the impact may cause irreplaceable loss of resources:	N/A	N/A	N/A	N/A
Degree to which the impact can be reversed:	N/A	N/A	N/A	N/A
Indirect impacts:	 → Local spending on food, transpor → Increased profit gains for the local → Support for local SMMEs 			N/A
Cumulative impact prior to mitigation:	Moderate positive cumulative benefit from	n local employment and procurement		N/A
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High	High	High	N/A
Degree to which the impact can be avoided:	Not avoidable	Not avoidable	Not avoidable	Fully avoided, but with negative socioeconomic consequence
Degree to which the impact can be managed:	High – through contractual clauses and local labour use			N/A
Degree to which the impact can be mitigated:	High	High	High	N/A
Proposed mitigation:	 → Prioritise local hiring → Source materials and services from local businesses → Enforce employment equity 			None
Residual impacts:	Temporary economic benefits; increased in	ncome in households		None

Cumulative impact post mitigation:	High	High	High	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High +	High +	High +	High -
Potential impact and risk:	IMPACT 14: VISUAL IMPACTS			
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative	Temporary visual disturbance caused by co	onstruction machinery, earthworks, vehicle mo	ovement, site clearance and materials s	tockpiles.
Nature of impact:	Negative	Negative	Negative	Neutral / Positive (preservation of current landscape character)
Extent and duration of impact:	Local; short-term	Local; short-term	Local; short-term	N/A
Consequence of impact or risk:	Temporary degradation of scenic quality of the site due to construction works.	Temporary degradation of scenic quality of the site due to construction works.	Temporary degradation of scenic quality of the site due to construction works.	N/A
Probability of occurrence:	Definite	Definite	Definite	N/A
Degree to which the impact may cause irreplaceable loss of resources:	None	None	None	None
Degree to which the impact can be reversed:	Fully reversible – once construction is complete and landscaping is implemented	Fully reversible – once construction is complete and landscaping is implemented	Fully reversible – once construction is complete and landscaping is implemented	N/A
Indirect impacts:	 Perceived decrease in aesthetic qualit Possible impact on adjacent property 			N/A

Cumulative impact prior to mitigation:	The temporary presence of cleared land, earthworks, construction vehicles, scaffolding, stockpiles, and temporary site offices may create a broader visual sense of disruption			N/A
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Medium	N/A
Degree to which the impact can be avoided:	Low – construction is inherently disruptive.	Low – construction is inherently disruptive.	Low – construction is inherently disruptive.	N/A
Degree to which the impact can be managed:	High	High	High	N/A
Degree to which the impact can be mitigated:	High	High	High	N/A
Proposed mitigation:	 → Limit construction areas to minimum required footprint → Screen site with shade netting or hoarding → Maintain clean and orderly site → Restrict working hours → Phase construction to minimise large-scale disruption 			N/A
Residual impacts:	Minor, localised and temporary visual disti	urbance		N/A
Cumulative impact post mitigation:	Low	Low	Low	N/A
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low -	Low -	Low -	N/A

Potential impact and risk:	IMPACT 15: NOISE IMPACTS			
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative	Temporary noise from construction activit residents.	ies such as machinery, earthworks, and vehicle	e movement, affecting nearby	No noise impact; current ambient noise levels maintained.
Nature of impact:	Negative	Negative	Negative	N/A
Extent and duration of impact:	Localised; short-term (limited to construction period, daytime hours only)	Localised; short-term (limited to construction period, daytime hours only)	Localised; short-term (limited to construction period, daytime hours only)	N/A
Consequence of impact or risk:	Noise disturbance to nearby residents, esp	pecially during early morning or peak construc	tion periods.	N/A
Probability of occurrence:	None	None	None	N/A
Degree to which the impact may cause irreplaceable loss of resources:	None	None	None	N/A
Degree to which the impact can be reversed:	Fully reversible upon construction completion			N/A
Indirect impacts:	 → Temporary reduction in residential amenity → Potential complaints from community → Increased stress or disturbance to sensitive receptors (e.g. elderly, children) 			N/A
Cumulative impact prior to mitigation:	Noise disturbances probably from the nearby projects occurring simultaneously			N/A
Significance rating of impact prior to mitigation (e.g. Low, Medium,	Medium	Medium	Medium	N/A

Medium-High, High, or Very-High)				
Degree to which the impact can be avoided:	Low	Low	Low	Fully avoided.
Degree to which the impact can be managed:	High	High	High	N/A
Degree to which the impact can be mitigated:	High	High	High	N/A
Proposed mitigation:	 → Limit construction to weekdays to the construction of the construction	None		
Residual impacts:	Minor temporary noise disturbance			None
Cumulative impact post mitigation:	Low	Low	Low	None
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low -	Low -	Low -	N/A
Potential impact and risk:	IMPACT 16: DUST IMPACT			
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative	Dust generation from excavation, site clearance, and construction vehicle movement may affect air quality and nearby residents temporarily			No dust generation; ambient air quality remains unchanged.
Nature of impact:	Negative	Negative	Negative	N/A

				basic Assessment Report Nev 1
Extent and duration of impact:	Local; short-term	Local; short-term	Local; short-term	N/A
Consequence of impact or risk:	May cause nuisance to residents, especiall	y during dry, windy conditions. Could tempora	arily reduce visibility and air quality.	N/A
Probability of occurrence:	Definite during dry/windy days	Definite during dry/windy days	Definite during dry/windy days	N/A
Degree to which the impact may cause irreplaceable loss of resources:	None	None	None	N/A
Degree to which the impact can be reversed:	Reversible	Reversible	Reversible	N/A
Indirect impacts:	Dust settling on nearby properties and veh	nicles		N/A
Cumulative impact prior to mitigation:	Low	Low	Low	N/A
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low	Low	Low	N/A
Degree to which the impact can be avoided:	Medium – High	Medium – High	Medium – High	N/A
Degree to which the impact can be managed:	High	High	High	N/A
Degree to which the impact can be mitigated:	High	High	High	N/A

Proposed mitigation:	 → Regular wetting of exposed surfaces and access roads → Cover stockpiles and trucks → Limit clearing to active work areas → Cease dust-generating activities during high winds → Maintain complaints register and appoint an ECO 			N/A
Residual impacts:	Minor and temporary dust may occur			N/A
Cumulative impact post mitigation:	Low	Low	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low	Low	Low	N/A
Potential impact and risk:	IMPACT 17: TRAFFIC IMPACTS			
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative	Temporary increase in heavy vehicle move congestion, and safety risks / nuisance to p	ment along Bosbok and Dyer Streets, with pot pedestrians and residents.	rential wear on roads, noise,	No construction-related traffic; baseline conditions remain.
Nature of impact:	Negative	Namativa		Manakaal
	-0.1	Negative	Negative	Neutral
Extent and duration of impact:	Local; short-term (limited to construction period)	Local; short-term (limited to construction period)	Negative Local; short-term (limited to construction period)	None
	Local; short-term (limited to construction period)	Local; short-term (limited to construction	Local; short-term (limited to construction period)	
impact: Consequence of	Local; short-term (limited to construction period)	Local; short-term (limited to construction period)	Local; short-term (limited to construction period)	None

Degree to which the impact can be reversed:	Fully reversible once construction ends			N/A
Indirect impacts:	Increased noise and dust from delivery tru	cks and construction vehicles.		None
Cumulative impact prior to mitigation:	Moderate	Moderate Moderate I		
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Medium	N/A
Degree to which the impact can be avoided:	Low	Low	Low	N/A
Degree to which the impact can be managed:	High	High	High	H/A
Degree to which the impact can be mitigated:	High	High	High	N/A
Proposed mitigation:	 → Limit truck access to off-peak hours → Enforce strict speed limits (e.g. ≤30 km/h) for all construction-related vehicles within and near residential zones. → Avoid parking near or close to other residential erven out → Communicate construction schedules in advance with surrounding residents and the municipality via notices or SMS alerts. → Use tarpaulins or covers for trucks carrying sand, gravel, or debris to prevent spillage and dust pollution. → Regularly maintain access roads to prevent potholes, dust, and surface degradation from heavy vehicle use 			N/A
Residual impacts:	Minor traffic impacts, easily absorbed by existing network.			N/A
Cumulative impact post mitigation:	services or refuse collection, particula → If other developments or infrastructu	inated delivery schedules across multiple sites orly on narrow local roads. re projects are ongoing nearby, the total numl ne pressure on road capacity, leading to more	ber of trucks and deliveries using the	N/A

	→ Constant noise, dust, and traffic disruption from more than one project in the area can intensify resident frustration.			
Significance rating of				
impact after mitigation				
(e.g. Low, Medium,	Low	Low	Low	N/A
Medium-High, High, or				
Very-High)				

POST CONSTRUCTION				
Potential impact & risk:	IMPACT 1: SPREAD OF WEEDS AND A	LIEN PLANT SPECIES		
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative	There are currently eleven (11) alien plant species within the project area, three (3) of which are listed as invasive. If impacted areas that do not form part of the development footprint are not rehabilitated, these disturbed areas can become places for alien invasive, and approximately 2.7 ha of the 11.4 ha project area is species to establish. If left unmitigated, these species can spread and establish themselves in intact vegetation in surrounding intact ecosystems, resulting in the displacement of indigenous species and possible local extinctions of SCC. There are currently 11 alien plant species within the project area, three are invasive, and approximately 2.7 ha of the 11.4 ha project area is dominated by alien woodland of Acicia cyclops. Under the No-go alternative these invasive species are likely to persist and spread, continuing to displace indigenous flora, degrade biodiversity, and disrupt ecosystem processes, further threatening the ecological integrity of the area without management intervention.			
Nature of impact:	Direct Negative	Direct Negative	Direct Negative	Negative
Extent and duration of impact:	Local & Long-term	Local & Long-term	Local & Long-term	Local & Long-term
Consequence of impact or risk:	Medium	Medium	Medium	Medium
Probability of occurrence:	Probable	Probable	Probable	Probable
Degree to which the impact may cause	Marginal Loss	Marginal Loss	Marginal Loss	Marginal Loss

irreplaceable loss of resources:				
Degree to which the impact can be reversed:	Reversible	Reversible	Reversible	Reversible
Indirect impacts:	Displacement and loss of indigenous plant	species and diversity.		
Cumulative impact prior to mitigation:	Medium	Medium	Medium	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Medium	Medium
Degree to which the impact can be avoided:	High	High	High	N/A
Degree to which the impact can be managed:	High	High	High	
Degree to which the impact can be mitigated:	High	High	High	
Proposed mitigation:	 → The site must be checked regularly for the presence of alien invasive species and weeds. When alien invasive species are found, immediate action must be taken to remove them. → Alien Invasive Plant Species and Weeds must be disposed on in line with the recommendations outlined in the Working for Water Programme. → Any equipment brought onto site must be clean to ensure no transfer or introduction of seeds. → No exotic species are permitted to be planted on site. Only indigenous plant species can be used for rehabilitation/landscaping. → An alien invasive method statement must be incorporated into the EMPr to ensure that these species do not spread onto neighbouring properties. 			
Residual impacts:	Low	Low	Low	

Cumulative impact post mitigation:	Low	Low	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low	Low	Low	
Potential impact and risk:	IMPACT 2: DISTURBANCE TO FAUNAL	SPECIES AND THEIR LIVELIHOOD DUE TO	PROJECT RELATED ACTIVITIES.	
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative	The operation of the development will result in a level of disturbance to the project area that currently experiences some disturbance. expected disturbance includes: • the increase in the number of people and vehicles accessing the area will likely introduce noise. • the residence could introduce a barrier to faunal movement not previously present. • The site must be checked regularly for the presence of alien invasive species and weeds. When alien invasive species are found, immediate action must be taken to remove them. • Alien Invasive Plant Species and Weeds must be disposed on in line with the recommendations outlined in the Working for Water Programme. • Any equipment brought onto site must be clean to ensure no transfer or introduction of seeds. • No exotic species are permitted to be planted on site. Only indigenous plant species can be used for rehabilitation/landscaping. • An alien invasive method statement must be incorporated into the EMPr to ensure that these species do not spread onto neighbouring properties.			The project area is within the urban edge with residential development to across the road to the east and south and a busy road to the north. Faunal species that inhabit the project area are likely habituated to some level of disturbance, lighting and noise.
Nature of impact:	Direct Negative	Direct Negative	Direct Negative	Negative
Extent and duration of impact:	On site & Permanent	On site & Permanent	On site & Permanent	On site & Long term
Consequence of impact or risk:	Medium	Medium	Medium	Low
Probability of occurrence:	Probable	Probable	Probable	Definite

Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss	Marginal loss	Marginal loss	Marginal loss
Degree to which the impact can be reversed:	Partly Reversible	Partly Reversible	Partly Reversible	Partly Reversible
Indirect impacts:	Displaced faunal species will move into adjute for food and mates.	acent habitat potentially causing a knock-on di	splacement of faunal species already inhabiti	ng the area and increasing competition
Cumulative impact prior to mitigation:	Medium	Medium	Medium	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	Medium	Medium	Low
Degree to which the impact can be avoided:	Low	Low	Low	N/A
Degree to which the impact can be managed:	Low	Low	Low	
Degree to which the impact can be mitigated:	Low	Low	Low	
Proposed mitigation:	 → Speed restrictions within the development for all vehicles (40km/h is recommended) should be implemented to reduce the possibility of collisions and roadkill. → Do not place lighting on the exterior of the boundary wall (i.e. pointing into the Nature Reserve). → Ideally, residents must not have pets that can leave their premises and enter the surrounding natural area. i.e. Domestic cats should not be permitted and if they are, they must wear a bell. Fines should be issued by the Body Corporate if not adhered to. → Restrictions can be placed on noise to minimise impact. Body Corporate to establish a noise policy and associated fines. 			

