LORNAY
ENVIRONMENTAL CONSULTING

PRE-APPLICATION
BASIC ASSESSMENT REPORT

Proposed Residential dwellings and associated infrastructure
Portion 4 of the Farm 643, Stanford, Caledon RD

22 January 2026

Consultant:
Michelle Naylor | Env. Consultant **|** M.Sc., Pr. Sci. Nat., EAPASA
cell: 083 245 6556**|** michelle@lornay.co.za **|** www.lornay.co.za
Unit 5/1F Hemel & Aarde Wine Village, Hermanus, 7200
Lornay Environmental Consulting Pty Ltd**|** Reg 2015/445417/07

Western Cape Government

Department of Environmental Affairs and Development Planning

BASIC ASSESSMENT REPORT

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

APRIL 2024

Western Cape Government

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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)

Proposed Residential dwellings and associated infrastructure on Portion 4 of the Farm 643, Stanford, Caledon RD

EXECUTIVE SUMMARY

Background

Portion 4 of Farm 643 is situated to the west of the town of Stanford within the Overstrand Local Municipality, Western Cape. The property is bounded to the north by the Klein Rivier and is accessed via the Wortelgat Road. The property measures approximately 13.53 hectares and is characterised by largely fallow land that has not been cultivated for more than a decade.

The surrounding land use is predominantly agricultural, with adjacent properties comprising a mix of low-density residential dwellings and active farming operations. The broader landscape therefore retains a rural character, with gradual residential expansion occurring in the area.

The applicant, Cheddles (Pty) Ltd, appointed Lornay Environmental Consulting (Pty) Ltd as the independent Environmental Assessment Practitioner (EAP) to undertake a Basic Assessment process in terms of the National Environmental Management Act (Act 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 (as amended).

Description of the Proposed Development

The proposed development will occupy an area of approximately 5 500 m^2 within the broader 13.53-hectare (135 300 m^2) property and consists of two single residential dwellings, a manager's cottage and a jetty and slipway, designed to integrate with the natural environment.

Residential Buildings

The development includes two single-storey residential dwellings, designed to be visually and environmentally compatible with the surrounding landscape for use by the owners.

House 1 will be partially constructed within the disturbed footprint of an existing road, thereby minimising vegetation clearance. The total building footprint will be approximately 2 221 m^2 and will be located above the 5 m contour line. Associated recreational features, including a swimming pool, firepit, and pedestrian pathways, are proposed below the 5 m contour line. These elements will utilise previously disturbed areas and will collectively occupy a footprint of approximately 100 m^2.

House 2 will be located outside of existing road infrastructure and will require limited clearance of indigenous vegetation. The building footprint will be approximately 1 220 m^2, with access provided via an upgraded existing access road.

Manager's Cottage

A Manager's Cottage is proposed to accommodate on-site management and maintenance personnel. The cottage will occupy approximately 1 000 m^2 and will be located within a previously disturbed area. Its design will be consistent with the architectural principles applied to the main dwellings.

Access Roads

Internal access roads will be constructed and/or upgraded, primarily utilising existing disturbed pathways to minimise vegetation clearance. The roads will be kept as informal jeep tracks, similar to existing tracks on the property, and may include natural surfacing or grass blocks where necessary. The total length of internal access roads will be less than 1 000 m, with a maximum width of 4 m.

Jetty and Slipway

A jetty and slipway are proposed to provide controlled, low-impact access to the Klein Rivier. These structures have been designed in accordance with the Sea Shore Act (Act No. 21 of 1935) and CapeNature guidelines for riverine and estuarine infrastructure.

Associated Infrastructure

Water Supply

Water will be sourced from an existing borehole located near the property entrance and used for domestic purposes only, falling under Schedule 1 (Reasonable Domestic Use) of the National Water Act. Water storage tanks covering approximately 26 m^2 will be installed within an existing disturbed area on the western portion of the property.

Electricity

All dwellings will operate off-grid using roof-mounted solar photovoltaic systems.

Sewage

A sealed conservancy tank with a minimum capacity of 6 000 litres will be installed to collect sewage and greywater. The tank will be emptied periodically by a licensed waste contractor, with effluent disposed of at a registered municipal wastewater treatment facility.

Solid Waste

Solid waste generated on site will be collected and disposed of at a registered waste disposal facility by an approved service provider.

Environmental Sensitivities

Specialist studies confirmed that Portion 4 of Farm 643 supports a mosaic of natural to semi-natural terrestrial vegetation, largely influenced by historical agricultural disturbance. While the vegetation present does not constitute intact or pristine examples of the regionally mapped vegetation types, the botanical specialist confirmed that it remains ecologically functional and capable of supporting terrestrial biodiversity, however the overall botanical impacts assessed as low negative, subject to mitigations.

In terms of Faunal impacts and of particular significance is the confirmed presence of occupied and suitable habitat for the Mute Winter Katydid, a listed Species of Conservation Concern. The faunal specialist identified this habitat as an area of Very High Sensitivity and recommended the establishment of a minimum 50 m no-go buffer surrounding all mapped katydid habitat. These areas are to be strictly avoided during construction and operation, with no infrastructure development, hard road surfaces, or landscaping activities permitted within the buffer to prevent habitat loss, fragmentation, and disturbance.

The subject property is located on the upper reaches of the Klein River, below the town of Stanford. The Klein Rivier and its associated riparian zone represent a highly sensitive ecological system. Informed by specialist input, development below the 5 m contour has been strictly limited to essential, low-impact recreational infrastructure only. All bulk and permanent infrastructure has been positioned above the 5 m contour line and more than 100 m landward of the High-Water Mark (HWM).

The northern portion of the property falls within both the Coastal Protection Zone and the Coastal Management Line of the Klein River. Listed activities relating to both watercourses and the sea are included in this application,

however it is important to note that the watercourse at the property does not experience tidal fluctuation or saltwater inundation and the riparian zone is not reflective of that of an estuary.

Only the jetty and slipway are proposed below the High-Water Mark and the 5 m contour, and these structures have been carefully designed and assessed in detail. Through the refinement of the development from Alternatives 1 and 2 to Alternative 3 (preferred), the footprint and intensity of infrastructure in these zones were reduced.

Alternatives

The following alternatives were assessed as part of the Basic Assessment process:

Alternative 1 (non-preferred)

Alternative 1 proposes the placement of two residential dwellings and associated infrastructure extending below the 5 m contour of the Klein Rivier. Specialist assessments identified this alternative as environmentally and practically constrained due to:

- → Increased flood risk and vulnerability to fluctuating riverine water levels;
- → Encroachment into sensitive riparian and aquatic zones;
- → Increased long-term maintenance and safety risks, particularly under projected climate change conditions.

Alternative 2 (non-preferred)

Alternative 2 relocates the residential dwellings above the 5 m contour, thereby reducing flood risk. However, faunal specialist investigations confirmed that House 2 would be located within confirmed Mute Winter Katydid habitat, resulting in direct habitat loss for a Species of Conservation Concern. In addition, this alternative retained multiple jetties and slipways, increasing disturbance within the riverine environment.

Despite improvements in flood resilience, the biodiversity impacts associated with this alternative are considered unacceptable, and it is therefore regarded as non-preferred.

Alternative 3 (Preferred Alternative)

Alternative 3 represents an evolution of the layout in response to specialist findings and is the preferred alternative for the proposed development. Key features of this alternative include:

- → Relocation of House 2 outside the 50 m no-go buffer associated with confirmed Mute Winter Katydid habitat and above the 5 m contour line.
- → Concentration of access roads within existing disturbed areas to minimise vegetation clearance and disturbance.
- → Removal of additional jetties, resulting in a single jetty and slipway, thereby reducing disturbance within the estuarine environment.
- → Retention of the majority of the property in a natural or near-natural state.

The botanical specialist confirmed, through an addendum assessment, that the revised Alternative 3 layout does not increase botanical or terrestrial biodiversity impacts, and that the overall impact remains low negative, provided that recommended mitigation measures are implemented.

No-Go Alternative

Under the No-Go Alternative, no development would occur on Portion 4 of Farm 643. This option would result in the least environmental impact, as the site would remain in its current undeveloped state. Risks associated with improper land management or unregulated development exists under this scenario. In addition, this alternative does not meet the applicant's objectives for the establishment of a family-oriented residential development and would result in no formalised land management or environmental controls being implemented.

Specialist studies conducted

The following specialist studies informed this Draft BAR:

- → **Terrestrial Biodiversity Impact Assessment** - assessed vegetation types, ecological sensitivity, and potential impacts on plant species and terrestrial biodiversity.
- → **Terrestrial Biodiversity Addendum** - confirmed that the revised Alternative 3 layout remains acceptable from a botanical perspective with low and very low impacts.
- → **Faunal Impact Assessment** - identified the presence of animal species of conservation concern, including the Mute Winter Katydid habitat and informed the delineation of no-go areas and the refinement of the preferred development layout through the repositioning of House 2.

Application Process

This document constitutes a Draft Basic Assessment Report prepared to support the first round of public participation. Interested and Affected Parties will be provided with an opportunity to review the proposed development and specialist findings and to submit comments. All comments received will be recorded and addressed in the Final BAR submitted to the competent authority for decision-making.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MAPS

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

	• Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): o Watercourses / Rivers / Wetlands o Flood lines (*i.e.,* 1:100 year, 1:50 year and 1:10 year where applicable); o Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"): o Ridges; o Cultural and historical features/landscapes; o Areas with indigenous vegetation (even if degraded or infested with alien species). • Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted. • North arrow A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.
Site photographs	Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as **Appendix C**. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.
Biodiversity Overlay Map:	A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as **Appendix D**.
Linear activities or development and multiple properties	GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system. Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix. For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as **Appendix A3**.

ACRONYMS

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

Appendix List	
Appendix A | Locality	
Appendix A	Locality Map
Appendix B | Alternatives	
Appendix B1	Alternative Layout 1
Appendix B2	Alternative Layout 2
Appendix B3	Alternative Layout 3 (Preferred)
Appendix C | Photo Report	
Appendix C	Photo Report
Appendix D | GIS Mapping	
Appendix D	BGIS Mapping
Appendix E | Public Participation	
Appendix E	Notice of PPP 1
Appendix F | EMPr	
Appendix F	Environmental Management Programme (EMPr)
Appendix G | Specialists	
Appendix G1a	Terrestrial Biodiversity Impact Assessment
Appendix G1b	Terrestrial Biodiversity Impact Assessment Addendum
Appendix G2	Faunal Impact Assessment
Appendix H | DFFE Site Screening	
Appendix H1	Screening Tool Report
Appendix H2	Site Sensitivity Verification Report (SSVR)
Appendix I | Service Confirmation	
Appendix I	Pending

SECTION A: ADMINISTRATIVE DETAILS

Highlight the Departmental Region in which the intended application will fall	CAPE TOWN OFFICE: REGION 1		GEORGE OFFICE: REGION 3
	(City of Cape Town, West Coast District	(Cape Winelands District & Overberg District) X	(Central Karoo District & Garden Route District)

Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:	Cheddles Pty Ltd	
Name of contact person for Applicant/Proponent (if other):	Hedley Gerhardt	
Company/ Trading name/State Department/Organ of State:	Cheddles Pty Ltd	
Company Registration Number:	-	
Postal address:	6 Frere Road, Sea Point,	
	Cape Town	Postal code: 8000
Telephone:	( )	Cell: +27(0) 72 778 6392
E-mail:	hedleyg@gmail.com	Fax: ( )
Company of EAP:	Lornay Environmental Consulting	
EAP name:	Michelle Naylor	
Postal address:	Unit 5/1F Hemel & Aarde Wine Village,	
	Hermanus	Postal code: 7200
Telephone:	( )	Cell: +27(0) 83 245 6556
E-mail:	michelle@lornay.co.za	Fax: ( )
Qualifications:	MSc (Rhodes University)	
EAP registration no:	2019/698	
Duplicate this section where there is more than one landowner Name of landowner:	As above	
Name of contact person for landowner (if other):		
Postal address:		
		Postal code:
Telephone:	( )	Cell:
E-mail:		Fax: ( )
Name of Person in control of the land:	As above	
Name of contact person for person in control of the land:		
Postal address:		
		Postal code:
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 Municipality	
Contact person:	Chester Arendse	
Postal address:	Hermanus	
		Postal code: 7200

Telephone	028 384 8320	Cell: N/A
E-mail:	carendse@overstrand.gov.za	Fax: N/A

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

1.	Is the proposed development (please tick):	New	X	Expansion	
2.	Is the proposed site(s) a brownfield of greenfield site? Please explain.				

The proposed site can be considered a combination of both a greenfield and brownfield site. While the majority of the farm remains undeveloped and has not been disturbed within the last ten years, indicating characteristics of a greenfield site, there are also existing internal roads and access paths present on the property. These features reflect limited historical disturbance and align with a brownfield context in those specific areas. The existing internal roads will be utilised as far as possible in the design process to minimise additional environmental impact.

~~3.~~	~~**For Linear activities or developments**~~	
~~3.1.~~	~~Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:~~	
~~3.2.~~	~~Development footprint of the proposed development for all alternatives.~~	~~m²~~
~~3.3.~~	~~Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.~~	
~~3.4.~~	~~Indicate how access to the proposed routes will be obtained for all alternatives.~~	
~~3.5.~~	~~SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives~~	
~~3.6.~~	~~**Starting point co-ordinates for all alternatives**~~	
	~~Latitude (S)~~	~~º~~ ~~‘~~ ~~“~~
	~~Longitude (E)~~	~~º~~ ~~‘~~ ~~“~~
	~~**Middle point co-ordinates for all alternatives**~~	
	~~Latitude (S)~~	~~º~~ ~~‘~~ ~~“~~
	~~Longitude (E)~~	~~º~~ ~~‘~~ ~~“~~
	~~**End point co-ordinates for all alternatives**~~	
	~~Latitude (S)~~	~~º~~ ~~‘~~ ~~“~~
	~~Longitude (E)~~	~~º~~ ~~‘~~ ~~“~~
~~**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):	135300 m² (13.53 ha)

4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):	0 m^2
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:	~ 5500 m^2 (0.5 ha)

DISTURBED VEGETATION

DEADP & Cape Nature:	Symbol	Area
Existing disturbed footprint of road		N/A
Proposed building footprint within existing footprint of disturbed road		206 m²
Proposed House 01 building footprint outside of existing disturbed road & required disturbed vegetation		2221 m²
Proposed pool, firepit & path footprint below 5m contour & outside of existing disturbed road & required disturbed vegetation		100 m²
Proposed House 02 building footprint outside of existing disturbed road & required disturbed vegetation		1220 m²
Proposed Managers cottage building footprint outside of existing disturbed road & required disturbed vegetation		1000 m²
Proposed Gate House footprint outside of existing disturbed road & required disturbed vegetation		595 m²

4.4.	Provide a detailed description of the proposed development and its associated infrastructure (This must include details of e.g. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities).

Cheddles (Pty) Ltd (hereinafter referred to as the Applicant), has appointed Lornay Environmental Consulting (Pty) Ltd as the independent Environmental Assessment Practitioner (EAP) to undertake the Environmental Authorisation process in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended).

The proposed development is situated on Portion 4 of the Farm Middelburg No. 643, near Stanford in the Western Cape. The proposal entails the establishment of a low-density residential development comprising two private residential dwellings, a Manager's Cottage, an internal access road, and associated infrastructure and recreational features.

The design intent is to concentrate the development footprint within previously disturbed or transformed portions of the site to reduce environmental impact and retain the rural character of the area. Although the property has remained largely undisturbed over the past decade, several areas exhibit historic disturbance and are now dominated by secondary grass cover. These areas include portions proposed for the internal access road, the Manager's Cottage, House 2, and parts of the northern extent near the adjacent watercourse.

The proposed development will collectively occupy an area of approximately 5500 m² within the broader 13.53-hectare (135 300 m²) property.

Residential Buildings

The development includes two residential dwellings. Both dwellings will be single-storey and architecturally integrated into the natural surroundings:

- → **House 1** will be partially constructed within the disturbed footprint of an existing road, with the majority of the structure extending into an area where limited vegetation disturbance will be required. The total building footprint will cover approximately **2221 m²** and will be situated above the 5m contour line.
    - Associated recreational features including a swimming pool, firepit, and pedestrian pathway are proposed below the 5 m contour line. These elements will utilise the disturbed footprint and will be designed to integrate seamlessly with the surrounding topography and vegetation. The total footprint proposed for these structures is approximately **100m²**

- → **House 2** building area is situated outside of the existing road and therefore will require clearance of indigenous vegetation. The building footprint will be approximately **1220 m².** Access to the house will be via the existing access road that will be upgraded.

Manager's Cottage

- → A Manager's Cottage is proposed to accommodate on-site management and maintenance personnel.
    - This unit will occupy approximately **1 000 m²** and will be situated within an area previously disturbed. The design will follow the same architectural principles as the main dwellings.

Access Road

An internal access road will be constructed and / or upgraded, using existing disturbed pathways to minimise vegetation disturbance. The applicant will aim to retain the internal access roads as informal as possible, as per the current roads on site. Some natural surface material or grass blocks may have to be added in sections. All the access roads will have a combined length of less than **1000 m** and a maximum width of **4m**.

Jetty and Slipway

A slipway and jetty are proposed as part of the proposal. These structures have been designed in accordance with the Seashore Act and CapeNature's guidelines for riverine and estuarine infrastructure. The structures will provide controlled, low-impact access to the river while minimising disturbance to the bed and banks of the Kleinrivier.

House 1 (road, jetty and slipway)

For House 1, an access track, slipway and jetty is proposed.

- An access road covering a footprint of approximately **337 m²** will link the dwelling to the jetty and slipway area.
- A jetty with a development footprint of approximately **53 m²** is proposed. The jetty is designed in line with the "Specific Conditions and Structure Specifications" as issued by Cape Nature in line with the Application to Enter into a Lease Agreement in terms of the Sea Shore Act, Act 1935 (Act No 21 of 1935).
- A slipway with a development footprint of approximately **170 m²** will facilitate small watercraft launching and retrieval.

In total, the combined footprint of the access track, jetty, and slipway will amount to approximately **560 m²,** all situated below the 5 m contour line.

The design and construction of these structures will adhere to best environmental practices, ensuring minimal disturbance to the riverine habitat and maintaining the natural visual and ecological character of the riverfront.

Associated infrastructure:

Water

To ensure reliable water availability and pressure regulation, storage tanks will be installed within existing disturbed area of approximately **26 m²** situated on the western portion of the property. Water will be extracted from the borehole located near the entrance of the property, the water will be for household use, and therefore no authorisation is required in terms of National Water Act as it will fall under Schedule 1 – Reasonable Domestic Use.

Electricity

The dwellings will operate off the grid with the use of roof mounted solar installations.

Sewage

A minimum 6 000-litre sealed conservancy tank will be provided, sized to adequately accommodate effluent volumes from the residential units. The tank will be connected to the internal sewer drainage network of the buildings to collect both sewage and greywater in a secure, watertight system. The contents of the conservancy tank will be periodically emptied by a licensed private waste contractor and disposed of at a registered municipal wastewater treatment facility.

Solid Waste

The solid waste will be collected onsite and disposed of at a registered facility by the operator as required.

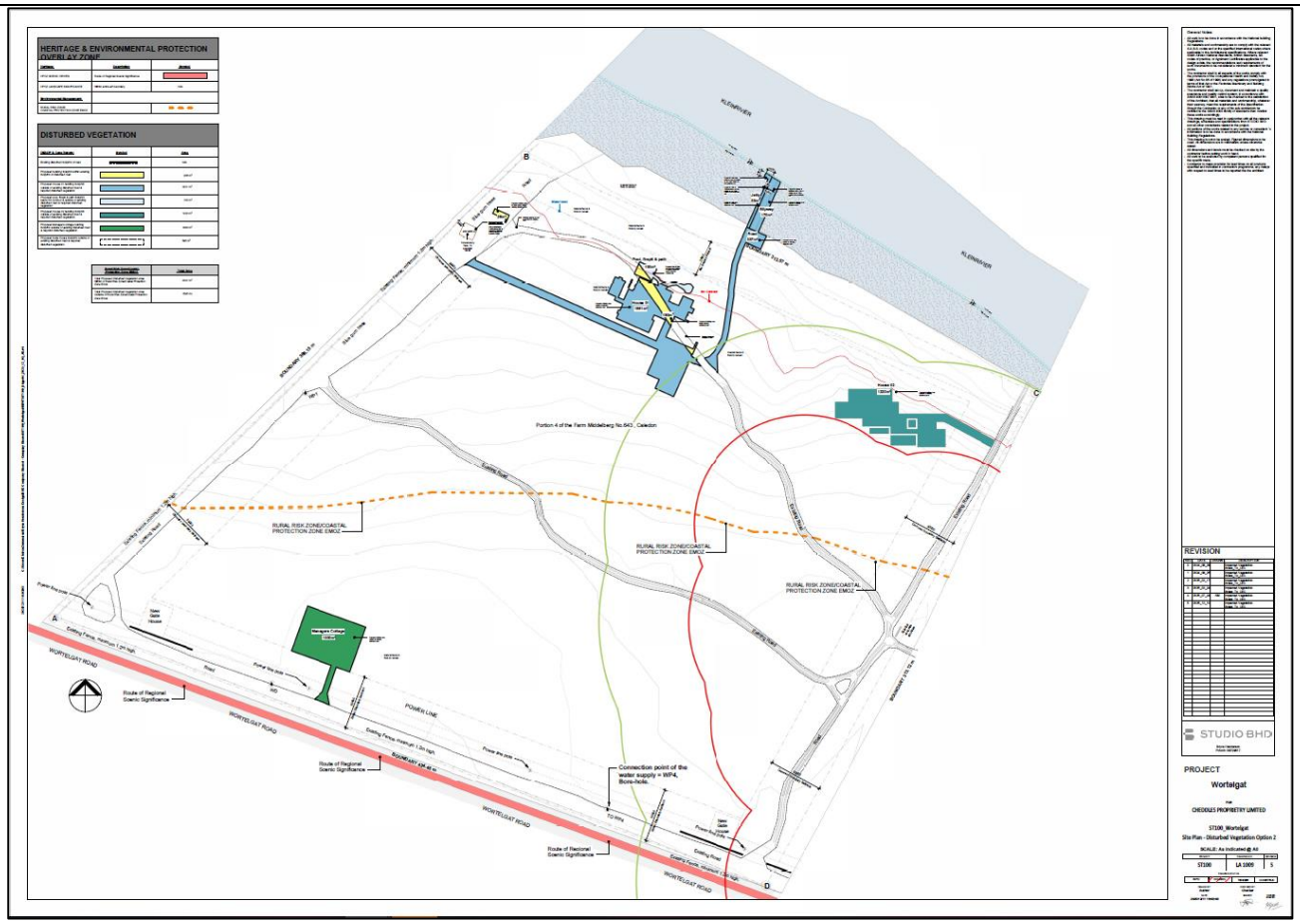

Figure 1: Proposed Site development plan – Preferred Alternative (Alternative 3).

Photo 1: Aerial view of the site, banks and Klein River. System typical of a river and not a estuary.

Photo 2: View of the existing firebreaks which also act as access routes, situated on the right and travelling from south to north of the property that will be upgraded.

Photo 3. View of the area proposed for House 2.

Photo 5. Overview of the existing access road. House 1 will be concentrated here which will connect both house 1 and House 2 access.

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

Access off the Wortelgat Road is existing. Existing internal access roads will be used as far as possible to access specific areas on the site.

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

4.7.	Coordinates of the proposed site(s) for all alternatives:			
	Latitude (S)	34º	25′	56.81″
	Longitude (E)	19º	25′	56.05″

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

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

Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes, include a copy of the exemption notice in Appendix E18.	YES	NO 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 E1.	YES	NO X
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.

Sea-Shore Act (Act 21 of 1935)

The proposed development includes application for the construction of a jetty and slipway on the Klein River. A permit from Cape Nature in terms of the Seashore Act is required prior to the construction of these structures.

4. Policies

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

1. Western Cape Spatial Development Framework (WCSDF) (2014)

3.3.7 SETTLEMENT SYNTHESIS

"The key concepts related to the settlement policies are illustrated in Figure 58. In summary these are to:

I. Develop regional planning frameworks to manage the tension between the protection of high value resources and landscapes and urban growth in the growth nodes (i.e. Cape Metro, George/Mossel Bay and Saldanha Bay/Vredenburg functional regions)

II. Ensure that densification, infill and brownfield regeneration in these areas is a non-negotiable first action in the growth nodes

III. Invest in regional service centre towns to support and integrate with the rural hinterlands, prioritising investment in housing, health and education in these towns rather than dispersing investment to villages and hamlets

IV. *Develop regional rural development frameworks to align settlement planning with large scale infrastructure investments (oil and gas, dams, regional movement routes etc).*

V. *Use ICT and periodic social services to reduce the need for rural dwellers to travel to services.*

VI. *Support investment of Provincial resources and finance in existing settlements, in line with a clear understanding of their regional role and potential and limit unproductive or potentially abortive investment in poorly located, isolated new developments.*

The proposed activity involves a low-intensity residential development situated on a rural property outside the urban edge, within an area that is largely transformed and previously disturbed. The proposal responds directly to the WCSDF's principles by:

- Concentrating development within previously disturbed areas, thereby avoiding sensitive or undisturbed natural habitats.
- Maintaining the rural character and scenic integrity of the landscape through low-density design, natural building materials, and minimal visual intrusion.
- Ensuring that infrastructure is self-sufficient, using off-grid technologies (borehole water, conservancy tanks, and solar power) in line with provincial policy for developments outside municipal service areas.
- Supporting the local rural economy through job creation during the construction phase and ongoing maintenance requirements.

3.2.3.3. PROVINCIAL SPATIAL POLICIES

POLICY E2: DIVERSIFY AND STRENGTHEN THE RURAL ECONOMY

RURAL PLANNING

1. *Rural considerations to be factored into all municipal IDPs and SDFs, with priority given to getting rural coverage in all district SDFs and then refining the detail of the planning at local municipality level. SDFs should be able to assist in the identification of strategically located land for land reform purposes in terms of the Pro-active Land Acquisition Strategy (PLAS). Provincial Government should strengthen its partnership with DRDLR in giving support to municipalities in their undertaking rural planning.*

2. *The Provincial Department of Agriculture's area based plans (1:10 000 scale) and associated spatial data are useful tools to use for detailed planning or assessing farm level land use applications.*

3. *Where regional SDFs are compiled by Provincial Government, rural considerations are to be dealt with on the same basis as municipal SDFs.*

DEVELOPMENT OUTSIDE THE URBAN EDGE

4. *Compatible and sustainable rural activities (i.e. activities that are appropriate in a rural context, generate positive socio- economic returns, and do not compromise the environment or ability of the municipality to deliver on its mandate) and of an appropriate scale and form can be accommodated outside the urban edge (except in bona fide wilderness areas).*
5. *The 2009 PSDF draft Rural Land Use Planning and Management Guidelines to be reviewed and updated to serve as basis for clarifying the interpretation of this policy. The following criteria should be applied in assessing consistency with this policy:*
    - *(I) Environmental authorisation*
    - *(II) Compatibility with land use activities suitable in the CBA it is situated in, and subject to an EIA*
    - *(III) Does not alienate unique or high value agricultural land, or compromise existing farming activities.*

(IV) Does not compromise the current or future possible use of mineral resources
(V) Is consistent with the cultural and scenic landscapes within which it is situated.
(VI) Does not involve extensions to the municipality's reticulation networks (i.e. served by off-grid technologies)
(VII) Does not impose real costs or risks to the municipality delivering on their mandate.
(VIII) Does not infringe on the authenticity of rural landscapes.

6. *Land use incentives should be used to facilitate rural land use transitions that the State cannot afford to fund on its own (e.g. securing priority biodiversity areas or climate adaptation corridors; rural development; agrarian transformation).*
7. *The current Provincial Resort Policy to be reviewed to make it consistent with PSDF 2014, and its recommendations incorporated in the updated 2009 PSDF Rural Land Use Planning and Management Guidelines."*

The proposed development is consistent with Policy E2 in that it:

- Constitutes a compatible rural land use that is appropriate in both scale and form.
- Does not alienate high-value agricultural land or interfere with existing farming operations on the subject property or adjacent properties.
- It follows a formal process for obtaining environmentally authorised under NEMA and subject to specialist inputs such as the Faunal specialist.
- Is located outside the municipal reticulation network, relying on off-grid services (borehole water supply, solar energy, and conservancy tanks), consistent with WCSDF criteria for developments beyond the urban edge.
- Maintains the cultural and scenic landscape character of the Stanford rural setting.

Overstrand Municipality Spatial Development Framework (OMSDF) (2020)

The site is situated outside the demarcated urban edge of the Overstand Municipality in Stanford town. The OMSDF identifies three broad landscape zones: the coastal belt, coastal plain, and mountainous areas, with policies promoting sustainable rural development that is sensitive to environmental and visual constraints.

The proposed development compiles with the OMSDF (2020):

- The site is located outside the demarcated urban edge of Stanford, within the rural hinterland, where only compatible, low-impact activities are supported.
- The proposed residential units are low-density, occupy a small footprint (±5342 m²), and utilise existing disturbed areas, thereby minimising transformation of rural land.
- The design and siting of the dwellings maintain open space continuity and scenic quality, consistent with OMSDF policy objectives to preserve rural landscape character.
- The proposal contributes to controlled, context-sensitive rural diversification and avoids leapfrog or sprawling urban expansion.

Overstrand Municipality Integrated Development Plan (2025/2026)

The Overstrand IDP outlines the municipality's strategic development priorities, including sustainable land management, environmental protection, and equitable access to services and opportunities.

- The development promotes sustainable land use through its environmentally responsive design and compliance with environmental legislation.

- It supports local economic development through short-term job creation during construction and ongoing maintenance work.
- It ensures responsible resource use, employing off-grid systems for energy, water, and waste management, consistent with the IDP's focus on climate resilience and resource efficiency.

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 for the Review of Specialist Input in the EIA process (June 2005).

This guideline provides direction on the role and quality standards of specialist studies in environmental assessments, ensuring that findings are scientifically sound, relevant, and integrated into the decision-making process.

Guideline for Environmental Management Plans (June 2005)

This guideline outlines the structure and essential components of an Environmental Management Programme (EMPr), ensuring that mitigation measures and monitoring actions are clearly defined, implementable, and auditable.

Guideline on Alternatives (March 2013)

This guideline emphasises the importance of identifying, describing, and assessing reasonable and feasible alternatives in the EIA process.

Guideline on Need and Desirability (March 2013)

This guideline provides a framework for assessing the broader contextual justification for a proposed development, including its alignment with spatial planning, socio-economic priorities, and sustainable resource use. For this proposal, the guideline assisted in demonstrating that the development is contextually appropriate, aligns with local and regional planning instruments, and supports sustainable rural residential use while maintaining environmental integrity.

Western Cape Biodiversity Spatial Plan Handbook and Guidelines (2023)

The WCBSP provides a spatial biodiversity framework for the Western Cape, identifying Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) that guide land-use planning and environmental decision-making.

This guideline directly informed the site sensitivity analysis, ensuring that the proposed development footprint minimise vegetation clearance within CBAs, and maintains natural connectivity and ecological functioning in accordance with provincial biodiversity priorities.

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 and adjacent agricultural properties have not been farmed for many years, nor is the property suitable for intensive farming purposes. No rezoning is applicable to the proposal and therefore the property will retain its Agricultural Zoning. No further assessment is required under this theme.

Animal Species Theme - High Sensitivity – In accordance High Sensitivity of animal species identified in the DFFE Screening Tool, a Terrestrial Animal Site Sensitivity Verification and Species Specialist Assessment was undertaken by Venter (2025) to confirm site sensitivity and identify potential species of conservation concern that may occur within the proposed development footprint. The Screening Report identified eleven (11) animal species of concern as potentially occurring on the property. These species include high-sensitivity birds species, as well as medium-sensitivity species such as amphibians, invertebrates, and reptiles (notably snakes). The Faunal Specialist Assessment verified the site sensitivity and confirmed the presence of seven (3) animal species of conservation concern on-site. Confirmed species include the Mute Winter Katydid, Western Leopard Toad, and African Marsh Harrier, while additional high-likelihood SCC are considered present within the Potential Area of Influence (PAOI). The property also provides an important ecological linkage between the Klein River and the surrounding fynbos habitats, contributing to regional landscape connectivity.

Although the proposed development has a limited overall footprint, even low-intensity residential development has the potential to introduce long-term edge effects and localised disturbance within this ecologically sensitive setting. Under the original layout (Alternative 2), impacts were assessed as being of Medium to High significance, primarily due to direct overlap with confirmed katydid habitat and cumulative disturbance to watercourse-associated fauna.

In response to the faunal specialist's recommendations, the Preferred Alternative (Alternative 3) incorporates key design revisions, including the reduction of jetty infrastructure from two structures to a single jetty, as well as the relocation of House 02 outside the recommended 50 m buffer around the confirmed Mute Winter Katydid habitat. These design changes substantially reduce the extent of habitat disturbance and fragmentation.

It is therefore the specialist's opinion that the revisions incorporated in Alternative 3 significantly reduce the predicted faunal impacts. Consequently, residual impacts are reduced from Medium–High significance under Alternative 2 to Low–Medium significance under the Preferred Alternative (Alternative 3).

Aquatic Biodiversity Theme – Very high sensitivity – The site is located along the banks of the Klein Rivier. The development, except for the jetty(s) and slipway(s), swimming pool, fire pit and a pathway will be located above the 5m contour, and more than 32 m from the edge of the watercourse and more than 100 m from the HWM. Given this, it is concluded that no further Aquatic Biodiversity specialist input is required.

Archaeological and Cultural Heritage Theme – Low sensitivity – No further Heritage Assessment will be implemented.

Civil Aviation Theme – Low sensitivity – the proposed activity is in line with the existing agricultural land use zoning in the area. Therefore, no additional impacts are expected to this theme. No further assessment is required.

Defense Theme – Low sensitivity – the proposed expansion is in line with the existing agricultural land use zoning in the area. Therefore, no additional impacts are expected to this theme. No further assessment is required.

Paleontology Theme – Very high – Portion 4 of Farm 643 is located within an area identified as having very high paleontological sensitivity. The development of a low-density residential dwelling in a rural agricultural setting may involve limited ground disturbance for building foundations, services, and landscaping. Given the small-scale and low-impact nature of the proposed residential development, a full Paleontological Impact Assessment (PIA) is not required. No significant excavation or earthworks beyond typical residential construction are planned, and much of the site has been previously disturbed. While the site is classified as very high sensitivity for paleontological resources, the proposed residential development is unlikely to cause significant impacts, provided that the chance-find procedure is implemented.

Plant Species Theme – Medium Sensitivity – The proposed development site has been classified as having medium sensitivity due to the likelihood occurrence of plants species of conservation concern. No plant species of conservation concern (SCC) were encountered in the study area. The principal reason for this is that the vegetation type is not Agulhas Limestone Fynbos and the list of sensitive species generated by the environmental screening tool do not exist on the property. Therefore the botanical specialist assesses the site as LOW sensitivity under this theme.

Terrestrial Biodiversity Theme – Very high Sensitivity – The site for the proposed residential development on Portion 4 of Farm 643 is located in an area identified as having very high terrestrial biodiversity sensitive, based on the vegetation type that is mapped for the site (Agulhas Limestone Fynbos). The secondary reason is that the site is mapped as CBA1 as per the WCBSP (2023). However, since the vegetation is not Agulhas Limestone Fynbos, it is contended here that the terrestrial biodiversity is LOW since Agulhas Limestone Fynbos is absent. Furthermore, the site should not be classified as CBA1.

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.
12	The development of— (i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs - (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse;	The proposed development includes the installation of two water-based access structures, jetties and slipways along the Klein River, both with the total development footprint of more than 100m^2. These structures are located within 32 metres of a watercourse, specifically within the riparian Zone of the Klein River.
17	Development – (i) in the sea; (ii) in an estuary; (iii) within the littoral active zone; (iv) in front of a development setback; or (v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater; in respect of - (a) fixed or floating jetties and slipways; (b) tidal pools; (c) embankments; (d) rock revetments or stabilising structures including stabilising walls; or (e) buildings of 50 square metres or more; or (f) infrastructure or structures with a development footprint of 50 square metres or more	The proposed development includes the installation of two water-based access structures, jetties and slipways along the Klein River, both with the total development footprint of more than 100m^2. These structures are located within 32 metres of a watercourse, specifically within the riparian Zone of the Klein River. Note that the preferred alternative sees a reduction in the jetty and slip way to one only.

