DRAFT BASIC ASSESSMENT REPORT

for

HOUSE COMBRINK

on

Portion 30 of Farm Misgunst aan de Gouritz River No. 257, Fransmanshoek Conservancy, Vleesbaai, Western Cape Province

In terms of the

National Environmental Management Act (Act No. 107 of 1998, as amended) & 2014 Environmental Impact Regulations

Prepared for Applicant:

Comcor Invest (Pty) Ltd

Date: 14 November 2024

Appointed EAP: Ms Louise-Mari van Zyl
Assisted by Candidate EAP: Ms Mariska Byleveld
Email: louise@cape-eaprac.co.za / mariska@cape-eaprac.co.za

Report Reference: MOS823/06
Department Reference: 16/3/3/1/D6/29/0041/24
Case Officer: Shireen Pullen

Cape EAPrac
Cape Environmental Assessment Practitioners

Tel: +27 44 874 0365 PO Box 2070, George 6530
Fax: +27 44 874 0432 17 Progress Street, George

www.cape-eaprac.co.za

APPOINTED ENVIRONMENTAL ASSESSMENT PRACTITIONER:

***Cape EAPrac* Environmental Assessment Practitioners**

PO Box 2070

George

6530

Tel: 044-874 0365

Appointed EAP: Louise-Mari van Zyl (MA Geography & Environmental Science [US]; Registered Environmental Assessment Practitioner with the Environmental Assessment Practitioners of South Africa, EAPSA, Registration Number **2019/1444**. Ms van Zyl has over twenty years' experience as an environmental practitioner.

Assisted by Candidate EAP: Ms Mariska Byleveld (MSc Geology [University of the Free State]) (Candidate EAPASA Registration Number: **2023/6593**).

PURPOSE OF THIS REPORT:
Departmental Review

APPLICANT:
Comcor Invest (Pty) Ltd

CAPE EAPRAC REFERENCE NO:
MOS823/06

SUBMISSION DATE
14 November 2024

DRAFT BASIC ASSESSMENT REPORT

in terms of the

National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended &
Environmental Impact Regulations 2014

HOUSE COMBRINK

Portion 30 of Farm Misgunst aan de Gouritz River No. 257, Fransmanshoek Conservancy, Vleesbaai, Western Cape Province

Submitted for:

Stakeholder Review & Comment

Report Issued by:
Cape Environmental Assessment Practitioners

Tel: 044 874 0365
Web: www.cape-eaprac.co.za

PO Box 2070
17 Progress Street
George 6530

ORDER OF REPORT

Basic Assessment Report

Appendix A : Maps

Appendix A1 : Locality Map

Appendix A2 : Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning

~~Appendix A3 : Map with the GPS co-ordinates for linear activities~~

Appendix B Site Plans

Appendix B1 : Site development plan(s)

Appendix B2 : A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas

Appendix C : Photographs

Appendix D : Biodiversity overlay map

Appendix E : Permit(s) / license(s) / exemption notice, agreements, comments from State Department/Organs of state and service letters from the municipality.

~~Appendix E1 : Response from HWC~~

~~Appendix E2 : Copy of comment from Cape Nature~~

~~Appendix E3 : Final Comment from BOCMA~~

~~Appendix E4 : Comment from the DEA: Oceans and Coast~~

~~Appendix E5 : Comment from the DAFF~~

~~Appendix E6 : Comment from WCG: Transport and Public Works~~

~~Appendix E7 : Comment from WCG: DoA~~

~~Appendix E8 : Comment from WCG: DHS~~

~~Appendix E9 : Comment from WCG: DoH~~

~~AppendixE10 : Comment from DEA&DP: Pollution Management~~

~~AppendixE11 : Comment from DEA&DP: Waste Management~~

~~AppendixE12 : Comment from DEA&DP: Biodiversity~~

~~AppendixE13 : Comment from DEA&DP: Air Quality~~

~~AppendixE14 : Comment from DEA&DP: Coastal Management~~

~~AppendixE15 : Comment from the local authority~~

~~AppendixE16 : Confirmation of all services (water, electricity, sewage, solid waste management)~~

~~AppendixE17 : Comment from the District Municipality~~

~~AppendixE18 : Copy of an exemption notice~~

~~AppendixE19 : Pre-approval for the reclamation of land~~

~~AppendixE20 : Proof of agreement/TOR of the specialist studies conducted.~~

AppendixE21 : Proof of land use rights/zoning

Appendix F : Public participation information: including a copy of the register of I&APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required.