	 → External lights that are used in t installation of low UV emitting lies. → Ensure all vehicles adhere to the. → Create faunal micro habitats wit. → Body corporate and Estate Agen noise and pets based on living ir. → No feeding of wildlife is permitt. → No pesticides may be used to c (e.g., owls) that result in the ow. → Occupants of the residential unit "no wild animals will be hunted transported in or through the p development will be in possessi 	s : r		
Residual impacts:	Low	Low	Low	
Cumulative impact post mitigation:	Low	Low	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low	Low	Low	
Potential impact and risk:	IMPACT 3: SOCIOECONOMIC IMPACT	rs ·	'	
	Alternative 1 (Option A)	Alternative 2 (Option B)	Alternative 3: Option C (Preferred)	No-Go
Alternative	Significant positive impact through housing provision, local economic activity, enhanced property values, and long-term employment through maintenance, security, and service demand.			Lost opportunity to address housing needs and stimulate local economy. Status quo remains.
Nature of impact:	Positive	Positive	Positive	N/A
Extent and duration of impact:	Local; long-term and ongoing	Local; long-term and ongoing	Local; long-term and ongoing	N/A

Consequence of impact or risk:	→ Substantial uplift in housing availabilit → Moderate increase in demand for local	Continued underutilisation of urban land; no positive change to socioeconomic environment		
Probability of occurrence:	High	High	High	N/A
Degree to which the impact may cause irreplaceable loss of resources:	None	None	None	N/A
Degree to which the impact can be reversed:	Not applicable – positive impacts are bene	N/A		
Indirect impacts:	 → Growth in property values → Support for local retail, tourism, and service sectors 			Missed opportunity for social upliftment and housing delivery.
Cumulative impact prior to mitigation:	High – contributes to regional growth targ	N/A		
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High	High	High	N/A
Degree to which the impact can be avoided:	Not avoidable	Not avoidable	Not available	Fully avoided, but to the detriment of the local community
Degree to which the impact can be managed:	High	High	High	N/A
Degree to which the impact can be mitigated:	High	High	High	N/A
Proposed mitigation:	→ Prioritise local economic linkages and			

	→ Strengthen HOA role in community building.			
Residual impacts:	Sustainable, positive contribution to local economy and social fabric			Persistent housing demand and economic underperformance
Cumulative impact post mitigation:	High	High	High	Low (negative)
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High +	High +	High +	N/A

DECOMMISSIONING PHASE

Not Applicable.

SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

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 Impact Assessment

This specialist assessment included the Plant Species, Terrestrial Species and Animal Species Themes:

<u>Terrestrial Biodiversity Theme</u>

The desktop assessment and field survey confirmed that the project area occurs within Overberg Dune Strandveld. This vegetation type is listed as EN due to its narrow distribution and evidence of ongoing biotic disruption from invasive alien plant species (DFFE, 2022). Despite being listed as EN, 93% (323.2 km²) currently remains intact. The SEI of the Overberg Dune Strandveld was determined to be HIGH. However, it should be noted that portions of Overberg Dune Strandveld within the project area have been modified and degraded due to the establishment of alien invasive plant species and the creation of fire breaks which has resulted in the fragmentation of vegetation.

In addition to the above, the project area occurs within the Walker Bay KBA. According to the World Database of KBAs, this site qualifies as a Key Biodiversity Area of international significance that meets the thresholds for 4 criteria described in the Global Standard for the Identification of KBAs.

The Walker Bay KBA is 322 km² in extent. The proposed residential development occurs within a small portion (0.11 km² = 0.03%), and on the edge, of the Walker Bay KBA adjacent to existing residential development. Implications on biodiversity may include the loss of some habitats that support sensitive species (refer to Section 5.2 below), may result in the loss of individual SCC and could increase habitat fragmentation.

Based on the above, the specialist disagrees with the VERY HIGH sensitivity rating of the Overberg Dune Strandveld and suggests the following:

- → The portion of Overberg Dune Strandveld is reclassified as HIGH rather than VERY HIGH.
- → The Acacia Woodland is reclassified as VERY LOW rather than VERY HIGH.
- → The Degraded Overberg Dune Strandveld (firebreaks) is reclassified as MEDIUM rather than VERY HIGH.

Plant Species Theme

The DFFE Screening Tool Report classified the plant species theme of the project area as MEDIUM due to the possible occurrence of forty-eight (48) sensitive plant species. Of these 48 species, four (4) sensitive plant species were confirmed to occur within the project area including three (3) VU species (*Lampranthus fergusoniae*, *Cynanchum zeyheri*, and *Athanasia quinquedentata* subsp. *rigens*), and one (1) NT species (*Asparagus lignosus*). Furthermore, three (3) SCC have a VERY HIGH likelihood of occurrence and three (3) have a HIGH likelihood of occurrence within the project area as they have been recorded on adjacent properties. As such, the specialist disagrees with the MEDIUM sensitivity rating of the Plant Species Theme as per the DFFE Screening Tool Report and suggests that the plant species theme sensitivity of the Overberg Dune Strandveld and Degraded Areas is reclassified as HIGH due to the confirmed occurrence of SCC, but that the Plant Species Theme Sensitivity of the *Acacia* Woodland should remain medium.

Animal Species Theme

The DFFE Screening Tool Report identified the project area as having a HIGH sensitivity for two (2) bird SCC and MEDIUM sensitivity for two (2) bird SCC and one (1) reptile SCC. Of these species, only the Southern Adder (VU) and Cape Dwarf Chameleon (NT) have a high likelihood of occurrence in the project area. The SEI of the Overberg Dune Strandveld for the Southern Adder and Cape Dwarf Chameleon is MEDIUM. Based on the above, the specialist disagrees with the High sensitivity rating of the Black Harrier as this species has a low likelihood of breeding in the near-intact Overberg Dune Strandveld habitat, therefore it is reclassified as MEDIUM. The specialist suggests that degraded areas are also reclassified as MEDIUM for the Cape Dwarf Chameleon rather than HIGH. The specialist agrees with the MEDIUM sensitivity rating of the Southern Adder (VU) in the Overberg Dune Strandveld habitat.

Site Ecological Importance

Three (3) habitat types were identified in the report including:

- → Near-intact Overberg Dune Strandveld;
- → Degraded Overberg Dune Strandveld which include the firebreaks
- → Acacia Woodland dominated by dense stands of the alien invasive plant species Acacia cyclops.

The highest overall SEI rating was applied to each habitat type identified. According to the assessment of SEI, the SEI of the near-intact Overberg Dune Strandveld was determined to be HIGH whilst the SEI of the Degraded Overberg Dune Strandveld and Acacia Woodland was determined to be MEDIUM.

In terms of the Species Environmental Assessment Guideline (SANBI, 2020), minimisation and avoidance mitigation should apply to areas of HIGH SEI, including changes to the design and layout of project infrastructure to limit the amount of habitat impacted. Limited development activities of low impact are acceptable and offset mitigation may be required for high impact activities. For areas of MEDIUM SEI, development activities of medium impact are acceptable followed by appropriate restoration activities.

Summary of Impacts

Twelve (12) impacts were identified for the proposed project. For Option A and B, of the twelve impacts identified, three (3) are of high significance and nine (9) are of medium significance prior to mitigation, the significance of six (6) of these impacts can be reduced to medium and six (6) can be reduced to low, if the mitigation measures identified are implemented and adhered to.

For Option C (the preferred alternative), of the twelve impacts identified, three (3) impacts are classified as HIGH, four (4) impacts are classified as MEDIUM, and five (5) impacts are classified as LOW. If the mitigation measures identified in this report are implemented and adhered to, the significance of these impacts can be reduced resulting in one (1) residual impact of MEDIUM significance and eleven (11) residual impacts of LOW significance.

The cumulative impacts are considered low to medium post mitigation.

Conclusions and Recommendations

Option A (Alternative 1) will result in the loss of approximately 7.13 ha (0.0713 km²) of Overberg Dune Strandveld, representing a loss of 0.02% of the total remaining extent of this vegetation type, Option B (Alternative 2) will result in the loss of 10.6 ha (0.106 km²) of Overberg Dune Strandveld, representing a loss of 0.03% of the total remaining extent of this vegetation type, and Option C (Alternative 3) will result in the loss of 6.12 ha (0.0612 km²) of Overberg Dune Strandveld, representing a loss of 0.02% of the total remaining extent of this vegetation type.

While this vegetation is classified as an Endangered Ecosystem, it is important to note that the project area is located within the urban edge, has already been impacted by habitat fragmentation, alien invasive species, and is surrounded by a network of roads with existing development situated to the east, west and south of the project area. These existing disturbances have reduced the overall ecological sensitivity of the area, potentially lowering the significance of the impact relative to more pristine or less disturbed habitats. In addition, 93% of this vegetation type currently remains and the conservation target for this vegetation type is 36%. Still, given the Endangered status of this vegetation type, any loss remains a concern, and mitigation measures have been identified to minimize any adverse effects.

Of the three alternatives, **Option C** (Alternative 3) will result in the lowest overall loss of Overberg Dune Strandveld; and includes the designation of a portion of the project area (2.7 ha) in the north as Open Space which would maintain ecological connectivity with the portion of near-intact Overberg Dune Strandveld just north of the boundary of the project area. Considering the significance of the residual impacts associated with Option C (Alternative 3) which are classified as LOW in comparison to Option A (Alternative 1) and B (Alternative 2), it is the opinion of the specialist that Option C (Alternative 3) is the preferred development alternative and that a biodiversity offset is not required, provided the Open Space Area is considered as a no-go area for development and maintained in its current near-natural state.

Option A (Alternative 1) and B (Alternative 2) would result in six (6) residual impacts of MEDIUM significance. In terms of the National Biodiversity Offset Guideline (2023), where residual negative biodiversity impacts are evaluated to be of medium or high significance, a biodiversity offset would be required. The Starting Offset Ratio for Overberg Dune Strandveld is 10:1 in terms of Annexure A of the Biodiversity Offset Guideline (2023). Furthermore, a higher ratio of 30:1 is applied to all CBA sites. Considering the site is located within a CBA 1, the higher or the two ratios would apply as the starting ratio. However, the Biodiversity Offset Guideline (2023) also states that other factors may justify smaller ratios, such as when the impact occurs in an urban setting where there are severe spatial constraints. Option A and B would therefore require a biodiversity offset.

Mitigation measures as listed in the Terrestrial Impact Assessment

- → Construction vehicles and machinery must not encroach into identified 'no-go' areas or areas outside the project footprint.
- → Topsoil (20 cm, where possible) must be collected and stored in an area of low (preferable) and medium sensitivity and used to rehabilitate impacted areas that are no longer required during the operational phase (e.g. laydown areas).
- → Only indigenous species must be used for rehabilitation.
- → Lay down areas must be located within the project footprint and must not encroach into the surrounding vegetation, particularly to the north of the site.
- → Employees must be prohibited from making open fires during the construction phase to prevent uncontrolled run-away fires.
- → The site must be checked regularly for the presence of alien invasive species. When alien invasive species are found, immediate action must be taken to remove them.
- → Employees must be prohibited from collecting plants. It is recommended that spot checks of pockets and bags are done on a regular basis to ensure that no unlawful harvesting of plant species is occurring.
- → If Option C (preferred Alternative) is approved, the near-intact Overberg Dune Strandveld within the Open Space Area must be maintained and considered a no-go area. Construction activities cannot encroach into this no-go area.
- → Mitigation measures listed under impact 1 above must be implemented.
- → Where populations of these species can't be avoided, a translocation plan to move these species must be implemented. This plan must identify the number of individuals that will be impacted and identify a suitable receiving environment where they can be moved. Included in this plan, must be a monitoring program to monitor the success of the translocation of these species.
- → If option C (preferred Alternative) is approved, SCC should be translocated into the designated Open Space Area.