19	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from (i) a watercourse	The construction of the jetty and slipway will require limited excavation, shaping, and stabilisation along the riverbank of the Klein River, resulting in the movement and deposition of more than 10 m^3 of soil and sand within the riparian zone.
19A	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from— (i) the seashore; (ii) the littoral active zone, an estuary or a distance of 100 metres inland of the highwater mark of the sea or an estuary, whichever distance is the greater; or (iii) the sea;	The construction of the jetty and slipway will require excavation and shaping along the bank of the Klein River, resulting in the movement and deposition of more than 5 m^3 of soil and sand within 100 metres of the high-water mark. Certain infrastructure for the residential dwellings also falls within this 100 m of the High-Water Mark.
Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Listing Notice 3**	Describe the portion of the proposed development to which the applicable listed activity relates.
12	The clearance of an area of 300 square metres or more of indigenous vegetation 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	More than 300 m^2 of indigenous vegetation will be cleared to accommodate the proposed development.
14	The development of infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs – (a) within a watercourse; (b) un front of a development setback; or (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the urban edge of a watercourse; i. Western Cape i. Outside urban areas: (ff) Critical Biodiversity Areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (hh) Areas on the estuary side of the development setback line or in an estuarine functional zone where such development setback has been determined.	The proposed development includes the construction of two access roads extending from the existing disturbed track to provide access to two jetties and two slipways. These structures are located below the 5 m contour line. The combined footprint of these features including the two access roads, jetties, slipways, and a portion of the proposed pool area amounts to approximately 940 m^2.

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 3; Activity 4*: The development of the road wider than 4 meters with a reserve of less than 13.5 meters. 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:*

Disturbed areas will be utilized as far as practicable for road construction. All proposed roads will have a maximum width of less than 4 metres and will not include a road reserve. As a result, the proposed development does not trigger Listing Notice 3, Activity 4.

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

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

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

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

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1.	Provide a description of the preferred alternative.

The preferred alternative (Alternative 3) entails the small-scale development of 2 private dwellings and a manager's cottage on Portion 4 of the Farm Middelburg No. 643, located in the Stanford area within the Overstrand Local Municipality. This property is the only site under consideration and therefore constitutes both the preferred property and the preferred site alternative.

The property is located outside the urban edge and is currently zoned Agricultural Zone I, which permits agricultural activities and, associated consent uses. The surrounding properties are also zoned for agricultural purposes and have been transformed to support agricultural operations, contributing to the rural character and land-use pattern of the area. The property abuts Klein River to the north, vacant properties to the east and the west, which appear to have been historically transformed for agricultural purposes (farming) as well as a transformed portion of the properties situated to the south. The project involves the construction of 2 single residential dwellings and a manager's house concentrated within previously disturbed or transformed areas on the site. The proposed development will cover a total area of approximately 5500 m² within the broader 13.5 ha (135,000 m²) farm property.

Main Residential dwellings

The development includes two single residential dwellings. Both dwellings will be single-storey and architecturally integrated into the natural surroundings for use by the land owners:

- → **House 1** will be partially constructed within the footprint of an existing disturbed road, with the majority of the structure extending into an area where limited vegetation disturbance will be required. The total building footprint will cover approximately **2221 m²** and will be situated above the 5m contour line.
    - Associated recreational features including a swimming pool, firepit, and pedestrian pathway are proposed below the 5 m contour line, outside of the existing disturbed road area. These elements will utilise the disturbed footprint and will be designed to integrate seamlessly with the surrounding topography and vegetation. The total footprint proposed for these structures is approximately **100m²**

- → **House 2** building area is situated outside of the existing road and therefore will require clearance of indigenous vegetation. The building footprint will be approximately **1220 m².** Access to the house will be via the existing access road that will be upgraded.

Manager's Cottage

- → A Manager's Cottage is proposed to accommodate on-site management and maintenance personnel.
    - This unit will occupy approximately **1 000 m²** and will be situated within an area previously disturbed by human activity. The design will follow the same architectural principles as the main dwellings.

Access Road

An internal access road will be required and existing disturbed pathways on site have been used as far as possible to minimise vegetation disturbance. The roads will be small scale and kept as natural jeep track type roads, if surfacing is required grass pavers will be used. All the access roads will have a combined length of less than **1000 m** and a maximum width of **4m**.

Slip way and Jetty

A jetty and a slipway for the launching of the landowner's private boat, is proposed. These structures have been designed in accordance with the Seashore Act and CapeNature's guidelines for riverine and estuarine infrastructure. The structures will provide controlled, low-impact access to the river while minimising disturbance to the riverbed and banks.

House 1 (road, jetty and slipway)

For House 1, the following is proposed:

- An access route covering a footprint of approximately **337 m²** will link the dwelling to the jetty and slipway
- A jetty with a development footprint of approximately **53 m²** will be constructed to provide river access for recreational purposes.
- A slipway with a development footprint of approximately **170 m²** will facilitate small watercraft launching and retrieval.

In total, the combined footprint of the road, jetty, and slipway will amount to approximately **560 m²,** all situated below the 5 m contour line along the riverbank.

The design and construction of these structures will adhere to best environmental practices, ensuring minimal disturbance to the riverine habitat and maintaining the natural visual and ecological character of the riverfront.

Associated infrastructure:

Water

To ensure reliable water availability and pressure regulation, storage tanks will be installed within existing disturbed area of approximately **26 m²** situated on the western portion of the property. Water will be extracted from the borehole located near the entrance of the property, the water will before household use, and therefore no authorisation is required in terms of National Water Act.

Electricity

Off the grid with roof mounted solar panels.

Sewage

The conservancy tank will be installed within an already disturbed area situated on the western portion of the property, located above the 5 m contour line to ensure safety from flooding and to maintain compliance with setback requirements.

A minimum 6 000-litre sealed conservancy tank will be provided, sized to adequately accommodate effluent volumes from the residential units. The tank will be connected to the internal sewer drainage network of the buildings to collect both sewage and greywater in a secure, watertight system. The contents of the conservancy tank will be periodically emptied by a licensed private waste contractor and disposed of at a registered municipal wastewater treatment facility.

Solid Waste

The solid waste will be collected onsite and disposed of at a registered facility.

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.

Portion 4 of the Farm Middelburg No. 643 is zoned Agricultural Zone I in terms of the Overstrand Municipality Zoning Scheme. This zoning permits agricultural land uses as the primary function of the property, while also allowing certain associated uses via consent use. The property owners are entitled to both a main dwelling and a manager's dwelling as primary rights.

Although the main and manager's dwellings may, in principle, be of unlimited size, the total development footprint must remain compatible with the agricultural nature of the property and the applicable municipal planning provisions.

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

The property is currently zoned Agricultural Zone I, which permits agricultural land uses and allows for the establishment of at least one single residential dwelling as a primary right. The proposed development comprising two residential dwellings and a Manager's Cottage does not conflict with the existing land use zoning of the property, as the zoning scheme makes provision for additional residential units on agricultural land subject to municipal approval processes via consent use.

No previous or conflicting development rights have been granted for the site that would restrict the proposed project. Accordingly, there is no overlap or inconsistency between the current proposal and any existing approvals. Where

additional authorisations may be required such as consent uses (e.g., in relation to the jetty and slipway under the Seashore Act), these will be obtained in parallel with this application to ensure full compliance.

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

Extract from Western Cape Spatial Development Framework (WCSDF) (2014)

3*.3.7 SETTLEMENT SYNTHESIS*

"The key concepts related to the settlement policies are illustrated in Figure 58. In summary these are to:

VII. Develop regional planning frameworks to manage the tension between the protection of high value resources and landscapes and urban growth in the growth nodes (i.e. Cape Metro, George/Mossel Bay and Saldanha Bay/Vredenburg functional regions)

VIII. Ensure that densification, infill and brownfield regeneration in these areas is a non-negotiable first action in the growth nodes

IX. Invest in regional service centre towns to support and integrate with the rural hinterlands, prioritising investment in housing, health and education in these towns rather than dispersing investment to villages and hamlets

X. Develop regional rural development frameworks to align settlement planning with large scale infrastructure investments (oil and gas, dams, regional movement routes etc).

XI. Use ICT and periodic social services to reduce the need for rural dwellers to travel to services.

XII. Support investment of Provincial resources and finance in existing settlements, in line with a clear understanding of their regional role and potential and limit unproductive or potentially abortive investment in poorly located, isolated new developments.

The proposed development aligns with the Western Cape Provincial Spatial Development Framework (2014):

- The proposed residential development is located outside the urban edge, within a property zoned Agricultural Zone I. The development footprint has been carefully concentrated within previously disturbed or transformed areas, reducing the impact on high-value natural and agricultural resources. Existing disturbed areas will be utilised as far as possible for the proposed development. By focusing on low-density development within already transformed areas, the proposal aligns with the WCSDF principle of protecting high-value landscapes while accommodating limited residential growth.

- While the development site is outside a designated growth node and does not contribute to densification or infill, the proposal demonstrates sensitivity to the existing rural land-use pattern. The small-scale, low-density nature of the development ensures that it does not pre-emptively compromise opportunities for future densification within nearby urban areas. This approach aligns indirectly with the WCSDF policy by avoiding unplanned expansion into sensitive areas.

- Stanford, as the nearest regional service centre, provides housing, health, education, and other services. By locating the development in proximity to Stanford, the project supports integration with the regional service centre and reduces the need for residents to seek services in more distant locations. This targeted proximity aligns with the WCSDF goal of strengthening existing service hubs rather than dispersing new settlements in isolated locations.

- The development does not require major new infrastructure investments beyond upgrading internal access roads, minor utility connections, and small-scale water-based structures. The site's use of existing pathways

and previously disturbed areas ensures that the project leverages current infrastructure without creating high-cost, low-productivity investment demands. This is consistent with the WCSDF principle of aligning rural development with efficient infrastructure use.

- While the development is residential in nature, the small scale and integration with Stanford's service provision ensures that travel needs for essential services are minimized. The project does not encourage isolated settlement and allows residents to access existing educational, health, and retail services efficiently.

- The proposed development is modest in scale (two residential dwellings, a manager's cottage, and minor recreational infrastructure) and is sited on an already partially transformed portion of the property. By concentrating development within previously disturbed areas and avoiding unnecessary expansion into pristine agricultural or ecological zones, the project limits the risk of unproductive or abortive investment. It ensures that provincial resources, such as permitting oversight and environmental management support, are used effectively and responsibly.

4.2	The Integrated Development Plan of the local municipality.

The Overstrand Municipality Integrated Development Plan (IDP) 2025/26 Review provides the strategic and policy framework guiding development within the municipal area. The IDP places emphasis on sustainable development, environmental protection, responsible spatial planning, and the efficient use of existing infrastructure, particularly within rural and environmentally sensitive areas.

The proposed development has been assessed against the strategic intent and development principles of the Overstrand IDP and is considered to be broadly aligned with its objectives, subject to the implementation of appropriate environmental mitigation measures.

Environmental Sustainability and Biodiversity Management

The IDP identifies environmental sustainability and biodiversity protection as key priorities under its strategic focus on sustainable service delivery and environmental governance. It recognises the ecological sensitivity of the Overstrand area, including riverine systems and species of conservation concern, and promotes development that is informed by environmental assessments and specialist input.

In response to these objectives, the proposed development has been refined to incorporate the findings and recommendations of the specialist studies. The adoption of Alternative 3 reflects a direct response to the IDP's emphasis on avoiding and minimising impacts on sensitive environments. This includes:

- The relocation of one residential unit outside the identified habitat of the Mute Winter Katydid,

- The establishment of a 50 m buffer zone around the species' location, and

- The reduction of jetty and slipway infrastructure from two to one, thereby limiting disturbance to the riverine environment.

These measures demonstrate alignment with the IDP's intent to balance development with the protection of critical biodiversity and ecological systems.

Spatial Planning and Rural Land Use

The IDP promotes context-appropriate development that respects the rural character of non-urban areas and discourages unnecessary land fragmentation and urban sprawl. It further supports land-use practices that are compatible with surrounding uses and that do not compromise long-term environmental sustainability.

The proposed development is limited in scale, does not involve subdivision of the property, and retains the existing agricultural zoning of Portion 4 of Farm 643. As such, it does not introduce an intensive or incompatible land use and remains consistent with the rural land-use objectives outlined in the IDP.

Infrastructure Efficiency and Resource Use

The IDP emphasises the importance of efficient use of existing infrastructure to reduce environmental disturbance and avoid unnecessary expansion of services. In line with this principle, the proposed development utilises the existing access via Wortelgat Road, thereby minimising the need for new road construction and additional vegetation clearance.

This approach supports the IDP's objective of promoting development that makes responsible use of existing infrastructure while limiting environmental impacts.

4.3.	The Spatial Development Framework of the local municipality.

Location outside the urban edge

The development site is located outside the demarcated urban edge of Stanford. The OMSDF encourages that developments beyond the urban edge should be small-scale, environmentally sensitive, and respectful of the rural character of the area. By proposing only two residential dwellings, a manager's cottage, and limited recreational infrastructure (swimming pool, firepit, pathways), the project maintains a low-density profile, in line with OMSDF guidance for rural development.

Compliance with landscape zones

The OMSDF identifies three broad landscape zones: coastal belt, coastal plain, and mountainous areas, with policies promoting sustainable land use and conservation. The site is part of the coastal plain adjacent to the Klein Rivier. The proposed development concentrates construction within previously disturbed or transformed areas, thereby minimizing impacts on the natural landscape, conserving open space, and maintaining visual integrity from surrounding areas. Recreational structures (jetty and slipway) are designed to follow environmental guidelines to protect the ecosystem.

Environmental and visual sensitivity

The OMSDF stresses that rural development should avoid significant disturbance to natural habitats and visual corridors. The development plan:

- Limits vegetation clearance through the use of exiting disturbed areas.
- Designs buildings to be single-storey with architectural features compatible with the rural character, ensuring minimal visual intrusion on the surrounding agricultural landscape.

Sustainable rural development principles

The OMSDF encourages development that is sustainable, supporting local needs without compromising environmental quality. The project:

- Concentrates development within transformed areas to avoid unnecessary land conversion.
- Integrates with existing infrastructure and road networks to avoid high-cost, low-efficiency investments.
- Provides limited on-site management via a manager's cottage to support operational sustainability and site oversight.

Integration with surrounding land uses

The OMSDF promotes development that complements existing agricultural and rural land uses. The site is surrounded by properties transformed for agriculture, and the small-scale, low-impact residential development will not disrupt the prevailing land-use pattern. By keeping the development footprint minimal and strategically located, the proposal respects the continuity of rural operations and landscape aesthetics.

4.4.	The Environmental Management Framework applicable to the area.

The Overstrand Public Viewer and the Overstrand Municipality Spatial Development Framework (SDF, 2020) were consulted as part of this application. According to the Environmental Management Overlay Zone layers, approximately half of the property falls within the Coastal Protection Zone (CPZ), as illustrated in **Figure 2**. This designation is linked to the property's location abutting the Klein River along its northern boundary and introduces additional considerations for environmental sensitivity and the protection of riparian areas.

The property is situated along the banks of the Klein River, more than 32 metres away from the edge of the watercourse, but within 100 m of the High-Water Mark (HWM). The proposed residential dwellings will be located above the 5-metre contour, while the slipway and the jetty are proposed below the 5-metre contour, overlooking the Klein River. As a result, an application in terms of the Seashore Act will be required for the water-based access structures.

Importantly, no ecological corridors, urban conservation areas, or conservation-worthy areas have been mapped within the boundaries of the property. While the site is therefore subject to environmental management considerations under the Integrated Coastal Management Act due to its proximity to the Klein River and its rural setting, it is not formally identified as part of a critical biodiversity area or conservation priority network.

Figure 2: illustrates the Environmental Management Framework overlays as they apply to the subject property.

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

To be included after the public participation process.

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

The Western Cape Biodiversity Spatial Plan (WCBSP, 2023) provides a spatial framework to prioritise Biodiversity Priority Areas for conservation action, including protected area expansion, ecological infrastructure maintenance, and informed land-use decision-making. The guidelines emphasise the value of biodiversity and ecological infrastructure in the province, while recognising their vulnerability to development pressures. To guide responsible planning, the WCBSP maps Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs), which are considered essential for conserving biodiversity patterns and maintaining ecological processes.

According to the Western Cape Biodiversity Spatial Plan (WCBSP, 2023), the property is mapped as a Critical Biodiversity Area 1 (CBA1), terrestrial and aquatic (**Figure 3-1**). However, site-based botanical verification confirmed that the vegetation present does not correspond with the Agulhas Limestone Fynbos vegetation unit that underpins the CBA1 classification. No plant Species of Conservation Concern or species characteristic of this vegetation type were recorded during the field survey. Based on this, the botanical specialist concluded that the mapped CBA1 category does not reflect the actual ecological condition of the site and that a more appropriate ecological classification would be ESA2, or possibly Other Natural Area (ONA).

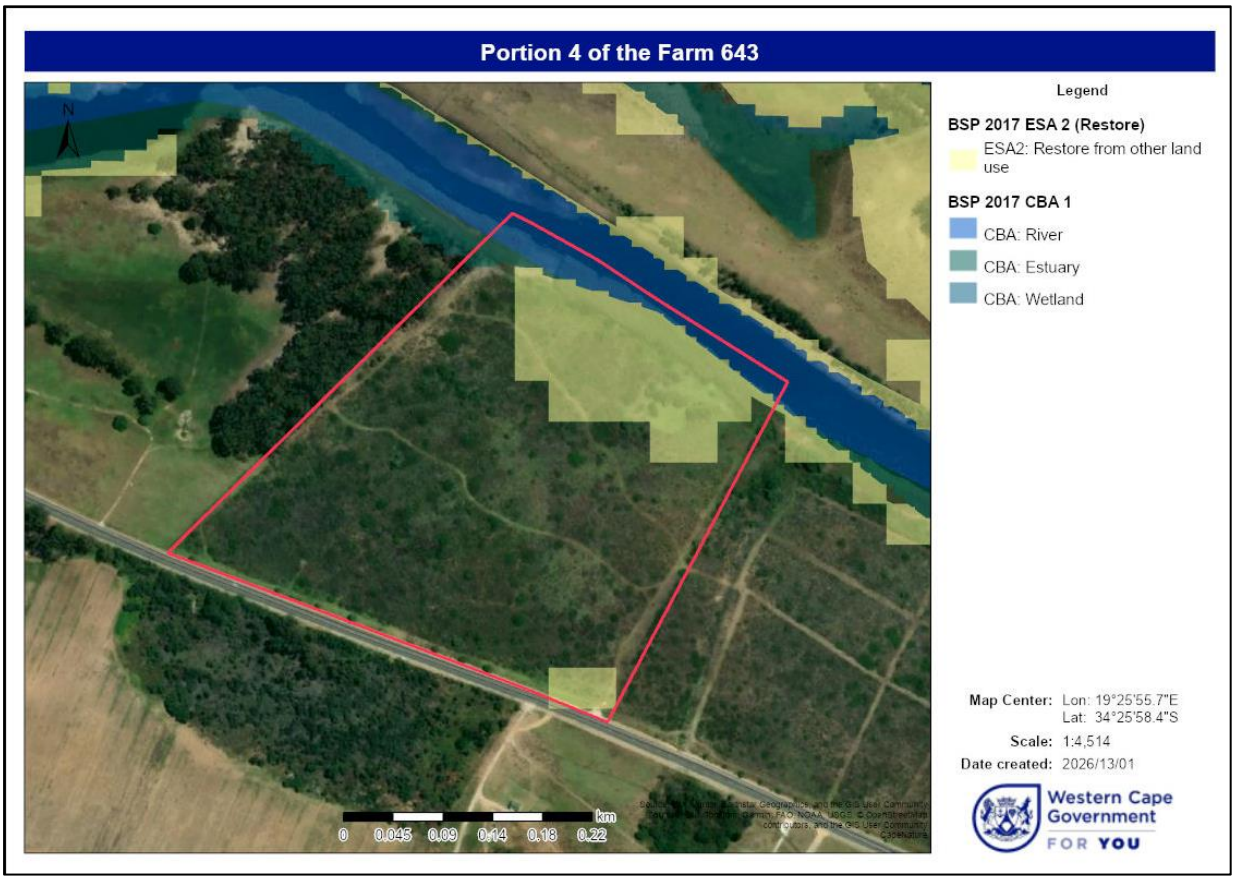

Figure 3-1: 2017 WCBSP maps the small portion of the site as ESA2, whereby the rest of the property remain unclassified.

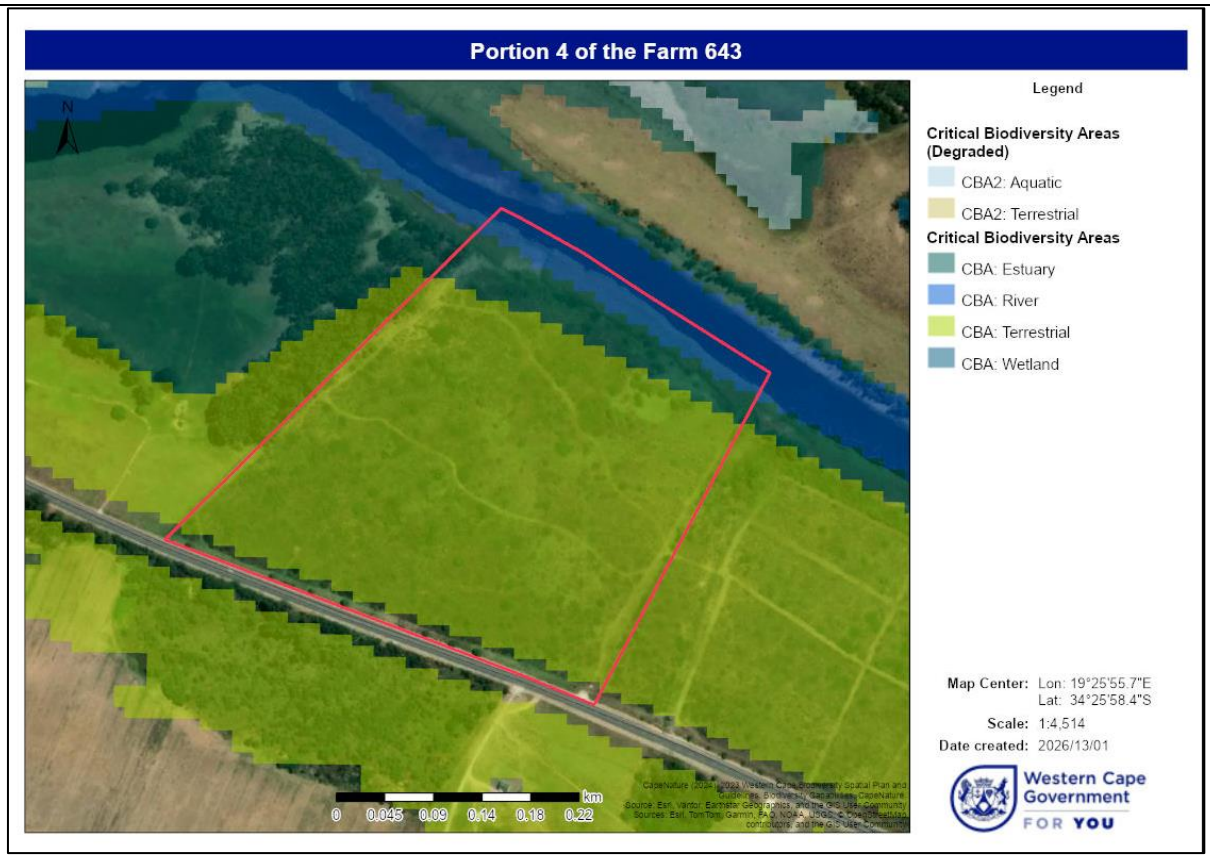

Figure 3-2: 2023 WCBSP shows that the site is mostly mapped as CBA1 (terrestrial) with the small portion situated along the Klein River that is mapped as CBA1.

Despite the discrepancy between the mapped and verified vegetation sensitivity, the proposed development has been guided by the broader ecological functions recognised in the Biodiversity Spatial Plan, particularly the maintenance of ecological connectivity and biodiversity processes. The southern portion of the site, which falls within the Coastal Protection Zone and is mapped as CBA1/ESA in the WCBSP (2017), forms part of a functional ecological corridor linking the Klein Rivier with surrounding fynbos habitats (refer to **Figure 3-2**). The faunal specialist confirmed that several Species of Conservation Concern (SCC) utilise this broader landscape, and that the property contributes to faunal movement and dispersal, particularly for species such as the Western Leopard Toad, the Mute Katydid, and foraging habitat for the African Marsh Harrier.

A confirmed record of the Mute Winter Katydid along the eastern boundary of the site directly influenced the development layout. A buffer area was implemented to avoid disturbance to this species and to prevent encroachment of development into sensitive habitat, in line with WCBSP avoidance and mitigation principles.

In line with the WCBSP Handbook and Guideline (2023), the desired management objective for CBA1 areas is to maintain the land in a natural or near-natural state, with strict avoidance of further habitat loss and transformation. It is crucial to note that the proposed development is considered a low-impact development, as it concentrates structures within previously disturbed areas and avoids high-value conservation zones. Key components of the development, particularly the internal access roads, have been strategically concentrated within historically disturbed or transformed portions of the property, following existing road alignments. This approach minimizes disturbance to intact natural areas and reduces pressure on critical habitats. The residential dwellings are carefully sited along these existing roads, above the 5-metre contour line, and outside sensitive riparian zones, demonstrating clear compliance

with biodiversity spatial planning guidelines. While a small portion of the swimming pool falls within the 5-metre contour.

In addition, the proposal integrates mitigation measures aimed at limiting vegetation clearance and disturbance. These measures are consistent with the WCBSP principle that only low-impact, biodiversity-sensitive land uses are appropriate within CBA1 areas. In this way, the development approach seeks to balance the functional use of the property with the overarching objective of conserving its ecological integrity.

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

The Integrated Coastal Management Act (ICMA, Act 24 of 2008) seeks to promote the sustainable use, conservation, and management of the coastal environment. It does so by identifying and regulating activities within specific zones of the coastal protection area, the coastal public property, and the coastal access land, among others. The purpose of these zones is to ensure that development along coastal areas does not compromise ecological integrity, public access, or the long-term resilience of coastal ecosystems.

In the case of Portion 4 of Farm 643, half of the property is located within the Coastal Protection Zone (CPZ) due to its proximity to the Klein River. The CPZ is intended to safeguard sensitive riparian systems, protect ecological infrastructure, and minimise risks associated with inappropriate development in sensitive coastal areas. Although some infrastructure will be situated within 100m of the High-Water Mark of the Klein River, the proposed development aligns with this intention by situating the main residential dwellings above the 5-metre contour line, outside of sensitive riparian habitat, thereby reducing direct impacts on the riverine system. By limiting development to already disturbed or transformed areas, the project avoids unnecessary intrusion into intact natural habitats within the CPZ. **The definition of this portion of the Klein River as part of the sea is questionable since the area does not experience tidal influence.**

The proposed jetty and slipway fall within the ambit of the ICMA as water-based access infrastructure, their location will be within the 5m contour. The intention of the ICMA in this regard is not to prohibit such uses outright but to regulate them to ensure that they are designed, located, and managed in a manner that does not compromise the ecological functioning of the riverine systems. Consistent with this, the project recognises that these structures will require separate authorisation in terms of the ICMA and the Seashore Act, and they will be developed in line with CapeNature and municipal specifications.

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

The screening tool has not changed from the one submitted with the NOI.

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

The property is not situated within an urban area.

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

The proposed development has been designed to optimise the use of existing resources and infrastructure by leveraging previously disturbed areas on the property. Internal access roads and building footprints are aligned with historic pathways and previously transformed zones, reducing the need for new land clearing and minimizing construction-related impacts. By using these existing alignments, the development limits soil disturbance, preserves natural drainage patterns, and reduces construction costs associated with creating entirely new infrastructure.

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

Associated infrastructure:

Water

To ensure reliable water availability and pressure regulation, storage tanks will be installed within a designated area of approximately **26 m²** situated on the western portion of the property, within the footprint of an existing disturbed road. Water will be extracted from the borehole for household use, and therefore no authorisation is required in terms of National Water Act.

Electricity

Off the grid options will be included in the design and roof mounted solar panels will be used to cover the electrical requirements of the site.

Sewage

Sewage generated from the proposed development will be managed through a closed prefabricated conservancy tank system. The conservancy tank will be installed within an already disturbed area situated on the western portion of the property, located above the 5 m contour line to ensure safety from flooding and to maintain compliance with coastal and watercourse setback requirements.

A minimum 6 000-litre sealed conservancy tank will be provided, sized to adequately accommodate effluent volumes from the residential units. The tank will be connected to the internal sewer drainage network of the buildings to collect both sewage and greywater in a secure, watertight system. The contents of the conservancy tank will be periodically emptied by a licensed private waste contractor and disposed of at a registered municipal wastewater treatment facility

Solid Waste

The solid waste will be collected onsite and disposed of at a registered facility.

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

The need and desirability of the proposed development have been evaluated in accordance with the Department's *Guideline on Need and Desirability (March 2013)* and the principles of *Integrated Environmental Management (IEM)* as set out in the National Environmental Management Act (NEMA) (Act No. 107 of 1998).

Need for the Proposed Development

The preferred site for the proposed development is Portion 4 of Farm 643, situated west of Stanford. This property was identified as the only feasible site for the proposed activity, as it is under the ownership and control of the applicant. No alternative land parcels are available within the applicant's ownership that could reasonably accommodate the proposed development. The absence of alternative sites therefore significantly constrains site selection options, rendering this property the only viable location for achieving the project objectives. In this context, the preparation of a comparative site selection matrix was not considered applicable.

From a broader socio-economic perspective, the Overstrand area continues to experience demand for housing and small-scale development opportunities that support local livelihoods, land-based investment, and the diversification of rural land use. While the proposed development is limited in scale, it contributes to this need by enabling appropriate, low-intensity residential use within an existing rural landscape, without triggering large-scale transformation or urban sprawl.

The proposed activity further responds to the need for landowners to utilise their property in a manner that is economically viable while remaining compliant with environmental legislation. In this regard, the development seeks to balance land-use rights with environmental responsibility, as envisaged by NEMA.

Desirability of the Proposed Development

The desirability of the proposed development is informed by its location, scale, layout design, and responsiveness to environmental constraints. The site is located within a rural setting that offers a tranquil living environment, which aligns with the intended development outcomes and is compatible with the character of the surrounding landscape.

Importantly, the desirability of the development has been significantly enhanced through the refinement of the layout to Alternative 3, which directly responds to the findings and recommendations of the specialist studies. The preferred layout avoids sensitive biodiversity features, including the habitat of the Mute Winter Katydid, through the relocation of one residential unit outside the identified habitat and the establishment of a 50 m buffer zone. In addition, the reduction of jetty and slipway infrastructure from two to one represents a substantial improvement over earlier alternatives and demonstrates a clear commitment to minimising impacts on the riverine environment.

From a land-use perspective, the property remains zoned for agricultural use and will not be subdivided, thereby maintaining consistency with surrounding land uses and avoiding fragmentation of the rural landscape. The scale of the proposed activity is considered appropriate to the receiving environment and does not introduce land uses that are incompatible with existing activities in the area.

The site further benefits from existing infrastructure, including an established access route via Wortelgat Road, which runs along the southern boundary of the property. Utilising this existing access significantly reduces the need for new road construction and limits additional vegetation clearance and soil disturbance. This approach aligns with the NEMA principles of resource efficiency, avoidance of unnecessary environmental degradation, and sustainable development.

Alignment with NEMA Principles

The proposed development, particularly in its refined form (Alternative 3), demonstrates alignment with the key principles of NEMA by:

- Avoiding and minimising environmental impacts where reasonably practicable;
- Promoting development that is socially and economically beneficial while remaining environmentally responsible;
- Ensuring that sensitive ecological features are protected through informed planning and specialist-driven mitigation measures; and
- Supporting sustainable land use that does not compromise the ecological integrity of the area or the needs of future generations.

SECTION F: PUBLIC PARTICIPATION

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

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

N/A

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

N/A

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

DEA&DP Landuse DOA Elsenburg DEA&DP Coastal Management Cape Nature Cape Nature – Seashore Act BOCMA 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.

To be included after PPP.

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, and all the registered I&APs must be included in Appendix F. The register must be maintained and made available to any person requesting access to the register in writing.

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

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

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

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

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

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

SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

1. Groundwater

1.1.	Was a specialist study conducted?	YES	NO 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 explain how this has influenced your proposed development.		
N/A			
1.4.	Indicate the depth of groundwater and explain how the depth of groundwater and type of aquifer (if present) has influenced your proposed development.		
N/A			

2. Surface water

2.1.	Was a specialist study conducted?	YES	NO X
2.2.	Provide the name and/or company who conducted the specialist study.		
N/A			
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.		
N/A			

3. Coastal Environment

3.1.	Was a specialist study conducted?	YES	NO 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 taken into account and explain how this influenced your proposed development.		

Section 63 of the Integrated Coastal Management Act (ICMA, Act 24 of 2008) provides the framework for regulating development within the Coastal Protection Zone (CPZ). The purpose of this section is to safeguard the natural functioning of coastal ecosystems, maintain the ecological integrity of riparian areas, and prevent risks associated with inappropriate development in proximity to watercourses. These provisions were carefully considered during the planning of the proposed development on Portion 4 of Farm 643.

Section 63 (1):

(b) the extent to which the applicant has in the past complied with similar authorisations;

N/A

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

The property is situated along the Klein River; however, this section of the river is not accessible to the public and does not provide any formalised coastal access points or recreational areas. **The property is also located beyond the defined Klein Rivier Estuary system and located on the upper reaches of the Klein Rivier where there is no tidal influence or saltwater intrusion. The banks of the river also do not exhibit typical estuarine habitat but more riparian / riverine habitat. The property is located approximately 30 km from the coast.** There are no designated or historical public places along this stretch of the river for the public to sit, gather, or launch small vessels. As such, the proposed development does not interfere with any existing or established public access to coastal public property.

The development is located on privately owned land and will not result in the closure or obstruction of any recognised coastal access route. Furthermore, the planned residential use does not introduce any barriers to access rights along the Klein River. The jetty and slipway structures will be for private use by the landowner and do not conflict with broader public access objectives, as this part of the river was not previously available for public entry. Therefore, the proposed

development will not restrict or negatively affect public access to the Klein River and remains consistent with the purpose for establishing and protecting coastal public property, the coastal protection zone, and coastal access land.

(d) the estuarine management plans, coastal management programmes, coastal management lines and coastal management objectives applicable in the area;

N/A – Although low density residential use in line with the property owners primary rights is considered in alignment with the objectives of the above-mentioned documents.

(e) the likely socio-economic impact if the listed activity is authorised or is not authorised;

Short-term employment will be implemented for clearance and construction of the proposed development.

(f) The likely impact of the proposed activity on the coastal environment, including cumulative effects on its impacts together with those of existing activities.

The proposed residential dwelling will be situated above the 5m contour of the Klein River. The primary coastal (watercourse) impacts associated with the proposed development are linked to the construction of a slipway and jetty. These activities will require localized clearance and alteration of the shoreline, which may result in disturbance of riparian zones, which may temporarily increase sedimentation, and localized disruption of ecological functioning. Importantly, these structures will be subject to permit application under the Seashore Act, ensuring that their placement and design comply with all environmental safeguards.

It is noted that the property is located outside of the tidal range, within the upper reaches of the Klein River system, which does not experience saltwater inundation or tidal influence. As such, the risk of direct marine tidal impacts is low; however, localized disturbance of riparian and near-shore habitats may still occur.

Section 63 (2): The competent authority may not issue an environmental authorisation if the development or activity for which authorisation is sought -

(a) is situated within coastal public property and is inconsistent with the objective of conserving and enhancing coastal public property for the benefit of current and future generations.

The proposed development is located on privately-owned property adjacent to the upper reaches of the Klein River. The footprint of the development does not fall within designated Coastal Public Property, and there is no existing public access route traversing the site. Accordingly, the proposal does not impede or compromise public access rights, nor does it conflict with the statutory objective of conserving and enhancing CPP.