Appendix F1 : Registered I&AP List

Appendix F2 : Adverts & Site Notices

Appendix F3 : Stakeholder Notification

~~Appendix F4 : Stakeholder Comment~~

~~Appendix F5 : Comments & Responses Report~~

Appendix G : Specialist & Technical Reports

Appendix H : Environmental Management Programme (EMP)

Appendix I : Screening tool report

TABLE OF CONTENTS

LIST OF FIGURES

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.

TEMPLATE VERSION: APRIL 2024

Western Cape Government

BASIC ASSESSMENT REPORT

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

TEMPLATE VERSION: 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)

Comcor Invest (Pty) Ltd, hereafter referred to as the Applicant, intends to develop **one (1) dwelling** and **associated infrastructure** (access road, water reservoir, rainwater tanks, off-grid solar system, biogas digester, artificial wetland and services), as a **primary residence**, on a pre-identified portion of Portion 30 of Farm Misgunst aan de Gouritz River No. 257, Vleesbaai, Western Cape Province.

The property is located within the Fransmanshoek Conservancy area which is situated approximately 3km south-east of Vleesbaai (Figure 1). The Conservancy consists of numerous 'small holding' properties.

The property is ±8.62ha in size, zoned **Agriculture I** and accessible via the existing District Road 4979 from where an existing gravel road traverses the property (Figure 1).

The **Preferred Alternative** entails the following development components (Figure 1) (Figure 2):

- One (1) x Primary Dwelling
- One (1) x Access Road
- One (1) x Water Reservoir
- Ten (10) x 5000 litre Rainwater Tanks (totalling to 50 000l)
- One (1) x Off Grid Solar System
- One (1) x Artificial Wetland System as part of sewer
- Services: Water, Sewer and Tele-communication infrastructure

Figure 1: Locality map of Portion 30 of Farm Misgunst aan de Gouritz no. 257 (red polygon). The yellow polygon represents the approximate locality of the select site area displayed in the top right corner of the locality map.

The development footprint of the preferred alternative amounts to **±1 498m²** including the dwelling and additional infrastructure (access road, water tanks, water reservoir, biogas digester, artificial wetland and solar system).

The household water tanks, artificial wetland and services are all positioned in previously disturbed areas (**±166m²**). Work space areas around these features will be rehabilitated post construction.

Approximately **±298m²** will be temporarily disturbed around the proposed dwelling to provide space for construction related activities i.e. stockpiling of material/worker areas.

The existing gravel **access road** extends from property's northern to southern boundary (Figure 1). It is proposed to construct a short link track, extending from this existing gravel access road to the proposed dwelling position (Figure 2). The track itself will be less than 4m wide and will be in the form of a 2-spoor track with a road construction area varying from 3.5m - 6m (depending on the steepness of the slope for final design) (Figure 2).

The site selection as well as layout plan has been informed by the **biodiversity site sensitivity analysis**, as well as **slope analysis**, inclusive of the position of **protected tree species** (also indicated on the SDP).

SERVICES

Water

The expected water usage will be between 1500 – 1750 litres / day.

1. The property has an **existing borehole** with a tested pump rate of **0.3l/s**. Water from this borehole is saline and not necessarily suitable for human consumption unless treated but is

usable for general house building requirements during the construction phase and fire-demand requirements during the operational phase.

Based on the existing vegetation on site, the fire-risk for the proposed dwelling is regarded as **Low**. However, to accommodate fire-flow demand as stipulated by the Municipality, water from the existing borehole will be pumped and stored within a **household water tank reservoir** (max 10 000 litres) located south of the proposed dwelling (Figure 3).

2. The dwelling will connect to the existing **Ø25mm water pipeline** (municipal line) in the road reserve of District Road 4979 running past this property to Fransmanshoek Point. Water from this pipeline will be used for potable household supply, with rainwater as supplementary source. Notably water from the borehole can also be used to supplement household supply when mixed/diluted with potable supply should it be deemed necessary at times of reduced water supply, low rainfall when rainwater may be insufficient to supplement municipal supply and/or maintenance periods (of the municipal water line).

According to the Engineering Services Report (2024), water availability from the existing water pipeline is not always dependable based mostly on the time of the year i.e. during peak holiday periods when demand may exceed supply for limited periods. To address this temporary fluctuation and provide surety of supply, the engineer incorporated a potable supply storage capacity of 50 000l to adjust for high seasonal demand when there may be limited potable municipal water supply. **Ten (10) x 5000 litre water tanks** (combined 50 000l) will be installed at the proposed dwelling (Figure 3). These tanks will be filled with a combination of **both rainwater** and **potable municipal supply water** from the existing Ø25mm municipal water pipeline (during off-peak periods when sufficient water supply is available in this network point). In addition, borehole water can also be diluted/mixed with potable supply to further increase surety of supply.