- → Where translocation of plant species is required, this must be undertaken by a qualified botanist or horticulturalist.
- → Permits for all protected species must be obtained prior to construction commencing. A Search and Rescue Plan to move protected species must be drafted and implemented.
- → It is recommended that SCC and protected species that need to be moved are used as far as is feasible to rehabilitate areas impacted on during construction but not required during the operational phase.
- → The site must be checked regularly for the presence of alien invasive species and weeds. When alien invasive species are found, immediate action must be taken to remove them.
- → Alien Invasive Plant Species and Weeds must be disposed on in line with the recommendations outlined in the Working for Water Programme.
- → Any equipment brought onto site must be clean to ensure no transfer or introduction of seeds.
- → No exotic species are permitted to be planted on site. Only indigenous plant species can be used for rehabilitation/landscaping.
- → The ECO must create a list with accompanying photographs of possible alien invasive species that could occur on site prior to construction. This photo guide must be used to determine if any alien invasive species are present.
- → An alien invasive method statement must be incorporated into the EMPr.
- → All construction and construction related activities (including parking of vehicles and machinery) must remain within the approved project footprint and must not encroach into areas outside the project footprint. To facilitate this, the boundaries of the development footprint areas must be clearly demarcated and communicated to all on-site personnel during induction.
- → Temporary infrastructure (laydown areas, widened roads, etc.) must be rehabilitated and rehabilitation efforts must provide habitat for faunal species. Rocks and logs removed during clearing of the project footprint must be stacked, ideally, in previously disturbed areas or within the temporary footprint to provide shelter E.g. Rock stacks and stumperies but must not disrupt adjacent habitat to create these.
- → Draft a translocation SOP for the Southern Adder (VU) and Cape Dwarf Chameleon (NT) and implement immediately prior to construction. A permit from Cape Nature will be required to relocate this species.
- → A clause must be included in contracts for ALL personnel (i.e. including contractors) working on site stating that: "no wild animals will be hunted, killed, poisoned or captured. No wild animals will be imported into, exported from or transported in or through the province. No wild animals will be sold, bought, donated and no person associated with the development will be in possession of any live wild animal, carcass or anything manufactured from the carcass unless they have been appointed to implement the Carcass Management Plan or Animal Relocation Plan."
- → In addition, a clause relating to fines, possible dismissal and legal prosecution must be included should any of the above transgressions occur for SCC.
- → The ECO should appoint a member of staff to walk ahead of construction machinery directly prior to vegetation clearance. Should any faunal species be identified during the walk through, these should be allowed to move out of harm's way prior to vegetation clearance.
- → The ECO must create a list with accompanying photographs of possible faunal SCC that could occur in the project area prior to construction. This photo guide must be used to determine if faunal SCC are encountered.
- → Should any fauna SCC be encountered during construction and operation, these must be recorded (i.e. be photographed, GPS co-ordinates taken) and information placed on iNaturalist
- → In the unlikely event that bird SCC inhabit the site to breed, all site personnel are not to disturb them, even approaching nests of SCC is considered harmful to the success of breeding. Should an active breeding nests (eggs, nestlings, fledglings) be discovered in or near construction areas prior to or during the construction phase:
 - These must be reported to ECO.
 - Where deemed necessary an appropriate buffer should be placed around the nest. If uncertain on the size of such a buffer, the ECO may contact an avifaunal specialist for advice.
 - No construction activity should occur within the buffer and the nest must be monitored.

- → Once birds have finished nesting and the fledglings left the nest construction can recommence within the buffer zone
- → It is recommended that vegetation clearance takes place gradually, commencing from eastern side of the project area and methodically advancing towards the western side to encourage the movement of any faunal species to the natural area.
- → Dust suppression measures must be implemented in the dry and/or windy months.
- → All machinery, vehicles and earth moving equipment must be maintained and the noise these create must meet industry minimum standards. e.g. the sound generated by a machine must be below a certain decibel as prescribed in the relevant noise control regulations.
- → No construction night lighting must be allowed. If required, minimise lighting in open space areas within development and any external lights must be down lights placed as low as possible and installation of low UV emitting lights.
- → Steep sided drains, gutters, canals and open pits/trenches must be covered with mesh (5mm x 5mm) or sloped to prevent fauna falling in and getting stuck. No unnecessary structures that would act as pitfall traps for animals must be constructed.
- → Permeable internal and external fences/walls (after construction is completed) must be implemented to allow for the movement of small faunal species through the development, particularly fencing surrounding the Open Space Area. These must have ground level gaps of 10cm x 10cm at 10m intervals. These gaps must be kept free of obstructions, including plant growth and debris.
- → No night driving should be permitted, if unavoidable, this must be restricted, and speed limits adhered to.
- → Speed restrictions within the development for construction vehicles (40km/h is recommended) should be in place to reduce the incidence of faunal mortality on project roads.
- → A trained snake handler must be on call during construction to remove any snakes within construction areas.
- → A clause relating to fines, possible dismissal and legal prosecution must be included in all contracts for ALL personnel (i.e. including contractors) working on site should any speeding or persecution of animals occur.
- → Induction material must iterate safety to fauna and personnel through avoidance of wildlife. For example, snakes tend to only strike if threatened (cornered or attacked).
- → It is strongly recommended that rodenticides not be used at any the newly established buildings or around auxiliary infrastructure on the project site. While pest control of this nature may be effective, even so-called "environmentally friendly" rodenticides are toxic and pose significant secondary poisoning risk to predatory avifauna, especially owls.

Heritage Impact Assessment

The Heritage Impact Assessment (HIA), which included an Archaeological Impact Assessment (AIA) and a desktop Palaeontological Impact Assessment (PIA), assessed the potential for heritage-related impacts.

Archaeology

The assessment found that while the area is located within a broader archaeologically sensitive coastal landscape, the actual development footprint presented limited archaeological evidence. Only a single point with fragments of marine shellfish, possibly related to dune mole rat activity, was identified suggesting the potential presence of sub-surface archaeological deposits in the southwestern portion of the site. No additional cultural materials, such as pottery, stone tools, or burials, were recorded, and no graves or culturally significant built environment features were identified. The overall archaeological sensitivity of the site was graded as low (Grade IIIC), though this is subject to confirmation via test excavations in selected areas, especially the southeastern corner of Erf 1473.

Palaeontology

In terms of palaeontology, the site lies within aeolian dunes of the Holocene Strandveld Formation overlying the Waenhuiskrans Formation. While fossil material such as land snails, tortoise shell, and small mammal bones may occur sporadically in these sediments, the likelihood of significant fossil finds is low. However, given the moderate palaeontological sensitivity, especially in the underlying Waenhuiskrans Formation, the implementation of a Fossil Finds Procedure (FFP) is recommended to guide the management of any unexpected fossil discoveries during construction.

Mitigation measures

- → Test pits in the southeastern corner of the proposed development site must be conducted to establish the presence/absence of any potentially important sub surface archaeological deposits, prior to construction excavations commencing
- → A walk down survey of the proposed development site must be conducted after the site has been cleared of vegetation.
- → If any unmarked human remains are uncovered or exposed during excavations, work must stop, and the finds reported to the Environmental Control Officer and the contracted archaeologist (Jonathan Kaplan 082 321 0172). Human remains must not be removed or disturbed until inspected by the archaeologist.
- → A protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), must be included in the Environmental Management Plan (EMP) for the proposed development. The Fossil Finds Procedure provides guidelines to be followed in the event of fossil bone finds in the excavations.

Palaeontological Impact Assessment

The development site, located south of Gansbaai on the Gansbaai-Danger Point promontory, is underlain by vegetated dunes of the Holocene Strandveld Formation, which overlie older, calcified dunes of the mid to late Quaternary Waenhuiskrans Formation. These formations rest on a marine-cut platform over Table Mountain Group bedrock (Peninsula Formation, early Ordovician, ~490–470 Ma), which contains only trace fossils and is not paleontologically significant for this development.

Strandveld Formation is rated as MODERATE sensitivity due to its proximity to the coast, where subfossil bones (mainly <7 ka) of extant fauna (e.g., elephant, rhino, hippo) and Late Stone Age archaeological material may occur. These subfossils, though rare, can provide valuable ecological data through radiocarbon dating and isotopic analysis. The moderate rating aligns with the EIA Screening Tool's Palaeontology Theme Sensitivity for similar coastal formations (e.g., Witzand Formation on the West Coast).

Waenhuiskrans Formation is rated as VERY HIGH sensitivity by SAHRIS due to previous fossil bone finds in coastal developments. Fossils in this formation, dated ~170–80 ka, are likely to include extant fauna but may also feature unexpected or extinct species due to past ecological and climatic variations. However, the PIA assigns a MODERATE sensitivity rating for additional finds, as they are considered common or stratigraphically long-ranging, with limited new scientific importance.

The development involves excavations for building foundations (0.6–1.0 m depth) and service infrastructure (1.0–2.0 m depth), primarily affecting the Strandveld Formation and, to a lesser extent, the upper Waenhuiskrans Formation. The impact is rated MEDIUM NEGATIVE without mitigation due to the potential permanent loss of fossil bones and archaeological material, which cannot be predicted in location. With mitigation, the impact shifts to MEDIUM TO HIGH POSITIVE, as fossil rescue enhances scientific knowledge.

The fossil potential is based on regional observations and geological literature, assuming typical fossil content for the formations. A key limitation is the inability to predict precise fossil locations, as significant bones are sparsely distributed and often only detected during excavation. The thick vegetation cover precludes field surveys, making construction-phase monitoring critical.

Mitigation measures

- → The possible presence of fossils in the subsurface does not have an *a priori* influence on the decision to proceed with the proposed development. However, mitigation measures are essential. The potential impact has a moderate influence upon the proposed project, consisting of implemented mitigation measures recommended below, to be followed during the vegetation clearing and Construction Phases.
- → Although the inspection of construction excavations may be specified in the Archaeological Impact Assessment, it is not feasible for a specialist monitor to be continuously present during the Construction Phases, when fossils may be unearthed at any time. The rescue of fossil bones during earth works critically depends on spotting this material as it is uncovered during digging.
- → For successful mitigation, it is therefore crucial that earth works personnel must be involved in mitigation by watching for fossil bones as excavations are being made.
- → It is recommended that a protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the proposed development.
- → The Fossil Finds Procedure included as Appendix 2 provides guidelines to be followed in the event of fossil bone finds in the excavations. The works supervisor/foreman and workers involved in excavating the building foundations, infrastructure trenches and stormwater drainage must be informed of the need to watch for fossils and archaeological material. Workers seeing potential objects are to cease work at that spot and to report to the works supervisor who, in turn, will report to the Environmental Control Officer (ECO) and/or the Developer. The ECO/Developer will contact and liaise with Heritage Western Cape and the standby archaeologist or palaeontologist on the nature of the find and suitable consequent actions such as immediate site inspection, application for a palaeontological collection permit and drafting of a work plan for the collection of the find.
- → If a significant occurrence of fossil bones in a palaeontological context is discovered a professional palaeontologist must be appointed to collect them and to record their contexts. Said palaeontologist must also undertake the recording of the stratigraphic context and sedimentary geometry of the exposure, the sampling of ambient small fossil content and the compilation of the report for distribution to Heritage Western Cape, SAHRA, the approved curatorial institution and local heritage interest groups.
- → A permit from HWC is required to excavate fossil bone finds. The applicant should be the qualified specialist responsible for assessment, collection and reporting (palaeontologist). Should fossils be found that require rapid collecting, application for a palaeontological permit with supporting work plan will immediately be made to HWC. The application requires the details and permission of the registered owner of the site. The fossils and their contextual information must be deposited at a SAHRA/HWC-approved institution. The rescue of discovered palaeontological remains by a contracted specialist shall be at the Developer's expense.

Conditions of Heritage Permit as issued by Heritage Western Cape

Heritage Western Cape issued a final comment on 8 April 2025, **endorsing the HIA** as having met the provisions of Section 38(3) of the NHRA. In addition to the above recommendations, HWC has included the following conditions in the permit:

- → Archaeological monitoring should occur during vegetation clearing as there might be surface remains that are impacted during the clearing. A work Plan must be submitted for the Archaeological monitoring to HWC for the endorsement.
- → Test excavations in the southeastern corner of Erf 1473 must be conducted to establish the presence/absence of any sub surface archaeological deposits, prior to construction excavations commencing.
- → A walk down survey of the development site must be conducted after the site has been cleared of vegetation.
- → If any unmarked human remains are uncovered or exposed during excavations, work must stop, and the finds reported to the Environmental Control Officer and the contracted archaeologist (Jonathan Kaplan 082 321 0172)

- [and Heritage Western Cape. Human remains must not be removed or disturbed without required approvals from the heritage authority].
- → A protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), must be included in the Environmental Management Plan (EMP) for the proposed development. The Fossil Finds Procedure provides guidelines to be followed in the event of fossil bone finds in the excavations.

Aquatic Compliance Statement

According to the Department of Forestry, Fisheries, and the Environment (DFFE) screening tool, the area was initially flagged as having "Very High" aquatic biodiversity sensitivity due to the presence of mapped aquatic Ecological Support Areas (ESA 1 and ESA 2) linked to "coastal corridor and watercourse" features identified in the 2017 Western Cape Biodiversity Spatial Plan (WCBSP). This prompted the requirement for a compliance statement and a site sensitivity verification process.

Delta Ecology conducted a comprehensive desktop review and a field assessment on 17 October 2024. The Assessment confirmed the absence of any mapped wetlands, rivers, or drainage lines within the site or within the regulated 500 m buffer, as indicated in datasets such as the National Wetlands Map 5 (NWM5), the National Freshwater Ecosystem Priority Areas (NFEPA), and the National Geo-spatial Information (NGI) river and topographical data. The field verification further found that the site does not contain any wetland or riparian features. Specifically, there were no topographical signatures such as riverbeds or banks, no hydric soils, and no hydrophytic or riparian vegetation indicative of watercourse conditions as defined under the National Water Act (Act 36 of 1998).

Soil samples from the site revealed well-drained sandy soils, while vegetation observed consisted predominantly of terrestrial species including *Searsia lucida*, *Searsia glauca*, *Agathosma capensis*, *and Helichrysum patulum*. The presence of alien invasive species such as Acacia cyclops was also noted. Based on these findings, the aquatic sensitivity of the study area was downgraded from Very High to Low, and it was concluded that the site does not support any aquatic ecosystems or ecological functions typically associated with aquatic biodiversity features.

As such, no aquatic-specific mitigation measures were deemed necessary, and no aquatic-related development restrictions or buffer zones were triggered. The report concludes that, from an Aquatic Biodiversity perspective, there are no constraints to the approval of the proposed development, provided general environmental best practices are followed and no further Aquatic Assessment is required.