The development remains subject to compliance with all relevant environmental legislation, including riparian management provisions, to ensure that its impacts are minimized and that the ecological integrity of the Klein River system is maintained for current and future generations.

(b) Is situated within the coastal protection zone and is inconsistent with the purpose for which a coastal protection zone is established as set out in section 17:

The property is situated on the upper reaches of the Klein River, along this section, the area does not experience any tidal or intertidal influence.

(c) Is situated within the coastal access land and is inconsistent with the purpose for which coastal access land is designated as set out in section 18;

N/A

(d) Is likely to cause irreversible or long-lasting adverse effects to any aspect of the coastal environment that cannot be satisfactorily mitigated:

N/A

(e) Is likely to be significantly damaged or prejudiced by dynamic coastal processes;

N/A

(f) Would substantially prejudice the achievement if any coastal management objective; or

N/A

(g) Would be contrary to the interest of the whole community;

N/A

3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.

Portion 4 of the Farm 643 is located to the west of Stanford town and is adjacent to the upper reaches of the Klein Rivier. The northern portion of the property falls within the Coastal Protection Zone (CPZ), the Coastal Management Line (CML), and the 5m contour is located on the watercourse side of the property. The 5 m contour was surveyed on site in 2024.

It is acknowledged by the EAP that the presence of the 5 m contour in this scenario demarcates the Estuarine Functional Zone (EFZ), however it is noted that the property is located on the upper, narrow reaches of the Klein River and does not experience tidal fluctuations or saltwater intrusion. The banks are indicative of a riparian zone and not typical estuarine systems and it is therefore debateable whether this reach can be accurately defined as an estuary. Regardless, listed activities relating to both the HWM and watercourses are applied for and assessed in this application.

The objectives and principles of estuary management planning—particularly the protection of estuarine processes, water quality, ecological functioning, and public interest—have directly informed the design and siting of the proposed development. In alignment with these principles, the layout has been structured to avoid unnecessary disturbance within the watercourse.

With regards to the proposed development on the property, the property falls within the Coastal Protection Zone bulk infrastructure associated with the proposed development has been positioned above the 5 m contour and more than 100 m landward of the High-Water Mark.

3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.

Half of the property is mapped as a Coastal Protection Zone (CPZ), the development is located within 100m of the High-Water Mark of the estuary, 32 m of a river course. Additionally, all the residential dwelling proposed will be located above the 5m contour (Estuarine Functional Zone) of the watercourse, with limited infrastructure below the 5m contour.

The bulk infrastructure is located above the 5m contour and more than 100 m from the river edge.

Only the jetty, slipway and part of the recreational area (pool, firepit) fall partially below the 5m contour.

4. Biodiversity

4.1.	Were specialist studies conducted?	YES x	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		

Faunal Impact Assessment - Jan Venter – Wildlife Conservation Decision Support

Terrestrial and Botanical Impact Assessment – Dave Mc Donald.

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.

Terrestrial Biodiversity Impact Assessment

Vegetation

A range of systematic conservation planning tools and biodiversity informants were consulted to assess the ecological sensitivity of Portion 4 of Middelburg 643, Stanford. These included the National Vegetation Map of South Africa (VEGMAP, SANBI 2024), the National Web-based Environmental Screening Tool, the Western Cape Biodiversity Spatial Plan (CapeNature, 2024), and the National Red List of Ecosystems (SANBI, 2022). These sources were used in conjunction with site-specific field surveys undertaken by the appointed specialist.

According to the South African Vegetation Mapping (2024), the site is mapped as Agulhas Limestone Fynbos, which is listed as Critically Endangered in the Revised National List of Ecosystems that are Threatened and In Need of Protection (2022). This mapping also forms the basis for the Western Cape Biodiversity Spatial Plan's classification of the site as a Critical Biodiversity Area 1 (CBA1), and for the National Red List of Ecosystems classification of the site as Critically Endangered. The National Screening Tool similarly indicates Medium sensitivity for the plant species and, Very High for terrestrial biodiversity theme based on this underlying vegetation classification.

Field verification conducted on 5 October 2025, corroborated by consultation with regional vegetation expert Mr Sean Privett, established that the site contains no limestone substrate and that the vegetation does not conform to Agulhas Limestone Fynbos in substrate, structure, or species composition. Instead, the vegetation similar to Eastern Rûens Shale Renosterveld even though it does not fit easily into the described concept of this vegetation type. The specialist confirmed that the vegetation has low botanical and terrestrial biodiversity sensitivity and that no plant species of conservation concern were recorded. Because the conservation planning products depend on the incorrect VEGMAP classification, their associated sensitivity ratings do not reflect the actual ecological conditions on the property.

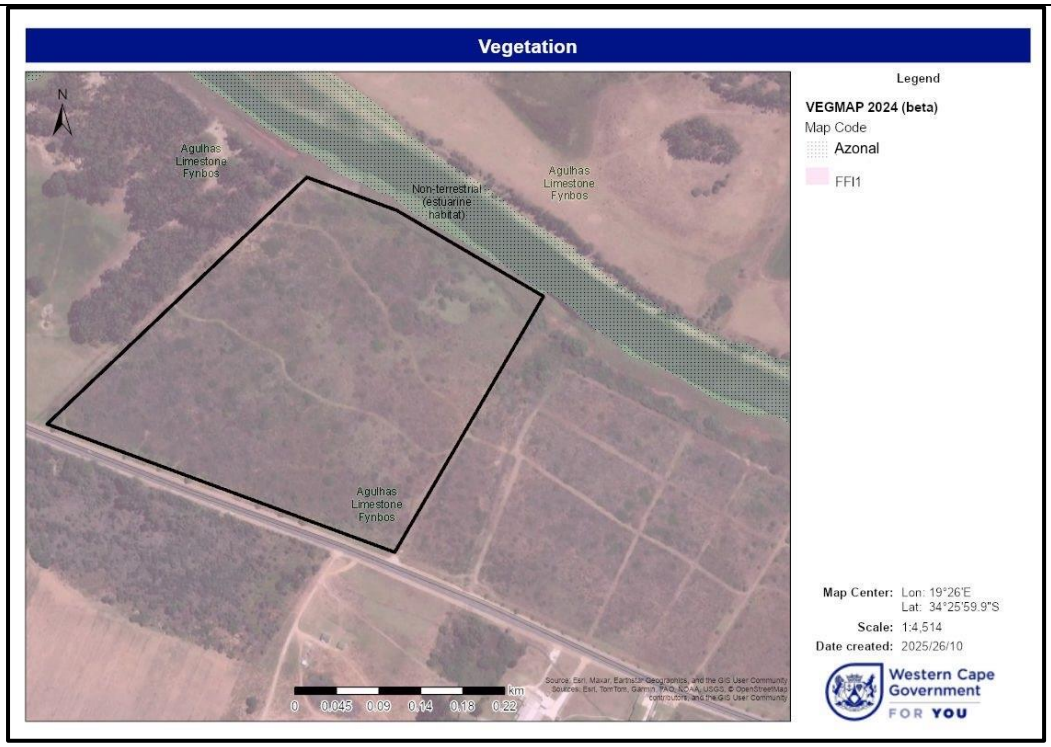

Figure 4: The vegetation type for the study area (black outline) as given in VEGMAP. This classification and hence mapping is incorrect. ***Source;*** (McDonald, 2025).

Vegetation found in the study area

According to the botanical specialist, the vegetation on the subject property comprises two primary vegetation sub-types, which correspond to distinct ecological gradients across the property.

The first sub-type occurs within the low-lying riparian floodplain of the Kleinrivier. Along the riverbank, the vegetation is characterised by dense stands of Common Reed (Phragmites australis), forming a continuous fringe along the watercourse. The adjacent floodplain is strongly dominated by *Stenotaphrum secundatum* (buffalo grass), which establishes a dense grassy sward interspersed with emergent shrubs and trees. These shrubs occur either as scattered individuals or as multi-stemmed thickets comprising species such as *Gymnosporia buxifolia, Plecostachys serpyllifolia*, *Senecio halimifolius*, *Searsia glauca*, and *Searsia rehmanniana*. Some of these thickets include taller species such as *Olea europaea subsp. cuspidata* and *Melianthus* major, reflecting a structurally diverse riparian zone that is seasonally inundated when river levels rise.

Photo 6: The low-lying part of the property close to the Kleinrivier. This area is flooded when the river level is high. *Source;* McDonald (2025).

Photo 7: The reed, Phragmites australis fringes the riverbank. The dense shrub in the centre of the image is *Gymnosporia buxifolia*. *Source*; McDonald (2025).

Photo 8. A spreading shrub of *Searsia glauca* (blue khunibush). *Source;* McDonald (2025).

Photo 9. *Melianthus major* with brown inflorescences forming part of a thicket with tall *Olea europaea subsp. cuspidata* (wild olive). *Source;* McDonald (2025).

Further upslope, beyond the floodplain, the vegetation transitions into a distinctly different shrubland sub-type. This upland area is dominated by dense to mid-dense stands of mid-high to tall shrubs, with *Passerina corymbosa, Gnidia squarrosa,* and *Muraltia spinosa* forming the co-dominant upper stratum. The lower stratum includes a combination of low shrubs—such as multiple Helichrysum species and a mixture of indigenous and exotic grasses, including Briza maxima and *Bromus diandrus*. Within this matrix shrubland, occasional dense thickets of *Searsia crenata* or *Searsia glauca* occur, sometimes accompanied by *Gymnosporia buxifolia*. Scattered *Olea europaea subsp. cuspidata* trees are also present throughout this upland area.

The specialist further notes that portions of this upland shrubland are moribund, with patches of tall shrubs showing signs of senescence and die-back. This condition is typical of fire-dependent shrubland systems where ecological rejuvenation is hindered by the absence of natural fire cycles.

Photo 10. Dense stands of *Passerina corymbosa* occur over large areas of the property. *Source;* McDonald (2025).

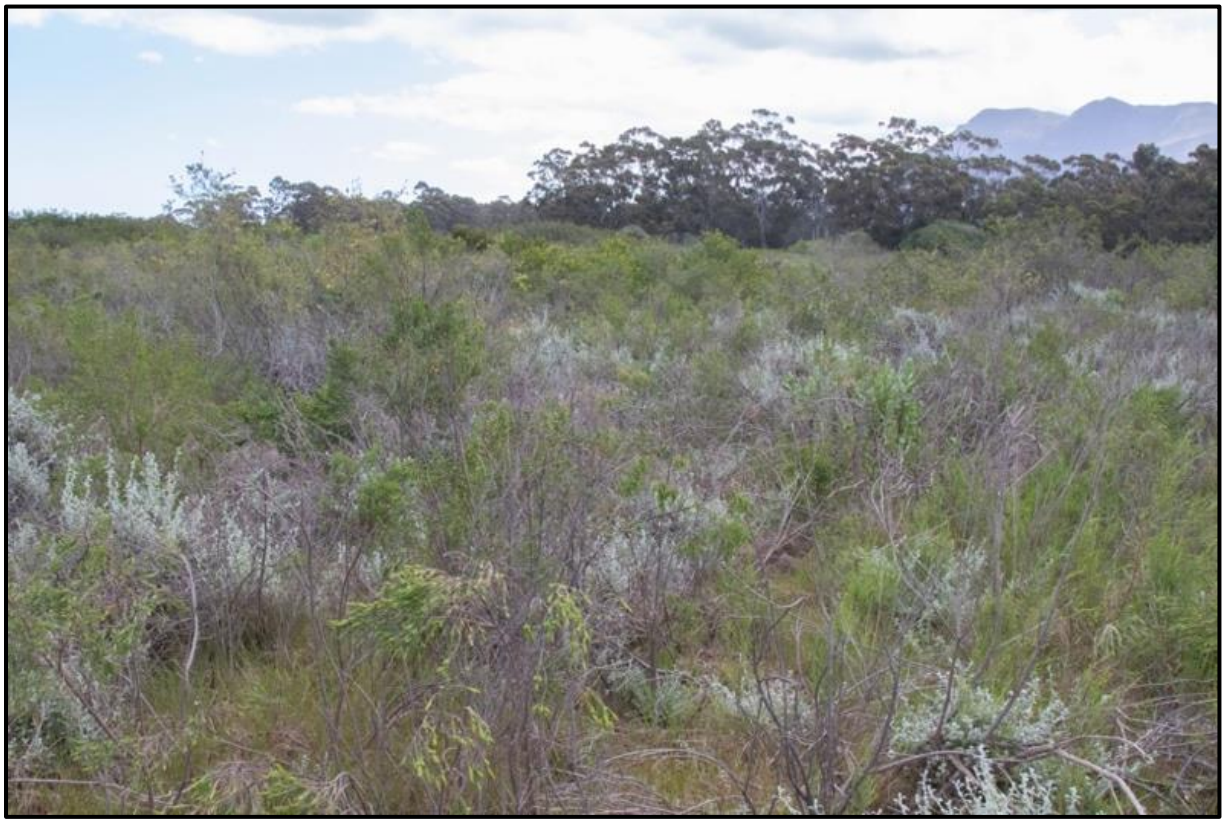

Photo 11. The light grey plants are *Helichrysum spp*. in the understorey of the dense shrubland. *Source*; McDonald (2025).

Photo 12. *Gnidia squarrosa* is co-dominant in places in the dense mid-high to tall shrubland. *Source*; McDonald (2025).

The birds and animals observed onsite

The specialist recorded relatively few bird and animal species during the site survey, reflecting both the dense nature of the vegetation and the limited open foraging areas. Bird species detected acoustically included Bokmakierie, Cape Robin-Chat and Karoo Prinia. An adult Angulate Tortoise (*Chersina angulata*), a South African endemic was observed, confirming the presence of resident vertebrate fauna within the system.

Although no small antelope were seen, the specialist notes that their presence is plausible given the habitat structure. Signs of Cape Porcupine (*Hystrix africaeaustralis*) activity were recorded in the form of characteristic digging marks where individuals had foraged for roots and bulbs. The porcupines themselves were not observed due to their nocturnal behaviour.

Photo 13. Angulate Tortoise (*Chersina angulata*). Source; McDonald (2025).

Photo 14. A hole dug by a porcupine in search of edible bulbs and corms. *Source;* McDonald (2025).

Plant Species Theme Sensitivity

The National Web-based Environmental Screening Tool classifies the site as having Medium sensitivity under the "Relative Plant Species Theme." However, field assessments conducted by the botanical specialist do not support this rating. The sensitivity rating generated by the Screening Tool is based on the assumption that the site supports Agulhas Limestone Fynbos, a Critically Endangered vegetation type. Field verification confirmed that this classification is incorrect as no limestone-derived vegetation occurs on the property, and the vegetation present is more consistent with a form of Eastern Rûens Shale Renosterveld, although not fully aligned with its typical description.

Based on on-site surveys, the specialist concluded that the vegetation exhibits Low botanical and terrestrial biodiversity sensitivity. No plant species of conservation concern were recorded during the assessment. The suite of sensitive species listed by SANBI for the Screening Tool pertains exclusively to Agulhas Limestone Fynbos, none of which were found on the property. In accordance with the Screening Tool protocol, sensitive species names are not published in this report. Overall, the field results demonstrate that the Screening Tool's Medium sensitivity rating is not reflective of the actual ecological conditions on site.

Relative Terrestrial Biodiversity Theme Sensitivity

The National Screening Tool classified the terrestrial biodiversity theme as Very High sensitivity, based again on the assumption that the property supports Agulhas Limestone Fynbos and falls within a Critical Biodiversity Area 1 (CBA1). The specialist's verification shows that this vegetation type is absent, and therefore the foundation for the high sensitivity rating is incorrect.

In light of the actual vegetation present and the absence of Agulhas Limestone Fynbos, the specialist determined that the terrestrial biodiversity sensitivity of the site is Low, and the property should not be classified as CBA1.

Western Cape Biodiversity Spatial Plan

The specialist disputes the current Western Cape Biodiversity Spatial Plan (CapeNature, 2024) classification of the subject property as Critical Biodiversity Area 1 (CBA1). Given the absence of Agulhas Limestone Fynbos and the field evidence of low botanical sensitivity, the specialist considers the CBA1 designation incorrect for this property and contends that the site's appropriate classification would be no higher than Ecological Support Area 2 (ESA2), and potentially Other Natural Area (ONA).

The specialist confirmed that no plant species of conservation concern were recorded within the study area. This is primarily because the vegetation present is not Agulhas Limestone Fynbos, meaning that the list of sensitive species generated by the National Screening Tool does not apply to the site. Based on field observations, the Site Ecological Importance (SEI) was recalculated rather than relying on the Western Cape Biodiversity Spatial Plan's incorrect CBA1 classification. Using the standard methodology—where Biodiversity Importance (BI) is derived from Conservation Importance (LOW) and Functional Integrity (MEDIUM), and Receptor Resilience (RR) is assessed as LOW—the SEI was determined to be LOW. This reflects the site's low ecological sensitivity and limited capacity to support species or habitats of high conservation value. According to the interpretation guidelines for a LOW SEI rating, the site can accommodate medium-impact development, provided that appropriate minimisation and restoration measures are implemented.

Impact Assessment (Specialist Summary)

The specialist assessed the No-Go Alternative and two development alternatives, with Alternative 1 representing the non-preferred option (development below the 5 m contour), Alternative 2 (development above the 5 m contour using

existing roads and paths where possible) and Alternative 3 (preferred). Both development scenarios (Alternative 1 and 2) include the construction of jetties and slipways, whereas Alternative 3 is only limited to one jetty and slipway.

For the No-Go Alternative, the specialist notes that the site would remain largely unchanged, with the existing vegetation remaining undisturbed and ecological processes continuing without direct anthropogenic interference. As a result, no direct impacts on terrestrial or riparian vegetation would occur.

Under Alternative 1, which involves development below the 5 m contour, the specialist finds that the proposed construction of residences, jetties, and slipways would generate a low negative impact during the planning, design, and development phase. This is due to the loss of low-sensitivity terrestrial vegetation and riparian vegetation situated within the flood-prone zone of the Klein River. The development footprint would result in local, short-term vegetation loss and increase the risk of compromising the area's ability to withstand flooding. Although the impact is rated as medium significance before mitigation, recommended measures—such as restricting development to above the 5 m contour, limiting infrastructure within the riparian zone, using existing access routes, and clearing invasive alien plants—would reduce risks but still result in a medium negative residual impact. During the operational phase, the continued presence of infrastructure in the floodplain would maintain a medium negative impact, with mitigation opportunities limited. The decommissioning phase is not applicable, as the development lifespan exceeds 25 years.

For Alternative 2, the specialist concludes that impacts would be substantially reduced. Vegetation clearing would be limited to the undescribed shrubland above the 5 m contour and small areas of riparian vegetation where jetties or slipways are planned. Prior to mitigation, this alternative would produce a medium negative impact; however, by avoiding the estuarine functional zone (demarcated by the 5m contour), using existing roads, limiting water-based infrastructure to one jetty and one slipway, and removing alien invasive plants, the residual impact is reduced to low negative. During the operational phase, some ongoing loss of vegetation may occur due to fire management and human presence, but these impacts remain low in significance and can be managed effectively. The specialist emphasises the importance of avoiding disturbance to mature wild olive trees where possible. As with Alternative 1, the decommissioning phase is not applicable.

The new preferred layout (Alternative 3) represents a further refinement of Alternative 2 and directly incorporates the findings and recommendations of the Faunal specialist. The layout was specifically revised to ensure improved avoidance of species sensitive areas as identified by the Faunal specialist.

The revised layout (Alternative 3) is further supported by the botanical specialist (refer to **Appendix G1b**), who highlighted that the findings of the faunal assessment confirmed the presence of an endangered katydid species within a specific habitat area on the property. In response to this finding, the preferred development layout was amended to avoid all development within the katydid's habitat, thereby eliminating direct habitat loss and disturbance to the species. As a result of this revision, the previously preferred layout (Alternative 2) has evolved and the new preferred layout is Alternative 3.

The conclusions of the Addendum to the Terrestrial Biodiversity Assessment, confirm that the revised layout does not introduce any additional botanical or general terrestrial biodiversity impacts beyond those already assessed. Following careful consideration of the revised layout, it is concluded that the significance of impacts on botanical and terrestrial biodiversity remains unchanged, and continues to be rated as Low Negative, as previously determined in Table 5 of the main report.

Faunal Impact Assessment

Terrestrial Animal Site Sensitivity Verification and Species Specialist Assessment Report (Faunal Impact Assessment) was undertaken. The desktop study included the use of iNaturalist and Global Biodiversity Information Framework (GBIF)

records as well as reports, field guides and scientific literature. These records were used to determine the species recorded in the area and the presence of potential SCC, with particular emphasis on the SCC listed by the screening tool.

Three site visits were performed 16th of August 2025 and again on 25 and 26 of August species and signs of presence (sounds, tracks, scats etc), observed were recorded. Surveys consisted of meandering search effort on foot by 11 skilled observers, combined with point surveys (10 min search effort) performed by two of these observers within the development site and surrounds (**Figure 5**). The PAOI was set considering main SCC likely to be present on or close to the development footprint (**Figure 6**).

Description of habitat onsite

The faunal specialist describes the habitat on Portion 4 of Farm 643, Stanford, as being predominantly covered by Agulhas Limestone Fynbos, a Critically Endangered vegetation type as listed under the National Environmental Management: Biodiversity Act (Act 10 of 2004) and the Revised National List of Ecosystems That Are Threatened and in Need of Protection (2022). Through a combination of desktop analysis using Google Earth imagery and on-site verification, the specialist identified and mapped five distinct faunal habitat types within the study area. These include Open Fynbos scrubland, Dense Fynbos scrubland, Phragmites reedbeds, Eucalyptus habitat, and Kikuyu grass habitat (**Figure 9**). Each of these habitat types contributes differently to the site's ecological diversity and supports varying assemblages of fauna associated with the Agulhas Limestone Fynbos ecosystem.

The Open Fynbos Habitat, located mainly in the north-eastern section of the property (Locations 1, 7, 8, and 9), is characterised by sandy soils with a well-developed grassy ground layer interspersed with low fynbos shrubs. This habitat supports a variety of small mammals, reptiles, and invertebrates, providing open foraging and movement areas for fauna associated with fynbos ecosystems.

The Dense Fynbos Habitat, which covers the majority of the property (Locations 2, 5, 6, 7, 10, 11, 12, 13, and 14), consists of dense fynbos scrub vegetation, typically under 2.5 metres in height. The soils are sandy, and the vegetation is dominated by indigenous shrubs with sparse grass cover. Occasional small trees occur within this habitat, offering structural diversity and suitable shelter for bird and small mammal species.

The Phragmites Habitat, occurring along the mudflats of the Klein Rivier in the north-eastern part of the property (Locations 3 and 4), is dominated by reedbeds that form part of the riparian ecosystem. This area provides critical foraging and breeding habitat for aquatic and semi-aquatic species, particularly waterbirds and amphibians, and contributes significantly to the ecological connectivity between terrestrial and riparian environments.

The Eucalyptus Habitat (Location 5) is found in the north-western corner of the property and consists of a stand of tall Eucalyptus trees with several dead stumps. This area represents a transformed habitat, offering limited ecological value, although some bird species may utilise the tall trees for perching or nesting.

The Kikuyu Grass Habitat occurs in scattered patches across the site and is characterised by dense stands of Kikuyu grass interspersed with low fynbos shrubs under 1.5 metres tall. This habitat type reflects past disturbance and vegetation modification and supports fewer faunal species compared to natural fynbos areas.

Animal species recorded onsite

During the site survey, a number of faunal species was recorded across these habitat types, including mammals, birds, reptiles, amphibians, and invertebrates. These also includes 3 animal species of conservation concern confirmed onsite during site investigation, including confirmed records of the Mute Winter Katydid, Western Leopard Toad, and African Marsh Harrier, with additional high-likelihood SCC present in the PAOI.

The Mute Winter Katydid, listed as Vulnerable, was the most significant faunal finding of the survey. A total of 43 individuals were recorded during targeted nocturnal and diurnal searches (refer to **Figure 9**), with a population density estimated at approximately 1.17 individuals per hectare. The species was concentrated in the central and eastern portions of the property, primarily within dense Agulhas Limestone Fynbos habitat, which is itself a Critically Endangered vegetation type. This habitat forms an important ecological core within the site, and its disturbance would have led to local population losses. Consequently, one of the originally proposed dwellings (House 2) was relocated to ensure a minimum 50-metre buffer around the confirmed katydid habitat is established. The report further recommended that at least 70% of the property remain undeveloped and under natural cover, with ongoing alien vegetation management to maintain habitat integrity.

The Western Leopard Toad, an Endangered amphibian, was confirmed through a verified iNaturalist record of a roadkill individual along the main access road adjacent to the property (**Figure 8**). The surrounding wetland and riparian zone, dominated by Phragmites reedbeds, provides suitable breeding and foraging habitat for this species. Although no breeding sites were found directly within the proposed footprint, the proximity to suitable habitat necessitated careful management of the development interface with the wetland.

The proposed development is small in footprint, but even low-intensity residential use introduces irreversible disturbance and long-term edge effects in a sensitive landscape. Without mitigation, impacts would have been Medium to High significance under Alternative 2. With the recommended suite of mitigation measures which have been fully implemented through specialist recommendations, impacts are reduced to Low - Medium under the current preferred Alternative 3.

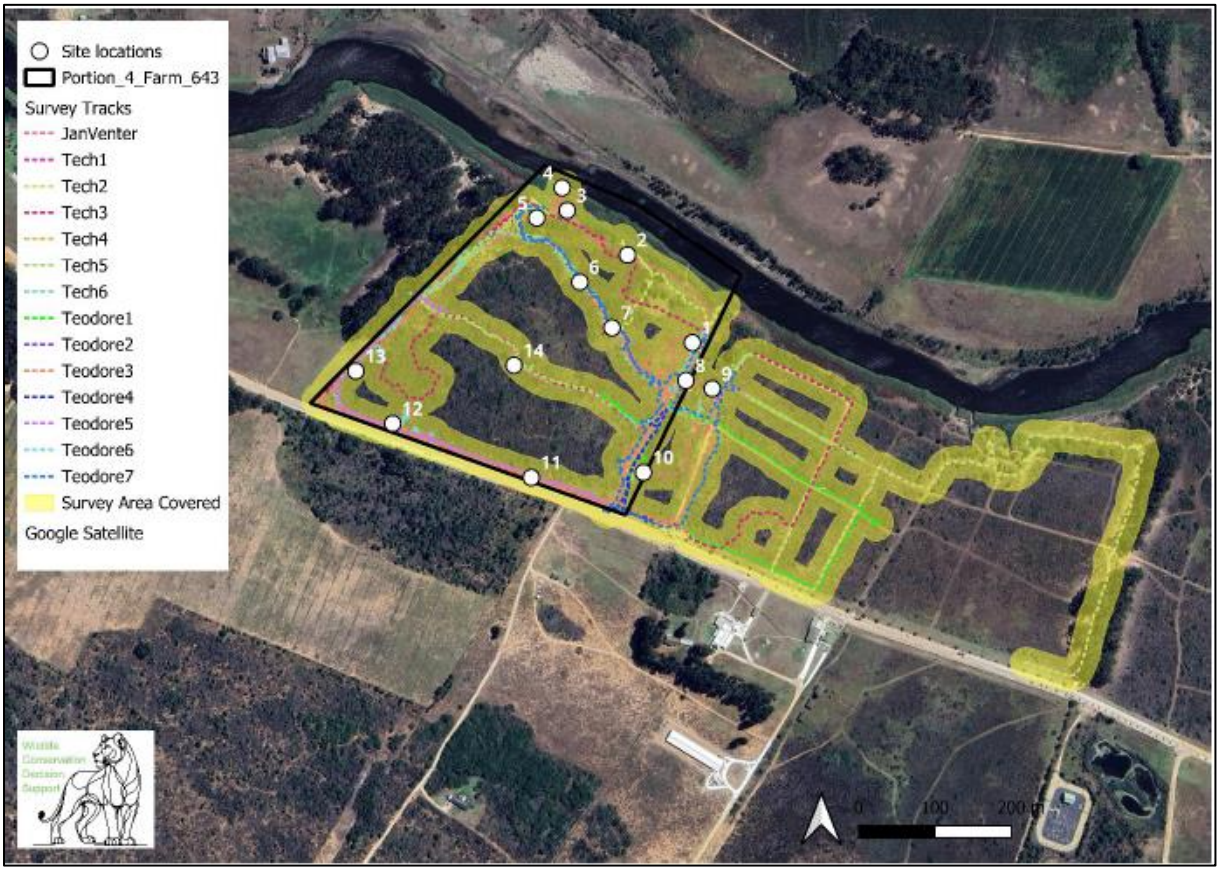

Figure 5: A map indicating the areas within the property investigated during the site visit. *Source;* (Venter, 2025).

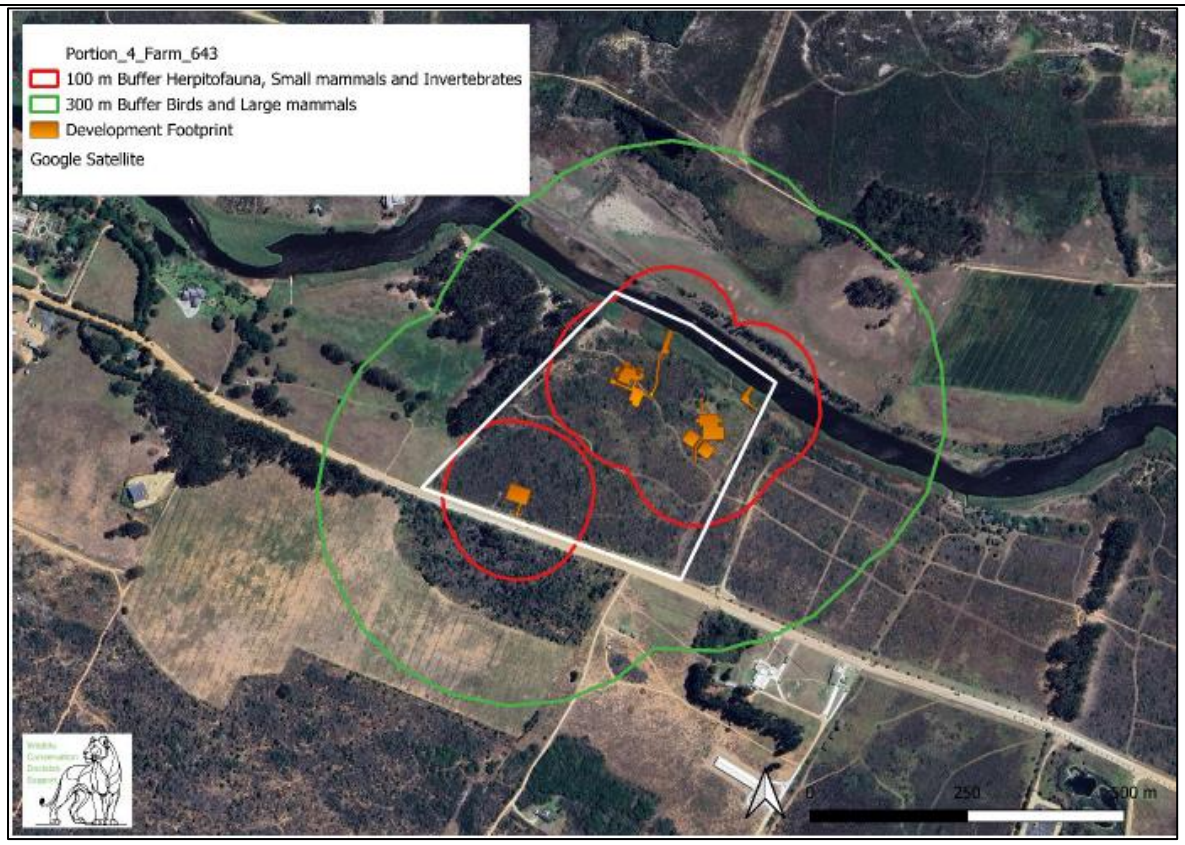

Figure 6: The PAOI for the preferred alternative was set considering main SCC likely to be present on or close to the development footprint. *Source;* (Venter, 2025).

Figure 7: The broad faunal habitats in the study area.

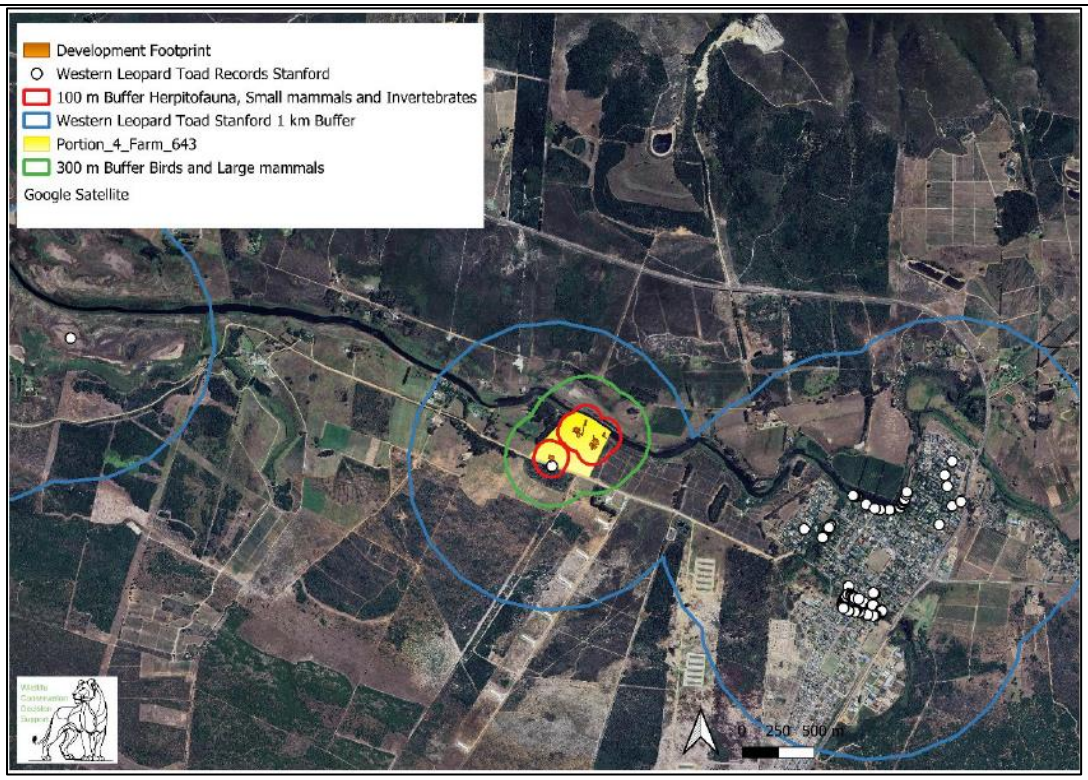

Figure 8: Western Leopard Toad records in the Stanford area in relation to the location of Portion 4 of Farm 643. *Source*; (Venter, 2025).

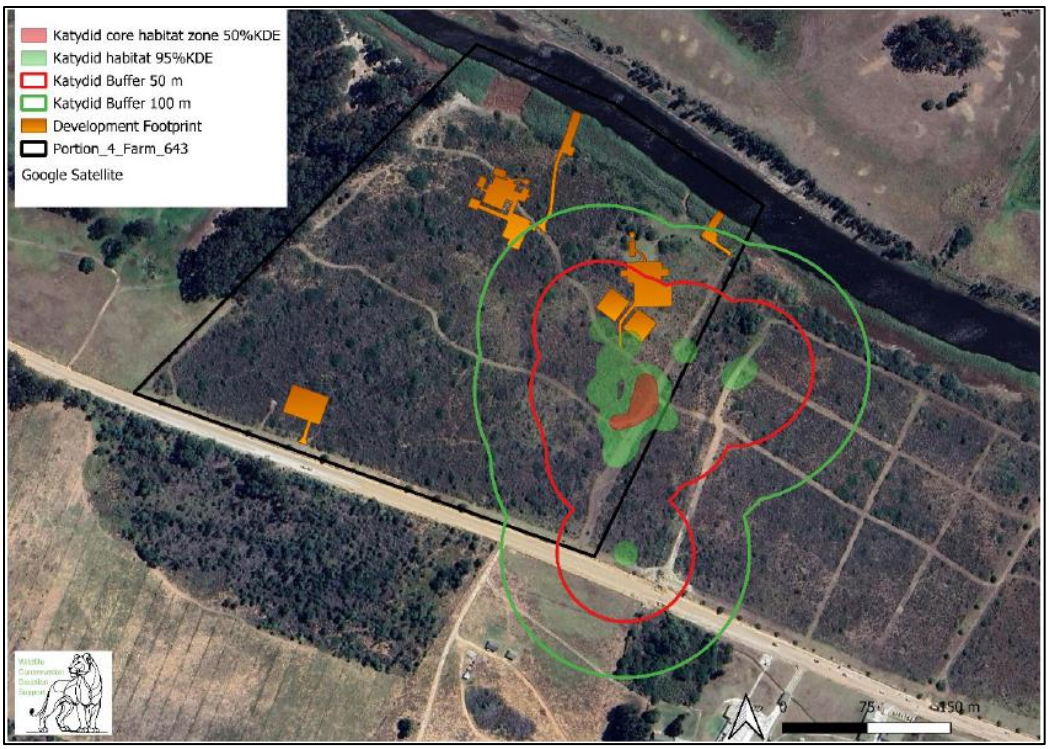

Figure 9: The modelled distribution of the B. aptera population on the property. As a precautionary measure a 50 m buffer around the 95%KDE represents a high-risk sensitive zone and the 100 m a medium risk sensitive zone for the species. *Source*; (Venter, 2025).