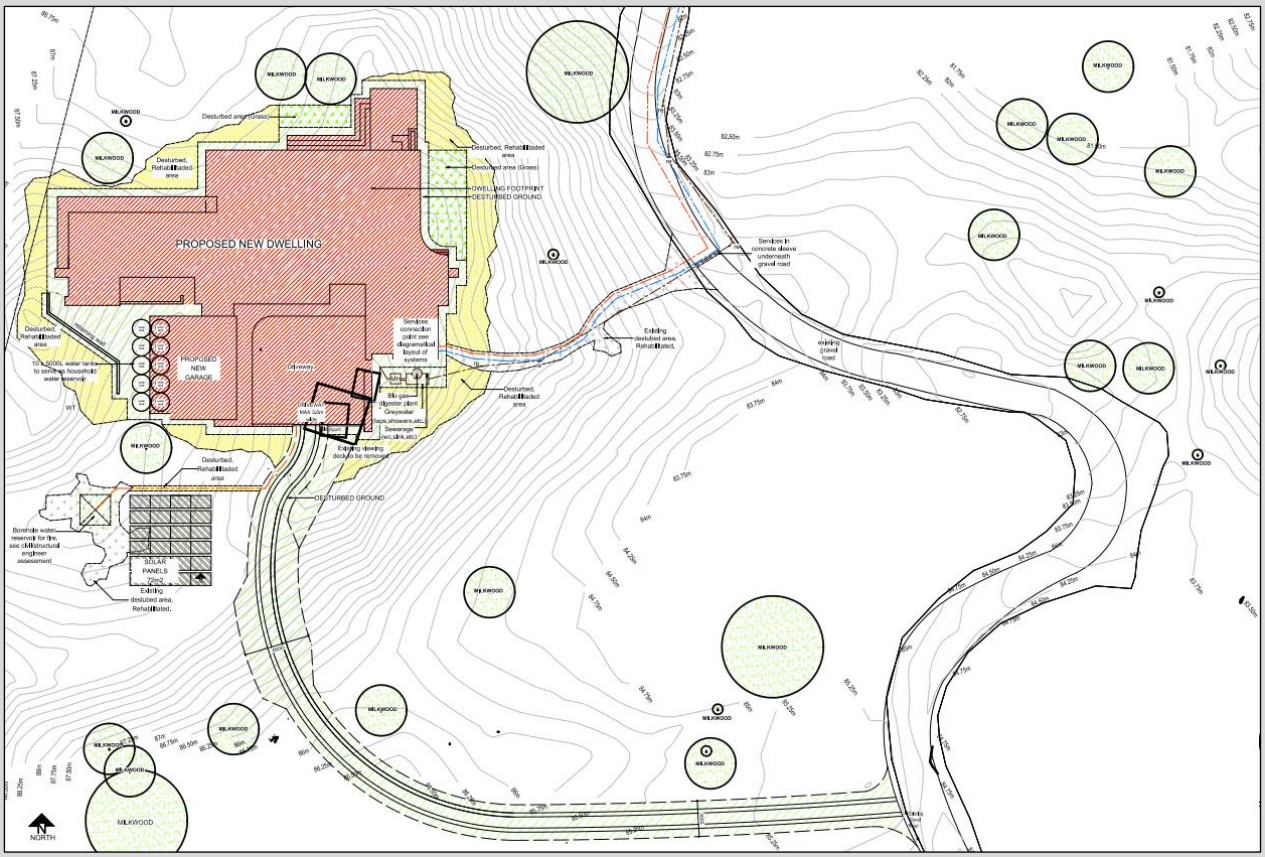


Figure 2: Detailed site layout plan of the Preferred Design Alternative (source: Konka Studio).