Agricultural Compliance Statement

The Screening Tool classified the site as having medium to high agricultural sensitivity, based on land capability ratings ranging from 6 to 9. However, this assessment disputes the high sensitivity classification, rating the entire site as medium agricultural sensitivity with a maximum land capability of 6. The site is not classified as cropland, and its soils, primarily grey regic sands (H land types), have low cropping potential due to poor water and nutrient holding capacity. This is supported by the absence of crop production on similar land types in the area.

The development will result in zero agricultural impact because the site has no current or future agricultural production potential. An agricultural impact requires a change in production potential, which is not applicable here. The cumulative agricultural impact is assessed as low and acceptable, as the development does not contribute to regional loss of agricultural production potential. The no-go alternative (no development) has no agricultural impact, but this is not significantly different from the low impact of the proposed development, making both options equally acceptable from an agricultural perspective.

The assessment concludes that no impact management measures or monitoring requirements are necessary for the Environmental Management Programme (EMPr), given the negligible agricultural impact.

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

Terrestrial Biodiversity Impacts Assessment

Recommended mitigation measures

- → Construction vehicles and machinery must not encroach into identified 'no-go' areas or areas outside the project footprint.
- → Topsoil (20 cm, where possible) must be collected and stored in an area of low (preferable) and medium sensitivity and used to rehabilitate impacted areas that are no longer required during the operational phase (e.g. laydown areas).
- → Only indigenous species must be used for rehabilitation.
- → Lay down areas must be located within the project footprint and must not encroach into the surrounding vegetation, particularly to the north of the site.
- → Employees must be prohibited from making open fires during the construction phase to prevent uncontrolled run-away fires.
- → The site must be checked regularly for the presence of alien invasive species. When alien invasive species are found, immediate action must be taken to remove them.
- → Employees must be prohibited from collecting plants. It is recommended that spot checks of pockets and bags are done on a regular basis to ensure that no unlawful harvesting of plant species is occurring.
- → If Option C (preferred Alternative) is approved, the near-intact Overberg Dune Strandveld within the Open Space Area must be maintained and considered a no-go area. Construction activities cannot encroach into this no-go area.
- → Mitigation measures listed under impact 1 above must be implemented.
- → Where populations of these species can't be avoided, a translocation plan to move these species must be implemented. This plan must identify the number of individuals that will be impacted and identify a suitable receiving environment where they can be moved. Included in this plan, must be a monitoring program to monitor the success of the translocation of these species.
- → If option C (preferred Alternative) is approved, SCC should be translocated into the designated Open Space Area.
- → Where translocation of plant species is required, this must be undertaken by a qualified botanist or horticulturalist.
- → Permits for all protected species must be obtained prior to construction commencing. A Search and Rescue Plan to move protected species must be drafted and implemented.
- → It is recommended that SCC and protected species that need to be moved are used as far as is feasible to rehabilitate areas impacted on during construction but not required during the operational phase.
- → The site must be checked regularly for the presence of alien invasive species and weeds. When alien invasive species are found, immediate action must be taken to remove them.
- → Alien Invasive Plant Species and Weeds must be disposed on in line with the recommendations outlined in the Working for Water Programme.
- → Any equipment brought onto site must be clean to ensure no transfer or introduction of seeds.
- → No exotic species are permitted to be planted on site. Only indigenous plant species can be used for rehabilitation/landscaping.
- → The ECO must create a list with accompanying photographs of possible alien invasive species that could occur on site prior to construction. This photo guide must be used to determine if any alien invasive species are present.
- → An alien invasive method statement must be incorporated into the EMPr.
- → All construction and construction related activities (including parking of vehicles and machinery) must remain within the approved project footprint and must not encroach into areas outside the project footprint. To facilitate this, the boundaries of the development footprint areas must be clearly demarcated and communicated to all on-site personnel during induction.

- → Temporary infrastructure (laydown areas, widened roads, etc.) must be rehabilitated and rehabilitation efforts must provide habitat for faunal species. Rocks and logs removed during clearing of the project footprint must be stacked, ideally, in previously disturbed areas or within the temporary footprint to provide shelter E.g. Rock stacks and stumperies but must not disrupt adjacent habitat to create these.
- → Draft a translocation SOP for the Southern Adder (VU) and Cape Dwarf Chameleon (NT) and implement immediately prior to construction. A permit from Cape Nature will be required to relocate this species.
- → A clause must be included in contracts for ALL personnel (i.e. including contractors) working on site stating that: "no wild animals will be hunted, killed, poisoned or captured. No wild animals will be imported into, exported from or transported in or through the province. No wild animals will be sold, bought, donated and no person associated with the development will be in possession of any live wild animal, carcass or anything manufactured from the carcass unless they have been appointed to implement the Carcass Management Plan or Animal Relocation Plan."
- → In addition, a clause relating to fines, possible dismissal and legal prosecution must be included should any of the above transgressions occur for SCC.
- → The ECO should appoint a member of staff to walk ahead of construction machinery directly prior to vegetation clearance. Should any faunal species be identified during the walk through, these should be allowed to move out of harm's way prior to vegetation clearance.
- → The ECO must create a list with accompanying photographs of possible faunal SCC that could occur in the project area prior to construction. This photo guide must be used to determine if faunal SCC are encountered.
- → Should any fauna SCC be encountered during construction and operation, these must be recorded (i.e. be photographed, GPS co-ordinates taken) and information placed on iNaturalist
- → In the unlikely event that bird SCC inhabit the site to breed, all site personnel are not to disturb them, even approaching nests of SCC is considered harmful to the success of breeding. Should an active breeding nests (eggs, nestlings, fledglings) be discovered in or near construction areas prior to or during the construction phase:
 - These must be reported to ECO.
 - Where deemed necessary an appropriate buffer should be placed around the nest. If uncertain on the size of such a buffer, the ECO may contact an avifaunal specialist for advice.
 - o No construction activity should occur within the buffer and the nest must be monitored.
- → Once birds have finished nesting and the fledglings left the nest construction can recommence within the buffer zone.
- → It is recommended that vegetation clearance takes place gradually, commencing from eastern side of the project area and methodically advancing towards the western side to encourage the movement of any faunal species to the natural area.
- → Dust suppression measures must be implemented in the dry and/or windy months.
- → All machinery, vehicles and earth moving equipment must be maintained and the noise these create must meet industry minimum standards. e.g. the sound generated by a machine must be below a certain decibel as prescribed in the relevant noise control regulations.
- → No construction night lighting must be allowed. If required, minimise lighting in open space areas within development and any external lights must be down lights placed as low as possible and installation of low UV emitting lights.
- → Steep sided drains, gutters, canals and open pits/trenches must be covered with mesh (5mm x 5mm) or sloped to prevent fauna falling in and getting stuck. No unnecessary structures that would act as pitfall traps for animals must be constructed.
- → Permeable internal and external fences/walls (after construction is completed) must be implemented to allow for the movement of small faunal species through the development, particularly fencing surrounding the Open Space Area. These must have ground level gaps of 10cm x 10cm at 10m intervals. These gaps must be kept free of obstructions, including plant growth and debris.
- → No night driving should be permitted, if unavoidable, this must be restricted, and speed limits adhered to.

- → Speed restrictions within the development for construction vehicles (40km/h is recommended) should be in place to reduce the incidence of faunal mortality on project roads.
- → A trained snake handler must be on call during construction to remove any snakes within construction areas.
- → A clause relating to fines, possible dismissal and legal prosecution must be included in all contracts for ALL personnel (i.e. including contractors) working on site should any speeding or persecution of animals occur.
- → Induction material must iterate safety to fauna and personnel through avoidance of wildlife. For example, snakes tend to only strike if threatened (cornered or attacked).
- → It is strongly recommended that rodenticides not be used at any the newly established buildings or around auxiliary infrastructure on the project site. While pest control of this nature may be effective, even so-called "environmentally friendly" rodenticides are toxic and pose significant secondary poisoning risk to predatory avifauna, especially owls.
- → The site must be checked regularly for the presence of alien invasive species and weeds. When alien invasive species are found, immediate action must be taken to remove them.
- → Alien Invasive Plant Species and Weeds must be disposed on in line with the recommendations outlined in the Working for Water Programme.
- → Any equipment brought onto site must be clean to ensure no transfer or introduction of seeds.
- → No exotic species are permitted to be planted on site. Only indigenous plant species can be used for rehabilitation/landscaping.
- → An alien invasive method statement must be incorporated into the EMPr to ensure that these species do not spread onto neighbouring properties.
- → Speed restrictions within the development for all vehicles (40km/h is recommended) should be implemented to reduce the possibility of collisions and roadkill.
- → Do not place lighting on the exterior of the boundary wall (i.e. pointing into the Nature Reserve).
- → Ideally, residents must not have pets that can leave their premises and enter the surrounding natural area. i.e. Domestic cats should not be permitted and if they are, they must wear a bell. Fines should be issued by the Body Corporate if not adhered to.
- → Restrictions can be placed on noise to minimise impact. Body Corporate to establish a noise policy and associated fines.
- → External lights that are used in the mixed-use development must be down lights placed as low on the wall as possible and installation of low UV emitting lights, such as most LEDs. Minimise lighting in open space areas within development.
- → Ensure all vehicles adhere to the relevant noise restrictions.
- → Create faunal micro habitats within developed area e.g. rocky outcrops, corridors of shrubbery, stumperies.
- → Body corporate and Estate Agents to ensure potential buyers and residents are aware of the restrictions placed on lighting, noise and pets based on living in an area bordering an ecological corridor.
- → No feeding of wildlife is permitted, including bird feeders.
- → No pesticides may be used to control pests, especially rodents, as poisoned rodents are often eaten by predatory birds (e.g., owls) that result in the owl dying. If pesticide is required only 'Eco Rat Rodenticide' may be used.
- → Occupants of the residential units must be made aware of the current legislation applicable to all fauna in the project area: "no wild animals will be hunted, killed, poisoned, or captured. No wild animals will be imported into, exported from, or transported in or through the province. No wild animals will be sold, bought, donated and no person associated with the development will be in possession of any live wild animal, carcass or anything manufactured from the carcass."

Heritage Impact Assessment

Recommended mitigation measures

- Test pits in the southeastern corner of the proposed development site must be conducted to establish the presence/absence of any potentially important sub surface archaeological deposits, prior to construction excavations commencing.
- A walk down survey of the proposed development site must be conducted after the site has been cleared of vegetation.
- If any unmarked human remains are uncovered or exposed during excavations, work must stop, and the finds reported to the Environmental Control Officer and the contracted archaeologist (Jonathan Kaplan 082 321 0172). Human remains must not be removed or disturbed until inspected by the archaeologist.
- A protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), must be included in the Environmental Management Plan (EMP) for the proposed development. The Fossil Finds Procedure provides guidelines to be followed in the event of fossil bone finds in the excavations.

Palaeontological Impact Assessment

Recommended mitigation measures

- → The possible presence of fossils in the subsurface does not have an *a priori* influence on the decision to proceed with the proposed development. However, mitigation measures are essential. The potential impact has a moderate influence upon the proposed project, consisting of implemented mitigation measures recommended below, to be followed during the vegetation clearing and Construction Phases.
- → Although the inspection of construction excavations may be specified in the Archaeological Impact Assessment, it is not feasible for a specialist monitor to be continuously present during the Construction Phases, when fossils may be unearthed at any time. The rescue of fossil bones during earth works critically depends on spotting this material as it is uncovered during digging.
- → For successful mitigation, it is therefore crucial that earth works personnel must be involved in mitigation by watching for fossil bones as excavations are being made.
- → It is recommended that a protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the proposed development.
- → The Fossil Finds Procedure included as Appendix 2 provides guidelines to be followed in the event of fossil bone finds in the excavations. The works supervisor/foreman and workers involved in excavating the building foundations, infrastructure trenches and stormwater drainage must be informed of the need to watch for fossils and archaeological material. Workers seeing potential objects are to cease work at that spot and to report to the works supervisor who, in turn, will report to the Environmental Control Officer (ECO) and/or the Developer. The ECO/Developer will contact and liaise with Heritage Western Cape and the standby archaeologist or palaeontologist on the nature of the find and suitable consequent actions such as immediate site inspection, application for a palaeontological collection permit and drafting of a work plan for the collection of the find.
- → If a significant occurrence of fossil bones in a palaeontological context is discovered a professional palaeontologist must be appointed to collect them and to record their contexts. Said palaeontologist must also undertake the recording of the stratigraphic context and sedimentary geometry of the exposure, the sampling of ambient small fossil content and the compilation of the report for distribution to Heritage Western Cape, SAHRA, the approved curatorial institution and local heritage interest groups.
- → A permit from HWC is required to excavate fossil bone finds. The applicant should be the qualified specialist responsible for assessment, collection and reporting (palaeontologist). Should fossils be found that require rapid collecting, application for a palaeontological permit with supporting work plan will immediately be made to HWC. The application requires the details and permission of the registered owner of the site. The fossils and their contextual information must be deposited at a SAHRA/HWC-approved institution. The rescue of discovered palaeontological remains by a contracted specialist shall be at the Developer's expense.

Heritage Western Cape Permit conditions

Heritage Western Cape issued a final comment on 8 April 2025, **endorsing the HIA** as having met the provisions of Section 38(3) of the NHRA. In addition to the above recommendations, HWC has included the following conditions in the permit:

- → Archaeological monitoring should occur during vegetation clearing as there might be surface remains that are impacted during the clearing. A work Plan must be submitted for the Archaeological monitoring to HWC for the endorsement.
- → Test excavations in the southeastern corner of Erf 1473 must be conducted to establish the presence/absence of any sub surface archaeological deposits, prior to construction excavations commencing.
- → A walk down survey of the development site must be conducted after the site has been cleared of vegetation.
- → If any unmarked human remains are uncovered or exposed during excavations, work must stop, and the finds reported to the Environmental Control Officer and the contracted archaeologist (Jonathan Kaplan 082 321 0172) [and Heritage Western Cape. Human remains must not be removed or disturbed without required approvals from the heritage authority].
- → A protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), must be included in the Environmental Management Plan (EMP) for the proposed development. The Fossil Finds Procedure provides guidelines to be followed in the event of fossil bone finds in the excavations.