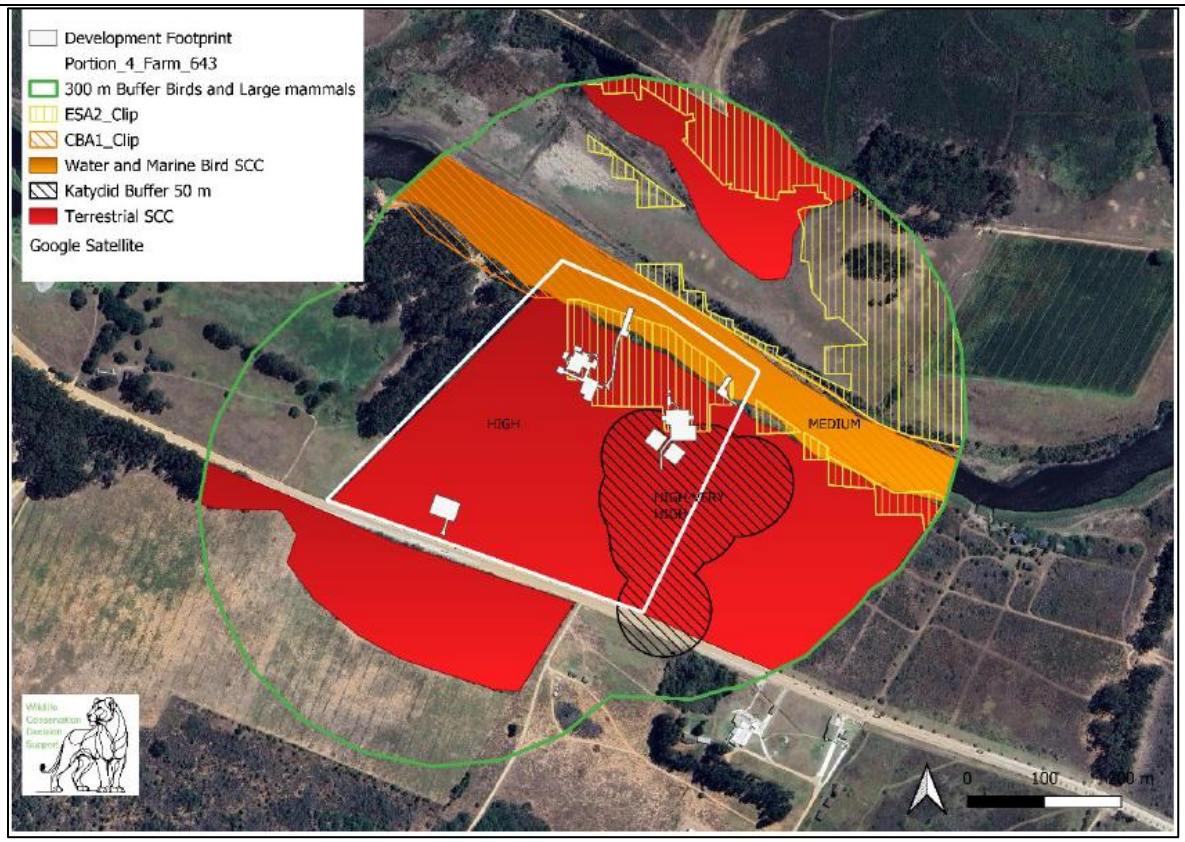

Figure 10: The SEI of the SCC faunal habitats on Portion 4 of Farm 643, Stanford. *Source;* (Venter, 2025).

Impact Assessment

The faunal specialist assessed the potential impacts of the proposed development on the Animal species theme and habitats occurring on Portion 4 of Farm 643. The assessment considered the No-Go Alternative as well as three development alternatives, Non-Preferred (Alternative 1, (Alternative 2), and the Preferred (Alternative 3) with particular emphasis on Species of Conservation Concern (SCC) and faunal landscape connectivity, as detailed in the faunal impact rating table (pages 56–72 of the Terrestrial Animal Species Assessment).

The assessment indicates that the site supports a disproportionately high concentration of SCC for its size, including confirmed records of the Mute Winter Katydid, Western Leopard Toad (*Sclerophrys pantherina*), and African Marsh Harrier (*Circus ranivorus*), with additional SCC likely present in the broader area of potential impact (PAOI). The property also provides a functional ecological corridor, maintaining landscape connectivity between the Klein Rivier and the surrounding fynbos habitats.

Although the proposed development has a limited overall footprint, even low-intensity residential development has the potential to introduce long-term edge effects and localised disturbance within this ecologically sensitive setting. Under the original layout (Alternative 2), impacts were assessed as being of Medium to High significance, primarily due to direct overlap with confirmed katydid habitat and cumulative disturbance to river-associated fauna.

In response to the faunal specialist's recommendations, the Preferred Alternative (Alternative 3) incorporates key design revisions, including the reduction of jetty infrastructure from two structures to a single jetty, as well as the relocation of House 02 outside the recommended 50 m buffer around the confirmed Mute Winter Katydid habitat. These design changes substantially reduce the extent of habitat disturbance and fragmentation.

It is therefore the specialist's opinion that the revisions incorporated in Alternative 3 significantly reduce the predicted faunal impacts. Consequently, residual impacts are reduced from Medium–High significance under Alternative 2 to Low–Medium significance under the Preferred Alternative (Alternative 3).

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.

Terrestrial Biodiversity Impact Assessment (Botanical Impact)

The study area is mapped as a Critical Biodiversity Area (CBA1) as per Western Cape Biodiversity Spatial Plan (WCBSP, 2023); however, the botanical specialist disputes the current Western Cape Biodiversity Spatial Plan classification of Portion 4 as Critical Biodiversity Area 1 (CBA1). Given the absence of Agulhas Limestone Fynbos and the field evidence of low botanical sensitivity, the specialist considers the CBA1 designation incorrect for this property and contends that the site's appropriate classification would be no higher than Ecological Support Area 2 (ESA2), and potentially Other Natural Area (ONA). Moreover, the absence of plant species of conservation concern associated with Agulhas Limestone Fynbos, none of which were recorded during the survey, the specialist concluded that the actual plant species sensitivity is Low. The sensitive species listed in the screening tool are not relevant to the vegetation present onsite and were not encountered during site survey.

Based on botanical field observations, the Site Ecological Importance (SEI) was recalculated rather than relying on the Western Cape Biodiversity Spatial Plan's incorrect CBA1 classification. Using the standard methodology—where Biodiversity Importance (BI) is derived from Conservation Importance (LOW) and Functional Integrity (MEDIUM), and Receptor Resilience (RR) is assessed as LOW the SEI was determined to be LOW.

Terrestrial Animal Site Sensitivity Verification and Species Specialist Assessment (Faunal Impact)

The faunal assessment utilised the Western Cape Biodiversity Spatial Plan (WCBSP, 2017) to evaluate the sensitivity of the site. The property is located within the Coastal Protection Zone, and the southern portion of the site, situated in close proximity to the Klein Rivier, falls within CBA1 and ESA areas according to the WCBSP (2017). This classification reflects the site's ecological importance due to its adjacency to the river and its role in supporting regional biodiversity.

The faunal specialist highlights that maintaining landscape connectivity in this context is particularly important for the persistence of faunal species that rely on the Agulhas Limestone Fynbos and the Kleinrivier Estuary for foraging and breeding. Several terrestrial animal species, including Species of Conservation Concern (SCC), were recorded during site surveys, underscoring the ecological sensitivity of this portion of the property. In addition to animal species recorded onsite, the Mute Katydid, a total of 43 individual species were observed in the central portion of the property, predominantly within the short grass adjacent to shrub areas (refer to **Figure 9**). No records of the Mute Katydid were encountered in proximity to the Klein Rivier.

Further to the animal species observed during site investigation, other animal species of conservation concern includes Western Leopard Toad. The faunal specialist notes the confirmed record of this species adjacent to the property; however, none were recorded in the development footprint.

The botanical specialist report notes that the property should not be regarded as a Critical Biodiversity Area (CBA) as identified in the Western Cape Biodiversity Spatial Plan (2023). Although the WCBSP (2023) maps the site as a CBA, the botanist confirms that the vegetation on the property does not reflect Agulhas Limestone Fynbos, nor were any plant Species of Conservation Concern or species typically associated with this vegetation type recorded during the site survey. It is based on the assumption that the CBA designation in the WCBSP (2023) likely stems from the South African Vegetation Map (2024), which classifies the subject property as Agulhas Limestone Fynbos, a critically endangered

vegetation type. However, field verification indicates that species characteristic of this vegetation unit are absent from the site.

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

According to the Western Cape Biodiversity Spatial Plan (WCBSP, 2023), the property is mapped as a Critical Biodiversity Area 1 (CBA1). However, site-based botanical verification confirmed that the vegetation present does not correspond with the Agulhas Limestone Fynbos vegetation unit that underpins the CBA1 classification. No plant Species of Conservation Concern or species characteristic of this vegetation type were recorded during the survey. Based on this, the botanical specialist concluded that the mapped CBA1 category does not reflect the actual ecological condition of the site and that the appropriate ecological categorisation is more aligned with ESA2 or possibly Other Natural Area (ONA).

Despite the discrepancy between mapped and verified vegetation sensitivity, the proposed development needed to consider the ecological functions associated with the broader BSP categories, particularly the maintenance of ecological connectivity and biodiversity processes. The southern portion of the site, which falls within the Coastal Protection Zone and is mapped as CBA1/ESA in the WCBSP (2017), and as stated by the faunal specialist, this forms part of a functional ecological corridor linking the Klein Rivier with surrounding fynbos habitats. The faunal specialist confirmed that several animal Species of Conservation Concern utilise this broader landscape, and that the property contributes to faunal movement and dispersal, particularly for species such as the Western Leopard Toad, the Mute Katydid and foraging grounds for the African Marsh Harrier.

Under earlier layout iterations (Alternative 2), the proposed development would have resulted in localised habitat loss and fragmentation, particularly through the placement of House 02 within confirmed Mute Winter Katydid habitat, as well as disturbance to riparian-associated habitats and reedbeds below the 5 m contour due to the proposed placement of two jetties and slipways. These impacts were assessed by the faunal specialist as being of Medium to High significance.

The evolved Preferred Alternative (Alternative 3) was specifically informed by the WCBSP principles and specialist recommendations to avoid and minimise impacts on sensitive ecological features. Key design revisions include the relocation of House 02 outside the confirmed Mute Winter Katydid population area through the implementation of a 50 m buffer, and the reduction of jetty infrastructure from two structures to a single jetty. In addition, development has been concentrated within previously disturbed areas as far as possible. The vegetation affected is described as modified or degraded vegetation of low Site Ecological Importance, resembling Eastern Rûens Shale Renosterveld but not conforming to the formal vegetation unit description.

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 site is not located within a protected area.

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

The presence of several faunal species, including Species of Conservation Concern (SCC), both on and adjacent to the property played a significant role in shaping the proposed development layout, footprint, and mitigation measures. Specialist surveys recorded the Mute Katydid within the central portion of the site, confirmed Western Leopard Toad activity adjacent to the property, and identified the area as a foraging corridor for African Marsh Harrier. These findings highlighted the ecological sensitivity of the site, specifically the northern portion of the site adjacent to the Klein Rivier.

The direct footprint of the three proposed dwellings and associated infrastructure (approximately 5222 m²) will transform a limited section of the fynbos, while increased human activity could introduce edge effects such as artificial lighting, noise, and potential alien plant spread. However, these impacts, as highlighted by the faunal specialist could be

minimised through the iterative design process guided by the Biodiversity Spatial Plan and the specialist findings. These include the relocation of one dwelling outside the confirmed katydid population area, retention of a 50 m buffer along the wetland edge, reduction of jetties from two to one, and the commitment to retain at least 70% of the site as a natural conservation buffer. The retained natural areas will continue to function as part of the broader ecological corridor between the upland and river habitats, thereby sustaining the site's role within the CBA1/ESA2 network.

5. Geographical Aspects

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

The geographical context of the proposed development site has played an important role in shaping the design and layout of the project. It is important to note that, Portion 4 of Farm 643 is located on the upper reaches of the Klein River, however some of the property falls within the Coastal Protection Zone (CPZ). The riparian habitats represent sensitive geographical features, which require that development activities to be carefully managed to avoid direct interference with natural processes. However, the subject property, being in the upper reaches of the Klein River is not affected by coastal dynamic process, and tidal influence.

The topography of the site is characterised by a gentle slope towards the Klein River, with the 5-metre contour line providing a clear geographical threshold for sensitive areas. This contour has strongly influenced the siting of infrastructure. All residential dwellings and the Manager's Cottage have been placed above the 5-metre contour, ensuring that they are outside the riparian zone and buffered from flood risks. Conversely, the jetty and slipway structures are proposed below this contour due to their functional requirement.

The property's location outside the urban edge, within a rural setting dominated by agricultural land uses, has also influenced the development to adopt a low-density, rural-compatible character. The scale, siting, and orientation of buildings have been designed to blend with the surrounding rural landscape, minimising visual intrusion and preserving the overall geographical character of the area.

6. Heritage Resources

6.1.	Was a specialist study conducted?	YES	NO **X**
6.2.	Provide the name and/or company who conducted the specialist study.		
N/A			
6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development.		

The presence of sensitive heritage resources has not significantly influenced the proposed development, as no heritage sites or features of cultural, archaeological, or palaeontological significance were identified within or adjacent to the development footprint. Although the project will alter the existing landscape, including the loss of the currently undescribed vegetation type during the construction phase, this change does not impact any known heritage resources. As a result, no heritage-related constraints required modification of the layout or design, and the development can proceed without posing a risk to heritage features.

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.

The development proposed is small scale single residential use by the landowner, mitigation measures can be implemented for the construction phase in the unlikely event that finds are uncovered. Based on the scope of the development, it does not trigger the requirements set out under the National Heritage Resources Act (NHRA), which are described as below.

Section 38 of the Act states as follows:

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length ***– Not applicable***

(b) the construction of a bridge or similar structure exceeding 50m in length; ***– Not applicable***

(c) any development or other activity which will change the character of a site-

(i) exceeding 5 000 m^2 in extent; or ***– Not applicable***

(ii) involving three or more existing erven or subdivisions thereof; or ***– Not applicable***

(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or ***– Not applicable***

(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority; ***– Not applicable***

(d) the re-zoning of a site exceeding 10 000 m2 in extent; or ***– Not applicable***

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development. ***– Not applicable***

Given the above it is confirmed that no further Heritage application is required or applicable.

8. Socio/Economic Aspects

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

The area surrounding the proposed site is therefore best described as a mixed-use rural landscape, where economic activity is primarily rooted in agriculture and tourism. The property is situated to the west of Stanford town, within a predominantly rural setting. The broader area is characterised by a mixture of agricultural land, and low-density residential development. Agriculture, including viticulture, livestock grazing, and mixed farming, remains a key economic driver in the region, with farmsteads and cultivated fields forming much of the surrounding landscape. Stanford itself is a small but growing settlement that is known for its heritage value, eco-tourism, and artisanal economy. The town attracts visitors for its natural surroundings, access to the Klein River and Walker Bay, and its reputation as part of the

Overberg's agri-tourism and wine routes. Tourism and hospitality—ranging from guesthouses to restaurants and nature-based activities—play a significant role in sustaining the local economy alongside agriculture.

The local community is diverse, with employment opportunities largely tied to farming operations, conservation initiatives, small-scale enterprises, and service industries supporting tourism and residential needs. Seasonal employment linked to agricultural harvesting and tourism peaks is also common. Socially, Stanford has both long-established rural households and newer residents drawn by lifestyle and eco-tourism opportunities.

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

The proposed development holds several socio-economic values and contributions to the community and the broader area of Overstrand Municipality in the following ways:

- → One of the significant contributions is the creation of employment opportunities, both directly and indirectly. The development will have both short-term and long-term economic impacts on the surrounding area. It will create employment opportunities during the construction phase, which contribute positively to the local economy, even though small scale.
- → The development will contribute to skills development for the builders.

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.

It is highly unlikely that the proposed development will have any significant negative impacts on people's health and well-being. Nevertheless, considerations such as noise, dust, and visual character have been taken into account in the planning and execution of the project to minimise potential disturbances in the vicinity.

- → Construction activities and the temporary increase in human presence during the construction phase may contribute to elevated noise levels on a local scale. However, this potential impact is expected to be limited, as adjacent properties are currently vacant and the site is located in a rural setting. The impact on nearby residents will therefore be minimal and short-lived.
- → Localised dust generation may occur during earthworks and construction activities. While this could temporarily affect travellers along nearby road (Wortelgat road), the scale of the development—consisting of only two houses and a manager's cottage—means that the overall impact will be very small and of short duration. Mitigation measures will be implemented to further reduce this impact.
- → Given the small scale and low intensity of the development, no significant alteration to the visual character or sense of place of the broader area is anticipated. The rural setting will largely be maintained, and the proposed structures are consistent with the surrounding land use character.

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 preferred property and the only site proposed for the development is Portion 4 of the Farm 643, which is located in the rural setting outside Stanford town. The property covers an area of approximately 13.53 ha in extent and is situated along the upper reaches of the Klein River. There are no existing structures on the property, however, two access roads, which have been used in the past exist and will be utilised and integrated into the site development plan to provide access to the proposed development in the property. The site is accessible via Wortelgat Road.

Portion 4 of the Farm 643 is the only preferred site option for the proposed development and no other alternative site options have been investigated since the applicant owns the property. As a result, there is no other reason far beyond than this subject property. The proposed development takes cognisance of the rural setting wherein this development is proposed. The properties in the surroundings consist of single residential dwellings, with fewer properties that are being farmed, whereas the other are involved in agricultural processing. The intent of this application is that the owner wants to establish two single residential dwellings, a manager's cottage, internal access tracks within the previously demarcated access roads that were utilised in the past, as well as a jetty and slipway. All the major infrastructure such as residential dwellings, including the manager's cottage will be situated above the 5m contour and more than 32m away from the Klein River.

The proposed development will cover a total area of approximately 5222 m² within the broader 13.53 ha (135,300 m²) farm property.

Residential Buildings

The development includes two residential dwellings. Both dwellings will be single-storey and architecturally integrated into the natural surroundings:

- → **House 1** will be partially constructed within the footprint of an existing disturbed road, with the majority of the structure extending into an area where limited vegetation disturbance will be required. The total building footprint will cover approximately **2221 m²** and will be situated above the 5m contour line.
    - Associated recreational features including a swimming pool, firepit, and pedestrian pathway are proposed below the 5 m contour line, outside of the existing disturbed road area. These elements will utilise the disturbed footprint and will be designed to integrate seamlessly with the surrounding topography and vegetation. The total footprint proposed for these structures is approximately **100m²**
- → **House 2** building area is situated outside of the existing road and therefore will require clearance of indigenous vegetation. The building footprint will be approximately **1220 m².** Access to the house will be via the existing access road that will be upgraded.

Manager's Cottage

- → A Manager's Cottage is proposed to accommodate on-site management and maintenance personnel.

- This unit will occupy approximately **1 000 m²** and will be situated within an area previously disturbed by human activity. The design will follow the same architectural principles as the main dwellings.

Access Road

An internal access road will be constructed or upgraded, using existing disturbed pathways to minimise vegetation disturbance. The road will be surfaced with permeable material (e.g., gravel) to support natural drainage and reduce erosion. It will provide connectivity between the entrance, residential buildings, and the Manager's Cottage. All the access roads will have a combined length of less than **1000 m** and a maximum width of **4m**. the internal roads will be kept as natural jeep track routes as far as possible.

Jetty & Slipway

A dedicated access route and water-based facilities are proposed as follows:

- An access road to slip way covering a footprint of approximately **337 m²** will link the dwelling to the river-based structures.
- A jetty with a development footprint of approximately **53 m²** will be constructed to provide river access for recreational purposes.
- A slipway with a development footprint of approximately **170 m²** will facilitate small watercraft launching and retrieval.

In total, the combined footprint of the road, jetty, and slipway will amount to approximately **560 m²**

The design and construction of these structures will adhere to best environmental practices, ensuring minimal disturbance to the watercourse habitat and maintaining the natural visual and ecological character of the riverfront.

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

No other property or site alternatives that have been investigated.

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

The preferred site for the proposed development is Portion 4 of the Farm 643, situated west of Stanford. This property was identified as the only feasible alternative because it is under the ownership of the applicant, and no other land parcels are available within their ownership or control. The absence of alternative sites therefore restricts the options available, making this property the only viable choice for meeting the development objectives. Given the singular nature of the available landholding, the preparation of a comparative site selection matrix was not considered applicable in this case.

The motivation for selecting this property is further strengthened by the broader context of the Overstrand area, where there is a need to accommodate housing and small-scale development opportunities. The proposed site also offers unique locational attributes, such as being located within a rural setting that provides a tranquil living environment, which aligns with the intended development outcomes.

From a practical perspective, the property is already zoned for agricultural use and will not be subdivided, which maintains consistency with existing surrounding land use. Additionally, the site benefits from existing infrastructure, including an established access road (Wortelgat Road) that traverse along the southern boundary of the property and will serve as the

main access point to the development. This significantly reduces the need for extensive new road construction and limits the clearance of indigenous vegetation that would otherwise have been required if a less accessible site were selected.

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

Portion 4 of the Farm 643 is zoned for agricultural land use, which, in terms of the Municipal Planning By-Law, entitles the landowner to establish a main dwelling as a primary right. In addition, provision is made for a manager's dwelling, provided that a manager is formally appointed to oversee or conduct agricultural activities on the property. Should the land not be actively farmed, this right cannot be exercised. This regulatory framework directly influenced the process of identifying the most appropriate development option within the site. In accordance with the planning provisions, a formal land-use planning application (consent use) will be required for the establishment of an additional dwelling unit.

The property is jointly owned by two brothers, each of whom wishes to construct a single residential dwelling on the site. To accommodate this, the preferred alternative involves exercising the right to establish the primary dwelling while simultaneously applying for consent use to permit an additional dwelling unit. In terms of the Municipal Planning By-Law, the landowner is entitled to establish a main dwelling as a primary right; however, an additional dwelling may only be considered through a consent use application and may not exceed 250 m². This approach enables both owners to meet their housing needs while remaining fully compliant with the applicable planning and land-use regulations.

In identifying this preferred alternative, consideration was given to balancing the land-use rights of the owners with the requirements of the municipal planning framework, as well as environmental sensitivities. The presence of an existing access route (via Wortelgat Road) and the rural setting of the property further supported this option, as it minimises the need for new infrastructure, avoids unnecessary disturbance to the surrounding environment, and remains compatible with the character of the area.

Accordingly, the preferred alternative was determined to be the most feasible and sustainable option, providing a practical solution for the co-owners while aligning with legal, planning, and environmental requirements.

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

No property or site alternatives were considered for this development because the subject property, Portion 4 of Farm Middelburg No. 643, is the sole property owned by the applicants under Cheddles (Pty) Ltd. The development is intended to fulfil a specific personal and family vision, whereby the two brothers aim to establish two residential dwellings for their own use, a manager's cottage for on-site management, and associated recreational infrastructure such as a slipway and the jetty. The applicants' intention is to create a development that is in harmony with the rural character and tranquil setting of the area, reflecting both the natural environment and the historical context of the farm.

Given the ownership constraints and the personal nature of the development, no alternative properties were available for consideration. Furthermore, the design has been carefully optimised to minimise environmental impact, by concentrating infrastructure within previously disturbed areas, avoiding sensitive riparian and aquatic habitats, and limiting vegetation clearance. This approach ensures that the project is both feasible and aligned with the ecological, visual, and rural context of the site, while fulfilling the specific objectives of the property owners.

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

The proposed development will contribute to:

Alternative 1 (Non-preferred)

Positive impacts

→ There are no notable positive environmental impacts associated with this alternative.

Negative impacts

→ Both proposed residential dwellings fall below the 5 m contour, placing permanent infrastructure at significant risk of flooding during high-rainfall or storm-surge events.
→ Development below the 5 m contour may alter natural hydrological functioning, disrupt watercourse processes, and reduce the natural buffer zone that protects riparian habitats.
→ Increased disturbance to sensitive riparian vegetation, with associated loss of ecological integrity and habitat function.
→ Direct habitat loss for Species of Conservation Concern (SCC), particularly the Mute Winter Katydid (VU), with approximately 43 individuals recorded on the central portion of the property.
→ Fragmentation of habitat and reduced faunal connectivity between the estuary and upland areas.
→ Disturbance and displacement of riparian birds due to increased human presence and jetty usage.
→ Increased mortality risk for amphibians and reptiles as a result of vehicles, domestic pets, and intentional persecution.
→ Long-term edge effects associated with outdoor lighting, garden establishment, and the potential introduction or spread of alien plant species

Alternative 2 (Non preferred)

Positive impacts

→ The proposed residential dwellings are located above the 5 m contour, significantly reducing flood risk and improving long-term safety and climate-resilience of the development.
→ The proposed layout largely utilises previously disturbed or impacted areas, reducing the extent of new disturbance relative to Alternative 1.

Negative impacts

→ Some vegetation clearance will still be required, although the development mostly utilises the previously impacted areas onsite.
→ Direct habitat loss for Species of Conservation Concern (SCC), particularly the Mute Winter Katydid (VU), with approximately 43 individuals recorded on the central portion of the property.
→ Visual impacts associated with the introduction of new dwelling units.
→ Fragmentation and reduced faunal connectivity between riverine and upland habitats.
→ Disturbance and displacement of riverine bird species due to increased human activity and use of slipways and jetties.
→ Increased mortality risk for amphibians and reptiles resulting from vehicles, pets, and persecution.
→ Long-term edge effects including lighting impacts, landscaping and gardening disturbance, and potential alien plant invasions.

Alternative 3 – Preferred

Positive impacts

→ All residential dwellings are located above the 5 m contour, substantially reducing flood risk and ensuring greater long-term resilience to climate change.
→ Development footprints are concentrated within previously disturbed areas, minimising additional vegetation clearance and habitat transformation.
→ House 2 has been relocated outside the confirmed Mute Winter Katydid habitat, avoiding direct impacts on this Species of Conservation Concern. A 50 m buffer is maintained along these species, protecting their habitats.
→ Additional access has been provided to house 1 to reduce vehicle traffic within the katydid proximity.
→ Jetty infrastructure has been reduced from two structures to a single jetty, limiting disturbance to riverine processes and bird habitat.

Negative impacts

→ Limited and localised vegetation clearance will still occur within areas of low Site Ecological Importance.
→ Low-level disturbance to fauna may occur due to increased human presence, including noise and movement within the developed portions of the site.
→ Residual edge effects, such as low-intensity lighting, landscaping, and potential alien plant invasion, may persist but can be effectively managed through mitigation measures.

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

Provide a description of the preferred activity alternative.

N/A

Provide a description of any other activity alternatives investigated.

N/A

Provide a motivation for the preferred activity alternative.

N/A

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 (preferred)

The preferred development layout, Alternative 3, has been carefully designed to avoid negative environmental impacts, mitigate unavoidable impacts, and optimise positive outcomes. The layout focuses on concentrating most of the infrastructure, specifically roads, within previously disturbed or transformed areas of the farm in order to minimise extensive clearance of indigenous vegetation and disturbance of soil elsewhere for road construction.

House 01 is sited along these existing roads making use of the disturbed areas as far as possible, above the 5-metre contour line, and outside sensitive riparian and aquatic zones, further protecting ecological features. House 01 is partially located within an existing disturbed road footprint, while House 02 is positioned to minimize impact on surrounding natural areas, with only a small area of vegetation clearance required. A manager's cottage is included to facilitate on-site management and oversight, ensuring ongoing compliance with environmental management measures.

In accordance with specialist recommendations, House 02 under the Preferred Alternative is located outside the recommended 50 m buffer associated with confirmed Mute Winter Katydid habitat. This adjustment avoids direct habitat loss for this Species of Conservation Concern and represents a key improvement over earlier layout alternatives (Alternative 1 and Alternative 2).

Recreational infrastructure, including the slipway and jetty, is located within the High-Water Mark of the Klein Rivier. The revised layout (Alternative 3) incorporates a single slipway and jetty, thereby substantially reducing disturbance within the riverine environment compared to previous alternatives. These structures are designed to be elevated and of limited scale, ensuring minimal interference with natural water flow, sediment transport, and aquatic habitats, and supporting low-intensity recreational use only.

Additional recreational features include a swimming pool and a firepit. A portion of the swimming pool footprint and the firepit are located below the 5-metre contour line. Their placement has been carefully considered during the planning process to limit disturbance to sensitive riparian and aquatic habitats, and their footprint remains small relative to the overall extent of the site.

Summary of evolution of Alternative 3 (new preferred):

- House 2 footprint shifted to be outside of 50m Fauna impact zone and above 5m contour line
- Additional road added to reduce frequency of use for the current road that goes through 50m fauna impact zone
- Jetty removed to reduce impacted vegetation as well as frequency of road use through 50m fauna impact zone

Overall, Alternative 3 represents a biodiversity-sensitive layout that aligns with specialist recommendations and the objectives of the Western Cape Biodiversity Spatial Plan, while retaining the majority of the property in a natural or near-natural state.

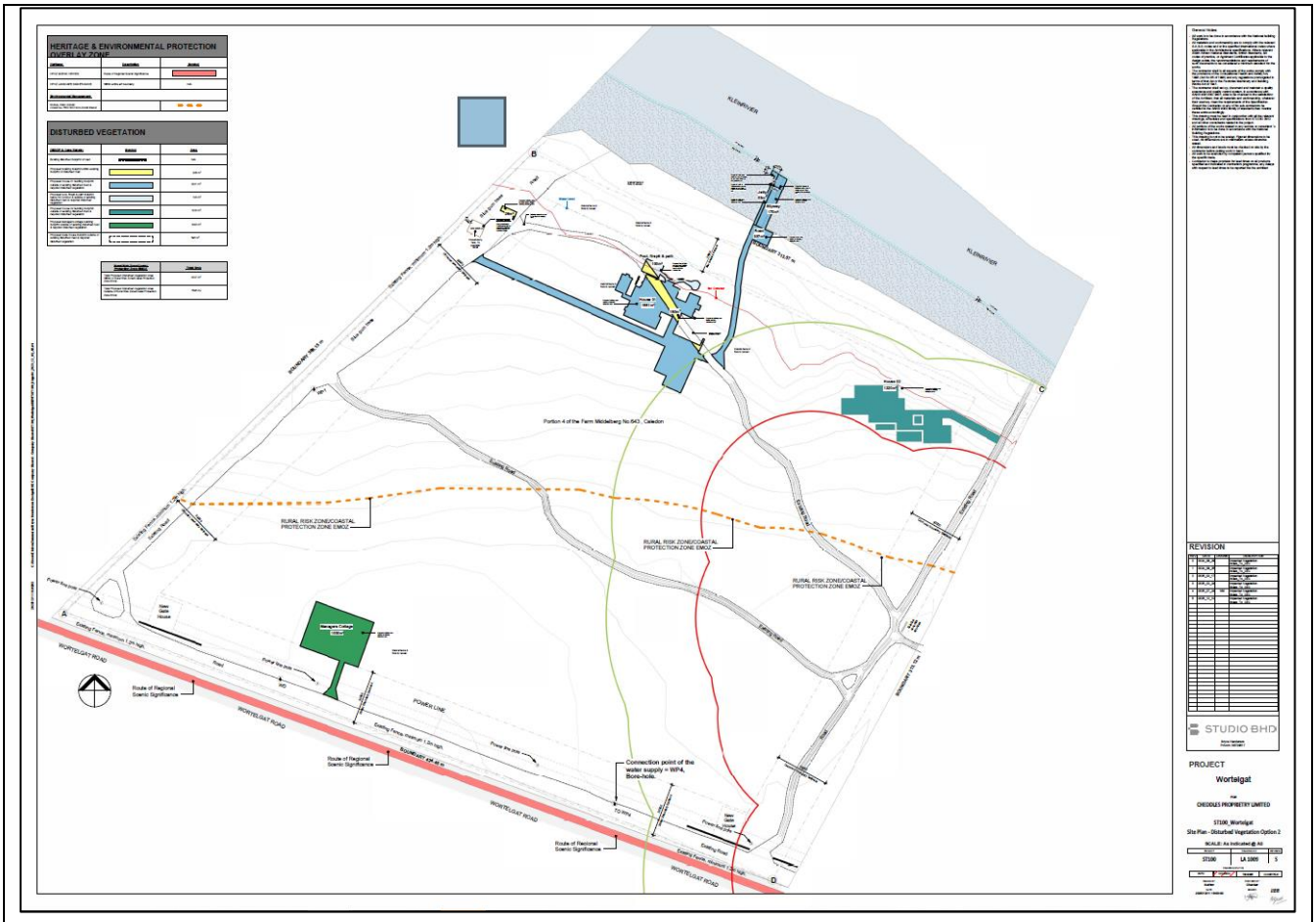

Figure 11: Preferred site development plan (Alternative 3- preferred).

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

Alternative 1 (Non-preferred)

Alternative 1 proposes the construction and placement of two single residential dwellings on Portion 4 of Farm 643, both of which extend slightly above the 5 m contour of the Klein River. The siting of the proposed dwellings and associated infrastructure in close proximity to the river raises a number of concerns, both from an environmental and a risk perspective.

The primary issue associated with this alternative is the vulnerability of the proposed structures to natural hazards such as flooding and fluctuating water levels within the river, during rainfall seasons. The 5 m contour serves as an important buffer zone that accommodates seasonal changes in water levels and storm events, and development within this zone is inherently at risk of inundation. Locating residential dwellings, within this area could lead to long-term maintenance and safety challenges, particularly under conditions of climate change, and increased flood intensity. This would not only pose risks to property and infrastructure but could also result in significant costs for the owners in the future.