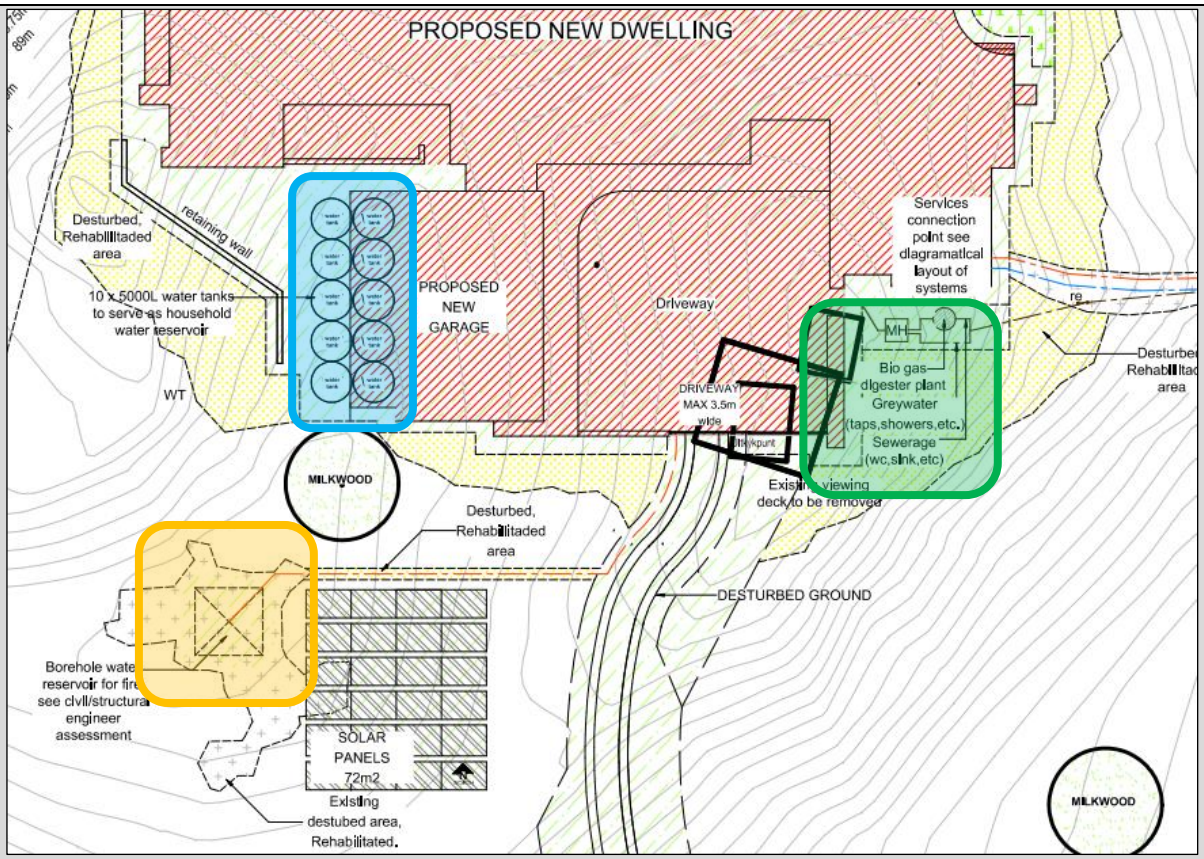


Figure 3: Enlarged figure of the layout plan showing the localities of the proposed groundwater reservoir tank (orange polygon), bio-gas digester plant for household sewage (green polygon) and supplementary potable water ten 5000 litre tanks (blue polygon).

Electricity

De Villiers & Moore Consulting Engineers compiled an Electrical Services Report for the proposed dwelling. According to the report, the proposed dwelling will be supplied from a suitable sized inverter, battery, photo voltaic system which will be integrated into the house (Figure 3).

The **off grid solar system** will be augmented by a suitably sized generator to assist with battery charging during days not conducive to solar generation.

It is proposed to install the solar panels on the roof of the proposed dwelling. However, the Applicant has provided for an extra area for solar panels, on the ground, next to the water reservoir (Figure 3) should the roof have insufficient space for the solar panels after final design. This additional disturbance footprint was assessed by all the specialists.

Sewage

The calculated sewerage and grey water generation from the household ranged between 500 – 750 litre / day.

Effluent from the household will be accommodated on-site as follows:

- Grey water will be diverted to a small artificial wetland for further polishing.
- Black water will be diverted to a small household bio-gas digester, with an overflow to the small artificial wetland.
- The filtered water from the artificial wetland system will be allowed to infiltrate the sand medium as treated to standard.

ENVIRONMENTAL SENSITIVITIES

As part of the pre-application phase, the Applicant appointed a Botanical/Biodiversity Specialist (Confluent Environmental), Fauna Specialist (Willem Matthee) and Aquatic Specialist (Confluent Environmental) to inspect the property and identify areas of low, medium, high and very high environmental sensitivity, to best inform the provisional Site Development Plan. Each specialist compiled a site-specific sensitivity map (botany/biodiversity & fauna) to inform the most suitable locality of the dwelling with least and/or manageable environmental impacts. Slope was also considered ito contour surveys. That is how the site selection of the footprint area on the property was informed.