In addition to the above mitigation measures, the requirements of the Environmental Management Programme are also enforced and must be implemented at all times during construction and operation of the activity.

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, situated in Van Dyksbaai between Gansbaai and Franskraal in the Overstrand Municipality, is expected to have a range of socio-economic impacts on the surrounding communities. The Overstrand region is widely known for its thriving tourism industry particularly whale watching, shark cage diving, and high-quality hospitality offerings. According to the Overstrand Municipality Spatial Development Framework (OMSDF, 2020), Van Dyksbaai is experiencing an annual population growth rate of approximately 2.1%. This growth is driven by both the younger demographic (ages 20–40) seeking employment opportunities and the elderly population (60+), many of whom view the area as an ideal retirement destination.

The net in-migration trends from 1996 to 2016, as shown in **Figure 24**, reveal that the region continues to attract both younger individuals (ages 15–24) and senior citizens (ages 75+), demonstrating a dual pressure on both job creation and the need for suitable housing. In response to this trend, the proposed development seeks to accommodate future population growth through the creation of residential erven in a more compact and efficient layout. This infill development strategy promotes spatial sustainability by reducing urban sprawl and limiting the unnecessary transformation of undeveloped land.

From a socio-economic perspective, the construction phase of the development will generate job opportunities for the local workforce, particularly for contractors and general labourers. This is especially important in light of the area's high levels of unemployment, particularly among disadvantaged communities. The project is therefore positioned to contribute positively to local livelihoods during its implementation phase.

In the longer term, the development will enhance housing availability in Van Dyksbaai, which supports the municipality's 2050 vision for ensuring that development is confined within urban edges and growth is managed based on sustainable

densification principles. The development promotes efficient land use and service delivery, aligning with the Overstrand Municipality's broader strategic goals.

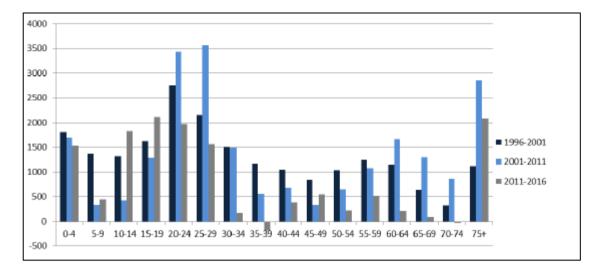


Figure 24: Net-migration in Overstrand from 1996 to 2016. Source; (OMSDF, 2020).

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.

N/A

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.

The integration of findings and recommendations from the various specialist studies particularly the Terrestrial Biodiversity Impact Assessment has been central to informing a well-considered and environmentally responsible approach to the proposed development. This assessment, which encompasses the Terrestrial Biodiversity Theme, Plant Species Theme, and Animal Species Theme, has played a critical role in identifying areas on the property that are classified as Very High and High in terms of their ecological sensitivity and biodiversity value.

The insights gained from these studies have guided the selection of a development layout that avoids and minimises impacts on sensitive habitats and species of conservation concern (SCC). As part of this process, the specialist team assessed three layout alternatives (Alternative 1, Alternative 2, and Alternative 3), evaluating each in terms of its associated development footprint and the measurable impact on identified site-specific ecological features. Based on this evaluation, the team recommended appropriate development measures aimed at reducing the ecological footprint and ensuring the protection of sensitive biodiversity elements. An extract from the Terrestrial Biodiversity Impact Assessment is provided below, summarising the key findings that have informed the layout selection and associated mitigation strategy for the proposed development.

Extract from the Terrestrial Biodiversity Impact Assessment:

Terrestrial Biodiversity Theme

"The desktop assessment and field survey confirmed that the project area occurs within Overberg Dune Strandveld. This vegetation type is listed as Endangered (EN) due to its narrow distribution and evidence of ongoing biotic disruption from invasive alien plant species (DFFE, 2022). Despite being listed as EN, 93% (323.2 km²) currently remains intact. The SEI of the Overberg Dune Strandveld was determined to be HIGH. However, it should be noted that portions of Overberg Dune Strandveld within the project area have been modified and degraded due to the establishment of alien invasive plant species and the creation of fire breaks which has resulted in the fragmentation of vegetation.

In addition to the above, the project area occurs within the Walker Bay KBA. According to the World Database of KBAs, this site qualifies as a Key Biodiversity Area of international significance that meets the thresholds for 4 criteria described in the Global Standard for the Identification of KBAs.

The Walker Bay KBA is 322 km^2 in extent. The proposed residential development occurs within a small portion (0.11 km2 = 0.03%), and on the edge, of the Walker Bay KBA adjacent to existing residential development. Implications on biodiversity may include the loss of some habitats that support sensitive species, may result in the loss of individual SCC and could increase habitat fragmentation.

Based on the above, the specialist disagrees with the VERY HIGH sensitivity rating of the Overberg Dune Strandveld and suggests the following:

- The portion of Overberg Dune Strandveld is reclassified as HIGH rather than VERY HIGH.
- The Acacia Woodland is reclassified as VERY LOW rather than VERY HIGH.
- The Degraded Overberg Dune Strandveld (firebreaks) is reclassified as MEDIUM rather than VERY HIGH.

Plant Species Theme

The National Web-Based Screening Tool classified the project area as medium under the plant species theme, with forty-eight (48) Sensitive Plant Species potentially present. During the field survey, four (4) plant SCC were observed including three (3) Vulnerable (VU) species (Lampranthus fergusoniae, Cynanchum zeyheri, and Athanasia quinquedentata subsp. rigens), and one Near Threatened (NT) species (Asparagus lignosus). Furthermore, three (3) SCC have a VERY HIGH likelihood of occurrence and three (3) have a HIGH likelihood of occurrence within the project area as they have been recorded on adjacent properties. Twelve (12) SCC have a moderate likelihood of occurrence within the project area. As such, the specialist disagrees with the MEDIUM sensitivity rating of the Plant Species Theme as per the DFFE Screening Tool Report and suggests that the plant species theme sensitivity of the Overberg Dune Strandveld and Degraded Areas is reclassified as HIGH due to the confirmed occurrence of SCC, but that the Plant Species Theme Sensitivity of the Acacia Woodland should remain medium.

Animal Species Theme

The DFFE Screening Tool Report identified the project area as having a HIGH sensitivity for two (2) bird SCC and MEDIUM sensitivity for two (2) bird SCC and one (1) reptile SCC. Of these species, only the Southern Adder (VU) and Cape Dwarf Chameleon (NT) have a high likelihood of occurrence in the project area. The SEI of the Overberg Dune Strandveld for the Southern Adder and Cape Dwarf Chameleon is MEDIUM. Based on the above, the specialist disagrees with the High sensitivity rating of the Black Harrier as this species has a low likelihood of breeding in the near-intact Overberg Dune Strandveld habitat, therefore it is reclassified as MEDIUM. The specialist suggests that degraded areas are also reclassified

as MEDIUM for the Cape Dwarf Chameleon rather than HIGH. The specialist agrees with the MEDIUM sensitivity rating of the Southern Adder (VU) in the Overberg Dune Strandveld habitat."

The Extract from the Heritage Impact Assessment:

"Archaeology

Fragments of marine shellfish associated with dune mole rat burrowing were encountered in the southwestern portion of the proposed site indicating the possible presence of some sub surface archaeological deposits (Figure 11). No cultural remains such as pottery, ostrich eggshell, or any stone tools or flakes were found.

No other archaeological resources were encountered during the walk down survey, although it is noted that most of the site is covered in extremely dense vegetation cover, resulting in low archaeological visibility.

The archaeological resources have been graded as having Low (Grade IIIC) local significance, subject to test excavations to establish the presence/absence of sub-surface deposits.

Palaeontology

The fossil bones that may occur in the Waenhuiskrans Fm. in the Project Area are expected to be of late-middle to earlier-late Quaternary age, between ~160 to ~80 ka and, like the later Strandveld Fm. dunes sands, also mainly comprised of representatives of the extant fauna, but unexpected species of a different fauna are more likely to occur, as a result of phases of different ecological and palaeoclimatic conditions in the past, as well as the bones of some species which became extinct in the geologically-recent past. Intersections of the upper, variously calcreted Waenhuiskrans Fm. in earthworks are expected to be limited in volume relative to the affected volume of overlying dune coversands. As it is likely that only a relatively small volume of Waenhuiskrans Formation deposits will be affected by the proposed development, the anticipated impact is assigned a MODERATE rating.

Built Environment

The only building on site is a ruined, modern, breeze block borehole structure on Erf 1479

Graves

No graves were encountered on the proposed site.

Cultural Landscape

The Cultural Landscape is characterised by ribbon development along the coast all the way to Franskraal, and the mouth of the Uilkraalmond, with large open spaces of vacant (agricultural) land inside the Urban Edge, and north of Dyer Street. Surrounding vacant land will likely be developed as demand for housing increases in the near future.

Recommendations

- Test pits in the southeastern corner of the proposed development site must be conducted to establish the
 presence/absence of any potentially important sub surface archaeological deposits, prior to construction
 excavations commencing
- walk down survey of the proposed development site must be conducted after the site has been cleared of vegetation.

- If any unmarked human remains are uncovered or exposed during excavations, work must stop, and the finds reported to the Environmental Control Officer and the contracted archaeologist (Jonathan Kaplan 082 321 0172). Human remains must not be removed or disturbed until inspected by the archaeologist.
- A protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), must be included in the Environmental Management Plan (EMP) for the proposed development. The Fossil Finds Procedure provides guidelines to be followed in the event of fossil bone finds in the excavations."

Extract from the Palaeontological Impact Assessment:

"Affected Formations

The development area is on old vegetated dunes of the Strandveld Fm, as is evident in the rounded-off dune ridges trending to the southeast across the area. The Strandveld Fm. dune ridges are underlain by the Waenhuiskrans Fm. (Figure 5). Presumably there are outcrops of calcrete and cemented aeolianite in the area, such as on ridge flanks or between ridges.

Anticipated Impact on Palaeontological Resources

The proposed development involves trenches for building foundations (0.6-1.0 m depth) and services infrastructure (1.0-2.0 m depth).

Due to its young Holocene age the Strandveld Fm. dunes typically host Late Stone Age archaeological material and the bones of "modern" (extant) animals which, not being very old, are termed "subfossils". The large bones of elephant, rhino, and hippo who died in the Strandveld Fm. dunes have occasionally been uncovered during sand quarrying and developments but are apparently rare finds. Deflation and passage of the Strandveld dunes would have moved embedded material down onto deflation palaeosurfaces and deeper down onto the underlying palaeosurface on top of the calcreted and cemented Waenhuiskrans Fm.

The MODERATE rating is applicable close to the coast where subfossil bones in archaeological sites occur, but sites are less common inland. The subfossil bones are expected to be of latest Quaternary, later Holocene age (mainly less than about 7 thousand years old) and are likely to be mainly members of the extant, modern fauna, but unexpected species which do not belong to the modern/historical fauna may occur, due to fluctuations in the prehistoric palaeoclimate of the region. Due to its proximity to the coast the MODERATE rating of the Strandveld Fm. on the proposed development site is endorsed.

a field survey is precluded by the formation being mainly beneath the thickly vegetated Strandveld Fm. dune sands and fossil bones may only be exposed during vegetation clearing and the Construction Phase earthworks.

The fossil bones that may occur in the Waenhuiskrans Fm. in the Project Area are expected to be of late-middle to earlier-late Quaternary age, between ~160 to ~80 ka (Figure 4) and, like the later Strandveld Fm. dunes sands, also mainly comprised of representatives of the extant fauna, but unexpected species of a different fauna are more likely to occur, as a result of phases of different ecological and palaeoclimatic conditions in the past, as well as the bones of some species which became extinct in the geologically-recent past. Intersections of the upper, variously calcreted Waenhuiskrans Fm. in earthworks are expected to be limited in volume relative to the affected volume of overlying dune coversands.

Recommendations

• The possible presence of fossils in the subsurface does not have an a priori influence on the decision to proceed with the proposed development. However, mitigation measures are essential. The potential impact has a moderate influence upon the proposed project, consisting of implemented mitigation measures recommended below, to be followed during the vegetation clearing and Construction Phases.