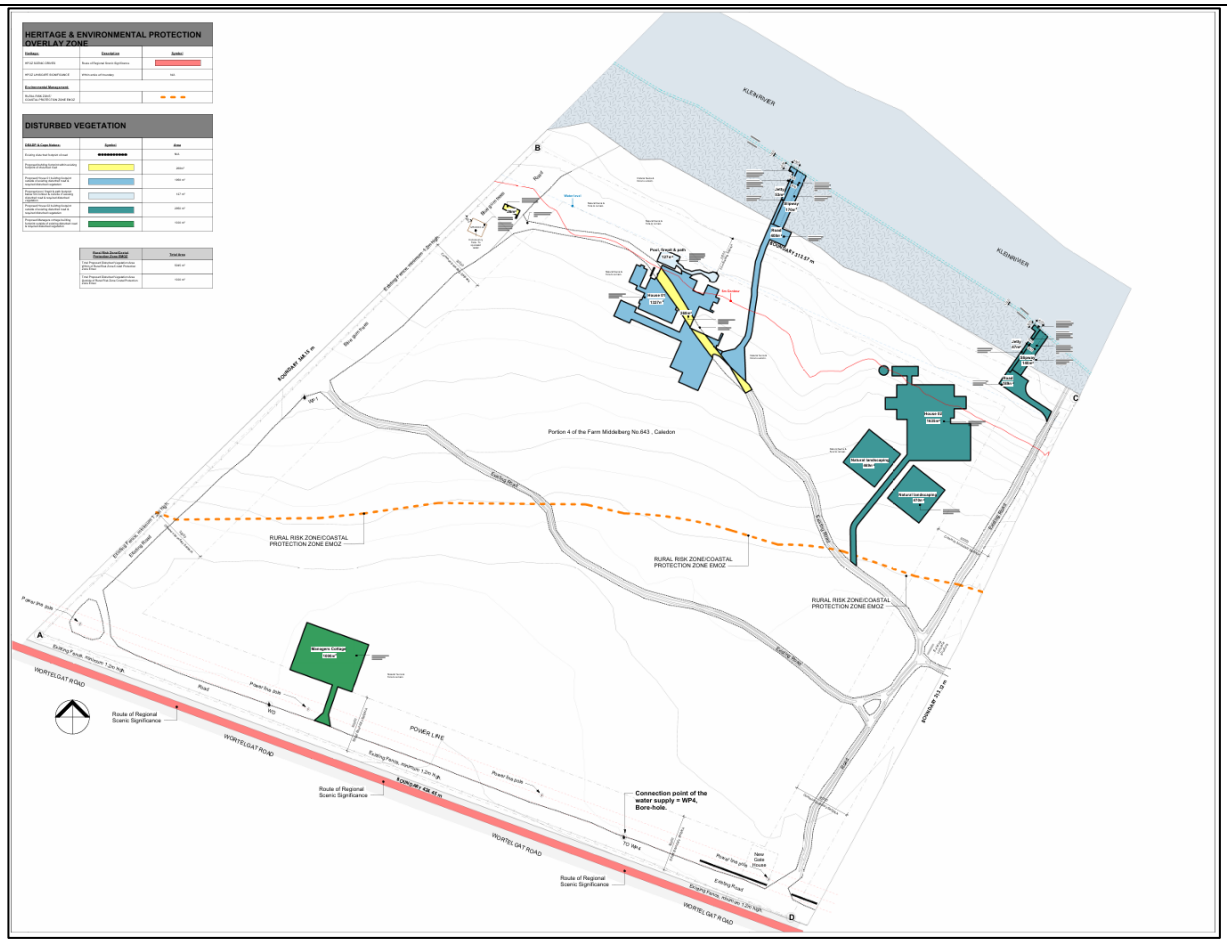

Figure 12- 1: Alternative 1 (non-preferred) site development plan.

Alternative 2 (Non-preferred)

Alternative 2 relocates the proposed residential dwellings above the 5-metre contour, thereby reducing flood risk and improving resilience to climate-related impacts. Under this layout, the major infrastructure is situated outside the riparian zone, representing a notable improvement over Alternative 1 from a risk management perspective.

However, this alternative introduces significant biodiversity-related impacts. House 2 is located within confirmed Mute Winter Katydid habitat, which would result in direct habitat loss for this Species of Conservation Concern. In addition, Alternative 2 retains two slipways and jetties within the riverine area, increasing the footprint of development and contributing to greater vegetation clearance, disturbance to river habitats, and disruption of faunal movement and bird activity.

Despite improvements in flood risk avoidance, the biodiversity impacts associated with this layout remain unacceptable. Consequently, Alternative 2 is also considered non-preferred when assessed against specialist recommendations and the objectives of the Western Cape Biodiversity Spatial Plan.

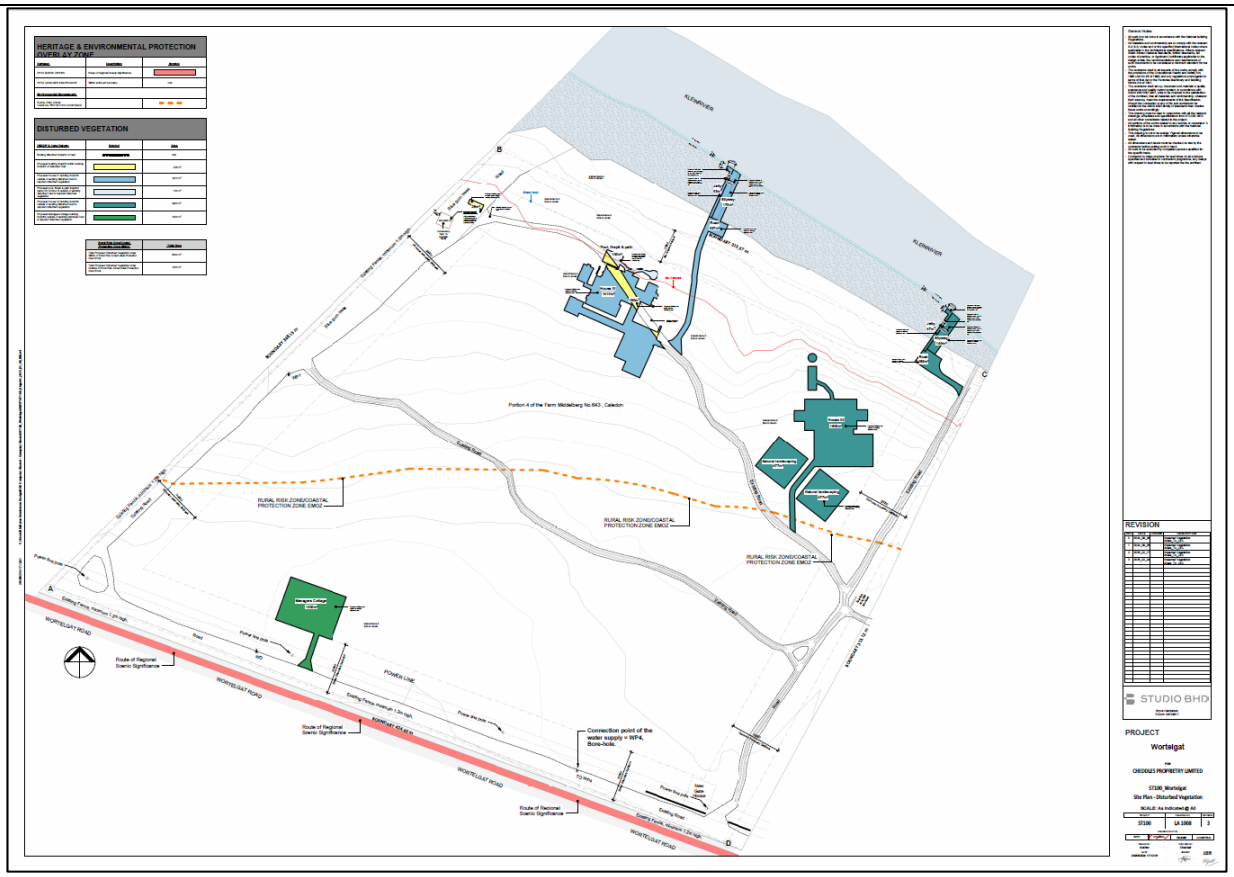

Figure 12-2: Alternative 2 – Non preferred.

No – Go

The No-Go Alternative assumes that no development occurs on Portion 4 of Farm 643 and that the property remains in its current, largely undeveloped condition. Under this scenario, no new residential dwellings, recreational infrastructure, or associated services would be constructed, and the environmental features of the site would remain undisturbed.

From an environmental perspective, the No-Go Alternative would result in the least impact, as no vegetation clearing, infrastructure placement, or disturbance of soils, fauna, or hydrological processes would occur. The natural character, ecological functioning, and visual qualities of the property and its surroundings would remain intact.

However, the No-Go Alternative does not meet the applicants' objectives to establish a family-oriented residential development aligned with their long-term vision for the property. It would also mean that the site remains underutilised with no improvements to land management, infrastructure, or recreational function. Therefore, while environmentally favourable, the No-Go Alternative is not aligned with the intended socio-economic and personal objectives of the landowners.

Provide a motivation for the preferred design or layout alternative.

Alternative 3 is identified as the preferred design or layout alternative as it represents the most environmentally responsible and risk-averse option, while still meeting the applicant's development objectives. The layout was developed through an iterative design process informed by specialist studies and the principles of the Western Cape Biodiversity Spatial Plan (WCBSP), with a strong emphasis on impact avoidance, minimisation, and mitigation.

From an environmental perspective, Alternative 3 achieves the greatest reduction in ecological impact compared to the other development alternatives. All residential dwellings are located above the 5-metre contour, significantly reducing the risk of flooding, erosion, and climate-related impacts. This improves long-term sustainability and avoids placing permanent infrastructure within high-risk and ecologically sensitive areas.

The preferred layout also responds directly to biodiversity constraints identified by the faunal specialist. House 02 has been relocated outside the confirmed Mute Winter Katydid habitat and beyond the recommended 50 m buffer, thereby avoiding direct habitat loss for this Species of Conservation Concern. In addition, the reduction of jetty infrastructure from two structures to a single jetty substantially limits disturbance to riverine habitats, reduces vegetation clearance, and minimises disruption to birds and aquatic ecological processes.

Alternative 3 further minimises environmental impacts by concentrating development within previously disturbed areas and along existing road alignments. This approach reduces the extent of new vegetation clearance, limits habitat fragmentation, and preserves ecological connectivity between the Klein Rivier and adjacent upland habitats. At least 70% of the property is retained in a natural or near-natural state, ensuring the continued functioning of the site as part of a broader ecological corridor.

While some residual impacts remain, these are limited in extent and can be effectively managed through the implementation of appropriate mitigation measures. In contrast, Alternatives 1 and 2 present either unacceptable flood risk, significant biodiversity impacts, or both. The No-Go Alternative, although environmentally favourable, does not meet the applicant's land-use and socio-economic objectives.

For these reasons, Alternative 3 provides the best balance between environmental protection, climate resilience, regulatory compliance, and the applicant's development objectives, and is therefore considered the preferred design and layout alternative.

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

N/A

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

Alternative 1 (Non-Preferred)

Positive Impacts

- → Provides direct residential and recreational use of the riverfront, potentially improving the aesthetic and recreational value of the site for the owners.
- → Minimal additional road or infrastructure construction may be required since existing access points are used.

Negative Impacts

- → Residential dwellings are located within the 5 m contour of the Klein River, placing them in a high-risk flood zone (1:100-year flood line), which may lead to property damage and risk to human safety.
- → Encroachment into the Riparian Zone could disrupt sensitive riparian and aquatic habitats, alter hydrological processes, and negatively affect flora and fauna.

- → Construction within the river may increase erosion and sediment deposition, degrading water quality and habitat conditions.

- → Swimming pools, jetties, and slipways located within the flood zone may suffer damage during flood or storm events.

- → Development within the estuarine buffer may contravene environmental management guidelines, potentially resulting in legal or regulatory challenges.

Alternative 2 (non-preferred)

Positive impacts

- → Residential dwellings are placed above the 5 m contour, reducing vulnerability to flooding, storm surges, and climate-related events.
- → By keeping dwellings outside the riparian zone, the integrity of sensitive habitats and natural hydrological processes is maintained.
- → Minimises long-term maintenance costs and environmental impacts by avoiding high-risk areas.
- → Jetties and slipways are strategically located below the 5 m contour, providing controlled access to the river with minimal ecological disturbance.

Negative impacts

- → Construction of residential dwellings and associated infrastructure may result in the loss of some indigenous vegetation and temporary disturbance to fauna.
- → Noise, dust, and soil disturbance during the building phase may have temporary effects on the local environment.
- → While mitigated by careful placement, jetties and slipways are strategically located below the 5 m contour, providing controlled access to the river with minimal ecological disturbance.

Alternative 3 (Preferred)

Positive impacts

- → All residential dwellings are located above the 5 m contour and outside the riparian zone, substantially reducing flood risk and ensuring greater long-term resilience to climate change.
- → Development footprints are concentrated within previously disturbed areas, minimising additional vegetation clearance and habitat transformation.
- → House 2 has been relocated outside the confirmed Mute Winter Katydid habitat, avoiding direct impacts on this Species of Conservation Concern. A 50 m buffer is maintained along these species, protecting their habitats.
- → Jetty infrastructure has been reduced from two structures to a single jetty, limiting disturbance to watercourse processes and bird habitat.
- → Additional access to house 1 included to reduce vehicle traffic in the sensitive katydid area.

Negative impacts

- → Limited and localised vegetation clearance will still occur within areas of low Site Ecological Importance.
- → Low-level disturbance to fauna may occur due to increased human presence, including noise and movement within the developed portions of the site.

→ Residual edge effects, such as low-intensity lighting, landscaping, and potential alien plant invasion, may persist but can be effectively managed through mitigation measures.

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:

N/A

Provide a description of any other technology alternatives investigated.

Roof mounted solar power.

Provide a motivation for the preferred technology alternative.

N/A

Provide a detailed motivation if no alternatives exist.

N/A

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

Positive impacts

- → The use of roof-mounted solar panels eliminates dependence on fossil-fuel-based power generation, lowering greenhouse gas emissions.
- → Incorporating energy-efficient technologies (lighting, insulation, and optimised building orientation) reduces overall electricity demand, contributing to sustainable resource use.
- → Adoption of solar technology demonstrates the integration of renewable energy in small-scale residential developments, supporting broader municipal and national sustainability goals.

Negative impacts

- → The production of solar panels, inverters, and batteries has upstream environmental impacts, including energy use, resource extraction, and emissions.
- → Roof-mounted solar panels may alter the visual character of the residential dwellings, although this is generally minimal when sensitively designed.
- → Solar panels and associated batteries require maintenance, and eventual disposal or recycling could generate waste or environmental pollutants if not managed properly.

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.
No operational alternatives have been considered for this development, as the proposed project is limited in scope to the establishment of two single residential dwellings and a manager's cottage on Portion 4 of Farm 643. The nature and scale of the development are inherently constrained by the ownership, size, and zoning of the property. The primary motivation for this approach is that the property is jointly owned by two brothers, each of whom intends to construct a residence, while the manager's cottage is required to support the oversight of management activities on the property.
List the positive and negative impacts that the operational alternatives will have on the environment.
N/A

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, which would entail not proceeding with the proposed development of two single residential dwellings and a manager's cottage on Portion 4 of Farm 643, is not considered the preferred alternative. Choosing this option would result in the underutilisation of the property, which is zoned for agricultural land use and capable of supporting residential development in accordance with municipal planning provisions. Furthermore, the No-Go option would prevent the landowners from exercising their legal land-use rights, including the establishment of a primary dwelling and, through consent use, an additional dwelling. This would hinder the ability of the owners to meet their housing needs and would preclude the development from contributing to broader socio-economic objectives, such as local employment during construction and associated economic contribution in the area. While the No-Go option would avoid potential environmental impacts associated with construction and human activity, the preferred development has been carefully designed to minimise ecological disturbance, ensure compliance with environmental regulations, and situate all dwellings outside sensitive flood-prone and riverine areas. Therefore, the benefits of responsibly developing the property outweigh the option of leaving the site undeveloped.

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.

No other alternative options that have been considered

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

Following a detailed assessment of potential development options for Portion 4 of Farm 643, Alternative 3 has been identified as the preferred layout for the proposed residential and recreational development. This alternative has been carefully designed to balance the landowners' development objectives with environmental sensitivities, ensuring minimal negative impacts while optimising positive outcomes. ***Alternative 3 (Preferred)*** The preferred layout concentrates infrastructure, particularly roads, within previously disturbed or transformed areas, thereby reducing the need for extensive vegetation clearance and soil disturbance. House 01 is sited along existing road

footprints, above the 5-metre contour, and outside sensitive riparian and aquatic zones, maximising protection of ecological features. House 02 has been repositioned to remain outside the 50 m buffer associated with confirmed Mute Winter Katydid habitat, avoiding direct impacts on this Species of Conservation Concern. A manager's cottage is included to support on-site oversight and ensure ongoing environmental compliance.

Recreational infrastructure has been rationalised under Alternative 3, with a single slipway and jetty designed to be elevated and of limited scale, minimising disturbance to riverine habitats and natural water flow. Additional features, including a swimming pool and firepit, have been sited with consideration of sensitive riparian areas, ensuring their footprints remain small relative to the overall property. Key refinements in Alternative 3 include:

- Relocation of House 02 outside the 50 m fauna impact zone and above the 5 m contour.
- Addition of an alternate road alignment to reduce traffic through sensitive areas.
- Removal of a secondary jetty to minimise vegetation clearance and disturbance.

Overall, Alternative 3 represents a biodiversity-sensitive and risk-informed layout that aligns with specialist recommendations and the Western Cape Biodiversity Spatial Plan, while retaining the majority of the property in a natural or near-natural state.

Alternative 1 (Non-preferred)

This option situates two dwellings close to the river, below the 5 m contour. While feasible from a construction perspective, it exposes structures to flooding, storm events, and long-term climate-related risks. Proximity to sensitive habitats also increases potential environmental impacts.

Alternative 2 (Non-preferred)

Relocating development above the 5 m contour reduces flood risk but introduces direct biodiversity impacts, including disturbance to confirmed Mute Winter Katydid habitat. Retention of two slipways and jetties further increases ecological disturbance. While improved in terms of risk management, the ecological impacts render this alternative non-preferred.

No-Go Alternative

The No-Go scenario would preserve the property in its current natural state, resulting in the least environmental impact. However, it does not meet the landowners' objectives for residential development, improved land management, or recreational use, and is therefore not considered a viable option.

On balance, Alternative 3 represents the most sustainable and responsible option, providing for the landowners' development objectives while avoiding and mitigating significant environmental impacts. The layout ensures the protection of key ecological features, reduces biodiversity loss, and minimises disruption to sensitive riparian areas, making it the preferred alternative for Portion 4 of Farm 643.

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).
During the assessment of development alternatives for Portion 4 of Farm 643, a critical No-Go area was identified in relation to sensitive faunal habitat. The Faunal Specialist mapped the presence of the Mute Winter Katydid (Species of

Conservation Concern) and recommended a strict buffer zone to protect this species. A 50 m no go buffer for the mapped katydid habitat was identified by the Faunal Specialist:

Mute Winter Katydid

- Critical buffer: Keep development outside the 50 m no-go buffer surrounding mapped katydid habitat.
- Avoid hard road surface construction
- Habitat protection: Mark and protect occupied patches as strict no-go areas during and after construction.
- Management restrictions: Prohibit mowing, gardening or herbicide or pesticide use within buffers.
- Monitoring: Regularly survey katydid populations post-construction to verify persistence and recolonisation

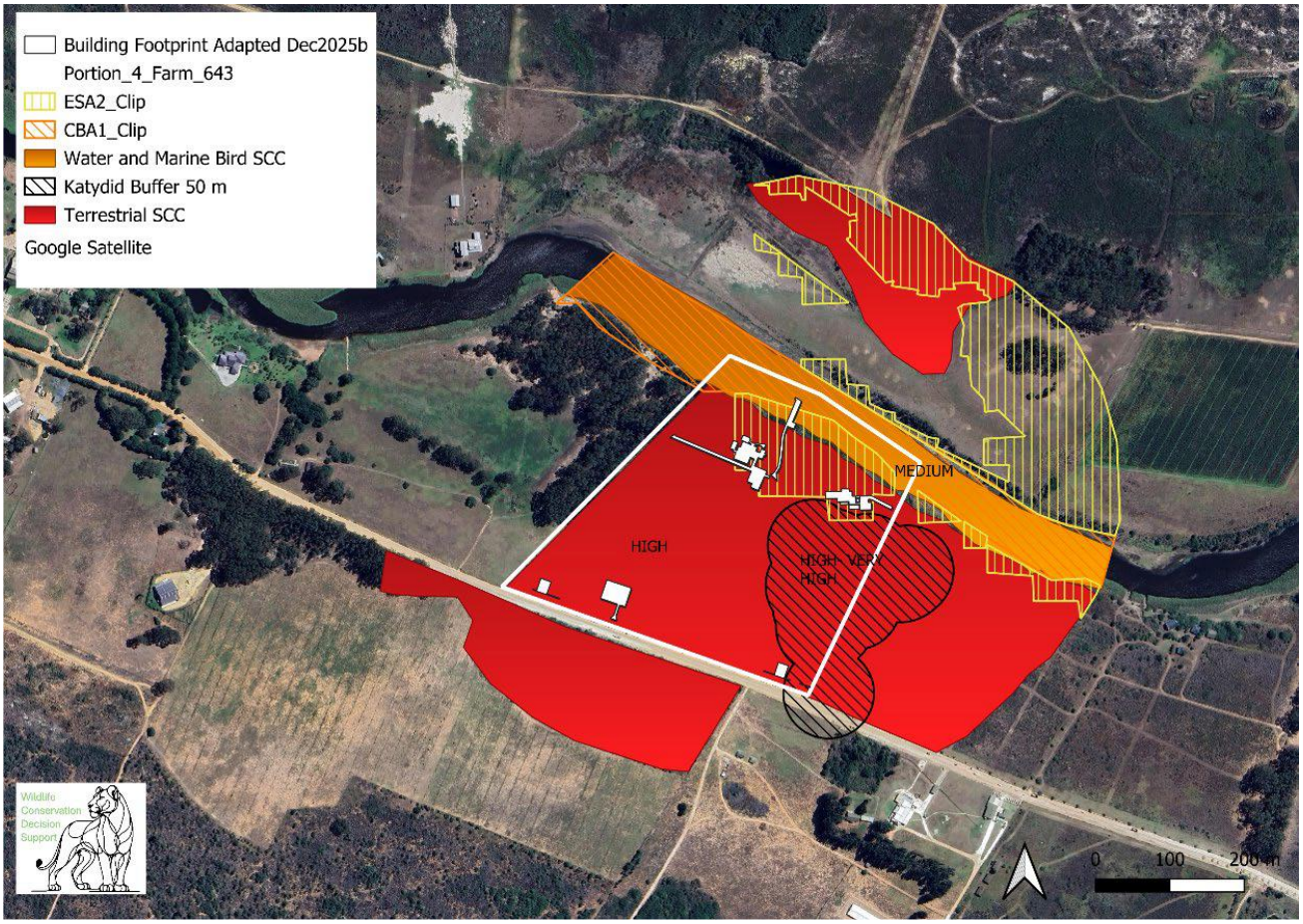

Figure 12-3: Illustrates the Very High Sensitivity area associated with the Katydid species.

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.

The Preferred and Alternative site development plans a substantially similar apart from the number of units and the envisaged.

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	
Extent	**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 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

Duration	**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 (e.g. removal or destruction of ecological habitat) that endures substantially beyond the 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.
Intensity	**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
	Low - people/communities are able to adapt with relative ease and maintain pre-impact 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.

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
	Low	Negligible	Minor	Minor
	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

Impact rating colour scale:

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.

ALTERNATIVE 1

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Socioeconomic impacts**
Potential Impact	Job creation during the development / construction phase
Nature of impact:	Positive
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Improved livelihoods for the local community
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	House provisions and job creation during construction phase
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High Positive
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	1. Ensure labour force is sourced locally as far as possible. 2. Consider gender balance during when sourcing labour.
Residual impacts:	Improved livelihoods and skill transfer
Cumulative impact post mitigation:	Job creation and skill transfer to local community
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High Positive**

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Visual impacts**
Potential Impact	Visual impacts of construction site and construction activities.
Nature of impact:	Negative
Extent and duration of impact:	Local; short-term
Consequence of impact or risk:	Partial loss of vegetation; as well as visibility of the construction activities.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	Irreversible

Indirect impacts:	None
Cumulative impact prior to mitigation:	Visual impacts associated with construction.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Good design approved by local authority. → Good housekeeping of construction site and working areas. → Screen the visual elements of site construction camp with netting. → Locate the site camp in a transformed area. → Officer to ensure that waste and batching areas are correctly screened and secured to prevent spread by wind, rain or animals.
Residual impacts:	Change of sense of place due to construction activities and construction workers.
Cumulative impact post mitigation:	Typical visual impacts associated with a construction site
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low Negative**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Dust impacts**
Potential Impact	Dust generated from site clearing and site preparation.
Nature of impact:	Negative
Extent and duration of impact:	Local, short term
Consequence of impact or risk:	Visual and health impacts Nuisance for residents adjacent to the site.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Potential for reduced visibility in general area.
Cumulative impact prior to mitigation:	Dust may be generated as a result of earthmoving activities required for construction and development.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Maintain ground cover for as long as possible to reduce the total surface area exposed to wind. Do not clear entire areas rather building footprint only → Ensure vehicle speed limits on site are kept to a minimum. → Delivery vehicles to keep loads covered.

	→ Cover fine material stockpiles. → Wet dry and dusty surfaces using non-potable water. → Staff to wear correct PPE if dust is generated for long periods. Road surfaces to be swept and kept clean of sand and fine materials.
Residual impacts:	None
Cumulative impact post mitigation:	Dust generated during construction, mitigation successful.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very-Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Noise impacts**
Potential Impact	Noise generated by vehicles and machinery during construction phase.
Nature of impact:	Negative
Extent and duration of impact:	Local, short term
Consequence of impact or risk:	Noise disturbance to transient receptors, i.e. motorists, pedestrians, residents.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Will not impact on resources
Degree to which the impact can be reversed:	High
Indirect impacts:	None
Cumulative impact prior to mitigation:	Noise from construction works
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	Medium - High
Degree to which the impact can be managed:	Medium - High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Limit noise levels (e.g. install and maintain silencers on machinery) → Provide protective wear for workers → Ensure that construction vehicles and machinery are maintained regularly to reduce noise generation. → Restrict construction to normal work hours.
Residual impacts:	None
Cumulative impact post mitigation:	Typical noise impacts associated with a construction site.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low Negative

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Botanical/ Ecological Impacts**
Potential Impact	Loss of terrestrial vegetation and riparian reedbeds below 5 m contour
Nature of impact:	Negative direct impact
Extent and duration of impact:	Local, Short-term
Consequence of impact or risk:	Loss of vegetation in the riparian zone and significant risk of the development negatively affecting the ability of the local environment to withstand the effects of flooding.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Moderate
Degree to which the impact can be reversed:	Low
Indirect impacts:	None identified
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ Designing the development to stay above the 5 m contour to reduce ecological impacts. → Using existing roads and paths for access to minimize new disturbances to the environment. → Limiting infrastructure like slipways and jetties, as only one jetty per property is typically permitted and slipways are discouraged. → Clearing of alien invasive plant species.
Residual impacts:	Medium Negative
Cumulative impact post mitigation:	Medium Negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium Negative

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Faunal landscape connectivity**
Potential Impact	Corridor narrowing (±30% of 12 ha); fencing/driveways; lighting; alien ingress which is greater sensitivity than the preferred.
Nature of impact:	Negative, direct & indirect. – same mechanisms as Preferred, with slightly higher sensitivity where one dwelling sits closer to the river edge.
Extent and duration of impact:	Site-local; long-term; slightly higher risk at river edge.

Consequence of impact or risk:	Moderate consequence due to potential reduction in functional connectivity across the site and risk to species reliant on movement between terrestrial and wetland habitats.
Probability of occurrence:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low to Medium — loss is localised and does not remove the entire corridor function due to retention of ~70% of the property in a natural state.
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Increased lighting and noise disturbance, potential predation by domestic pets, and spread of alien vegetation reducing habitat quality and permeability.
Cumulative impact prior to mitigation:	Adds to ongoing fragmentation pressure along the Klein River corridor and Agulhas Limestone Fynbos ecosystem
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ Maintain a continuous natural corridor across at least 70% of the property to allow free movement between the Klein River and adjacent upland habitats. → Prohibit impermeable fencing; if fences are required, ensure wildlife-permeable design (≥30 cm ground clearance, no mesh smaller than 100×100 mm). → Consolidate infrastructure and driveways to reduce fragmentation and maintain open strips for fauna. → Actively rehabilitate degraded strips post-construction and manage alien regrowth to preserve corridor functionality.
Residual impacts:	Edge effects persist but functional corridor retained if measures embedded.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Black Harrier**
Potential Impact	Habitat loss/fragmentation within potential territories; construction disturbance.
Nature of impact:	Negative;
Extent and duration of impact:	Local; long-term
Consequence of impact or risk:	Reduction of available foraging ground within a landscape that supports a regionally important population; minor contribution to broader cumulative loss of lowland fynbos habitat.
Probability of occurrence:	High

Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Irreversible
Indirect impacts:	Loss of hunting/possible nesting areas in the footprint; construction activity and machinery increase flush/disturbance risk.
Cumulative impact prior to mitigation:	Medium – High
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low – Medium
Degree to which the impact can be mitigated:	Low – Medium
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-go buffer at reed margins and river edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the river to prevent disorientation or displacement of watercourse-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of river-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Displacement risk reduced but not eliminated; foraging persists in retained strips.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Marsh Harrier**
Potential Impact	Dwelling slightly closer to watercourse increases sensitivity during works.
Nature of impact:	Negative
Extent and duration of impact:	Local; short-term
Consequence of impact or risk:	Potential temporary displacement of foraging individuals and reduced local habitat use during construction.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Degree to which the impact can be reversed:	Irreversible
Indirect impacts:	Disturbance to associated watercourse bird species; temporary reduction in foraging efficiency; possible increase in predation pressure or displacement from preferred sites.

Cumulative impact prior to mitigation:	Adds minor short-term disturbance to existing pressures along the Klein River from human activity and nearby land uses	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	
Degree to which the impact can be avoided:	Low – Medium	
Degree to which the impact can be managed:	Medium	
Degree to which the impact can be mitigated:	Medium	
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the watercourse to prevent disorientation or displacement of watercourse dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of river-edge natural habitat through stewardship or conservation agreements.	
Residual impacts:	Local residual disturbance remains	
Cumulative impact post mitigation:		
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE		
Potential impact and risk:	**Denham's bustard**	
Potential Impact	Temporary disturbance near river still immaterial for bustard.	
Nature of impact:	Negative	
Extent and duration of impact:	Local; short-term	
Consequence of impact or risk:	The species is wide-ranging and unlikely to be resident; temporary displacement from foraging areas possible but insignificant to regional population.	
Probability of occurrence:	Low	
Degree to which the impact may cause irreplaceable loss of resources:	Low	
Degree to which the impact can be reversed:	High	
Indirect impacts:	Brief disturbance to foraging individuals; short-term reduction in local activity; potential short-lived avoidance of construction areas.	
Cumulative impact prior to mitigation:	Low	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low	
Degree to which the impact can be avoided:	High	
Degree to which the impact can be managed:	High	
Degree to which the impact can be mitigated:	High	

Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very- Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very – Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Southern Black Korhaan**
Potential Impact	Loss/ disturbance to small, patchy suitable area; construction noise.
Nature of impact:	Negative;
Extent and duration of impact:	Site- Local
Consequence of impact or risk:	Minor local habitat loss and temporary disturbance but given the species' mobility and limited use of the site, long-term effects are minimal.
Probability of occurrence:	Medium
Degree to which the impact may cause irreplaceable loss of resources:	The affected patches are not unique or critical to the regional population and represent marginal habitat.
Degree to which the impact can be reversed:	Irreversible
Indirect impacts:	Temporary displacement from foraging areas, possible voidance of construction zone, and increased risk of disturbance from noise and human presence.
Cumulative impact prior to mitigation:	Adds slightly to the overall decline in available open habitat across the Overberg region but at a negligible scale.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medum
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones
Residual impacts:	Reduced local habitat availability; regional persistence unaffected
Cumulative impact post mitigation:	Low — no significant contribution to regional cumulative impacts on the species.

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Great White Pelican**
Potential Impact	Construction disturbance: proximity change immaterial ecologically; Disturbance of foraging and roosting birds near reed margins and river edges.
Nature of impact:	Negative
Extent and duration of impact:	Site-Local; short-term
Consequence of impact or risk:	The species forages and roosts within the larger Klein River and will not be dependent on, or significantly affected by, site-specific activities.
Probability of occurrence:	Low to Medium — individuals may occasionally overfly or rest nearby but are unlikely to be directly disturbed given their broad use of the river
Degree to which the impact may cause irreplaceable loss of resources:	Very Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Brief flushing of individuals if present during noisy works; minimal and temporary reduction in local use of the watercourse edge.
Cumulative impact prior to mitigation:	Low – adds negligibly to broader watercourse human activity impacts; no measurable contribution to population-level effects.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the watercourse to prevent disorientation or displacement of dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of watercourse edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very- Low (-)

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Martial Eagle**
Potential Impact	Short-term disturbance to overflying birds due to construction activity, noise, and increased human presence.
Nature of impact:	Negative
Extent and duration of impact:	Site-local; short-term
Consequence of impact or risk:	Minor disturbance of flight paths and foraging patterns of transient individuals; negligible long-term effect given absence of nesting or core foraging habitat within the site.
Probability of occurrence:	Low – species occurs occasionally as a wide-ranging overflying raptor, with limited site-specific use.
Degree to which the impact may cause irreplaceable loss of resources:	Low – no critical breeding, roosting, or feeding resources are located within the development footprint.
Degree to which the impact can be reversed:	High – species will resume use of airspace once construction activity ceases.
Indirect impacts:	Minor, temporary displacement from immediate airspace; no measurable population-level effects.
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low (-)

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Caspian Tern**
Potential Impact	Temporary disturbance during works; no breeding on site.
Nature of impact:	Negative
Extent and duration of impact:	Site; short-term
Consequence of impact or risk:	Minor disturbance to foraging or roosting individuals using the nearby river margins. No loss of breeding habitat or long-term displacement expected
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High

Indirect impacts:	Temporal avoidance of the estuary edge immediately adjacent to the site due to construction-related noise and activity.
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. - Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. - Shield and direct lighting away from the estuary to prevent disorientation or displacement of watercourse-dependent species. - Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). - Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Western Leopard Toad
Potential Impact	Construction disturbance; occasional roadkill risk during clearing/earthworks
Nature of impact:	Negative
Extent and duration of impact:	Site-local; short-medium term
Consequence of impact or risk:	Construction activities may disturb individual toads sheltering in vegetation or soil cavities and increase the likelihood of mortality from machinery and vehicle movement. As the species does not breed on site, the impact is limited to temporary displacement or loss of individuals rather than population-level effects.
Probability of occurrence:	Likely - the species may occur sporadically within the site, especially following rainfall or during nocturnal movements.
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High – once construction activities cease and vegetation recovers, the site can again support occasional movement or foraging by the species.
Indirect impacts:	Potential temporary avoidance of the area by amphibians due to vibration, noise, and compaction of soils; increased risk of mortality from vehicle movement on newly constructed access roads.
Cumulative impact prior to mitigation:	Medium

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Medium
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Shape access tracks with shallow U/V profiles; include amphibian-safe drainage. → Prohibit pesticides and herbicides on site. → Fit escape ramps or "toad savers" in swimming pools. → Retain indigenous groundcover and vegetated strips between dwellings to support terrestrial dispersal. → Provide residents with awareness material on toad movement periods and safe behaviours.
Residual impacts:	Low – with mitigation, the impact will be temporary and reversible, and individuals are expected to reoccupy the area post-construction
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Southern Adder**
Potential Impact	Direct loss of refugia during clearing; persecution risk; roadkill during works.
Nature of impact:	Negative
Extent and duration of impact:	Site -local; long-term
Consequence of impact or risk:	Loss of individual snakes; potential local population disturbance; minor contribution to cumulative population decline in the broader area.
Probability of occurrence:	Likely - snakes are likely present in vegetated and undisturbed patches, especially during warmer months.
Degree to which the impact may cause irreplaceable loss of resources:	Low – individual snakes may be lost, but local population is likely resilient if habitat patches are retained.
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Increased predation risk on local fauna due to displacement; potential ecosystem imbalances if snake populations decline in isolated patches.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High
Degree to which the impact can be avoided:	Low -Medium
Degree to which the impact can be managed:	Low – Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ Conduct supervised vegetation clearance with relocation of snakes and refugia where possible. → Retain or recreate rock piles, woody debris, and shrub thickets as refugia.