Botany/Biodiversity

- The mapped sensitivity of the terrestrial biodiversity theme is confirmed as Very High.
- The sensitivity of the plant species theme is confirmed as Low.
    - No Plant SCC was found and are unlikely to occur within the development footprint.
- The property has a High Site Ecological Importance, which means that adherence to the mitigation hierarchy (avoid/prevent, minimise, rehabilitate/restore) is essential to preserve the biodiversity and habitat resilience. While the proposed development will impact on biodiversity, the specialist provided mitigation measures to reduce the degree of impact from **Moderate Negative to Minor / Negligible Negative**. The overall **residual impact** of the proposed dwelling is therefore **Minor Negative**.

Fauna

- The sensitivity of the animal species theme is confirmed as **Low**:
    - No flagged fauna SCC were found on site and their presence within the study area i.e., development footprint is confirmed to be unlikely.
    - The nature of this activity is not expected to have an impact on fauna SCC within and beyond the boundary of the preferred site.
    - The activity leaves enough vegetation to act as ecological corridors and habitats for fauna species.

Aquatic

According to the Screening Tool Report, the mapped aquatic biodiversity within the site is Very High on the basis that the site falls within a Freshwater Ecosystem Priority Area (FEPA). The specialist concluded the following findings:

- There are no clear areas of natural drainage on the property and no hydro-geomorphological landscape features indicating the presence of a watercourse.
- No freshwater features were identified within the footprint of the property or within 500m of the property.
- While development falls within a FEPA the site falls well outside the catchment area of a river reach for which the FEPA status was determined.
- The aquatic sensitivity is disputed and confirmed as **Low**.

Agriculture

According to the agricultural specialist, the site is completely unsuitable for viable rainfed crop production and its potential is assessed as **Very Low** for the following reasons:

- The dryland cropping potential is limited by the combination of climate & soil constraints.

- The property's size and location which is isolated from another farmland.
- The lack of any existing cropping infrastructure.
- Location within the Fransmanshoek Conservancy which is not conducive to agricultural disturbances.

The overall negative agricultural impact of the development is assessed here as being of L**ow** significance.

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):

	○ Watercourses / Rivers / Wetlands ○ Flood lines (*i.e.,* 1:100 year, 1:50 year and 1:10 year where applicable); ○ Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"): ○ Ridges; ○ Cultural and historical features/landscapes; ○ Areas with indigenous vegetation (even if degraded or infested with alien species). • Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted. • North arrow A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.
Site photographs	Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as **Appendix C**. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.
Biodiversity Overlay Map:	A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as **Appendix D**.
Linear activities or development and multiple properties	GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system. Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix. For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as **Appendix A3**.

ACRONYMS

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

ATTACHMENTS

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

The following checklist of attachments must be completed.

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

	Appendix E9:	**Comment from WCG: DoH**	X
	Appendix E10:	**Comment from DEA&DP: Pollution Management**	X
	Appendix E11:	**Comment from DEA&DP: Waste Management**	X
	Appendix E12:	**Comment from DEA&DP: Biodiversity**	X
	Appendix E13:	**Comment from DEA&DP: Air Quality**	X
	Appendix E14:	**Comment from DEA&DP: Coastal Management**	X
	Appendix E15:	**Comment from the local authority**	X
	Appendix E16:	**Confirmation of all services (water, electricity, sewage, solid waste management)**	X
	Appendix E17:	**Comment from the District Municipality**	X
	Appendix E18:	**Copy of an exemption notice**	X
	Appendix E19	**Pre-approval for the reclamation of land**	X
	Appendix E20:	**Proof of agreement/TOR of the specialist studies conducted.**	X
	Appendix E21:	**Proof of land use rights**	✓
	Appendix E22:	**Proof of public participation agreement for linear activities**	X
Appendix F:	**Public participation information: including a copy of the register of I&APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required.**		✓
Appendix G:	**Specialist Report(s)**		✓
Appendix H:	**EMPr**		✓
Appendix I:	**Screening tool report**		✓
Appendix J:	**The impact and risk assessment for each alternative**		In BAR
Appendix K:	**Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline**		In BAR