- Although the inspection of construction excavations may be specified in the Archaeological Impact Assessment, it
 is not feasible for a specialist monitor to be continuously present during the Construction Phases, when fossils
 may be unearthed at any time. The rescue of fossil bones during earth works critically depends on spotting this
 material as it is uncovered during digging.
- For successful mitigation, it is therefore crucial that earth works personnel must be involved in mitigation by watching for fossil bones as excavations are being made.
- It is recommended that a protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the proposed development.
- The Fossil Finds Procedure included as Appendix 2 provides guidelines to be followed in the event of fossil bone finds in the excavations. The works supervisor/foreman and workers involved in excavating the building foundations, infrastructure trenches and stormwater drainage must be informed of the need to watch for fossils and archaeological material. Workers seeing potential objects are to cease work at that spot and to report to the works supervisor who, in turn, will report to the Environmental Control Officer (ECO) and/or the Developer. The ECO/Developer will contact and liaise with Heritage Western Cape and the standby archaeologist or palaeontologist on the nature of the find and suitable consequent actions such as immediate site inspection, application for a palaeontological collection permit and drafting of a work plan for the collection of the find.
- If a significant occurrence of fossil bones in a palaeontological context is discovered a professional palaeontologist must be appointed to collect them and to record their contexts. Said palaeontologist must also undertake the recording of the stratigraphic context and sedimentary geometry of the exposure, the sampling of ambient small fossil content and the compilation of the report for distribution to Heritage Western Cape, SAHRA, the approved curatorial institution and local heritage interest groups.
- A permit from HWC is required to excavate fossil bone finds. The applicant should be the qualified specialist responsible for assessment, collection and reporting (palaeontologist). Should fossils be found that require rapid collecting, application for a palaeontological permit with supporting work plan will immediately be made to HWC. The application requires the details and permission of the registered owner of the site. The fossils and their contextual information must be deposited at a SAHRA/HWC-approved institution. The rescue of discovered palaeontological remains by a contracted specialist shall be at the Developer's expense".
- 8. Explain how the mitigation hierarchy has been applied to arrive at the best practicable environmental option.

The mitigation hierarchy was carefully applied in assessing and ultimately selecting the best practicable environmental option for the proposed residential development in Van Dyksbaai. This process followed the established sequence of avoidance, minimisation, rehabilitation, and offset, with the primary objective of reducing environmental harm while supporting sustainable development outcomes.

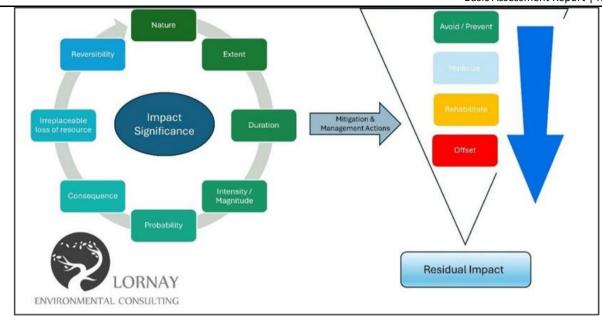


Figure 25: Mitigation hierarchy

Avoidance

Avoidance was prioritised during the initial site selection and layout planning stages. The Terrestrial Biodiversity Assessment confirmed the ecological sensitivity of the area due to its location within Overberg Dune Strandveld an Endangered ecosystem and its overlap with Critical Biodiversity Area 1 (CBA 1), Ecological Support Area (ESA 2), and the internationally recognised Walker Bay Key Biodiversity Area (KBA). As part of the avoidance strategy, three alternative development layouts Alternative 1 (Option A), Alternative 2 (Option B), and Alternative 3 (Option C) were assessed. Option A proposed 152 residential erven with a development footprint of approximately 9.6 ha, while Option B proposed 151 erven on a 10.2 ha footprint. Both alternatives would have resulted in significant encroachment into CBA 1 and ESA-designated areas, posing high risks to biodiversity and ecosystem functioning.

In contrast, Alternative 3 (Option C) was deliberately designed to **avoid** the most ecologically sensitive areas, particularly the mapped CBA 1 identified in the 2017 Western Cape Biodiversity Spatial Plan (WCBSP). This layout confines the development footprint (8.4 ha) to the degraded, near-intact, and alien-invaded portions of the property, while establishing a 2.7 ha open space corridor that maintains ecological connectivity with the near-intact Overberg Dune Strandveld to the north. This open space area will be designated as a no-go area for development, ensuring that the high-value habitat within CBA 1 is excluded from direct impacts.

Minimisation

Minimisation was applied through careful spatial design and selection of the least impactful layout option. Alternative 3 (Option C) results in the least overall vegetation loss approximately 6.12 ha of Overberg Dune Strandveld compared to 7.13 ha and 10.6 ha in Alternative 1 (Options A) and Alternative 2 (Option B), respectively. This alternative also reduces the number of residential erven to 123, thus limiting overall habitat disturbance. Furthermore, the layout incorporates clustering of units, the use of permeable fencing to facilitate faunal movement, and strict buffer zones informed by terrain features and biodiversity constraints. These measures aim to limit edge effects, reduce fragmentation, and preserve the ecological integrity of adjacent habitats.

Rehabilitation

The preferred layout, Alternative 3 (Option C) has been designed to avoid high-sensitivity areas, particularly the Critical Biodiversity Area (CBA), which will be set aside as a permanent open space and designated no-go area. This open space

will be managed to maintain ecological connectivity and enable faunal movement across the landscape. To support ecological integrity, a long-term Alien Invasive Species Management Plan will be implemented as part of the Environmental Management Programme (EMPr), with targeted removal of *Acacia* species and other invasives during site establishment and throughout the operational phase.

Rehabilitation of disturbed areas post-construction will prioritise the use of indigenous plant species, particularly those translocated species from the development areas, and landscaping will be undertaken in a manner that supports local biodiversity. A pre-construction search and rescue operation, led by a qualified specialist, will be conducted to identify and translocate all SCC and other notable indigenous flora within the development footprint. Any slow-moving or vulnerable fauna, such as reptiles or amphibians encountered during site clearance, will also be safely relocated to suitable nearby habitats. All such efforts will be documented and reported as part of pre-construction and construction phase compliance.

Furthermore, all mitigation measures recommended by the appointed terrestrial and faunal specialists will be fully implemented and integrated into the EMPr, including actions related to biodiversity protection, heritage resource conservation, alien invasive species control, and palaeontological monitoring where applicable. These efforts are essential to ensuring that residual environmental impacts are minimised and that the high-sensitivity areas within the site are protected in perpetuity. In accordance with the Site Ecological Importance (SEI) assessment, development will be restricted to medium- and low-sensitivity areas, particularly degraded Overberg Dune Strandveld and Acacia woodlands, while high-sensitivity area, especially the CBA near-natural habitats will be conserved.

Offset

Offsetting, the final step in the mitigation hierarchy, was deemed unnecessary for Alternative 3 (option c). According to the specialist findings, residual impacts associated with this layout are considered low and **medium** post-mitigation. Unlike Alternative 1 (Option A) and Alternative 2 (Option B) which would require a biodiversity offset under the National Biodiversity Offset Guideline (2023) due to medium-significance residual impacts within a CBA, Alternative 3 (Option C) avoids this requirement by maintaining the CBA portion as open space and limiting development to ecologically compromised areas. Further to the reduced impact ratings, it is important to consider that the sites are located within the demarcated urban edge of the Overstrand Municipality and designated for single residential development.

Extract from the Terrestrial Biodiversity Impact Assessment:

"Option A will result in the loss of approximately 7.13 ha (0.0713 km^2) of Overberg Dune Strandveld, representing a loss of 0.02% of the total remaining extent of this vegetation type, Option B will result in the loss of 10.6 ha (0.106 km^2) of Overberg Dune Strandveld, representing a loss of 0.03% of the total remaining extent of this vegetation type, and Option C will result in the loss of 6.12 ha (0.0612 km^2) of Overberg Dune Strandveld, representing a loss of 0.02% of the total remaining extent of this vegetation type.

While this vegetation is classified as an Endangered Ecosystem, it is important to note that the project area is located within the urban edge, has already been impacted by habitat fragmentation, alien invasive species, and is surrounded by a network of roads with existing development situated to the east, west and south of the project area. These existing disturbances have reduced the overall ecological sensitivity of the area, potentially lowering the significance of the impact relative to more pristine or less disturbed habitats. In addition, 93% of this vegetation type currently remains and the conservation target for this vegetation type is 36%. Still, given the Endangered status of this vegetation type, any loss remains a concern, and mitigation measures have been identified to minimize any adverse effects.

Of the three alternatives, Option C will result in the lowest overall loss of Overberg Dune Strandveld; and includes the designation of a portion of the project area (2.65 ha) in the north as Open Space which would maintain ecological connectivity with the portion of near-intact Overberg Dune Stranveld just north of the boundary of the project area.

Considering the significance of the residual impacts associated with Option C which are classified as LOW in comparison to
Option A and B, it is the opinion of the specialist that Option C is the preferred development alternative and that a
biodiversity offset is not required, provided the Open Space Area is considered as a no-go area for development and
maintained in its current near-natural state.
Option A and B would result in six (6) residual impacts of MEDIUM significance. In terms of the National Biodiversity Offset Guideline (2023), where residual negative biodiversity impacts are evaluated to be of medium or high significance, a biodiversity offset would be required. The Starting Offset Ratio for Overberg Dune Strandveld is 10:1 in terms of Annexure A of the Biodiversity Offset Guideline (2023). Furthermore, a higher ratio of 30:1 is applied to all CBA sites. Considering the site is located within a CBA 1, the higher or the two ratios would apply as the starting ratio. However, the Biodiversity Offset Guideline (2023) also states that other factors may justify smaller ratios, such as when the impact occurs in an urban setting where there are severe spatial constraints. Option A and B would therefore require a biodiversity offset."

Summary of the application of the mitigation hierarchy to reach the Final Preferred layout Alternative 3 (Option C):



- Avoid the CBA area



Minimise

- Minimize vegetation loss reduction of erven
- Search and rescue for animal and plant species pre-construction.



Rehabilitate



Offset

- Implement Alien Vegetation Management
- Rehabilitate near-natural area (CBA)
- Plant species of conservation concern translocated from the development footprint

- Long term protection and maintenance of CBA area as a No-go

SECTION J: GENERAL

1. Environmental Impact Statement

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

Key Findings of the Basic Environmental Impact Assessment:

Terrestrial Biodiversity Impact Assessment

Terrestrial Biodiversity Theme

- → The site occurs within the Overberg Dune Strandveld, classified as Endangered in terms of national vegetation types.
- → The area also falls within the internationally recognised Walker Bay Key Biodiversity Area (KBA), although the development affects only a minor portion on its periphery.
- → Field surveys confirmed the presence of degraded areas dominated by alien vegetation and firebreaks, and areas with intact vegetation supporting SCC.
- → Based on ecological condition and SCC distribution, the sensitivity ratings of some habitats were revised:
 - Overberg Dune Strandveld: Very High → High
 - O Acacia Woodland: Very High → Very Low
 - Degraded areas (firebreaks): Very High → Medium

Plants Species Theme

- → Field assessments recorded four (4) SCC, including three Vulnerable (*Lampranthus fergusoniae, Cynanchum zeyheri, and Athanasia quinquedentata subsp. rigens*), and one Near Threatened species (*Asparagus lignosus*).
- → Three (3) SCC have a VERY HIGH likelihood of occurrence and three (3) have a HIGH likelihood of occurrence within the project area as they have been recorded on adjacent properties
- → The specialist disagrees with the MEDIUM sensitivity rating of the Plant Species Theme as per the DFFE Screening Tool Report and suggests that the plant species theme sensitivity of the Overberg Dune Strandveld and Degraded Areas is reclassified as HIGH due to the confirmed occurrence of SCC, but that the Plant Species Theme Sensitivity of the Acacia Woodland should remain medium.

Animal Species Theme

- → The DFFE Screening Tool Report identified the project area as having a HIGH sensitivity for two (2) bird SCC and MEDIUM sensitivity for two (2) bird SCC and one (1) reptile SCC.
- → Of these species, only the Southern Adder (VU) and Cape Dwarf Chameleon (NT) have a high likelihood of occurrence in the project area.
- → The SEI of the Overberg Dune Strandveld for the Southern Adder and Cape Dwarf Chameleon is MEDIUM
- → The specialist disagrees with the High sensitivity rating of the Black Harrier as this species has a low likelihood of breeding in the near-intact Overberg Dune Strandveld habitat, therefore it is reclassified as MEDIUM.
- → The specialist suggests that degraded areas are also reclassified as MEDIUM for the Cape Dwarf Chameleon rather than HIGH.

→ The specialist agrees with the MEDIUM sensitivity rating of the Southern Adder (VU) in the Overberg Dune Strandveld habitat.

Heritage Impact Assessment

Archaeology

- → It is estimated that about 80% of the site is covered in extremely dense vegetation, resulting in poor archaeological visibility.
- → Fragments of marine shellfish associated with dune mole rat burrowing were encountered in the south western portion of the proposed site indicating the possible presence of some sub surface archaeological deposits. No cultural remains such as pottery, ostrich eggshell, or any stone tools or flakes were found.
- → No other archaeological resources were encountered during the walk down survey, although it is noted that most of the site is covered in extremely dense vegetation cover, resulting in low archaeological visibility.
- → Unmarked Khoisan remains and buried shell middens may be uncovered by vegetation clearing operations or intercepted during excavations for building foundations and services.
- → The archaeological resources have been graded as having Low (Grade IIIC) local significance, subject to test excavations to establish the presence/absence of sub-surface deposits.
- → No graves were encountered on the proposed site.