	→ Educate contractors and residents about the conservation importance of Southern Adder and provide protocols for safe handling. → Impose strict speed limits on internal tracks to reduce roadkill risk. → Maintain functional fynbos structure with alien clearing and fire in line with ecological cycles.	
Residual impacts:	Localized disturbance; a small number of individuals may still be lost	
Cumulative impact post mitigation:	Low Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE		
Potential impact and risk:	**Mute Winter Katydid**	
Potential Impact	Direct loss of occupied microhabitats; local collapse risk due to low mobility.	
Nature of impact:	Negative	
Extent and duration of impact:	Site – local; long-term	
Consequence of impact or risk:	Loss of individuals and microhabitats may lead to local population decline; could disrupt local invertebrate community structure.	
Probability of occurrence:	Definite ; species is present in dense vegetation patches and leaf litter.	
Degree to which the impact may cause irreplaceable loss of resources:	Medium - while individuals are lost, the species is likely to persist in adjacent undisturbed habitats.	
Degree to which the impact can be reversed:	Moderate – habitat may regenerate, allowing recolonization over time, but recovery is slow due to low mobility.	
Indirect impacts:	Reduced prey availability for local insectivorous birds and small reptiles; potential minor alteration of local litter decomposition dynamics.	
Cumulative impact prior to mitigation:	High – combined with other small-scale habitat disturbances, could lead to local declines in sensitive invertebrate populations.	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High	
Degree to which the impact can be avoided:	Low	
Degree to which the impact can be managed:	Low	
Degree to which the impact can be mitigated:	Low – Medium	
Proposed mitigation:	→ Relocate the one planned dwelling and associated infrastructure outside a 50 m no-go buffer surrounding mapped katydid habitat. → Avoid hard road surface construction → Mark and protect occupied patches as no-go areas during and after construction. → Prohibit mowing, gardening or herbicide or pesticide use within buffers.	

	→ Regularly survey katydid populations post-construction to verify persistence and recolonisation.
Residual impacts:	Localized population loss; some microhabitats permanently altered but overall local population expected to persist.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Socio-economic impacts**
Potential impact	Access to permanent employment for the community individuals through housekeeping and gardening.
Nature of impact:	Positive
Extent and duration of impact:	Local; short-term
Consequence of impact or risk:	Improved livelihoods
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	Access to employment for the community during the operational phase; Job creation;
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	1. Ensure labour force is sourced locally as far as possible. 2. Consider gender balance during when sourcing labour
Residual impacts:	Improved livelihoods
Cumulative impact post mitigation:	Improved livelihoods
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High Positive**
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Botanical/Ecological Impacts**
Potential impact	Loss of low-lying vegetation close to the river that provides stability to the environment.
Nature of impact:	Flooding due to extreme weather events
Extent and duration of impact:	Medium term
Consequence of impact or risk:	Lowering the buffering of the
Probability of occurrence:	Medium
Degree to which the impact may cause irreplaceable loss of resources:	Medium

Degree to which the impact can be reversed:	Low
Indirect impacts:	Non identified
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium Negative
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	No operational phase mitigation would be possible
Residual impacts:	Medium Negative
Cumulative impact post mitigation:	Medium Negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium Negative
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Faunal landscape connectivity**
Potential impact	River edge lighting/traffic marginally increases nightly barrier effect, potentially disrupting movement of nocturnal fauna such as amphibians, small mammals, and invertebrates.
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long-term
Consequence of impact or risk:	Reduced movement and dispersal of fauna; potential localized population fragmentation; may limit access to breeding, foraging, or refuge sites for sensitive species
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Degree to which the impact can be reversed:	Low
Indirect impacts:	Potential increase in roadkill incidents; minor alterations to local predator-prey interactions; some species may shift activity patterns, affecting ecological processes.
Cumulative impact prior to mitigation:	Medium – combined with habitat fragmentation and other developments, there may be small cumulative effects on local faunal connectivity.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Low – Medium
Degree to which the impact can be managed:	Low – Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ Maintain a continuous natural corridor across at least 70% of the property to allow free movement between the Klein River and adjacent upland habitats. → Prohibit impermeable fencing; if fences are required, ensure wildlife-permeable design (≥30 cm ground clearance, no mesh smaller than 100×100 mm). → Consolidate infrastructure and driveways to reduce fragmentation and maintain open strips for fauna. → Actively rehabilitate degraded strips post-construction and manage alien regrowth to preserve corridor functionality.

Residual impacts:	Low residual illumination pressure at water edge; managed.	
Cumulative impact post mitigation:	Low – Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Black Harrier**	
Potential impact	Slightly higher night lighting effect near water edge without controls.	
Nature of impact:	Negative	
Extent and duration of impact:	Local; long-term	
Consequence of impact or risk:	River facing lighting marginally increases night-time avoidance.	
Probability of occurrence:	Definite	
Degree to which the impact may cause irreplaceable loss of resources:	Low – effects are behavioural and reversible; populations unlikely to be directly affected.	
Degree to which the impact can be reversed:	High – if lighting is managed, the species can resume normal use of the area.	
Indirect impacts:	Temporary displacement may slightly increase predation pressure on other prey species elsewhere; minor alteration of local hunting patterns.	
Cumulative impact prior to mitigation:	Low to Medium – minor additive effect if combined with other developments along the Klein River	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	
Degree to which the impact can be avoided:	Medium	
Degree to which the impact can be managed:	High	
Degree to which the impact can be mitigated:	High	
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the watercourse to prevent disorientation or displacement of species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of watercourse edge natural habitat through stewardship or conservation agreements	
Residual impacts:	Minor behavioural avoidance of lit areas; no measurable impact on population viability expected.	
Cumulative impact post mitigation:	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)

POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Marsh Harrier**
Potential impact	Night lighting near river marginally increases disturbance pulses
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long-term
Consequence of impact or risk:	Increased illumination near river edges may cause temporary avoidance or startle responses during nocturnal roosting
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low – disturbance may alter local activity patterns but is unlikely to lead to loss of breeding or feeding habitat.
Degree to which the impact can be reversed:	High – reducing lighting or implementing shielding can rapidly reverse behavioural effects.
Indirect impacts:	Minor shifts in prey distribution; temporary displacement of harriers to darker zones; potential increased competition in adjacent habitats.
Cumulative impact prior to mitigation:	Additive with other lighting sources along the river, leading to gradual reduction in undisturbed foraging zones
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and river edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the watercourse to prevent disorientation or displacement of watercourse-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of watercourse natural habitat through stewardship or conservation agreements.
Residual impacts:	Minimal behavioural disturbance: local birds may continue to avoid small lit patches
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)

POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Denham's bustard**
Potential impact	Human presence negligible effect due to habitat mismatch.
Nature of impact:	Negative
Extent and duration of impact:	Local site; long-term
Consequence of impact or risk:	The site's altered land cover and residential use reduce habitat suitability for Denham's Bustard, a species that prefers extensive open grasslands and agricultural fields. Occasional overflight or transient individuals may avoid the immediate area due to human activity and structures.
Probability of occurrence:	Probable; the species may occasionally traverse the area but is unlikely to utilize it regularly for foraging or breeding.
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Partially reversable
Indirect impacts:	None expected beyond localized avoidance; negligible influence on regional population dynamics or habitat function.
Cumulative impact prior to mitigation:	Low – surrounding landscapes retain more suitable open habitat; the development contributes minimally to regional habitat loss.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones.
Residual impacts:	Negligible; the species may continue to avoid the developed site, but no population-level impacts are expected.
Cumulative impact post mitigation:	Very low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low (-)

POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Southern Black Korhaan**
Potential impact	Edge disturbance (people/pets) reduces use of marginal habitat
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long-term
Consequence of impact or risk:	The proximity of human activity, domestic pets, and increased noise or movement near natural edges may deter Southern Black Korhaan from using adjacent open habitat for foraging or breeding.
Probability of occurrence:	Likely

Degree to which the impact may cause irreplaceable loss of resources:	Low – disturbance results mainly in displacement rather than permanent habitat loss; suitable habitat persists beyond the site
Degree to which the impact can be reversed:	Moderate to High – behavioural avoidance may lessen over time if disturbance is minimized and buffer vegetation is maintained.
Indirect impacts:	Potential increase in predation risk if birds are displaced to more exposed or disturbed areas; Disturbance may reduce breeding success in nearby territories; Possible secondary effects on other ground-nesting bird species
Cumulative impact prior to mitigation:	combined with similar developments, disturbance could contribute to gradual contraction of habitat use in peri-urban areas.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Medium
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones
Residual impacts:	Minor behavioural avoidance near edges may persist, but the broader local population will remain unaffected.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Great White Pelican**
Potential impact	Low-level displacement possible but minor.
Nature of impact:	Negative
Extent and duration of impact:	Site – local; long-term
Consequence of impact or risk:	The development may result in minor, localized avoidance by Great White Pelicans of nearby areas due to human activity, noise, or lighting, particularly during roosting or flight over the river.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Minimal; temporary shifts in local flight paths or loafing sites may occur but with no broader ecological consequence.
Cumulative impact prior to mitigation:	Low – cumulative effects across the region are minor given the species' adaptability and extensive foraging range.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low

Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Negligible; the species will continue to utilize the broader estuary system with minimal behavioural adjustments.
Cumulative impact post mitigation:	Very low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Martial Eagle**
Potential impact	Minimal chronic effect with residents.
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long-term
Consequence of impact or risk:	Occasional overflight or peripheral foraging by Martial Eagles may decline slightly due to increased human presence and movement.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High – behavioural avoidance is reversible; the species may resume use if disturbance decreases over time.
Indirect impacts:	Possible minor avoidance of localized areas with high human activity; Slight shift in local hunting patterns toward quieter open habitats
Cumulative impact prior to mitigation:	Localized effects from this and other developments contribute minimally to regional Martial Eagle population pressures, which are primarily driven by large-scale land use changes and powerline electrocution.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High

Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones
Residual impacts:	Negligible; the species may exhibit mild avoidance of the immediate development footprint, but no significant effect on population dynamics or habitat integrity is anticipated.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Caspian Tern**
Potential impact	Low-level disturbance; maintain buffer to estuary.
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long -term
Consequence of impact or risk:	Minor displacement of individuals occasionally foraging or roosting near the estuary mouth could occur due to increased human presence and recreational activity.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Temporary avoidance of the adjacent estuarine fringe during periods of high recreational use. Potential minor shifts in roosting patterns within the broader river system.
Cumulative impact prior to mitigation:	Development contributes slightly to overall estuarine disturbance pressures but does not affect critical habitat or breeding colonies.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species.

	→ Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Negligible – disturbance effects will be minimal if the buffer is maintained and access controls are implemented.
Cumulative impact post mitigation:	Very low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Western Leopard Toad**
Potential impact	Edge effects (lighting, pets, pesticides) on terrestrial movement.
Nature of impact:	Negative
Extent and duration of impact:	Site – local; long term
Consequence of impact or risk:	Artificial lighting, domestic pets, and pesticide use may interfere with the movement and nocturnal activity of the Western Leopard Toad, particularly during breeding migrations or foraging. This could result in localized mortality or avoidance of the site's margins, although no core breeding habitat occurs within the development footprint.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High – reduced lighting and pet control can restore suitable edge conditions over time.
Indirect impacts:	Possible reduction in amphibian abundance in gardens and open spaces due to pesticide use; Increased risk of predation by domestic animals; Minor disruption to nocturnal movement corridors.
Cumulative impact prior to mitigation:	Medium – incremental contribution to regional habitat fragmentation
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Medium – High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Shape access tracks with shallow U/V profiles; include amphibian-safe drainage. → Prohibit pesticides and herbicides on site. → Fit escape ramps or "toad savers" in swimming pools. → Retain indigenous groundcover and vegetated strips between dwellings to support terrestrial dispersal. → Provide residents with awareness material on toad movement periods and safe behaviours.
Residual impacts:	Minor, limited to isolated toad movement across developed areas; no population-level effects anticipated.
Cumulative impact post mitigation:	Very low

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-)	
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Southern Adder**	
Potential impact	Ongoing persecution and roadkill near dwellings; edge effects on refugia.	
Nature of impact:	Negative	
Extent and duration of impact:	Site-local; long term	
Consequence of impact or risk:	Increased human activity and vehicular movement along access routes elevate the risk of direct mortality through roadkill or persecution of snakes perceived as dangerous. Subtle habitat alteration (e.g., reduced refugia, compacted soils, and garden management) may lower local occupancy in suitable edge habitats.	
Probability of occurrence:	Likely; occasional encounters expected where remnant natural or open space areas occur adjacent to development.	
Degree to which the impact may cause irreplaceable loss of resources:	Low – Medium	
Degree to which the impact can be reversed:	Moderate – population recovery and recolonisation possible if human-snake conflict is reduced and habitat edges rehabilitated.	
Indirect impacts:	Loss of ecological function (predator role in small mammal control); Displacement of individuals into suboptimal areas due to disturbance; Reduction of local biodiversity resilience along the urban edge.	
Cumulative impact prior to mitigation:	Medium – adds incrementally to regional pressures from urban expansion, road networks, and human intolerance of snakes.	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High	
Degree to which the impact can be avoided:	Medium	
Degree to which the impact can be managed:	Medium	
Degree to which the impact can be mitigated:	High	
Proposed mitigation:	→ Conduct supervised vegetation clearance with relocation of snakes and refugia where possible. → Retain or recreate rock piles, woody debris, and shrub thickets as refugia. → Educate contractors and residents about the conservation importance of Southern Adder and provide protocols for safe handling. → Impose strict speed limits on internal tracks to reduce roadkill risk. → Maintain functional fynbos structure with alien clearing and fire in line with ecological cycles.	
Residual impacts:	Occasional snake mortality may still occur but at low frequency; local populations expected to persist regionally.	
Cumulative impact post mitigation:	Low - Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)

POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Mute Winter Katydid**	
Potential impact	Trampling and gardening degrade occupied patches; edge stress.	
Nature of impact:	Negative	
Extent and duration of impact:	Site – local; long – term	
Consequence of impact or risk:	The loss or degradation of natural vegetation within garden edges and open space areas could reduce the availability of microhabitats for katydid populations. Increased foot traffic, mowing, and landscaping activities may lead to localized population collapse in small remnant patches due to the species' limited mobility and habitat specificity.	
Probability of occurrence:	Medium – localized degradation of habitat patches is likely without management controls.	
Degree to which the impact may cause irreplaceable loss of resources:	Low to Medium – potential loss of individuals or small local populations, though broader populations remain viable in surrounding natural areas.	
Degree to which the impact can be reversed:	Moderate – recolonization possible if vegetation structure and quality are restored in buffer and open space areas.	
Indirect impacts:	Reduction in acoustic diversity and ecological balance within natural areas. Diminished invertebrate prey availability for small faunal species. Cumulative degradation of marginal habitats over time.	
Cumulative impact prior to mitigation:	Contributes to the regional decline of habitat-dependent invertebrates	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High	
Degree to which the impact can be avoided:	Low	
Degree to which the impact can be managed:	Low – medium	
Degree to which the impact can be mitigated:	Medium	
Proposed mitigation:	→ Relocate the one planned dwelling and associated infrastructure outside a 50 m no-go buffer surrounding mapped katydid habitat. → Avoid hard road surface construction → Mark and protect occupied patches as no-go areas during and after construction. → Prohibit mowing, gardening or herbicide or pesticide use within buffers. → Regularly survey katydid populations post-construction to verify persistence and recolonisation.	
Residual impacts:	Low chronic edge effects remain.	
Cumulative impact post mitigation:	Low – Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)

DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	N/A
Nature of impact:	-
Extent and duration of impact:	-
Consequence of impact or risk:	-
Probability of occurrence:	-
Degree to which the impact may cause irreplaceable loss of resources:	-
Degree to which the impact can be reversed:	-
Indirect impacts:	-
Cumulative impact prior to mitigation:	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-
Degree to which the impact can be avoided:	-
Degree to which the impact can be managed:	-
Degree to which the impact can be mitigated:	-
Proposed mitigation:	-
Residual impacts:	-
Cumulative impact post mitigation:	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-

ALTERNATIVE 2

All new infrastructure and development (except jetties), moved above the 5m contour, no faunal mitigations implemented, proposal includes 2 slipways and 2 jetties

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Socioeconomic impacts**
Potential Impact	Job creation during the development / construction phase
Nature of impact:	Positive
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Improved livelihoods for the local community
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	House provisions and job creation during construction phase
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High Positive
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	1. Ensure labour force is sourced locally as far as possible. 2. Consider gender balance during when sourcing labour.
Residual impacts:	Improved livelihoods and skill transfer
Cumulative impact post mitigation:	Job creation and skill transfer to local community
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High Positive**

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Visual impacts**
Potential Impact	Visual impacts of construction site and construction activities.
Nature of impact:	Negative
Extent and duration of impact:	Local; short-term
Consequence of impact or risk:	Partial loss of vegetation being replaced by concrete; as well as visibility of the construction activities.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	Irreversible
Indirect impacts:	None
Cumulative impact prior to mitigation:	Visual impacts associated with construction.

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Good design approved by local authority. → Good housekeeping of construction site and working areas. → Screen the visual elements of site construction camp with netting. → Locate the site camp in a transformed area. Not on proposed Open Space. → Site officer to walk the site on a daily basis to check for general site aesthetics and visual impacts, particularly prior to weekends and holidays. → Officer to ensure that waste and batching areas are correctly screened and secured to prevent spread by wind, rain or animals.
Residual impacts:	Change of sense of place due to construction activities and construction workers.
Cumulative impact post mitigation:	Typical visual impacts associated with a construction site
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low Negative**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Dust impacts**
Potential Impact	Dust generated from site clearing and site preparation.
Nature of impact:	Negative
Extent and duration of impact:	Local, short term
Consequence of impact or risk:	Visual and health impacts Nuisance for residents adjacent to the site.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Potential for reduced visibility in general area. Potential for allergic reactions in people allergic to dust.
Cumulative impact prior to mitigation:	Dust may be generated as a result of earthmoving activities required for construction and development.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Maintain ground cover for as long as possible to reduce the total surface area exposed to wind. Do not clear entire plots and rather clear building sites only .

	→ Ensure vehicle speed limits on site are kept to a minimum. → Delivery vehicles to keep loads covered. → Cover fine material stockpiles. → Wet dry and dusty surfaces using non-potable water. → Staff to wear correct PPE if dust is generated for long periods. Road surfaces to be swept and kept clean of sand and fine materials.
Residual impacts:	None
Cumulative impact post mitigation:	Dust generated during construction, mitigation successful.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very-Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Noise impacts**
Potential Impact	Noise generated by vehicles and machinery during construction phase.
Nature of impact:	Negative
Extent and duration of impact:	Local, short term
Consequence of impact or risk:	Noise disturbance to transient receptors, i.e. motorists, pedestrians, residents.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Will not impact on resources
Degree to which the impact can be reversed:	High
Indirect impacts:	None
Cumulative impact prior to mitigation:	Noise from construction works
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	Medium - High
Degree to which the impact can be managed:	Medium - High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Limit noise levels (e.g. install and maintain silencers on machinery) → Provide protective wear for workers i.e. ear plugs. → Ensure that construction vehicles and machinery are maintained regularly to reduce noise generation. → Restrict construction to normal work hours.
Residual impacts:	None
Cumulative impact post mitigation:	Typical noise impacts associated with a construction site.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	

Potential impact and risk:	Botanical/Ecological Impact
Potential Impact	Loss of terrestrial vegetation with low sensitivity above the 5 m contour and loss of riparian vegetation with medium sensitivity at the river i.e. below 5 m contour.
Nature of impact:	Clearing of natural vegetation
Extent and duration of impact:	The vegetation clearing would affect the undescribed shrubland vegetation within the footprint of the proposed residences and riparian zone at the location of the jetties and slipways.
Consequence of impact or risk:	Low impact on terrestrial vegetation and medium impact on riparian vegetation.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low
Indirect impacts:	None identified
Cumulative impact prior to mitigation:	Medium Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium Negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Moderate
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ Avoidance of the estuarine functional zone to reduce ecological impacts. → Existing roads would be used to avoid unnecessary disturbances to the environment. → Only one jetty and one slipway would be constructed. → Clearing of alien invasive plant species.
Residual impacts:	Low Negative
Cumulative impact post mitigation:	Low negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Faunal landscape connectivity**
Potential Impact	Corridor narrowing (±30% of 12 ha); fencing/driveways; lighting; alien ingress which is greater sensitivity than the preferred.
Nature of impact:	Negative, direct & indirect. – same mechanisms as Preferred, with slightly higher sensitivity where one dwelling sits closer to the estuary interface.
Extent and duration of impact:	Site-local; long-term; slightly higher risk at estuary edge.
Consequence of impact or risk:	Moderate consequence due to potential reduction in functional connectivity across the site and risk to species reliant on movement between terrestrial and wetland habitats.
Probability of occurrence:	High

Degree to which the impact may cause irreplaceable loss of resources:	Low to Medium — loss is localised and does not remove the entire corridor function due to retention of ~70% of the property in a natural state.
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Increased lighting and noise disturbance, potential predation by domestic pets, and spread of alien vegetation reducing habitat quality and permeability.
Cumulative impact prior to mitigation:	Adds to ongoing fragmentation pressure along the Klein River estuary corridor and Agulhas Limestone Fynbos ecosystem
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ Maintain a continuous natural corridor across at least 70% of the property to allow free movement between the Klein River estuary and adjacent upland habitats. → Prohibit impermeable fencing; if fences are required, ensure wildlife-permeable design (≥30 cm ground clearance, no mesh smaller than 100×100 mm). → Consolidate infrastructure and driveways to reduce fragmentation and maintain open strips for fauna. → Actively rehabilitate degraded strips post-construction and manage alien regrowth to preserve corridor functionality.
Residual impacts:	Edge effects persist but functional corridor retained if measures embedded.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Black Harrier**
Potential Impact	Habitat loss/fragmentation within potential territories; construction disturbance.
Nature of impact:	Negative;
Extent and duration of impact:	Local; long-term
Consequence of impact or risk:	Reduction of available foraging ground within a landscape that supports a regionally important population; minor contribution to broader cumulative loss of lowland fynbos habitat.
Probability of occurrence:	High
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Irreversible
Indirect impacts:	Loss of hunting/possible nesting areas in the footprint; construction activity and machinery increase flush/disturbance

	risk.
Cumulative impact prior to mitigation:	Medium – High
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low – Medium
Degree to which the impact can be mitigated:	Low – Medium
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Displacement risk reduced but not eliminated; foraging persists in retained strips.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Marsh Harrier**
Potential Impact	Dwelling slightly closer to estuary increases sensitivity during works.
Nature of impact:	Negative
Extent and duration of impact:	Local; short-term
Consequence of impact or risk:	Potential temporary displacement of foraging individuals and reduced local habitat use during construction.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Degree to which the impact can be reversed:	Irreversible
Indirect impacts:	Disturbance to associated estuarine bird species; temporary reduction in foraging efficiency; possible increase in predation pressure or displacement from preferred sites.
Cumulative impact prior to mitigation:	Adds minor short-term disturbance to existing pressures along the Klein River estuary from human activity and nearby land uses
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Low – Medium

Degree to which the impact can be managed:	Medium	
Degree to which the impact can be mitigated:	Medium	
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.	
Residual impacts:	Local residual disturbance remains	
Cumulative impact post mitigation:		
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE		
Potential impact and risk:	**Denham's bustard**	
Potential Impact	Temporary disturbance near estuary still immaterial for bustard.	
Nature of impact:	Negative	
Extent and duration of impact:	Local; short-term	
Consequence of impact or risk:	The species is wide-ranging and unlikely to be resident; temporary displacement from foraging areas possible but insignificant to regional population.	
Probability of occurrence:	Low	
Degree to which the impact may cause irreplaceable loss of resources:	Low	
Degree to which the impact can be reversed:	High	
Indirect impacts:	Brief disturbance to foraging individuals; short-term reduction in local activity; potential short-lived avoidance of construction areas.	
Cumulative impact prior to mitigation:	Low	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low	
Degree to which the impact can be avoided:	High	
Degree to which the impact can be managed:	High	
Degree to which the impact can be mitigated:	High	
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment.	

	→ Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones.
Residual impacts:	Neglible
Cumulative impact post mitigation:	Very- Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very – Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Southern Black Korhaan**
Potential Impact	Loss/ disturbance to small, patchy suitable area; construction noise.
Nature of impact:	Negative;
Extent and duration of impact:	Site- Local
Consequence of impact or risk:	Minor local habitat loss and temporary disturbance, but given the species' mobility and limited use of the site, long-term effects are minimal.
Probability of occurrence:	Medium
Degree to which the impact may cause irreplaceable loss of resources:	The affected patches are not unique or critical to the regional population and represent marginal habitat.
Degree to which the impact can be reversed:	Irreversible
Indirect impacts:	Temporary displacement from foraging areas, possible voidance of construction zone, and increased risk of disturbance from noise and human presence.
Cumulative impact prior to mitigation:	Adds slightly to the overall decline in available open habitat across the Overberg region but at a negligible scale.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medum
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones
Residual impacts:	Reduced local habitat availability; regional persistence unaffected
Cumulative impact post mitigation:	Low — no significant contribution to regional cumulative impacts on the species.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Great White Pelican**

Potential Impact	Construction disturbance; proximity change immaterial ecologically; Disturbance of foraging and roosting birds near reed margins and estuary edges.
Nature of impact:	Negative
Extent and duration of impact:	Site-Local; short-term
Consequence of impact or risk:	The species forages and roosts within the larger Klein River estuary and will not be dependent on, or significantly affected by, site-specific activities.
Probability of occurrence:	Low to Medium — individuals may occasionally overfly or rest nearby but are unlikely to be directly disturbed given their broad use of the estuary.
Degree to which the impact may cause irreplaceable loss of resources:	Very Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Brief flushing of individuals if present during noisy works; minimal and temporary reduction in local use of the estuary edge.
Cumulative impact prior to mitigation:	Low – adds negligibly to broader estuarine human activity impacts; no measurable contribution to population-level effects.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very- Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Martial Eagle**
Potential Impact	Short-term disturbance to overflying birds due to construction activity, noise, and increased human presence.
Nature of impact:	Negative
Extent and duration of impact:	Site-local; short-term
Consequence of impact or risk:	Minor disturbance of flight paths and foraging patterns of transient individuals; negligible long-term effect given absence of nesting or core foraging habitat within the site.

Probability of occurrence:	Low – species occurs occasionally as a wide-ranging overflying raptor, with limited site-specific use.
Degree to which the impact may cause irreplaceable loss of resources:	Low – no critical breeding, roosting, or feeding resources are located within the development footprint.
Degree to which the impact can be reversed:	High – species will resume use of airspace once construction activity ceases.
Indirect impacts:	Minor, temporary displacement from immediate airspace; no measurable population-level effects.
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very-Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Caspian Tern**
Potential Impact	Temporary disturbance during works; no breeding on site.
Nature of impact:	Negative
Extent and duration of impact:	Site; short-term
Consequence of impact or risk:	Minor disturbance to foraging or roosting individuals using the nearby estuarine margins. No loss of breeding habitat or long-term displacement expected
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Temporal avoidance of the estuary edge immediately adjacent to the site due to construction-related noise and activity.
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses.

	- Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. - Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species. - Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). - Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Western Leopard Toad
Potential Impact	Construction disturbance; occasional roadkill risk during clearing/earthworks
Nature of impact:	Negative
Extent and duration of impact:	Site-local; short-medium term
Consequence of impact or risk:	Construction activities may disturb individual toads sheltering in vegetation or soil cavities and increase the likelihood of mortality from machinery and vehicle movement. As the species does not breed on site, the impact is limited to temporary displacement or loss of individuals rather than population-level effects.
Probability of occurrence:	Likely - the species may occur sporadically within the site, especially following rainfall or during nocturnal movements.
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High – once construction activities cease and vegetation recovers, the site can again support occasional movement or foraging by the species.
Indirect impacts:	Potential temporary avoidance of the area by amphibians due to vibration, noise, and compaction of soils; increased risk of mortality from vehicle movement on newly constructed access roads.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Medium
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Shape access tracks with shallow U/V profiles; include amphibian-safe drainage. → Prohibit pesticides and herbicides on site. → Fit escape ramps or “toad savers” in swimming pools. → Retain indigenous groundcover and vegetated strips between dwellings to support terrestrial dispersal. → Provide residents with awareness material on toad movement periods and safe behaviours.

Residual impacts:	Low – with mitigation, the impact will be temporary and reversible, and individuals are expected to reoccupy the area post-construction
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Southern Adder**
Potential Impact	Direct loss of refugia during clearing; persecution risk; roadkill during works.
Nature of impact:	Negative
Extent and duration of impact:	Site -local; long-term
Consequence of impact or risk:	Loss of individual snakes; potential local population disturbance; minor contribution to cumulative population decline in the broader area.
Probability of occurrence:	Likely - snakes are likely present in vegetated and undisturbed patches, especially during warmer months.
Degree to which the impact may cause irreplaceable loss of resources:	Low – individual snakes may be lost, but local population is likely resilient if habitat patches are retained.
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Increased predation risk on local fauna due to displacement; potential ecosystem imbalances if snake populations decline in isolated patches.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High
Degree to which the impact can be avoided:	Low -Medium
Degree to which the impact can be managed:	Low – Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ Conduct supervised vegetation clearance with relocation of snakes and refugia where possible. → Retain or recreate rock piles, woody debris, and shrub thickets as refugia. → Educate contractors and residents about the conservation importance of Southern Adder and provide protocols for safe handling. → Impose strict speed limits on internal tracks to reduce roadkill risk. → Maintain functional fynbos structure with alien clearing and fire in line with ecological cycles.
Residual impacts:	Localized disturbance; a small number of individuals may still be lost
Cumulative impact post mitigation:	Low Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-) / Medium (-)

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Mute Winter Katydid**
Potential Impact	Direct loss of occupied microhabitats; local collapse risk due to low mobility.
Nature of impact:	Negative
Extent and duration of impact:	Site – local; long-term
Consequence of impact or risk:	Loss of individuals and microhabitats may lead to local population decline; could disrupt local invertebrate community structure.
Probability of occurrence:	Definite ; species is present in dense vegetation patches and leaf litter.
Degree to which the impact may cause irreplaceable loss of resources:	Medium - while individuals are lost, the species is likely to persist in adjacent undisturbed habitats.
Degree to which the impact can be reversed:	Moderate – habitat may regenerate, allowing recolonization over time, but recovery is slow due to low mobility.
Indirect impacts:	Reduced prey availability for local insectivorous birds and small reptiles; potential minor alteration of local litter decomposition dynamics.
Cumulative impact prior to mitigation:	High – combined with other small-scale habitat disturbances, could lead to local declines in sensitive invertebrate populations.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low – Medium
Proposed mitigation:	→ Relocate the one planned dwelling and associated infrastructure outside a 50 m no-go buffer surrounding mapped katydid habitat. → Avoid hard road surface construction → Mark and protect occupied patches as no-go areas during and after construction. → Prohibit mowing, gardening or herbicide or pesticide use within buffers. → Regularly survey katydid populations post-construction to verify persistence and recolonisation.
Residual impacts:	Localized population loss; some microhabitats permanently altered but overall local population expected to persist.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)

POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Socio-economic impacts**
Potential impact	Access to permanent employment for the community individuals through housekeeping and gardening.
Nature of impact:	Positive
Extent and duration of impact:	Local; short-term
Consequence of impact or risk:	Improved livelihoods
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	Access to employment for the community during the operational phase; Job creation;
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	1. Ensure labour force is sourced locally as far as possible. 2. Consider gender balance during when sourcing labour
Residual impacts:	Improved livelihoods
Cumulative impact post mitigation:	Improved livelihoods
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High Positive**

POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Botanical/Ecological Impacts**
Potential impact	→ Clearing of terrestrial vegetation beyond the limit of the footprints of the residences to limit danger of wildfires. → Slow and imperceptible loss of natural habitat due presence of residents. → Loss of natural vegetation → Development of residences should be above the 5 m contours and should wherever possible avoid well-established old trees, particularly of wild olive (*Olea europaea subsp. cuspidata*) → High – The impact within the sensitive riparian zone would be limited.
Nature of impact:	Negative
Extent and duration of impact:	Local; Long-term
Consequence of impact or risk:	Loss of natural vegetation

Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low
Indirect impacts:	None identified
Cumulative impact prior to mitigation:	Low Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Moderate
Degree to which the impact can be mitigated:	High – The impact within the sensitive riparian zone would be limited.
Proposed mitigation:	Development of residences should be above the 5 m contours and should wherever possible avoid well-established old trees, particularly of wild olive *(Olea europaea subsp. cuspidata)*
Residual impacts:	Low Negative
Cumulative impact post mitigation:	Low Negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Faunal landscape connectivity**
Potential impact	Estuary-edge lighting/traffic marginally increases nightly barrier effect, potentially disrupting movement of nocturnal fauna such as amphibians, small mammals, and invertebrates.
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long-term
Consequence of impact or risk:	Reduced movement and dispersal of fauna; potential localized population fragmentation; may limit access to breeding, foraging, or refuge sites for sensitive species
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Degree to which the impact can be reversed:	Low
Indirect impacts:	Potential increase in roadkill incidents; minor alterations to local predator-prey interactions; some species may shift activity patterns, affecting ecological processes.
Cumulative impact prior to mitigation:	Medium – combined with habitat fragmentation and other developments, there may be small cumulative effects on local faunal connectivity.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Low – Medium
Degree to which the impact can be managed:	Low – Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ Maintain a continuous natural corridor across at least 70% of the property to allow free movement between the Klein River estuary and adjacent upland habitats.

	→ Prohibit impermeable fencing; if fences are required, ensure wildlife-permeable design (≥30 cm ground clearance, no mesh smaller than 100×100 mm). → Consolidate infrastructure and driveways to reduce fragmentation and maintain open strips for fauna. → Actively rehabilitate degraded strips post-construction and manage alien regrowth to preserve corridor functionality.	
Residual impacts:	Low residual illumination pressure at water edge; managed.	
Cumulative impact post mitigation:	Low – Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Black Harrier**	
Potential impact	Slightly higher night lighting effect near water edge without controls.	
Nature of impact:	Negative	
Extent and duration of impact:	Local; long-term	
Consequence of impact or risk:	Estuary facing lighting marginally increases night-time avoidance.	
Probability of occurrence:	Definite	
Degree to which the impact may cause irreplaceable loss of resources:	Low – effects are behavioural and reversible; populations unlikely to be directly affected.	
Degree to which the impact can be reversed:	High – if lighting is managed, the species can resume normal use of the area.	
Indirect impacts:	Temporary displacement may slightly increase predation pressure on other prey species elsewhere; minor alteration of local hunting patterns.	
Cumulative impact prior to mitigation:	Low to Medium – minor additive effect if combined with other developments along estuary edges.	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	
Degree to which the impact can be avoided:	Medium	
Degree to which the impact can be managed:	High	
Degree to which the impact can be mitigated:	High	
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements →	

Residual impacts:	Minor behavioural avoidance of lit areas; no measurable impact on population viability expected.	
Cumulative impact post mitigation:	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Marsh Harrier**	
Potential impact	Night lighting near estuary marginally increases disturbance pulses	
Nature of impact:	Negative	
Extent and duration of impact:	Site-local; long-term	
Consequence of impact or risk:	Increased illumination near estuary edges may cause temporary avoidance or startle responses during nocturnal roosting	
Probability of occurrence:	Likely	
Degree to which the impact may cause irreplaceable loss of resources:	Low – disturbance may alter local activity patterns but is unlikely to lead to loss of breeding or feeding habitat.	
Degree to which the impact can be reversed:	High – reducing lighting or implementing shielding can rapidly reverse behavioural effects.	
Indirect impacts:	Minor shifts in prey distribution; temporary displacement of harriers to darker zones; potential increased competition in adjacent habitats.	
Cumulative impact prior to mitigation:	Additive with other lighting sources along the estuary, leading to gradual reduction in undisturbed foraging zones	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	
Degree to which the impact can be avoided:	Medium	
Degree to which the impact can be managed:	High	
Degree to which the impact can be mitigated:	High	
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.	
Residual impacts:	Minimal behavioural disturbance; local birds may continue to avoid small lit patches	
Cumulative impact post mitigation:	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	

POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Denham's bustard**
Potential impact	Human presence negligible effect due to habitat mismatch.
Nature of impact:	Negative
Extent and duration of impact:	Local site; long-term
Consequence of impact or risk:	The site's altered land cover and residential use reduce habitat suitability for Denham's Bustard, a species that prefers extensive open grasslands and agricultural fields. Occasional overflight or transient individuals may avoid the immediate area due to human activity and structures.
Probability of occurrence:	Probable; the species may occasionally traverse the area but is unlikely to utilize it regularly for foraging or breeding.
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Partially reversable
Indirect impacts:	None expected beyond localized avoidance; negligible influence on regional population dynamics or habitat function.
Cumulative impact prior to mitigation:	Low – surrounding landscapes retain more suitable open habitat; the development contributes minimally to regional habitat loss.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones.
Residual impacts:	Negligible; the species may continue to avoid the developed site, but no population-level impacts are expected.
Cumulative impact post mitigation:	Very low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Southern Black Korhaan**
Potential impact	Edge disturbance (people/pets) reduces use of marginal habitat
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long-term
Consequence of impact or risk:	The proximity of human activity, domestic pets, and increased noise or movement near natural edges may deter Southern Black Korhaan from using adjacent open habitat for foraging or breeding.
Probability of occurrence:	Likely

Degree to which the impact may cause irreplaceable loss of resources:	Low – disturbance results mainly in displacement rather than permanent habitat loss; suitable habitat persists beyond the site
Degree to which the impact can be reversed:	Moderate to High – behavioural avoidance may lessen over time if disturbance is minimized and buffer vegetation is maintained.
Indirect impacts:	Potential increase in predation risk if birds are displaced to more exposed or disturbed areas; Disturbance may reduce breeding success in nearby territories; Possible secondary effects on other ground-nesting bird species
Cumulative impact prior to mitigation:	Combined with similar developments, disturbance could contribute to gradual contraction of habitat use in peri-urban areas.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Medium
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones
Residual impacts:	Minor behavioural avoidance near edges may persist, but the broader local population will remain unaffected.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Great White Pelican**
Potential impact	Low-level displacement possible but minor.
Nature of impact:	Negative
Extent and duration of impact:	Site – local; long-term
Consequence of impact or risk:	The development may result in minor, localized avoidance by Great White Pelicans of nearby areas due to human activity, noise, or lighting, particularly during roosting or flight over the estuary.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Minimal; temporary shifts in local flight paths or loafing sites may occur but with no broader ecological consequence.
Cumulative impact prior to mitigation:	Low – cumulative effects across the region are minor given the species' adaptability and extensive foraging range.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low

Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and river edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Negligible; the species will continue to utilize the broader estuary system with minimal behavioural adjustments.
Cumulative impact post mitigation:	Very low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Martial Eagle**
Potential impact	Minimal chronic effect with residents.
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long-term
Consequence of impact or risk:	Occasional overflight or peripheral foraging by Martial Eagles may decline slightly due to increased human presence and movement.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High – behavioural avoidance is reversible; the species may resume use if disturbance decreases over time.
Indirect impacts:	Possible minor avoidance of localized areas with high human activity; Slight shift in local hunting patterns toward quieter open habitats
Cumulative impact prior to mitigation:	Localized effects from this and other developments contribute minimally to regional Martial Eagle population pressures, which are primarily driven by large-scale land use changes and powerline electrocution.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High

Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones
Residual impacts:	Negligible; the species may exhibit mild avoidance of the immediate development footprint, but no significant effect on population dynamics or habitat integrity is anticipated.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Caspian Tern**
Potential impact	Low-level disturbance; maintain buffer to estuary.
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long -term
Consequence of impact or risk:	Minor displacement of individuals occasionally foraging or roosting near the estuary mouth could occur due to increased human presence and recreational activity.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Temporary avoidance of the adjacent estuarine fringe during periods of high recreational use. Potential minor shifts in roosting patterns within the broader estuary system.
Cumulative impact prior to mitigation:	Development contributes slightly to overall estuarine disturbance pressures but does not affect critical habitat or breeding colonies.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the estuary to prevent disorientation or displacement of watercourse-dependent species.