SECTION A: ADMINISTRATIVE DETAILS

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

Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:	Comcor Invest (Pty) Ltd	
Name of contact person for Applicant/Proponent (if other):	Tehan Combrink	
Company/ Trading name/State Department/Organ of State:		
Company Registration Number:		
Postal address:	P.O. Box 91	
	Sinksabrug	Postal code: 6535
Telephone:		Cell: 082 776 7736
E-mail:	combrinktehan@gmail.com	Fax: ( )
Company of EAP:	Cape Environmental Assessment Practitioners (Cape EAPrac)	
EAP name:	Louise-Mari van Zyl (Appointed EAP) / Mariska Byleveld (Candidate EAP)	
Postal address:	PO Box 2070	
	George	Postal code: 6530
Telephone:	044 874 0365	Cell: 071 603 4132 / 084 5036 587
E-mail:	louise@cape-eaprac.co.za mariska@cape-eaprac.co.za	Fax: ( )
Qualifications:	Louise-Mari van Zyl: MA Geography [US] | Mariska Byleveld: MSc Geology [UFS]	
EAP registration no:	Louise-Mari van Zyl: 2019/1444 | Mariska Byleveld: 2023/6593	
Duplicate this section where there is more than one landowner Name of landowner:	Comcor Invest (Pty) Ltd	
Name of contact person for landowner (if other):	Tehan Combrink	
Postal address:	P.O. Box 91	
	Sinksabrug	Postal code: 6535
Telephone:		Cell: 082 776 7736
E-mail:	combrinktehan@gmail.com	Fax: ( )
Name of Person in control of the land:	Comcor Invest (Pty) Ltd	
Name of contact person for person in control of the land:	Tehan Combrink	
Postal address:	P.O. Box 91	
	Sinksabrug	Postal code: 6535
Telephone:		Cell: : 082 776 7736
E-mail:	combrinktehan@gmail.com	Fax: ( )

Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall:	Mossel Bay Municipality	
Contact person:	Carel Venter	
Postal address:	PO Box 25	
	Mossel Bay	Postal code: 6500

Telephone	044 606 5073	Cell:
E-mail:	cventer@mosselbay.gov.za	Fax: ( )

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

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

Portion 30 of Farm Misgunst aan de Gouritz no. 257 has an existing access road traversing the property, borehole & wooden platform that serves as a viewing deck which has been there since before the Applicant purchased the property (Figure 4).

Figure 4: Photographs of existing infrastructure on 30/257 Misgunst aan de Gouritz.

~~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.~~	
~~3.3.~~	~~Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.~~	

~~3.4.~~	~~Indicate how access to the proposed routes will be obtained for all alternatives.~~																				
~~3.5.~~	~~SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives~~																				

~~3.6.~~	**~~Starting point co-ordinates for all alternatives~~**			
	~~Latitude (S)~~			
	~~Longitude (E)~~			
	~~Middle-point co-ordinates for all alternatives~~			
	~~Latitude (S)~~			
	~~Longitude (E)~~			
	~~End point co-ordinates for all alternatives~~			
	~~Latitude (S)~~			
	~~Longitude (E)~~			

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

4.	**Other developments (primary dwelling and associated infrastructure)**	
4.1.	Property size(s) of all proposed site(s):	± 86 200 m^2
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):	Not Applicable
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:	Preferred Design Alternative: ± 1498 m^2 Non-Preferred Design Alternative: ± 1462 m^2
4.4.	Provide a detailed description of the proposed development and its associated infrastructure (This must include details of e.g. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities).	

The **Preferred Design Alternative** entails the following **development components** (Figure 5) (Figure 6):

- One (1) x Primary Dwelling
- One (1) x Access Road
- One (1) x Household Water Reservoir Tank
- Ten (10) x 5 000 litre Supplementary Water Tanks (totalling to 50 000l)
- One (1) x Off Grid Solar System
- One (1) x Artificial Wetland System for treated effluent
- Services: Water, Sewer and Tele-communication infrastructure.

The following **services** are noted (Figure 7):

Services	Source	Use
Water	Existing Borehole with dedicated surplus/fire reservoir tank	Builders & Fire-Flow Demand
	Ø25mm Municipal Water Pipeline	Human consumption and other residential uses in need of freshwater supply.
	10 x Rainwater Tanks (5000l each)	Human consumption and other residential uses in need of freshwater supply (supplementary to municipal supply).
Electricity	Off-grid solar system with generator	Dwelling
Sewage	Household Biogas Digester with small Artificial Wetland	Dwelling

It is proposed that all wastewater and grey water generation from the dwelling be treated as follows:

- All grey water from bathrooms, laundry and kitchen areas will be directly diverted to the small artificial wetland for polishing. The clean water from the wetland system will then be used for irrigation to infiltrate the sand medium (Figure 6).
- All black water from the bathrooms will be diverted to the household bio-gas digester with an overflow to the constructed / artificial wetland (Figure 6).
- The household biogas digester will have the following building functions:
    - Mixes the contents for increased gas generation efficiency.
    - Naturally decomposes biodegradable materials without additional chemicals.
    - Stores the biogas that is generated by this natural decomposition.
    - Generates an internal pressure which allows the biogas to be piped directly to the point of use in the house.
    - The digester mixing, gas storage and pressurisation are achieved without any mechanical input i.e. pumps or motors.