Palaeontology

- → According to Pether (2024) any fossil heritage resources will more than likely occur in an archaeological context. The large bones of elephant, rhino, and hippo who died in the Strandveld Fm. dunes have occasionally been uncovered during sand quarrying and developments but are apparently rare finds.
- → Along the South Coast (i.e. the Project Area), the Strandveld Fm. is UNCLASSIFIED (left clear), but according to Pether (2024) a MODERATE rating is more applicable close to the coast where subfossil bones in archaeological sites occur. The subfossil bones are expected to be of latest Quaternary, later Holocene age (mainly less than about 7000 years old) and are likely to be mainly members of the extant, modern fauna, but unexpected species which do not belong to the modern/historical fauna may occur, due to fluctuations in the prehistoric palaeo-climate of the region.
- → The fossil bones that may occur in the Waenhuiskrans Fm. in the Project Area are expected to be of late-middle to earlier-late Quaternary age, between ~160 to ~80 ka and, like the later Strandveld Fm. dunes sands, also mainly comprised of representatives of the extant fauna, but unexpected species of a different fauna are more likely to occur, as a result of phases of different ecological and palaeoclimatic conditions in the past, as well as the bones of some species which became extinct in the geologically-recent past.
- → Intersections of the upper, variously calcreted Waenhuiskrans Fm. in earthworks are expected to be limited in volume relative to the affected volume of overlying dune coversands. As it is likely that only a relatively small volume of Waenhuiskrans Formation deposits will be affected by the proposed development, the anticipated impact is assigned a MODERATE rating.
- → Minimal excavations into the calcreted Waenhuiskrans Fm. is unlikely to generate any fossil heritage.

Built Environment

The only building on site is a ruined, modern, breeze block borehole structure on Erf 1479.

<u>Cultural Landscape</u>

The Cultural Landscape is characterised by ribbon development along the coast all the way to Franskraal, and the mouth of the Uilkraalmond, with large open spaces of vacant (agricultural) land inside the Urban Edge, and north of Dyer Street. Surrounding vacant land will likely be developed as demand for housing increases in the near future.

Palaeontological Impact Assessment

- → The development area is on old, vegetated dunes of the Strandveld Fm, as is evident in the rounded-off dune ridges trending to the southeast across the area.
- → A field survey was precluded by the formation being mainly beneath the thickly vegetated Strandveld Fm. dune sands and fossil bones may only be exposed during vegetation clearing and the Construction Phase earthworks.
- → The fossil bones that may occur in the Waenhuiskrans Fm. in the Project Area are expected to be of late-middle to earlier-late Quaternary age, between ~160 to ~80 ka (Figure 4) and, like the later Strandveld Fm. dunes sands, also mainly comprised of representatives of the extant fauna, but unexpected species of a different fauna are more likely to occur, as a result of phases of different ecological and palaeoclimatic conditions in the past, as well as the bones of some species which became extinct in the geologically-recent past.
- → Intersections of the upper, variously calcreted Waenhuiskrans Fm. in earthworks are expected to be limited in volume relative to the affected volume of overlying dune coversands.

Aquatic Compliance Statement

According to the Department of Forestry, Fisheries, and the Environment (DFFE) screening tool, the area was initially flagged as having "Very High" aquatic biodiversity sensitivity due to the presence of mapped aquatic Ecological Support Areas (ESA 1 and ESA 2) linked to "coastal corridor and watercourse" features identified in the 2017 Western Cape Biodiversity Spatial Plan (WCBSP). This prompted the requirement for a compliance statement and a site sensitivity verification process.

Delta Ecology conducted a comprehensive desktop review and a field assessment on 17 October 2024. The desktop study confirmed the absence of any mapped wetlands, rivers, or drainage lines within the site or within the regulated 500 m buffer, as indicated in datasets such as the National Wetlands Map 5 (NWM5), the National Freshwater Ecosystem Priority Areas (NFEPA), and the National Geo-spatial Information (NGI) river and topographical data. The field verification further found that the site does not contain any wetland or riparian features. Specifically, there were no topographical signatures such as riverbeds or banks, no hydric soils, and no hydrophytic or riparian vegetation indicative of watercourse conditions as defined under the National Water Act (Act 36 of 1998).

Soil samples from the site revealed well-drained sandy soils, while vegetation observed consisted predominantly of terrestrial species including Searsia lucida, Searsia glauca, Agathosma capensis, and Helichrysum patulum. The presence of alien invasive species such as Acacia cyclops was also noted. Based on these findings, the aquatic sensitivity of the study area was downgraded from Very High to Low, and it was concluded that the site does not support any aquatic ecosystems or ecological functions typically associated with aquatic biodiversity features.

As such, no aquatic-specific mitigation measures were deemed necessary, and no aquatic-related development restrictions or buffer zones were triggered. The report concludes that, from an aquatic biodiversity perspective, there are no constraints to the approval of the proposed development, provided general environmental best practices are followed.

Agricultural Compliance Statement

The screening tool classified the site as having medium to high agricultural sensitivity, based on land capability ratings ranging from 6 to 9. However, this assessment disputes the high sensitivity classification, rating the entire site as medium agricultural sensitivity with a maximum land capability of 6. The site is not classified as cropland, and its soils, primarily grey regic sands (H land types), have low cropping potential due to poor water and nutrient holding capacity. This is supported by the absence of crop production on similar land types in the area.

The development will result in zero agricultural impact because the site has no current or future agricultural production potential. An agricultural impact requires a change in production potential, which is not applicable here. The cumulative agricultural impact is assessed as low and acceptable, as the development does not contribute to regional loss of

agricultural production potential. The no-go alternative (no development) has no agricultural impact, but this is not significantly different from the low impact of the proposed development, making both options equally acceptable from an agricultural perspective.

The assessment concludes that no impact management measures or monitoring requirements are necessary for the Environmental Management Programme (EMPr), given the negligible agricultural impact.

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)

Appendix B.

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

Positive impacts

- → The proposed development will generate short-term employment during the construction phase and may create long-term operational and maintenance jobs, contributing to local economic growth.
- → The development will contribute to meeting housing demands, aligned with municipal spatial development goals and policies.
- → Implementation of the project will include rehabilitation of the disturbed areas and the removal of invasive alien plants species.

Negative

- → The development may result in the permanent loss of indigenous vegetation within the development footprint, including portions of Endangered vegetation types and habitat for species of conservation concern (SCC).
- → The introduction of built infrastructure into previously natural veld will alter the visual character of the area, transforming it from a predominantly vegetated landscape to a developed, built-up environment.
- → Soil disturbance may promote the spread of alien vegetation if not properly managed during and after construction.

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

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

In order for the proposed development to proceed without causing significant disruption to the ecological, heritage and socio-economic value of the site, the following impact management outcomes derived from the Environmental Assessment and supporting specialist studies must be implemented and integrated into the Environmental Management Programme (EMPr):

Recommendations of the EAP

- → Areas identified as ecologically sensitive, including habitat for SCC and remnant Overberg Dune Strandveld, will be avoided where possible. The EMPr includes measures for vegetation clearing, pre-construction botanical and faunal walkthroughs, and plant rescue and relocation where feasible.
- → Open space area, specifically within the CBA area must be retained and managed as a No-go development area to facilitate faunal movement and reduce habitat fragmentation.
- → A long-term alien invasive species management plan must be included in the EMPr, with active removal of *Acacia* species and other invasives during site preparation and ongoing operational phases.

- → Measures must be adopted to minimise dust, noise, erosion, and water pollution during construction. These must include designated construction zones, dust suppression, erosion control structures, and regular environmental audits.
- → Post-construction rehabilitation must prioritise the use of indigenous plant species, including locally appropriate fynbos species. Landscaping must support biodiversity and reduce erosion potential.
- → A pre-construction search and rescue operation must be conducted by suitably qualified specialist to identify, document, and relocate all species of conservation concern (SCC) and other notable indigenous flora within the development footprint. Similarly, any slow-moving or vulnerable faunal species (e.g., reptiles, amphibians) encountered during vegetation clearing must be safely relocated to suitable nearby habitat. All search and rescue efforts must be documented and included in the construction phase compliance reporting.
- → All mitigation measures recommended by the appointed specialists must be implemented in full. These include, but are not limited to, biodiversity conservation actions, alien invasive species control, heritage resource protection, and palaeontological monitoring. These measures must be clearly reflected and enforced through the EMPr to ensure that environmental and heritage impacts are appropriately avoided, minimised, or managed.

Recommended mitigations measures from the Terrestrial Biodiversity Impact Assessment

- → Construction vehicles and machinery must not encroach into identified 'no-go' areas or areas outside the project footprint.
- → Topsoil (20 cm, where possible) must be collected and stored in an area of low (preferable) and medium sensitivity and used to rehabilitate impacted areas that are no longer required during the operational phase (e.g. laydown areas).
- → Only indigenous species must be used for rehabilitation.
- → Lay down areas must be located within the project footprint and must not encroach into the surrounding vegetation, particularly to the north of the site.
- → Employees must be prohibited from making open fires during the construction phase to prevent uncontrolled runaway fires.
- → The site must be checked regularly for the presence of alien invasive species. When alien invasive species are found, immediate action must be taken to remove them.
- → Employees must be prohibited from collecting plants. It is recommended that spot checks of pockets and bags are done on a regular basis to ensure that no unlawful harvesting of plant species is occurring.
- → If Option C (preferred Alternative) is approved, the near-intact Overberg Dune Strandveld within the Open Space Area must be maintained and considered a no-go area. Construction activities cannot encroach into this no-go area.
- → Where populations of these species cannot be avoided, a translocation plan to move these species must be implemented. This plan must identify the number of individuals that will be impacted and identify a suitable receiving environment where they can be moved. Included in this plan, must be a monitoring program to monitor the success of the translocation of these species.
- → If option C (preferred Alternative) is approved, SCC should be translocated into the designated Open Space Area.
- → Where translocation of plant species is required, this must be undertaken by a qualified botanist or horticulturalist.
- → Permits for all protected species must be obtained prior to construction commencing. A Search and Rescue Plan to move protected species must be drafted and implemented.
- → It is recommended that SCC and protected species that need to be moved are used as far as is feasible to rehabilitate areas impacted on during construction but not required during the operational phase.
- → The site must be checked regularly for the presence of alien invasive species and weeds. When alien invasive species are found, immediate action must be taken to remove them.
- → Alien Invasive Plant Species and Weeds must be disposed on in line with the recommendations outlined in the Working for Water Programme.
- → Any equipment brought onto site must be clean to ensure no transfer or introduction of seeds.
- → No exotic species are permitted to be planted on site. Only indigenous plant species can be used for rehabilitation/landscaping.

- → The ECO must create a list with accompanying photographs of possible alien invasive species that could occur on site prior to construction. This photo guide must be used to determine if any alien invasive species are present.
- → An alien invasive method statement must be incorporated into the EMPr.
- → All construction and construction related activities (including parking of vehicles and machinery) must remain within the approved project footprint and must not encroach into areas outside the project footprint. To facilitate this, the boundaries of the development footprint areas must be clearly demarcated and communicated to all on-site personnel during induction.
- → Temporary infrastructure (laydown areas, widened roads, etc.) must be rehabilitated and rehabilitation efforts must provide habitat for faunal species. Rocks and logs removed during clearing of the project footprint must be stacked, ideally, in previously disturbed areas or within the temporary footprint to provide shelter E.g. Rock stacks and stumperies but must not disrupt adjacent habitat to create these.
- → Draft a translocation SOP for the Southern Adder (VU) and Cape Dwarf Chameleon (NT) and implement immediately prior to construction. A permit from Cape Nature will be required to relocate this species.
- → A clause must be included in contracts for ALL personnel (i.e. including contractors) working on site stating that: "no wild animals will be hunted, killed, poisoned or captured. No wild animals will be imported into, exported from or transported in or through the province. No wild animals will be sold, bought, donated and no person associated with the development will be in possession of any live wild animal, carcass or anything manufactured from the carcass unless they have been appointed to implement the Carcass Management Plan or Animal Relocation Plan."
- → In addition, a clause relating to fines, possible dismissal and legal prosecution must be included should any of the above transgressions occur for SCC.
- → The ECO should appoint a member of staff to walk ahead of construction machinery directly prior to vegetation clearance. Should any faunal species be identified during the walk through, these should be allowed to move out of harm's way prior to vegetation clearance.
- → The ECO must create a list with accompanying photographs of possible faunal SCC that could occur in the project area prior to construction. This photo guide must be used to determine if faunal SCC are encountered.
- → Should any fauna SCC be encountered during construction and operation, these must be recorded (i.e. be photographed, GPS co-ordinates taken) and information placed on iNaturalist
- → In the unlikely event that bird SCC inhabit the site to breed, all site personnel are not to disturb them, even approaching nests of SCC is considered harmful to the success of breeding. Should an active breeding nests (eggs, nestlings, fledglings) be discovered in or near construction areas prior to or during the construction phase:
 - These must be reported to ECO.
 - Where deemed necessary an appropriate buffer should be placed around the nest. If uncertain on the size
 of such a buffer, the ECO may contact an avifaunal specialist for advice.
 - No construction activity should occur within the buffer and the nest must be monitored.
- → Once birds have finished nesting and the fledglings left the nest construction can recommence within the buffer zone.
- → It is recommended that vegetation clearance takes place gradually, commencing from eastern side of the project area and methodically advancing towards the western side to encourage the movement of any faunal species to the natural area.
- → Dust suppression measures must be implemented in the dry and/or windy months.
- → All machinery, vehicles and earth moving equipment must be maintained and the noise these create must meet industry minimum standards. e.g. the sound generated by a machine must be below a certain decibel as prescribed in the relevant noise control regulations.
- → No construction night lighting must be allowed. If required, minimise lighting in open space areas within development and any external lights must be down lights placed as low as possible and installation of low UV emitting lights.
- → Steep sided drains, gutters, canals and open pits/trenches must be covered with mesh (5mm x 5mm) or sloped to prevent fauna falling in and getting stuck. No unnecessary structures that would act as pitfall traps for animals must be constructed.
- → Permeable internal and external fences/walls (after construction is completed) must be implemented to allow for the movement of small faunal species through the development, particularly fencing surrounding the Open Space Area.