	→ Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of river-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Negligible – disturbance effects will be minimal if the buffer is maintained and access controls are implemented.
Cumulative impact post mitigation:	Very low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Western Leopard Toad**
Potential impact	Edge effects (lighting, pets, pesticides) on terrestrial movement.
Nature of impact:	Negative
Extent and duration of impact:	Site – local; long term
Consequence of impact or risk:	Artificial lighting, domestic pets, and pesticide use may interfere with the movement and nocturnal activity of the Western Leopard Toad, particularly during breeding migrations or foraging. This could result in localized mortality or avoidance of the site's margins, although no core breeding habitat occurs within the development footprint.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High – reduced lighting and pet control can restore suitable edge conditions over time.
Indirect impacts:	Possible reduction in amphibian abundance in gardens and open spaces due to pesticide use; Increased risk of predation by domestic animals; Minor disruption to nocturnal movement corridors.
Cumulative impact prior to mitigation:	Medium – incremental contribution to regional habitat fragmentation
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Medium – High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Shape access tracks with shallow U/V profiles; include amphibian-safe drainage. → Prohibit pesticides and herbicides on site. → Fit escape ramps or "toad savers" in swimming pools. → Retain indigenous groundcover and vegetated strips between dwellings to support terrestrial dispersal. → Provide residents with awareness material on toad movement periods and safe behaviours.
Residual impacts:	Minor, limited to isolated toad movement across developed areas; no population-level effects anticipated.
Cumulative impact post mitigation:	Very low

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-)	
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Southern Adder**	
Potential impact	Ongoing persecution and roadkill near dwellings; edge effects on refugia.	
Nature of impact:	Negative	
Extent and duration of impact:	Site-local; long term	
Consequence of impact or risk:	Increased human activity and vehicular movement along access routes elevate the risk of direct mortality through roadkill or persecution of snakes perceived as dangerous. Subtle habitat alteration (e.g., reduced refugia, compacted soils, and garden management) may lower local occupancy in suitable edge habitats.	
Probability of occurrence:	Likely; occasional encounters expected where remnant natural or open space areas occur adjacent to development.	
Degree to which the impact may cause irreplaceable loss of resources:	Low – Medium	
Degree to which the impact can be reversed:	Moderate – population recovery and recolonisation possible if human-snake conflict is reduced and habitat edges rehabilitated.	
Indirect impacts:	Loss of ecological function (predator role in small mammal control); Displacement of individuals into suboptimal areas due to disturbance; Reduction of local biodiversity resilience along the urban edge.	
Cumulative impact prior to mitigation:	Medium – adds incrementally to regional pressures from urban expansion, road networks, and human intolerance of snakes.	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High	
Degree to which the impact can be avoided:	Medium	
Degree to which the impact can be managed:	Medium	
Degree to which the impact can be mitigated:	High	
Proposed mitigation:	→ Conduct supervised vegetation clearance with relocation of snakes and refugia where possible. → Retain or recreate rock piles, woody debris, and shrub thickets as refugia. → Educate contractors and residents about the conservation importance of Southern Adder and provide protocols for safe handling. → Impose strict speed limits on internal tracks to reduce roadkill risk. → Maintain functional fynbos structure with alien clearing and fire in line with ecological cycles.	
Residual impacts:	Occasional snake mortality may still occur but at low frequency; local populations expected to persist regionally.	
Cumulative impact post mitigation:	Low - Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)

POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Mute Winter Katydid**	
Potential impact	Trampling and gardening degrade occupied patches; edge stress.	
Nature of impact:	Negative	
Extent and duration of impact:	Site – local; long – term	
Consequence of impact or risk:	The loss or degradation of natural vegetation within garden edges and open space areas could reduce the availability of microhabitats for katydid populations. Increased foot traffic, mowing, and landscaping activities may lead to localized population collapse in small remnant patches due to the species' limited mobility and habitat specificity.	
Probability of occurrence:	Medium – localized degradation of habitat patches is likely without management controls.	
Degree to which the impact may cause irreplaceable loss of resources:	Low to Medium – potential loss of individuals or small local populations, though broader populations remain viable in surrounding natural areas.	
Degree to which the impact can be reversed:	Moderate – recolonization possible if vegetation structure and quality are restored in buffer and open space areas.	
Indirect impacts:	Reduction in acoustic diversity and ecological balance within natural areas. Diminished invertebrate prey availability for small faunal species. Cumulative degradation of marginal habitats over time.	
Cumulative impact prior to mitigation:	Contributes to the regional decline of habitat-dependent invertebrates	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High	
Degree to which the impact can be avoided:	Low	
Degree to which the impact can be managed:	Low – medium	
Degree to which the impact can be mitigated:	Medium	
Proposed mitigation:	→ Relocate the one planned dwelling and associated infrastructure outside a 50 m no-go buffer surrounding mapped katydid habitat. → Avoid hard road surface construction → Mark and protect occupied patches as no-go areas during and after construction. → Prohibit mowing, gardening or herbicide or pesticide use within buffers. → Regularly survey katydid populations post-construction to verify persistence and recolonisation.	
Residual impacts:	Low chronic edge effects remain.	
Cumulative impact post mitigation:	Low – Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)

DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	N/A
Nature of impact:	-
Extent and duration of impact:	-
Consequence of impact or risk:	-
Probability of occurrence:	-
Degree to which the impact may cause irreplaceable loss of resources:	-
Degree to which the impact can be reversed:	-
Indirect impacts:	-
Cumulative impact prior to mitigation:	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-
Degree to which the impact can be avoided:	-
Degree to which the impact can be managed:	-
Degree to which the impact can be mitigated:	-
Proposed mitigation:	-
Residual impacts:	-
Cumulative impact post mitigation:	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-

ALTERNATIVE 3 (PREFERRED)

- Infrastructure and buildings above the 5m contour
- Only 1 jetty and slipway included
- Site plan amended to include the Faunal No-Go area

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Socioeconomic impacts**
Potential Impact	Job creation during the development / construction phase
Nature of impact:	Positive
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Improved livelihoods for the local community
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	House provisions and job creation during construction phase
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High Positive
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	1. Ensure labour force is sourced locally as far as possible. 2. Consider gender balance during when sourcing labour.
Residual impacts:	Improved livelihoods and skill transfer
Cumulative impact post mitigation:	Job creation and skill transfer to local community
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High Positive**

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Visual impacts**
Potential Impact	Visual impacts of construction site and construction activities.
Nature of impact:	Negative
Extent and duration of impact:	Local; short-term
Consequence of impact or risk:	Partial loss of vegetation being replaced by concrete; as well as visibility of the construction activities.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	Irreversible

Indirect impacts:	None
Cumulative impact prior to mitigation:	Visual impacts associated with construction.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Good design approved by local authority. → Good housekeeping of construction site and working areas. → Screen the visual elements of site construction camp with netting. → Locate the site camp in a transformed area. Not on proposed Open Space. → Site officer to walk the site on a daily basis to check for general site aesthetics and visual impacts, particularly prior to weekends and holidays. → Officer to ensure that waste and batching areas are correctly screened and secured to prevent spread by wind, rain or animals.
Residual impacts:	Change of sense of place due to construction activities and construction workers.
Cumulative impact post mitigation:	Typical visual impacts associated with a construction site
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low Negative**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Dust impacts**
Potential Impact	Dust generated from site clearing and site preparation.
Nature of impact:	Negative
Extent and duration of impact:	Local, short term
Consequence of impact or risk:	Visual and health impacts Nuisance for residents adjacent to the site.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Potential for reduced visibility in general area.
Cumulative impact prior to mitigation:	Dust may be generated as a result of earthmoving activities required for construction and development.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High

Proposed mitigation:	→ Maintain ground cover for as long as possible to reduce the total surface area exposed to wind. Do not clear entire plots and rather clear building sites only. → Ensure vehicle speed limits on site are kept to a minimum. → Delivery vehicles to keep loads covered. → Cover fine material stockpiles. → Wet dry and dusty surfaces using non-potable water. → Staff to wear correct PPE if dust is generated for long periods. Road surfaces to be swept and kept clean of sand and fine materials.
Residual impacts:	None
Cumulative impact post mitigation:	Dust generated during construction, mitigation successful.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very-Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Noise impacts**
Potential Impact	Noise generated by vehicles and machinery during construction phase.
Nature of impact:	Negative
Extent and duration of impact:	Local, short term
Consequence of impact or risk:	Noise disturbance to transient receptors, i.e. motorists, pedestrians, residents.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Will not impact on resources
Degree to which the impact can be reversed:	High
Indirect impacts:	None
Cumulative impact prior to mitigation:	Noise from construction works
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	Medium - High
Degree to which the impact can be managed:	Medium - High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Limit noise levels (e.g. install and maintain silencers on machinery) → Provide protective wear for workers i.e. ear plugs. → Ensure that construction vehicles and machinery are maintained regularly to reduce noise generation. → Restrict construction to normal work hours.
Residual impacts:	None
Cumulative impact post mitigation:	Typical noise impacts associated with a construction site.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low Negative

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Botanical/Ecological Impact**
Potential Impact	Loss of terrestrial vegetation with low sensitivity above the 5 m contour and loss of riparian vegetation with medium sensitivity at the river i.e. below 5 m contour.
Nature of impact:	Clearing of natural vegetation
Extent and duration of impact:	The vegetation clearing would affect the undescribed shrubland vegetation within the footprint of the proposed residences and riparian zone at the location of the jetties and slipways.
Consequence of impact or risk:	Low impact on terrestrial vegetation and medium impact on riparian vegetation.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low
Indirect impacts:	None identified
Cumulative impact prior to mitigation:	Medium Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium Negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Moderate
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	• Avoidance of the riparian zone to reduce ecological impacts. • Existing roads would be used to avoid unnecessary disturbances to the environment. • Only one jetty and one slipway would be constructed. Clearing of alien invasive plant species.
Residual impacts:	Low Negative
Cumulative impact post mitigation:	Low negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Faunal landscape connectivity**
Potential Impact	Corridor narrowing (±30% of 12 ha); fencing/driveways; lighting; alien ingress which is greater sensitivity than the preferred.
Nature of impact:	Negative, direct & indirect. Negative, direct & indirect. – building pads, driveways, fences and lighting physically narrow or break movement strips; disturbance increases avoidance of humanised edges.
Extent and duration of impact:	Site-local; long-term

Consequence of impact or risk:	Moderate consequence due to potential reduction in functional connectivity across the site and risk to species reliant on movement between terrestrial and wetland habitats.
Probability of occurrence:	High
Degree to which the impact may cause irreplaceable loss of resources:	Low to Medium — loss is localised and does not remove the entire corridor function due to retention of ~70% of the property in a natural state.
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Increased lighting and noise disturbance, potential predation by domestic pets, and spread of alien vegetation reducing habitat quality and permeability.
Cumulative impact prior to mitigation:	Adds to ongoing fragmentation pressure along the Klein River corridor and Agulhas Limestone Fynbos ecosystem
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ Maintain a continuous natural corridor across at least 70% of the property to allow free movement between the Klein River and adjacent upland habitats. → Prohibit impermeable fencing; if fences are required, ensure wildlife-permeable design (≥30 cm ground clearance, no mesh smaller than 100×100 mm). → Consolidate infrastructure and driveways to reduce fragmentation and maintain open strips for fauna. → Actively rehabilitate degraded strips post-construction and manage alien regrowth to preserve corridor functionality.
Residual impacts:	Edge effects persist but functional corridor retained if measures embedded.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Black Harrier**
Potential Impact	Habitat loss/fragmentation within potential territories; construction disturbance.
Nature of impact:	Negative.
Extent and duration of impact:	Local; long-term
Consequence of impact or risk:	Reduction of available foraging ground within a landscape that supports a regionally important population; minor contribution to broader cumulative loss of lowland fynbos habitat.

Probability of occurrence:	High
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Irreversible
Indirect impacts:	Loss of hunting/possible nesting areas in the footprint; construction activity and machinery increase flush/disturbance risk.
Cumulative impact prior to mitigation:	Medium – High
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low – Medium
Degree to which the impact can be mitigated:	Low – Medium
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and river edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the river to prevent disorientation or displacement of river-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of river-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Displacement risk reduced but not eliminated; foraging persists in retained strips.
Cumulative impact post mitigation:	Medium
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium (-)**
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Marsh Harrier**
Potential Impact	Dwelling slightly closer to estuary increases sensitivity during works.
Nature of impact:	Negative
Extent and duration of impact:	Local; short-term
Consequence of impact or risk:	Potential temporary displacement of foraging individuals and reduced local habitat use during construction.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Degree to which the impact can be reversed:	Irreversible
Indirect impacts:	Disturbance to associated estuarine bird species; temporary reduction in foraging efficiency; possible increase in predation pressure or displacement from preferred sites.

Cumulative impact prior to mitigation:	Adds minor short-term disturbance to existing pressures along the Klein River from human activity and nearby land uses	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	
Degree to which the impact can be avoided:	Low – Medium	
Degree to which the impact can be managed:	Medium	
Degree to which the impact can be mitigated:	Medium	
Proposed mitigation:	→ Reduce proposed jetties from two to a single jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.	
Residual impacts:	Local residual disturbance remains	
Cumulative impact post mitigation:	Low – Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE		
Potential impact and risk:	**Denham's bustard**	
Potential Impact	Temporary disturbance near estuary still immaterial for bustard.	
Nature of impact:	Negative	
Extent and duration of impact:	Local; short-term	
Consequence of impact or risk:	The species is wide-ranging and unlikely to be resident; temporary displacement from foraging areas possible but insignificant to regional population.	
Probability of occurrence:	Low	
Degree to which the impact may cause irreplaceable loss of resources:	Low	
Degree to which the impact can be reversed:	High	
Indirect impacts:	Brief disturbance to foraging individuals; short-term reduction in local activity; potential short-lived avoidance of construction areas.	
Cumulative impact prior to mitigation:	Low	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low	
Degree to which the impact can be avoided:	High	
Degree to which the impact can be managed:	High	
Degree to which the impact can be mitigated:	High	

Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very- Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very – Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Southern Black Korhaan**
Potential Impact	Loss/ disturbance to small, patchy suitable area; construction noise.
Nature of impact:	Negative;
Extent and duration of impact:	Site- Local
Consequence of impact or risk:	Minor local habitat loss and temporary disturbance but given the species' mobility and limited use of the site, long-term effects are minimal.
Probability of occurrence:	Medium
Degree to which the impact may cause irreplaceable loss of resources:	The affected patches are not unique or critical to the regional population and represent marginal habitat.
Degree to which the impact can be reversed:	Irreversible
Indirect impacts:	Temporary displacement from foraging areas, possible avoidance of construction zone, and increased risk of disturbance from noise and human presence.
Cumulative impact prior to mitigation:	Adds slightly to the overall decline in available open habitat across the Overberg region but at a negligible scale.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Medum
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones
Residual impacts:	Reduced local habitat availability; regional persistence unaffected
Cumulative impact post mitigation:	Low — no significant contribution to regional cumulative impacts on the species.

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

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Great White Pelican**
Potential Impact	Construction disturbance: proximity change immaterial ecologically; Disturbance of foraging and roosting birds near reed margins and river edges.
Nature of impact:	Negative
Extent and duration of impact:	Site-Local; short-term
Consequence of impact or risk:	The species forages and roosts within the larger Klein River and will not be dependent on, or significantly affected by, site-specific activities.
Probability of occurrence:	Low to Medium — individuals may occasionally overfly or rest nearby but are unlikely to be directly disturbed given their broad use of the river.
Degree to which the impact may cause irreplaceable loss of resources:	Very Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Brief flushing of individuals if present during noisy works; minimal and temporary reduction in local use of the estuary edge.
Cumulative impact prior to mitigation:	Low – adds negligibly to broader watercourse human activity impacts; no measurable contribution to population-level effects.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the watercourse to prevent disorientation or displacement of river-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of watercourse edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very- Low (-)

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Martial Eagle**
Potential Impact	Short-term disturbance to overflying birds due to construction activity, noise, and increased human presence.
Nature of impact:	Negative
Extent and duration of impact:	Site-local; short-term
Consequence of impact or risk:	Minor disturbance of flight paths and foraging patterns of transient individuals; negligible long-term effect given absence of nesting or core foraging habitat within the site.
Probability of occurrence:	Low – species occurs occasionally as a wide-ranging overflying raptor, with limited site-specific use.
Degree to which the impact may cause irreplaceable loss of resources:	Low – no critical breeding, roosting, or feeding resources are located within the development footprint.
Degree to which the impact can be reversed:	High – species will resume use of airspace once construction activity ceases.
Indirect impacts:	Minor, temporary displacement from immediate airspace; no measurable population-level effects.
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low (-)

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Caspian Tern**
Potential Impact	Temporary disturbance during works; no breeding on site.
Nature of impact:	Negative
Extent and duration of impact:	Site; short-term
Consequence of impact or risk:	Minor disturbance to foraging or roosting individuals using the nearby river margins. No loss of breeding habitat or long-term displacement expected
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low

Degree to which the impact can be reversed:	High
Indirect impacts:	Temporal avoidance of the estuary edge immediately adjacent to the site due to construction-related noise and activity.
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. - Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. - Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species. - Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). - Secure long-term management of river-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Western Leopard Toad**
Potential Impact	Construction disturbance; occasional roadkill risk during clearing/earthworks
Nature of impact:	Negative
Extent and duration of impact:	Site-local; short-medium term
Consequence of impact or risk:	Construction activities may disturb individual toads sheltering in vegetation or soil cavities and increase the likelihood of mortality from machinery and vehicle movement. As the species does not breed on site, the impact is limited to temporary displacement or loss of individuals rather than population-level effects.
Probability of occurrence:	Likely - the species may occur sporadically within the site, especially following rainfall or during nocturnal movements.
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High – once construction activities cease and vegetation recovers, the site can again support occasional movement or foraging by the species.
Indirect impacts:	Potential temporary avoidance of the area by amphibians due to vibration, noise, and compaction of soils; increased risk of mortality from vehicle movement on newly constructed access roads.
Cumulative impact prior to mitigation:	Medium

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Medium
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Shape access tracks with shallow U/V profiles; include amphibian-safe drainage. → Prohibit pesticides and herbicides on site. → Fit escape ramps or "toad savers" in swimming pools. → Retain indigenous groundcover and vegetated strips between dwellings to support terrestrial dispersal. → Provide residents with awareness material on toad movement periods and safe behaviours.
Residual impacts:	Low – with mitigation, the impact will be temporary and reversible, and individuals are expected to reoccupy the area post-construction
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**Southern Adder**
Potential Impact	Direct loss of refugia during clearing; persecution risk; roadkill during works.
Nature of impact:	Negative
Extent and duration of impact:	Site -local; long-term
Consequence of impact or risk:	Loss of individual snakes; potential local population disturbance; minor contribution to cumulative population declines in the broader area.
Probability of occurrence:	Likely - snakes are likely present in vegetated and undisturbed patches, especially during warmer months.
Degree to which the impact may cause irreplaceable loss of resources:	Low – individual snakes may be lost, but local population is likely resilient if habitat patches are retained.
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Increased predation risk on local fauna due to displacement; potential ecosystem imbalances if snake populations decline in isolated patches.
Cumulative impact prior to mitigation:	Medium
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High
Degree to which the impact can be avoided:	Low -Medium
Degree to which the impact can be managed:	Low – Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ Conduct supervised vegetation clearance with relocation of snakes and refugia where possible. → Retain or recreate rock piles, woody debris, and shrub thickets as refugia.

	→ Educate contractors and residents about the conservation importance of Southern Adder and provide protocols for safe handling. → Impose strict speed limits on internal tracks to reduce roadkill risk. → Maintain functional fynbos structure with alien clearing and fire in line with ecological cycles.	
Residual impacts:	Localized disturbance: a small number of individuals may still be lost	
Cumulative impact post mitigation:	Low Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE		
Potential impact and risk:	**Mute Winter Katydid**	
Potential Impact	Direct loss of occupied microhabitats; local collapse risk due to low mobility.	
Nature of impact:	Negative	
Extent and duration of impact:	Site – local; long-term	
Consequence of impact or risk:	Loss of individuals and microhabitats may lead to local population decline; could disrupt local invertebrate community structure.	
Probability of occurrence:	Definite; species is present in dense vegetation patches and leaf litter.	
Degree to which the impact may cause irreplaceable loss of resources:	Medium - while individuals are lost, the species is likely to persist in adjacent undisturbed habitats.	
Degree to which the impact can be reversed:	Moderate – habitat may regenerate, allowing recolonization over time, but recovery is slow due to low mobility.	
Indirect impacts:	Reduced prey availability for local insectivorous birds and small reptiles; potential minor alteration of local litter decomposition dynamics.	
Cumulative impact prior to mitigation:	High – combined with other small-scale habitat disturbances, could lead to local declines in sensitive invertebrate populations.	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High	
Degree to which the impact can be avoided:	Low	
Degree to which the impact can be managed:	Low	
Degree to which the impact can be mitigated:	Low – Medium	
Proposed mitigation:	→ Keep development outside the 50 m no-go buffer surrounding mapped katydid habitat. → Avoid hard road surface construction → Mark and protect occupied patches as no-go areas during and after construction. → Prohibit mowing, gardening or herbicide or pesticide use within buffers. → Regularly survey katydid populations post-construction to verify persistence and recolonisation.	

Residual impacts:	Localized population loss; some microhabitats permanently altered but overall local population expected to persist.	
Cumulative impact post mitigation:	Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Socio-economic impacts**	
Potential impact	Access to permanent employment for the community individuals through housekeeping and gardening.	
Nature of impact:	Positive	
Extent and duration of impact:	Local; short-term	
Consequence of impact or risk:	Improved livelihoods	
Probability of occurrence:	Definite	
Degree to which the impact may cause irreplaceable loss of resources:	N/A	
Degree to which the impact can be reversed:	N/A	
Indirect impacts:	N/A	
Cumulative impact prior to mitigation:	Access to employment for the community during the operational phase; Job creation;	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High	
Degree to which the impact can be avoided:	N/A	
Degree to which the impact can be managed:	High	
Degree to which the impact can be mitigated:	N/A	
Proposed mitigation:	1. Ensure labour force is sourced locally as far as possible. 2. Consider gender balance during when sourcing labour	
Residual impacts:	Improved livelihoods	
Cumulative impact post mitigation:	Improved livelihoods	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High Positive**	
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Botanical/Ecological Impacts**	
Potential impact	→ Clearing of terrestrial vegetation beyond the limit of the footprints of the residences to limit danger of wildfires. → Slow and imperceptible loss of natural habitat due presence of residents. → Loss of natural vegetation → Development of residences should be above the 5 m contours and should wherever possible avoid well-established old trees, particularly of wild olive (*Olea europaea subsp. cuspidata*)	

	→ High – The impact within the sensitive riparian zone would be limited.
Nature of impact:	Negative
Extent and duration of impact:	Local; Long-term
Consequence of impact or risk:	Loss of natural vegetation
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Low
Indirect impacts:	None identified
Cumulative impact prior to mitigation:	Low Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Moderate
Degree to which the impact can be mitigated:	High – The impact within the sensitive riparian zone would be limited.
Proposed mitigation:	Development of residences should be above the 5 m contours and should wherever possible avoid well-established old trees, particularly of wild olive *(Olea europaea subsp. cuspidata)*
Residual impacts:	Low Negative
Cumulative impact post mitigation:	Low Negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Faunal landscape connectivity**
Potential impact	Estuary-edge lighting/traffic marginally increases nightly barrier effect, potentially disrupting movement of nocturnal fauna such as amphibians, small mammals, and invertebrates.
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long-term
Consequence of impact or risk:	Reduced movement and dispersal of fauna; potential localized population fragmentation; may limit access to breeding, foraging, or refuge sites for sensitive species
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Degree to which the impact can be reversed:	Low
Indirect impacts:	Potential increase in roadkill incidents; minor alterations to local predator-prey interactions; some species may shift activity patterns, affecting ecological processes.
Cumulative impact prior to mitigation:	Medium – combined with habitat fragmentation and other developments, there may be small cumulative effects on local faunal connectivity.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium
Degree to which the impact can be avoided:	Low – Medium
Degree to which the impact can be managed:	Low – Medium

Degree to which the impact can be mitigated:	Medium	
Proposed mitigation:	→ Maintain a continuous natural corridor across at least 70% of the property to allow free movement between the Klein River and adjacent upland habitats. → Prohibit impermeable fencing; if fences are required, ensure wildlife-permeable design (≥30 cm ground clearance, no mesh smaller than 100×100 mm). → Consolidate infrastructure and driveways to reduce fragmentation and maintain open strips for fauna. → Actively rehabilitate degraded strips post-construction and manage alien regrowth to preserve corridor functionality. General Site-wide mitigation → Restrict built infrastructure to ~30% of the 12 ha property. → Cap development at three dwellings, as assessed in this application. → Adopt dark-sky compliant lighting (low-spectrum, full cut-off fittings, shield estuary-facing lights) to reduce disturbance to nocturnal fauna and birds. → Enforce pet curfews at night and discourage free-ranging cats and dogs to limit predation and disturbance to birds, reptiles and amphibians. → Implement a formal alien clearing and follow-up programme across retained natural areas to prevent decline in functional integrity. → Stewardship or conservation status: Consider assigning all retained natural habitat (~70% of site) to a formal conservation status, such as a biodiversity stewardship agreement, to ensure long-term ecological management.	
Residual impacts:	Low residual illumination pressure at water edge; managed.	
Cumulative impact post mitigation:	Low – Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Black Harrier**	
Potential impact	Slightly higher night lighting effect near water edge without controls.	
Nature of impact:	Negative	
Extent and duration of impact:	Local; long-term	
Consequence of impact or risk:	Estuary facing lighting marginally increases night-time avoidance.	
Probability of occurrence:	Definite	
Degree to which the impact may cause irreplaceable loss of resources:	Low – effects are behavioural and reversible; populations unlikely to be directly affected.	
Degree to which the impact can be reversed:	High – if lighting is managed, the species can resume normal use of the area.	

Indirect impacts:	Temporary displacement may slightly increase predation pressure on other prey species elsewhere; minor alteration of local hunting patterns.	
Cumulative impact prior to mitigation:	Low to Medium – minor additive effect if combined with other developments along river edges.	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	
Degree to which the impact can be avoided:	Medium	
Degree to which the impact can be managed:	High	
Degree to which the impact can be mitigated:	High	
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and river edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the estuary to prevent disorientation or displacement of river-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements	
Residual impacts:	Minor behavioural avoidance of lit areas; no measurable impact on population viability expected.	
Cumulative impact post mitigation:	Low	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Marsh Harrier**	
Potential impact	Night lighting near river marginally increases disturbance pulses	
Nature of impact:	Negative	
Extent and duration of impact:	Site-local; long-term	
Consequence of impact or risk:	Increased illumination near estuary edges may cause temporary avoidance or startle responses during nocturnal roosting	
Probability of occurrence:	Likely	
Degree to which the impact may cause irreplaceable loss of resources:	Low – disturbance may alter local activity patterns but is unlikely to lead to loss of breeding or feeding habitat.	
Degree to which the impact can be reversed:	High – reducing lighting or implementing shielding can rapidly reverse behavioural effects.	
Indirect impacts:	Minor shifts in prey distribution; temporary displacement of harriers to darker zones; potential increased competition in adjacent habitats.	
Cumulative impact prior to mitigation:	Additive with other lighting sources along the estuary, leading to gradual reduction in undisturbed foraging zones	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium	
Degree to which the impact can be avoided:	Medium	
Degree to which the impact can be managed:	High	

Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and river edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the river to prevent disorientation or displacement of river-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Minimal behavioural disturbance: local birds may continue to avoid small lit patches
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Denham's bustard**
Potential impact	Human presence negligible effect due to habitat mismatch.
Nature of impact:	Negative
Extent and duration of impact:	Local site; long-term
Consequence of impact or risk:	The site's altered land cover and residential use reduce habitat suitability for Denham's Bustard, a species that prefers extensive open grasslands and agricultural fields. Occasional overflight or transient individuals may avoid the immediate area due to human activity and structures.
Probability of occurrence:	Probable: the species may occasionally traverse the area but is unlikely to utilize it regularly for foraging or breeding.
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Partially reversable
Indirect impacts:	None expected beyond localized avoidance; negligible influence on regional population dynamics or habitat function.
Cumulative impact prior to mitigation:	Low – surrounding landscapes retain more suitable open habitat; the development contributes minimally to regional habitat loss.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment.

	→ Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones.
Residual impacts:	Negligible; the species may continue to avoid the developed site, but no population-level impacts are expected.
Cumulative impact post mitigation:	Very low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Southern Black Korhaan**
Potential impact	Edge disturbance (people/pets) reduces use of marginal habitat
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long-term
Consequence of impact or risk:	The proximity of human activity, domestic pets, and increased noise or movement near natural edges may deter Southern Black Korhaan from using adjacent open habitat for foraging or breeding.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low – disturbance results mainly in displacement rather than permanent habitat loss; suitable habitat persists beyond the site
Degree to which the impact can be reversed:	Moderate to High – behavioural avoidance may lessen over time if disturbance is minimized and buffer vegetation is maintained.
Indirect impacts:	Potential increase in predation risk if birds are displaced to more exposed or disturbed areas; Disturbance may reduce breeding success in nearby territories; Possible secondary effects on other ground-nesting bird species
Cumulative impact prior to mitigation:	Combined with similar developments, disturbance could contribute to gradual contraction of habitat use in peri-urban areas.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Medium
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones
Residual impacts:	Minor behavioural avoidance near edges may persist, but the broader local population will remain unaffected.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)

POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Great White Pelican**
Potential impact	Low-level displacement possible but minor.
Nature of impact:	Negative
Extent and duration of impact:	Site – local; long-term
Consequence of impact or risk:	The development may result in minor, localized avoidance by Great White Pelicans of nearby areas due to human activity, noise, or lighting, particularly during roosting or flight over the estuary.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Minimal; temporary shifts in local flight paths or loafing sites may occur but with no broader ecological consequence.
Cumulative impact prior to mitigation:	Low – cumulative effects across the region are minor given the species' adaptability and extensive foraging range.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and river edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Negligible; the species will continue to utilize the broader estuary system with minimal behavioural adjustments.
Cumulative impact post mitigation:	Very low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Martial Eagle**
Potential impact	Minimal chronic effect with residents.
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long-term

Consequence of impact or risk:	Occasional overflight or peripheral foraging by Martial Eagles may decline slightly due to increased human presence and movement.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High – behavioural avoidance is reversible; the species may resume use if disturbance decreases over time.
Indirect impacts:	Possible minor avoidance of localized areas with high human activity; Slight shift in local hunting patterns toward quieter open habitats
Cumulative impact prior to mitigation:	Localized effects from this and other developments contribute minimally to regional Martial Eagle population pressures, which are primarily driven by large-scale land use changes and powerline electrocution.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity. → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment. → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones
Residual impacts:	Negligible; the species may exhibit mild avoidance of the immediate development footprint, but no significant effect on population dynamics or habitat integrity is anticipated.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very - Low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Caspian Tern**
Potential impact	Low-level disturbance; maintain buffer to estuary.
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long -term
Consequence of impact or risk:	Minor displacement of individuals occasionally foraging or roosting near the estuary mouth could occur due to increased human presence and recreational activity.
Probability of occurrence:	Possible
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Temporary avoidance of the adjacent river fringe during periods of high recreational use.

	Potential minor shifts in roosting patterns within the broader watercourse system.
Cumulative impact prior to mitigation:	Development contributes slightly to overall estuarine disturbance pressures but does not affect critical habitat or breeding colonies.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses. → Maintain a no-work buffer at reed margins and river edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns. → Shield and direct lighting away from the river to prevent disorientation or displacement of estuary-dependent species. → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans). → Secure long-term management of river-edge natural habitat through stewardship or conservation agreements.
Residual impacts:	Negligible – disturbance effects will be minimal if the buffer is maintained and access controls are implemented.
Cumulative impact post mitigation:	Very low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Western Leopard Toad**
Potential impact	Edge effects (lighting, pets, pesticides) on terrestrial movement.
Nature of impact:	Negative
Extent and duration of impact:	Site – local; long term
Consequence of impact or risk:	Artificial lighting, domestic pets, and pesticide use may interfere with the movement and nocturnal activity of the Western Leopard Toad, particularly during breeding migrations or foraging. This could result in localized mortality or avoidance of the site's margins, although no core breeding habitat occurs within the development footprint.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High – reduced lighting and pet control can restore suitable edge conditions over time.
Indirect impacts:	Possible reduction in amphibian abundance in gardens and open spaces due to pesticide use; Increased risk of predation by domestic animals; Minor disruption to nocturnal movement corridors.