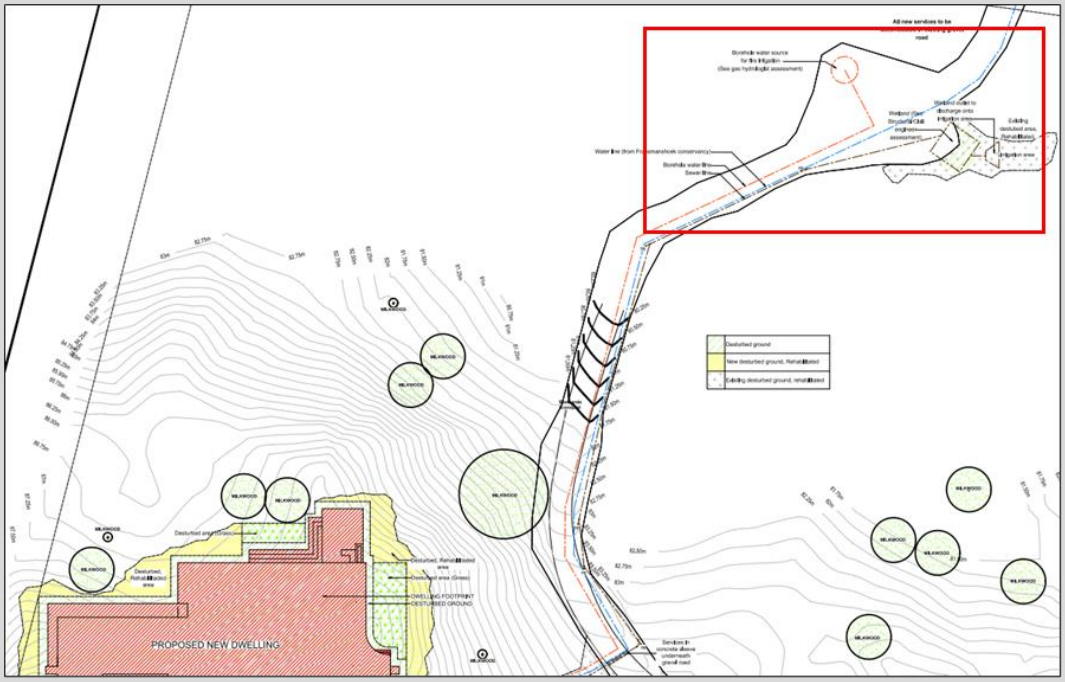


Figure 5: Proposed site plan for services for Portion 30 of Farm Misgunst aan de Gouritz no. 257, Vleesbaai. An enlarged figure of the red rectangle is presented in Figure 6 (see below).

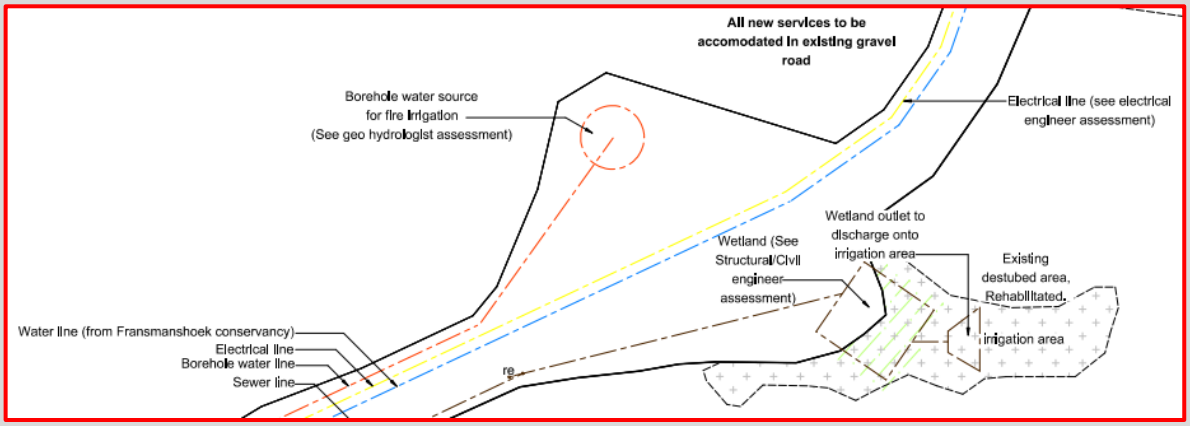


Figure 6: Locality of the existing borehole & proposed artificial wetland.