- These must have ground level gaps of 10cm x 10cm at 10m intervals. These gaps must be kept free of obstructions, including plant growth and debris.
- → No night driving should be permitted, if unavoidable, this must be restricted, and speed limits adhered to.
- → Speed restrictions within the development for construction vehicles (40km/h is recommended) should be in place to reduce the incidence of faunal mortality on project roads.
- → A trained snake handler must be on call during construction to remove any snakes within construction areas.
- → A clause relating to fines, possible dismissal and legal prosecution must be included in all contracts for ALL personnel (i.e. including contractors) working on site should any speeding or persecution of animals occur.
- → Induction material must iterate safety to fauna and personnel through avoidance of wildlife. For example, snakes tend to only strike if threatened (cornered or attacked).
- → It is strongly recommended that rodenticides not be used at any the newly established buildings or around auxiliary infrastructure on the project site. While pest control of this nature may be effective, even so-called "environmentally friendly" rodenticides are toxic and pose significant secondary poisoning risk to predatory avifauna, especially owls.
- → The site must be checked regularly for the presence of alien invasive species and weeds. When alien invasive species are found, immediate action must be taken to remove them.
- → Alien Invasive Plant Species and Weeds must be disposed on in line with the recommendations outlined in the Working for Water Programme.
- → Any equipment brought onto site must be clean to ensure no transfer or introduction of seeds.
- → No exotic species are permitted to be planted on site. Only indigenous plant species can be used for rehabilitation/landscaping.
- → An alien invasive method statement must be incorporated into the EMPr to ensure that these species do not spread onto neighbouring properties.
- → Speed restrictions within the development for all vehicles (40km/h is recommended) should be implemented to reduce the possibility of collisions and roadkill.
- → Do not place lighting on the exterior of the boundary wall (i.e. pointing into the Nature Reserve).
- → Ideally, residents must not have pets that can leave their premises and enter the surrounding natural area. i.e. Domestic cats should not be permitted and if they are, they must wear a bell. Fines should be issued by the Body Corporate if not adhered to.
- → Restrictions can be placed on noise to minimise impact. Body Corporate to establish a noise policy and associated fines.
- → External lights that are used in the mixed-use development must be down lights placed as low on the wall as possible and installation of low UV emitting lights, such as most LEDs. Minimise lighting in open space areas within development.
- → Ensure all vehicles adhere to the relevant noise restrictions.
- → Create faunal micro habitats within developed area e.g. rocky outcrops, corridors of shrubbery, stumperies.
- → Body corporate and Estate Agents to ensure potential buyers and residents are aware of the restrictions placed on lighting, noise and pets based on living in an area bordering an ecological corridor.
- → No pesticides may be used to control pests, especially rodents, as poisoned rodents are often eaten by predatory birds (e.g., owls) that result in the owl dying. If pesticide is required only 'Eco Rat Rodenticide' may be used.
- → Occupants of the residential units must be made aware of the current legislation applicable to all fauna in the project area: "no wild animals will be hunted, killed, poisoned, or captured. No wild animals will be imported into, exported from, or transported in or through the province. No wild animals will be sold, bought, donated and no person associated with the development will be in possession of any live wild animal, carcass or anything manufactured from the carcass.

Recommended mitigations from the Heritage Impact Assessment

- → Test pits in the southeastern corner of the proposed development site must be conducted to establish the presence/absence of any potentially important sub surface archaeological deposits, prior to construction excavations commencing.
- → A walk down survey of the proposed development site must be conducted after the site has been cleared of vegetation
- → If any unmarked human remains are uncovered or exposed during excavations, work must stop, and the finds reported to the Environmental Control Officer and the contracted archaeologist (Jonathan Kaplan 082 321 0172). Human remains must not be removed or disturbed until inspected by the archaeologist.
- → A protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), must be included in the Environmental Management Plan (EMP) for the proposed development. The Fossil Finds Procedure provides guidelines to be followed in the event of fossil bone finds in the excavations.

Recommended mitigation measures from the Palaeontological Impact Assessment

- → The possible presence of fossils in the subsurface does not have an *a priori* influence on the decision to proceed with the proposed development. However, mitigation measures are essential. The potential impact has a moderate influence upon the proposed project, consisting of implemented mitigation measures recommended below, to be followed during the vegetation clearing and Construction Phases.
- → Although the inspection of construction excavations may be specified in the Archaeological Impact Assessment, it is not feasible for a specialist monitor to be continuously present during the Construction Phases, when fossils may be unearthed at any time. The rescue of fossil bones during earth works critically depends on spotting this material as it is uncovered during digging.
- → For successful mitigation, it is therefore crucial that earth works personnel must be involved in mitigation by watching for fossil bones as excavations are being made.
- → It is recommended that a protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the proposed development.
- → The Fossil Finds Procedure included as Appendix 2 of the Palaeontological Impact Assessment provides guidelines to be followed in the event of fossil bone finds in the excavations. The works supervisor/foreman and workers involved in excavating the building foundations, infrastructure trenches and stormwater drainage must be informed of the need to watch for fossils and archaeological material. Workers seeing potential objects are to cease work at that spot and to report to the works supervisor who, in turn, will report to the Environmental Control Officer (ECO) and/or the Developer. The ECO/Developer will contact and liaise with Heritage Western Cape and the standby archaeologist or palaeontologist on the nature of the find and suitable consequent actions such as immediate site inspection, application for a palaeontological collection permit and drafting of a work plan for the collection of the find.
- → If a significant occurrence of fossil bones in a palaeontological context is discovered a professional palaeontologist must be appointed to collect them and to record their contexts. Said palaeontologist must also undertake the recording of the stratigraphic context and sedimentary geometry of the exposure, the sampling of ambient small fossil content and the compilation of the report for distribution to Heritage Western Cape, SAHRA, the approved curatorial institution and local heritage interest groups.
- → A permit from HWC is required to excavate fossil bone finds. The applicant should be the qualified specialist responsible for assessment, collection and reporting (palaeontologist). Should fossils be found that require rapid collecting, application for a palaeontological permit with supporting work plan will immediately be made to HWC. The application requires the details and permission of the registered owner of the site. The fossils and their contextual information must be deposited at a SAHRA/HWC-approved institution. The rescue of discovered palaeontological remains by a contracted specialist shall be at the Developer's expense.

Recommendations from Heritage Western Cape:

- → Archaeological monitoring should occur during vegetation clearing as there might be surface remains that are impacted during the clearing. A work Plan must be submitted for the Archaeological monitoring to HWC for the endorsement.
- → Test excavations in the southeastern corner of Erf 1473 must be conducted to establish the presence/absence of any sub surface archaeological deposits, prior to construction excavations commencing.
- → A walk down survey of the development site must be conducted after the site has been cleared of vegetation.
- → If any unmarked human remains are uncovered or exposed during excavations, work must stop, and the finds reported to the Environmental Control Officer and the contracted archaeologist (Jonathan Kaplan 082 321 0172) [and Heritage Western Cape. Human remains must not be removed or disturbed without required approvals from the heritage authority].
- → A protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), must be included in the Environmental Management Plan (EMP) for the proposed development. The Fossil Finds Procedure provides guidelines to be followed in the event of fossil bone finds in the excavations.
- 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.

Conditions of Authorisation:

- → The 2.7 ha open space area included in Alternative 3 (Option C) must be designated a no-go area and maintained in a near-natural state. This area includes a portion of the Critical Biodiversity Area (CBA 1) and plays a vital role in maintaining ecological connectivity and preventing habitat fragmentation.
- → A biodiversity offset is not required for Option C only if the designated open space is preserved in its natural condition.
- → Search and rescue operations must be conducted prior to construction to relocate plant and faunal species of conservation concern (SCC).
- → A Standard Operating Procedure (SOP) for the translocation of the Southern Adder (VU) and Cape Dwarf Chameleon (NT) must be prepared and implemented prior to site clearance. A permit from CapeNature must be obtained.
- → Where feasible, rescued SCC and protected species must be used to rehabilitate temporarily disturbed areas that are not part of the final development footprint.
- → Archaeological monitoring should occur during vegetation clearing as there might be surface remains that are impacted during the clearing. A work Plan must be submitted for the Archaeological monitoring to HWC for the endorsement.
- → Test excavations in the southeastern corner of Erf 1473 must be conducted to establish the presence/absence of any sub surface archaeological deposits, prior to construction excavations commencing.
- → A walk down survey of the development site must be conducted after the site has been cleared of vegetation.
- → If any unmarked human remains are uncovered or exposed during excavations, work must stop, and the finds reported to the Environmental Control Officer and the contracted archaeologist (Jonathan Kaplan 082 321 0172) [and Heritage Western Cape. Human remains must not be removed or disturbed without required approvals from the heritage authority].
- → The Fossil Finds Procedure must be included in the EMPr and followed during all excavation activities to mitigate palaeontological impacts.
- 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.

Based on the findings of the Basic Environmental Impact Assessment process and supported by the conclusions of the specialist studies, it is the reasoned opinion of the Environmental Assessment Practitioner (EAP) that the proposed

residential development under Alternative 3 (Option C) should be authorised, subject to the implementation of the following conditions, as derived from the recommendations and findings of the specialist assessments:

- → All mitigation measures recommended by the appointed specialists must be implemented in full. These include, but are not limited to, biodiversity conservation actions, alien invasive species control, heritage resource protection, and palaeontological monitoring. These measures must be clearly reflected and enforced through the EMPr to ensure that environmental and heritage impacts are appropriately avoided, minimised, or managed. These mitigation measures are auditable and can be reviewed for performance in line with the conditions of the Environmental Authorisation.
- → Prior to the commencement of construction, test pits must be conducted in the southeastern corner of the proposed development site to determine the presence or absence of sub-surface archaeological material. This is essential to ensure compliance with heritage legislation and to safeguard any archaeological resources that may be uncovered during earthworks.
- → A Standard Operating Procedure (SOP) for the translocation of the Southern Adder (VU) and Cape Dwarf Chameleon (NT) must be drafted and implemented immediately prior to construction. A permit from CapeNature will be required for the lawful handling and relocation of these species.
- → It is recommended that SCC and protected species that need to be moved are used as far as is feasible to rehabilitate areas impacted on during construction but not required during the operational phase.
- → The 2.7 ha open space area included in Alternative 3 (Option C), which incorporates the previously delineated CBA 1, must be maintained in its current near-natural state and designated a no-go area for any form of development. This area plays a critical role in maintaining ecological connectivity and reducing habitat fragmentation.
- 2.4. Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.

N/A

- 2.5. The period for which the EA is required, the date the activity will be concluded and when the post construction monitoring requirements should be finalised.
 - → The holder must commence the listed activities on site within a period of five (5) years from the date of issue of this Environmental Authorization. The development must be concluded within ten (10) years from the date of commencement of the first listed activity.
 - → Conduct Environmental Audits every 6 months during the duration of construction with one final construction audit at conclusion of construction.

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.

During the construction phase, non-potable water sources such as greywater or harvested rainwater will be prioritised for dust suppression, concrete mixing, and vegetation irrigation where feasible. Contractors will be required to use water-saving construction practices and to avoid any unnecessary water use.

4. Waste

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

On site separation, reduction and reuse should be encouraged in the construction and operational phases with the aim to reduce waste to landfill.

5. Energy Efficiency

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

Alternative energy:

- → Installation of gas geysers for hot water heating is encouraged.
- → Solar geysers are permitted with a max of 2 panels per erf.
- → The solar panels for hot water heating must be indicated on the drawings.
- → The water reservoir may not be mounted on the roof surface and must be concealed within the roof space.
- → The position and extent of any solar panels for alternative energy supply must be indicated on the drawings and approved by the HOA and were deemed necessary by any adjoining effected property owner.
- → Distinctions must be made between solar panels for hot water supply and alternative energy supply.

SECTION K: DECLARATIONS

DECLARATION OF THE APPLICANT

Note: Duplicate this section where there is more than one	App	licant.			
l,	ID	number	in	my	personal
capacity or duly authorised thereto hereby de	cla	re/affirm that all the information	subr	nittec	d or to be
submitted as part of this application form is true	e ar	nd 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:
- o meets all the requirements in terms of Regulation 13 of the NEMA EIA Regulations; or
- o 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
 - o 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 MICHELLE NAYLOR, EAP Registration number **2019/698** 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:
 - o 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
 - o 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;

MNaylor	
	27 July 2025
Signature of the EAP:	Date:
LORNAY ENVIRONMENTAL CONSULTING PTY LTD	
Name of company (if applicable):	

DECLARATION OF THE REVIEW EAP
I
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 ELA 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 ELA 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 o the information provided or to be provided as part of the application, and that:
 In terms of the general requirement to be independent: o 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 generor 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 ELA 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 a 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):

DECLARATI	N OF THE REVIEW SPECIALIST
declare/af	m indi:
• I have i	viewed all the work produced by the Specialist(s):
• I have t	viewed the correctness of the specialist information provided as part of this Report;
• I meet Regula	ll of the general requirements of specialists as set out in Regulation 13 of the NEMA ELA ons;
Depart the dec	isclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the ent and I&APs, all material information that has or may have the potential to influence sion of the Department or the objectivity of any Report, plan or document prepared as application; and
• I am a Regula	rare that a false declaration is an offence in terms of Regulation 48 of the NEMA ELA ons.
Signature c	the EAP: Date:
Name of c	mpany (if applicable):