Cumulative impact prior to mitigation:	Medium – incremental contribution to regional habitat fragmentation
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Medium – High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	→ Shape access tracks with shallow U/V profiles; include amphibian-safe drainage. → Prohibit pesticides and herbicides on site. → Fit escape ramps or "toad savers" in swimming pools. → Retain indigenous groundcover and vegetated strips between dwellings to support terrestrial dispersal. → Provide residents with awareness material on toad movement periods and safe behaviours.
Residual impacts:	Minor, limited to isolated toad movement across developed areas; no population-level effects anticipated.
Cumulative impact post mitigation:	Very low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk:	**Southern Adder**
Potential impact	Ongoing persecution and roadkill near dwellings; edge effects on refugia.
Nature of impact:	Negative
Extent and duration of impact:	Site-local; long term
Consequence of impact or risk:	Increased human activity and vehicular movement along access routes elevate the risk of direct mortality through roadkill or persecution of snakes perceived as dangerous. Subtle habitat alteration (e.g., reduced refugia, compacted soils, and garden management) may lower local occupancy in suitable edge habitats.
Probability of occurrence:	Likely; occasional encounters expected where remnant natural or open space areas occur adjacent to development.
Degree to which the impact may cause irreplaceable loss of resources:	Low – Medium
Degree to which the impact can be reversed:	Moderate – population recovery and recolonisation possible if human-snake conflict is reduced and habitat edges rehabilitated.
Indirect impacts:	Loss of ecological function (predator role in small mammal control); Displacement of individuals into suboptimal areas due to disturbance; Reduction of local biodiversity resilience along the urban edge.
Cumulative impact prior to mitigation:	Medium – adds incrementally to regional pressures from urban expansion, road networks, and human intolerance of snakes.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium

Degree to which the impact can be mitigated:	High	
Proposed mitigation:	→ Conduct supervised vegetation clearance with relocation of snakes and refugia where possible. → Retain or recreate rock piles, woody debris, and shrub thickets as refugia. → Educate contractors and residents about the conservation importance of Southern Adder and provide protocols for safe handling. → Impose strict speed limits on internal tracks to reduce roadkill risk. → Maintain functional fynbos structure with alien clearing and fire in line with ecological cycles.	
Residual impacts:	Occasional snake mortality may still occur but at low frequency; local populations expected to persist regionally.	
Cumulative impact post mitigation:	Low - Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
POST-CONSTRUCTION PHASE		
Potential impact and risk:	**Mute Winter Katydid**	
Potential impact	Trampling and gardening degrade occupied patches; edge stress.	
Nature of impact:	Negative	
Extent and duration of impact:	Site – local; long – term	
Consequence of impact or risk:	The loss or degradation of natural vegetation within garden edges and open space areas could reduce the availability of microhabitats for katydid populations. Increased foot traffic, mowing, and landscaping activities may lead to localized population collapse in small remnant patches due to the species' limited mobility and habitat specificity.	
Probability of occurrence:	Medium – localized degradation of habitat patches is likely without management controls.	
Degree to which the impact may cause irreplaceable loss of resources:	Low to Medium – potential loss of individuals or small local populations, though broader populations remain viable in surrounding natural areas.	
Degree to which the impact can be reversed:	Moderate – recolonization possible if vegetation structure and quality are restored in buffer and open space areas.	
Indirect impacts:	Reduction in acoustic diversity and ecological balance within natural areas. Diminished invertebrate prey availability for small faunal species. Cumulative degradation of marginal habitats over time.	
Cumulative impact prior to mitigation:	Contributes to the regional decline of habitat-dependent invertebrates	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium – High	
Degree to which the impact can be avoided:	Low	
Degree to which the impact can be managed:	Low – medium	
Degree to which the impact can be mitigated:	Medium	

Proposed mitigation:	→ Keep development outside the 50 m no-go buffer surrounding mapped katydid habitat. → Avoid hard road surface construction → Mark and protect occupied patches as no-go areas during and after construction. → Prohibit mowing, gardening or herbicide or pesticide use within buffers. → Regularly survey katydid populations post-construction to verify persistence and recolonisation.	
Residual impacts:	Low chronic edge effects remain.	
Cumulative impact post mitigation:	Low – Medium	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)

DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	N/A
Nature of impact:	-
Extent and duration of impact:	-
Consequence of impact or risk:	-
Probability of occurrence:	-
Degree to which the impact may cause irreplaceable loss of resources:	-
Degree to which the impact can be reversed:	-
Indirect impacts:	-
Cumulative impact prior to mitigation:	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-
Degree to which the impact can be avoided:	-
Degree to which the impact can be managed:	-
Degree to which the impact can be mitigated:	-
Proposed mitigation:	-
Residual impacts:	-
Cumulative impact post mitigation:	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-

NO – GO

→ Status quo is retained – property is not developed
→ Allows for risk for unauthorised / unregulated development
→ No scope of available job creation, skills transfer.
→ Management of the site limited in the absence of development.

SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

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

Terrestrial Animal Site Sensitivity Verification and Species Specialist Assessment Report

- → The assessment included a desktop study and site investigations, incorporating iNaturalist and GBIF records, reports, field guides, and scientific literature, as well as three site visits on 16, 25, and 26 August 2025.
- → Surveys combined meandering search effort on foot and 10-minute point surveys to record species and signs of presence (sounds, tracks, scats), with a focus on Species of Conservation Concern (SCC).
- → Five distinct faunal habitat types were identified: open fynbos scrubland, dense fynbos scrubland, Phragmites reedbeds, Eucalyptus stands, and Kikuyu grass patches, each supporting varying assemblages of fauna.
- → The site supports a disproportionately high concentration of SCC, including confirmed records of the Mute Winter Katydid (Vulnerable), Western Leopard Toad (Endangered), and African Marsh Harrier, with additional SCC likely in the broader area of potential impact.
- → The Mute Winter Katydid population was concentrated in dense fynbos areas; 43 individuals were recorded, with a density of ~1.17 individuals per hectare; infrastructure was relocated to maintain a 50-metre buffer, and at least 70% of the property is recommended to remain undeveloped.
- → The Western Leopard Toad was confirmed near the main access road, with suitable wetland and estuarine fringe habitat nearby, requiring careful management of development interfaces.
- → The property functions as an ecological corridor, maintaining connectivity between the Kleinrivier estuary and surrounding fynbos habitats.
- → Even low-intensity residential development introduces irreversible disturbance and long-term edge effects; without mitigation, potential impacts are Medium to High.
- → With implementation of mitigation measures—including limiting development to three dwellings, applying the full mitigation hierarchy, relocating infrastructure away from SCC habitats, reducing jetty infrastructure, alien vegetation management, and long-term conservation management—impacts can be reduced to Low - Medium but cannot be fully eliminated. This is fully achieved by the current layout alternative.
- → Alternative 3, the preferred development option, is considered ecologically acceptable, resulting in Low-Medium impacts on terrestrial animal species and habitats.

Terrestrial Biodiversity Impact Assessment

- → A range of systematic conservation planning tools and biodiversity informants were consulted, including VEGMAP (SANBI 2024), the National Web-based Environmental Screening Tool, the Western Cape Biodiversity Spatial Plan (CapeNature, 2023), and the National Red List of Ecosystems, alongside site-specific field surveys and expert consultation.
- → VEGMAP indicated that the site comprises Agulhas Limestone Fynbos, classified as Critically Endangered, forming the basis for the WCBSP classification of the site as Critical Biodiversity Area 1 (CBA1) and the National Red List of Ecosystems' Critically Endangered designation.
- → The National Screening Tool rated the site as medium sensitivity for plant species and Very High for terrestrial biodiversity based on the assumed presence of Agulhas Limestone Fynbos.
- → Field verification conducted on 5 October 2025 confirmed that no limestone substrate is present and that the vegetation does not correspond to Agulhas Limestone Fynbos in substrate, structure, or species composition.
- → The site's vegetation is more similar to Eastern Rûens Shale Renosterveld, although not fully aligned with its typical description, and exhibits low botanical and terrestrial biodiversity sensitivity.

- → No plant species of conservation concern were recorded during field surveys, meaning the sensitivity ratings from desktop tools do not reflect the actual ecological conditions onsite.
- → The vegetation comprises two main sub-types: low-lying riparian floodplain dominated by dense Common Reed (*Phragmites australis),* buffalo grass (*Stenotaphrum secundatum*), scattered and multi-stemmed thickets including *Gymnosporia buxifolia, Plecostachys serpyllifolia, Senecio halimifolius, Searsia glauca, Searsia rehmanniana,* and occasional taller trees such as *Olea europaea subsp. cuspidata* and *Melianthus* major; and upland shrubland dominated by dense to mid-dense mid-high to tall shrubs including *Passerina corymbosa*, *Gnidia squarrosa, Muraltia spinosa*, with low shrubs, grasses, occasional thickets, and scattered wild olive trees.
- → Portions of the upland shrubland are moribund, with senescent and dying shrubs due to the absence of natural fire cycles.
- → Few bird and animal species were observed on-site, including Bokmakierie, Cape Robin-Chat, Karoo Prinia, and an adult Angulate Tortoise (*Chersina angulata*), with signs of Cape Porcupine (*Hystrix africaeaustralis*) activity recorded.
- → The National Screening Tool's Medium sensitivity rating for plant species and Very High rating for terrestrial biodiversity were found to be incorrect, as no Agulhas Limestone Fynbos occurs on site and the vegetation present is of low ecological sensitivity.
- → The Western Cape Biodiversity Spatial Plan classification of the property as CBA1 is disputed by the specialist, highlighting that the site's appropriate classification should be not higher than Ecological Support Area 2 (ESA2) or Other Natural Area (ONA).
- → Site Ecological Importance (SEI) was recalculated based on field observations, using low Conservation Importance, medium Functional Integrity, and low Receptor Resilience, resulting in a SEI rating of LOW, indicating the site can accommodate medium-impact development with mitigation.
- → The No-Go Alternative would result in no direct impacts, with vegetation and ecological processes remaining undisturbed.
- → Alternative 1, involving development below the 5 m contour, would result in low negative impacts during the development phase, with medium significance pre-mitigation; residual impacts remain medium negative during operation due to loss of low-sensitivity terrestrial and riparian vegetation.
- → Alternative 3, the preferred option above the 5 m contour using existing roads and paths, limits vegetation clearing, avoids the 5m contour area, reduces jetty and slipway infrastructure, and removes alien invasive plants; residual impact is reduced to low negative during development and low significance during operation.
- → Overall, Alternative 3 is considered the ecologically preferred development option with acceptable impacts of low negative impacts, provided that the mitigations measures recommended by the faunal specialist have been implemented and reflected in the new preferred layout.

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

Terrestrial Animal Site Sensitivity Verification and Species Specialist Assessment Report

Mitigation measures

General Site-Wide Mitigation

- → Restrict built infrastructure to ~30% of the 12-ha property.
- → Cap development at three dwellings, as assessed in this application.
- → Adopt dark-sky compliant lighting (low-spectrum, full cut-off fittings, shield estuary-facing lights) to reduce disturbance to nocturnal fauna and birds.

→ Enforce pet curfews at night and discourage free-ranging cats and dogs to limit predation and disturbance to birds, reptiles and amphibians.

→ Implement a formal alien clearing and follow-up programme across retained natural areas to prevent decline in functional integrity.

→ Consider assigning all retained natural habitat (~70% of site) to a formal conservation status, such as a biodiversity stewardship agreement, to ensure long-term ecological management.

Faunal Landscape Connectivity

→ Maintain a continuous natural corridor across at least 70% of the property to allow free movement between the Klein River and adjacent upland habitats.

→ Prohibit impermeable fencing; if fences are required, ensure wildlife-permeable design (≥30 cm ground clearance, no mesh smaller than 100×100 mm).

→ Consolidate infrastructure and driveways to reduce fragmentation and maintain open strips for fauna.

→ Actively rehabilitate degraded strips post-construction and manage alien regrowth to preserve corridor functionality.

Estuarine and Water-Associated Birds (African Marsh Harrier, Caspian Tern, Great White Pelican)

→ Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses.

→ Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns.

→ Lighting controls: Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species.

→ Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans).

→ Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.

Terrestrial SCC Birds (Southern Black Korhaan, Denham's Bustard)

→ Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity.

→ Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment.

→ Disturbance reduction: Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones.

Amphibians (Western Leopard Toad)

- → Shape access tracks with shallow U/V profiles; include amphibian-safe drainage.
- → Prohibit pesticides and herbicides on site.
- → Fit escape ramps or "toad savers" in swimming pools.
- → Retain indigenous groundcover and vegetated strips between dwellings to support terrestrial dispersal.
- → Provide residents with awareness material on toad movement periods and safe behaviours.

Reptiles (Southern Adder)

- → Pre-construction search and rescue: Conduct supervised vegetation clearance with relocation of snakes and refugia where possible.
- → Retain or recreate rock piles, woody debris, and shrub thickets as refugia.
- → Educate contractors and residents about the conservation importance of Southern Adder and provide protocols for safe handling.
- → Impose strict speed limits on internal tracks to reduce roadkill risk.
- → Maintain functional fynbos structure with alien clearing and fire in line with ecological cycles.

Invertebrates (Mute Winter Katydid, Other SCCs)

Mute Winter Katydid

- → Keep development outside the 50 m no-go buffer surrounding mapped katydid habitat – As implemented in **Alternative 3 (Preferred)**
- → Avoid hard road surface construction
- → Mark and protect occupied patches as no-go areas during and after construction.
- → Prohibit mowing, gardening or herbicide or pesticide use within buffers.
- → Regularly survey katydid populations post-construction to verify persistence and recolonisation.

Yellow-winged Agile Grasshopper

- → No targeted mitigation required as the species' specific habitat is absent; site-wide alien control and natural vegetation retention suffice.

Other SCC Invertebrates

- → Map and avoid patches supporting confirmed SCCs where possible.
- → Establish indicator taxa monitoring to detect changes in population presence or habitat quality.

→ Actively restore and reseed disturbed patches post decommissioning to return invertebrate habitat function.

Terrestrial Biodiversity Impact Assessment

→ Designing the development to stay above the 5 m contour to reduce ecological impacts.
→ Using existing roads and paths for access to minimize new disturbances to the environment.
→ Limiting infrastructure like slipways and jetties, as only one jetty per property is typically permitted and slipways are discouraged.
→ Clearing of alien invasive plant species.
→ Avoidance of the area below the 5m contour to reduce ecological impacts.
→ Existing roads would be used to avoid unnecessary disturbances to the environment.
→ Only one jetty and one slipway would be constructed.
→ Clearing of alien invasive plant species.
→ Development of residences should be above the 5 m contours and should wherever possible avoid well-established old trees, particularly of wild olive (*Olea europaea subsp. cuspidata*)

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.

Positive impacts

→ The proposed development will contribute to job creation during the construction phase for local labourers, including skilled and unskilled workers.

→ Once completed, the residential units and associated infrastructure may enhance local property values and encourage investment in the area.

→ The construction and maintenance of the slipways and jetties could support recreational activities.

Negative impacts

→ Short-term disturbances such as noise, dust, and increased traffic during the construction phase may affect neighbouring properties and community members.

→ Visual impacts along the watercourse edge due to the jetties, slipways, and residential structures could alter the natural landscape character of the area.

→ Human presence near the river may disturb local wildlife, which could reduce the quality of natural areas used by the community for recreation or aesthetic enjoyment.

→ If not managed carefully, there may be long-term environmental impacts that could indirectly affect community livelihoods linked to ecosystem services, such as water quality or watercourse health.

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

The potential impacts of climate change have been carefully considered in the planning and design of the proposed development. The preferred layout (Alternative 3) was selected as the most viable option because it situates all permanent

structures, including the two residential dwellings, above the 5 m contour and more than 100 m away from the High-Water Mark of the Klein Rivier. This strategic placement reduces the risk of flooding associated with future climate change-related events, including increased rainfall, sea-level rise, or extreme weather events that may affect the river. By locating the dwellings in this manner, the development safeguards both the structures and the future residents from potential flood impacts, while also minimizing ecological disturbance to the riparian zones. This climate-resilient approach ensures the long-term sustainability and safety of the development in response to changing environmental conditions.

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 findings and recommendations of the specialist studies were systematically integrated into the project planning and design process to inform the most appropriate mitigation measures and to ensure that potential environmental impacts associated with the proposed development are effectively managed. Specialist inputs, including the faunal and terrestrial biodiversity assessments, were used to identify sensitive environmental features, assess potential impacts associated with the layout alternatives assessed, and guide the refinement of the preferred development layout.

The faunal specialist assessment identified the presence of the Mute Winter Katydid within a specific portion of the site and highlighted the sensitivity of its habitat to direct disturbance and habitat loss. In response to these findings, the initial layout alternatives (Alternatives 1 and 2) were reassessed, as both involved the placement of a residential unit within the identified Katydid habitat. The specialist recommended the establishment of a 50 m buffer zone around the species' location and the relocation of infrastructure outside this buffer to avoid direct impacts. These recommendations directly informed the development of Alternative 3, which relocates the affected residential unit outside the Katydid habitat and associated buffer zone, thereby avoiding habitat loss and significantly reducing faunal impacts.

In addition, the faunal specialist recommended a reduction in the extent of watercourse infrastructure to limit disturbance to the riverine environment. While Alternatives 1 and 2 proposed the construction of two jetties and slipways, Alternative 3 was revised to include only one jetty and a single slipway. This reduction represents a substantial improvement over the earlier alternatives and results in decreased disturbance to the riverine habitat, reduced footprint below the 5 m contour, and lower potential impacts on riverine ecological processes.

The revised layout (Alternative 3) is further supported by the botanical specialist (refer to Appendix G1b).

Through the integration of specialist findings and recommendations, Alternative 3 was developed as a refined layout that prioritises avoidance of sensitive habitats, minimises the development footprint, and reduces infrastructure-related impacts. This integrated approach ensured that the proposed mitigation measures are site-specific, scientifically informed, and effective in reducing residual impacts to acceptable levels, thereby representing the most appropriate and practicable environmental option for the proposed development.

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

The mitigation hierarchy was systematically applied during the assessment of the layout alternatives to identify the best practicable environmental option for the proposed development. This process was informed by site-specific environmental sensitivities and constraints identified through specialist studies and baseline environmental assessments.

The application of the mitigation hierarchy followed the three primary steps of avoidance, minimisation, and rehabilitation, with the objective of protecting sensitive environmental features on site. Through the implementation of

mitigation measures recommended by the appointed specialists, the residual impacts associated with the proposed activities were reduced to below a medium significance level. As a result, the need for biodiversity offsets, which represent the final step of the mitigation hierarchy, was assessed and deemed unnecessary for this project.

Specifically, the mitigation hierarchy was applied as follows:

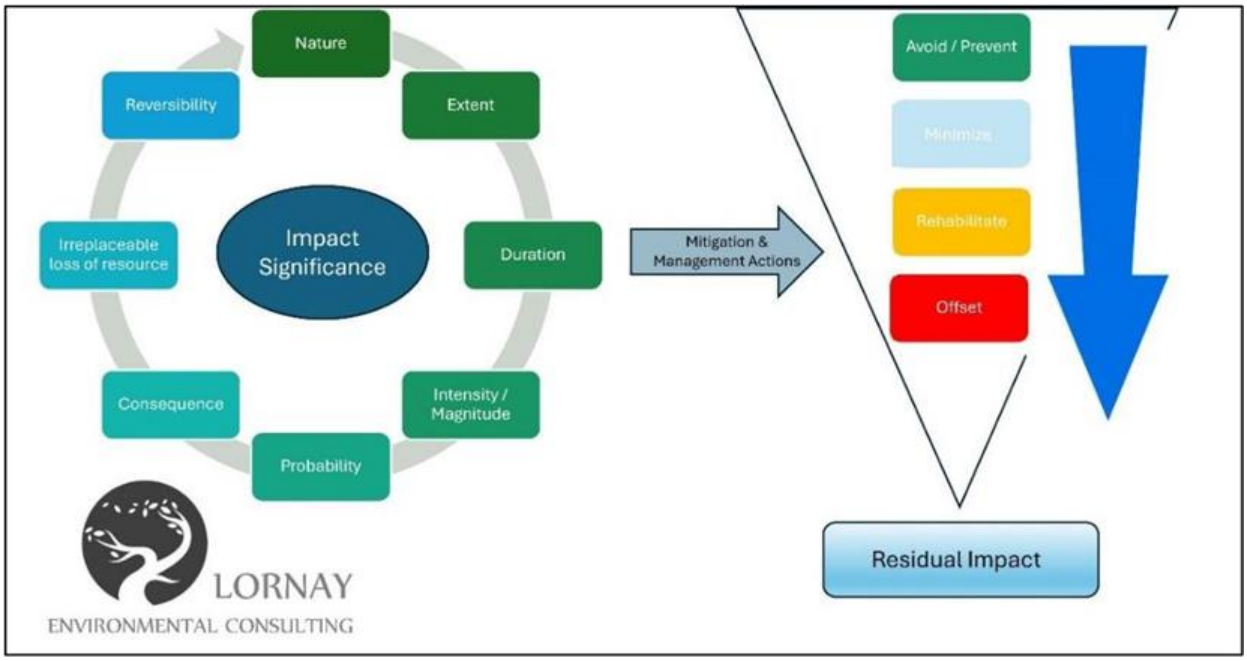

Figure 13: Mitigation hierarchy.

Avoidance

Avoidance was prioritised from the early stages of the layout assessment process. This involved the assessment of three layout alternatives, namely Alternative 1 and Alternative 2 (non-preferred), and Alternative 3, which was identified as the preferred layout option.

At the outset of the project, the applicant initially considered and favoured Alternative 2. However, further environmental assessment and input from specialist studies identified potential impacts associated with this layout, particularly in relation to sensitive environmental features on site. Both Alternative 1 and Alternative 2 involved the placement of one of the proposed residential units within the identified habitat of the Mute Winter Katydid, which would have resulted in the loss of suitable habitat for this species.

The specialist assessment therefore recommended the establishment of a 50 m buffer zone around the identified location of the Mute Winter Katydid, and the relocation of the affected housing unit outside of this buffer. As a result of these findings, Alternative 1 and Alternative 2 were reconsidered and ultimately rejected in favour of a layout that more effectively avoids environmentally sensitive areas.

In response to these recommendations, Alternative 3 was developed and refined to fully accommodate the required buffer zone and to avoid direct impacts on the species' habitat resulting to low-medium negative impact which is lower compared to the earlier alternative layouts.

Minimisation

The preferred layout (Alternative 3) incorporates a reduced development footprint, which minimises vegetation disturbance on site by utilising previously disturbed areas as far as practicable. This approach ensures that the majority of indigenous vegetation occurring on the site remains undisturbed.

Furthermore, the faunal specialist emphasised the importance of reducing the extent of jetty-related infrastructure. While Alternative 1 and Alternative 2 proposed two jetties, the preferred layout (Alternative 3) includes only one jetty and a single slipway, thereby significantly reducing disturbance within the watercourse environment.

In addition, the spatial arrangement of the proposed residential units and associated infrastructure was optimised to limit construction-related impacts, including soil disturbance, vegetation clearance, and habitat fragmentation. Construction activities will be confined to clearly demarcated areas to prevent unnecessary disturbance beyond the approved footprint. Through these measures, potential environmental impacts are effectively minimised.

Rehabilitation

Rehabilitation measures will be implemented to address any temporary disturbances associated with construction activities. All disturbed areas outside of the permanent development footprint will be rehabilitated following construction through re-vegetation with indigenous plant species appropriate to the local vegetation type. Disturbed soils will be stabilised to prevent erosion and the spread of invasive alien species.

Offset

The project does not qualify for the implementation of biodiversity offsets. This is due to the fact that, following the application of the mitigation hierarchy—specifically avoidance, minimisation, and rehabilitation—no significant residual impacts remain. All potential impacts associated with the proposed development were assessed as being below a medium significance level after the implementation of specialist-recommended mitigation measures.

As such, the application of biodiversity offsets, which represent the final step in the mitigation hierarchy, was considered and deemed unnecessary for this project.

SECTION J: GENERAL

1. Environmental Impact Statement

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

Summary of the Key Findings of the EIA

- → The property is abutting Klein River to the North
- → Specialist botanical and biodiversity assessments confirmed that the site does not contain Agulhas Limestone Fynbos, despite its CBA1 designation in the WCBSP. Field verification showed that the vegetation present is of low ecological sensitivity, with no plant Species of Conservation Concern recorded.
- → The property has been categorised into five faunal habitats; Open Fynbos scrubland, dense Fynbos scrubland, Phragmites reedbeds, Eucalyptus habitat, Kikuyu grass habitat
- → The Faunal Assessment confirmed the presence of several Species of Conservation Concern (SCC), including the Mute Winter Katydid (Vulnerable), Western Leopard Toad (Endangered), and African Marsh Harrier. These findings required the repositioning of infrastructure to avoid sensitive habitat areas.
- → The majority of the property falls within the Coastal Protection Zone
- → The preferred layout (Alternative 2) incorporates specialist recommendations by placing all permanent structures above the 5 m contour and more than 100 m from the High-Water Mark, thereby avoiding riparian zones and reducing flood risk under future climate change scenarios.
- → The property also plays a functional role in landscape connectivity between the Klein Rivier and surrounding fynbos.
- → The overall Site Ecological Importance (SEI) under animal species theme is considered High.
- → The proposed development is small in footprint but introduces irreversible disturbances and log-term edge effects in a sensitive landscape.
- → The faunal specialist recommendation and management is that the development, especially the one planned dwelling (House 2) and associated infrastructure must be placed outside a 50 m no-go buffer surrounding mapped katydid habitat. This has been achieved by through layout Alternative 3 (preferred).
- → It is recommended by the specialists that the jetty and slipway should be reduced and only be limited to one.

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)

Refer to **Appendix D.**

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

- → Short-term job creation during the construction phase and indirect stimulation of the local economy through the procurement of services and materials.
- → Enables the landowners to exercise their land-use rights in accordance with the Municipal Planning By-Law, thereby preventing underutilisation of the property.
- → Incorporation of solar energy systems to supplement Eskom supply, supporting sustainable energy use and reducing long-term reliance on non-renewable resources.

→ The preferred alternative ensures that residential dwellings are located above the 5m contour line, thereby avoiding areas most vulnerable to flooding.
→ The activity permits the construction of the residential units by avoiding the known location of the Mute Winter Katydid. This is achieved through the implementation of a buffer zone around the species' habitat.

Negative Impacts

→ Construction activities may result in vegetation clearance, soil disturbance, and temporary disruption of local fauna.
→ Introduction of built structures into a rural and largely natural setting may alter the visual character of the landscape.
→ Improper stormwater management during construction could result in erosion, sedimentation, or contamination of downstream watercourses.
→ Placement of dwellings within the 5m contour of the Klein River would expose residents and infrastructure to long-term risks of flooding, climate change-related events, and riverine dynamics.

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

Recommendations by the EAP:

→ Construction should take place during daylight hours only, with additional care near the watercourse margin and sensitive faunal habitats.
→ Construction activities will be confined to clearly demarcated building areas to prevent unnecessary disturbance beyond the approved footprint.
→ Fencing, if used, must allow free movement of small and medium-sized fauna (no solid or impermeable barriers).
→ At least 70% of the property must remain under natural vegetation, free from infrastructure and permanent barriers, to ensure movement of faunal species.
→ Outdoor lighting must be downward-shielded, low-intensity, and activated only when required for safety.
→ A long-term alien vegetation management plan must be implemented across the property, prioritising removal of invasive species such as *Acacia saligna* and *A. cyclops* and promoting indigenous fynbos regeneration.
→ The No go area indicated by the Faunal specialist and as reflected in Alternative 3, must be implemented and maintained in perpetuity.

Terrestrial Animal Site Sensitivity Verification and Species Specialist Assessment Report

Mitigation measures

General Site-Wide Mitigation

→ Restrict built infrastructure to ~30% of the 12-ha property.
→ Cap development at three dwellings, as assessed in this application.
→ Adopt dark-sky compliant lighting (low-spectrum, full cut-off fittings, shield estuary-facing lights) to reduce disturbance to nocturnal fauna and birds.
→ Enforce pet curfews at night and discourage free-ranging cats and dogs to limit predation and disturbance to birds, reptiles and amphibians.
→ Implement a formal alien clearing and follow-up programme across retained natural areas to prevent decline in functional integrity.
→ Consider assigning all retained natural habitat (~70% of site) to a formal conservation status, such as a biodiversity stewardship agreement, to ensure long-term ecological management.

Faunal Landscape Connectivity

- → Maintain a continuous natural corridor across at least 70% of the property to allow free movement between the Klein River and adjacent upland habitats.
- → Prohibit impermeable fencing; if fences are required, ensure wildlife-permeable design (≥30 cm ground clearance, no mesh smaller than 100×100 mm).
- → Consolidate infrastructure and driveways to reduce fragmentation and maintain open strips for fauna.
- → Actively rehabilitate degraded strips post-construction and manage alien regrowth to preserve corridor functionality.

Estuarine and Water-Associated Birds (African Marsh Harrier, Caspian Tern, Great White Pelican)

- → Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses.
- → Maintain a no-work buffer at reed margins and estuary edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns.
- → Lighting controls: Shield and direct lighting away from the estuary to prevent disorientation or displacement of estuary-dependent species.
- → Schedule noisy construction away from peak breeding/foraging seasons (Aug–Nov for marsh harrier; peak roost periods for terns/pelicans).
- → Secure long-term management of estuary-edge natural habitat through stewardship or conservation agreements.

Terrestrial SCC Birds (Southern Black Korhaan, Denham's Bustard)

- → Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity.
- → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment.
- → Disturbance reduction: Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones.

Amphibians (Western Leopard Toad)

- → Shape access tracks with shallow U/V profiles; include amphibian-safe drainage.
- → Prohibit pesticides and herbicides on site.
- → Fit escape ramps or "toad savers" in swimming pools.
- → Retain indigenous groundcover and vegetated strips between dwellings to support terrestrial dispersal.
- → Provide residents with awareness material on toad movement periods and safe behaviours.

Reptiles (Southern Adder)

- → Pre-construction search and rescue: Conduct supervised vegetation clearance with relocation of snakes and refugia where possible.
- → Retain or recreate rock piles, woody debris, and shrub thickets as refugia.
- → Educate contractors and residents about the conservation importance of Southern Adder and provide protocols for safe handling.
- → Impose strict speed limits on internal tracks to reduce roadkill risk.
- → Maintain functional fynbos structure with alien clearing and fire in line with ecological cycles.

Invertebrates (Mute Winter Katydid, Other SCCs)

Mute Winter Katydid

- → Keep development outside the 50 m no-go buffer surrounding mapped katydid habitat.
- → Avoid hard road surface construction
- → Mark and protect occupied patches as no-go areas during and after construction.
- → Prohibit mowing, gardening or herbicide or pesticide use within buffers.
- → Regularly survey katydid populations post-construction to verify persistence and recolonisation.

Yellow-winged Agile Grasshopper

- → No targeted mitigation required as the species' specific habitat is absent; site-wide alien control and natural vegetation retention suffice.

Other SCC Invertebrates

- → Map and avoid patches supporting confirmed SCCs where possible.
- → Establish indicator taxa monitoring to detect changes in population presence or habitat quality.
- → Actively restore and reseed disturbed patches post decommissioning to return invertebrate habitat function.

Terrestrial Biodiversity Impact Assessment

- → Designing the development to stay above the 5 m contour to reduce ecological impacts.
- → Using existing roads and paths for access to minimize new disturbances to the environment.
- → Limiting infrastructure like slipways and jetties, as only one jetty per property is typically permitted and slipways are discouraged.
- → Clearing of alien invasive plant species.
- → Avoidance of the area below the 5m contour to reduce ecological impacts.
- → Existing roads would be used to avoid unnecessary disturbances to the environment.
- → Only one jetty and one slipway would be constructed.
- → Clearing of alien invasive plant species.
- → Development of residences should be above the 5 m contours and should wherever possible avoid well-established old trees, particularly of wild olive (*Olea europaea subsp. cuspidata*).

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.

- → Keep development outside the 50 m no-go buffer surrounding mapped katydid habitat.
- → Mark and protect occupied patches as no-go areas during and after construction.
- → Align dwellings and infrastructure away from the few lower, more open fynbos patches that may be marginally suitable for korhaan or bustard activity.
- → Secure long-term management of river edge natural habitat through stewardship or conservation agreements.
- → Regularly survey katydid populations post-construction to verify persistence and recolonisation.
- → Establish indicator taxa monitoring to detect changes in population presence or habitat quality.

- → Actively restore and reseed disturbed patches post decommissioning to return invertebrate habitat function.
- → Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment.
- → Limit human and pet activity in marginal open patches and restrict additional disturbance near sensitive zones.
- → Consider assigning all retained natural habitat (~70% of site) to a formal conservation status, such as a biodiversity stewardship agreement, to ensure long-term ecological management.
- → Enforce pet curfews at night and discourage free-ranging cats and dogs to limit predation and disturbance to birds, reptiles and amphibians.
- → Adopt dark-sky compliant lighting (low-spectrum, full cut-off fittings, shield river-facing lights) to reduce disturbance to nocturnal fauna and birds.
- → Prohibit impermeable fencing; if fences are required, ensure wildlife-permeable design (≥30 cm ground clearance, no mesh smaller than 100×100 mm).
- → Reduce proposed jetties from two to a single low-intensity jetty to limit repeated disturbance pulses.
- → Maintain a no-work buffer at reed margins and river edges during construction; enforce quiet hours at dusk and dawn to protect hunting harriers and roosting terns.

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.

It is the Environmental Assessment Practitioner's finding that the proposed development on Portion 4 of Farm 643 should be authorised, subject to the full implementation of the recommended impact management and mitigation measures provided by the appointed specialists.

The property is privately owned by Cheddles (Pty) Ltd, representing two brothers who seek to establish two single residential dwellings House 1 and House 2 on their rural property situated west of Stanford, outside the urban edge and along the upper reaches of the Klein Rivier. The proposed development footprint has been deliberately designed to avoid environmentally sensitive areas and to limit disturbance.

All essential service infrastructure will be off grid, with water sourced from groundwater under a Schedule 1 domestic use, and sewage managed through a closed conservancy tank serviced by the Overstrand Municipality. Importantly, the residential dwellings, conservancy tanks, and all associated infrastructure will be positioned above the 5 m contour, more than 100 m from the High-Water Mark of the watercourse, and more than 32 m from the Klein Rivier, thereby avoiding flood-prone and ecologically sensitive riparian zones. Whereas the slipway and jetty, as is inherent to their function, must be located within close proximity to the water's edge.

Specialist studies further support authorisation of the development. The botanical specialist confirmed that the vegetation on site is of low ecological sensitivity, with no presence of Agulhas Limestone Fynbos or any plant Species of Conservation Concern. The Western Cape Biodiversity Spatial Plan's (2023) CBA1 mapping was found to be inaccurate for this property, with the appropriate classification more aligned with ESA2 or ONA. Similarly, the faunal specialist determined the Site Ecological Importance to be low, with impacts manageable through appropriate mitigation.

Based on these assessments and considering that the preferred layout (Alternative 3) successfully avoids ecologically sensitive areas and integrates all specialist recommendations, the development can be undertaken in an environmentally responsible manner.

If authorised, the following conditions should apply to ensure the development proceeds in a sustainable and environmentally compliant manner:

- → Keep development outside the 50 m no-go buffer surrounding mapped katydid habitat.
- → Maintain all permanent structures and service infrastructure above the 5 m contour and more than 100 m from the High-Water Mark of the Klein Rivier.

→ Limit vegetation clearing strictly to the development footprint and retain at least 70% of the property under natural vegetation cover to maintain ecological connectivity.
→ Implement an alien vegetation control programme throughout the property, including long-term monitoring and clearing of invasive species.
→ Avoid disturbance to mature wild olive trees and other structurally significant indigenous vegetation.
→ Design and construct the jetties and slipways in a manner that minimises watercourse disturbance, and ensure no infilling, excavation, or pollution occurs within the river.
→ Implement all faunal protection measures, including pre-construction walk-throughs, no-go areas, and strict management of construction activities to avoid harm to Species of Conservation Concern.
→ Use alien clearing and appropriate fire management to preserve a patchy vegetation structure, favouring species sensitive to tall, dense shrub encroachment.

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 options are explored to encourage off the grid sources.	

SECTION K: DECLARATIONS

DECLARATION OF THE APPLICANT

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

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

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

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

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

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

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

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

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

Signature of the Applicant: Date:

Name of company (if applicable):

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

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

16-01-2026

Signature of the EAP: Date:

Lornay Environmental Consulting

Name of company (if applicable):

DECLARATION OF THE REVIEW EAP

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

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

Signature of the EAP: Date:

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

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

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

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

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

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

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

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

Signature of the EAP: Date:

Name of company (if applicable):

DECLARATION OF THE REVIEW SPECIALIST

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

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

Signature of the EAP: Date:

Name of company (if applicable):