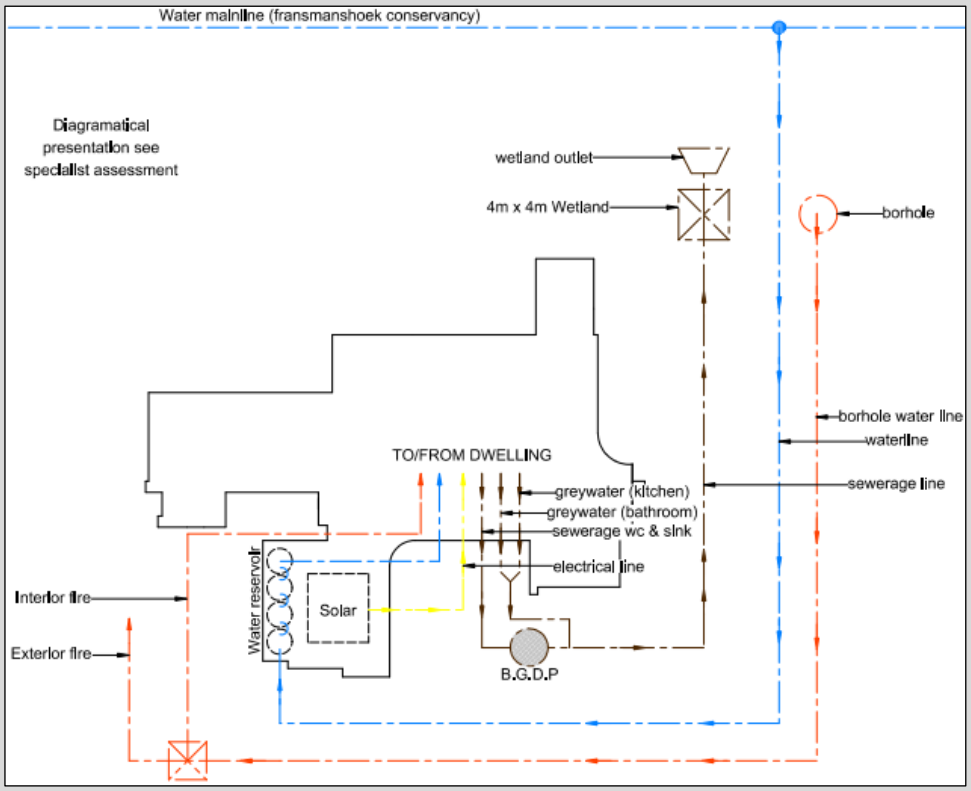


Figure 7: Service System Diagram (Water, Electricity & Sewer) for proposed dwelling.

ALTERNATIVES:

The Applicant initially considered the alternative to develop a primary and consent use secondary (two dwellings) on the property:

- Two (2) x Dwellings (Primary & Secondary)
- Two (2) x Access Roads
- Five (5) x 2500 litre Rainwater Tanks (Totalling to 12500 litres)
- One (1) x Off Grid Solar System
- Services: Water, Sewer and Tele-communication lines.

This feasible design alternative is however **not preferred** for the following reasons:

- Although impacts on biodiversity/botany can be sufficiently mitigated from Moderate Negative to Minor / Negligible Negative, its Significance of Impact Score is slightly higher compared to the preferred alternative.
    - Permanent Loss of Terrestrial Biodiversity
        - Both the preferred and non-preferred alternatives will have a Minor residual impact.
    - Permanent Loss of Populations of Important Plant Species
        - Both the preferred and non-preferred alternatives have negligible residual impacts. However, the non-preferred might result in the disturbance of more protected tree species compared to the preferred.
    - Landscaping effects on Habitats and Plant Secies
        - The preferred has a negligible negative residual impact whereas the non-preferred has a minor negative residual impact due to the assumed periodic disturbance of protected trees.

- According to the fauna specialist, the secondary dwelling is proposed directly adjacent to intact thicket areas which might result in indirect impacts on the Knysna Warbler that may prefer this habitat (temporarily during the construction phase).
- Water use is likely to be slightly higher with an additional dwelling and considering existing constraints within the Municipal supply, as well as borehole water quality, focussing on a primary dwelling is preferred.
- Given the ecosystem treat status of the vegetation type, a footprint limited to a primary dwelling (instead of primary and consent dwellings) is preferred and better aligned with the objective and outcomes of the Western Cape Biodiversity Spatial Development Framework (2017) for sensitive areas.

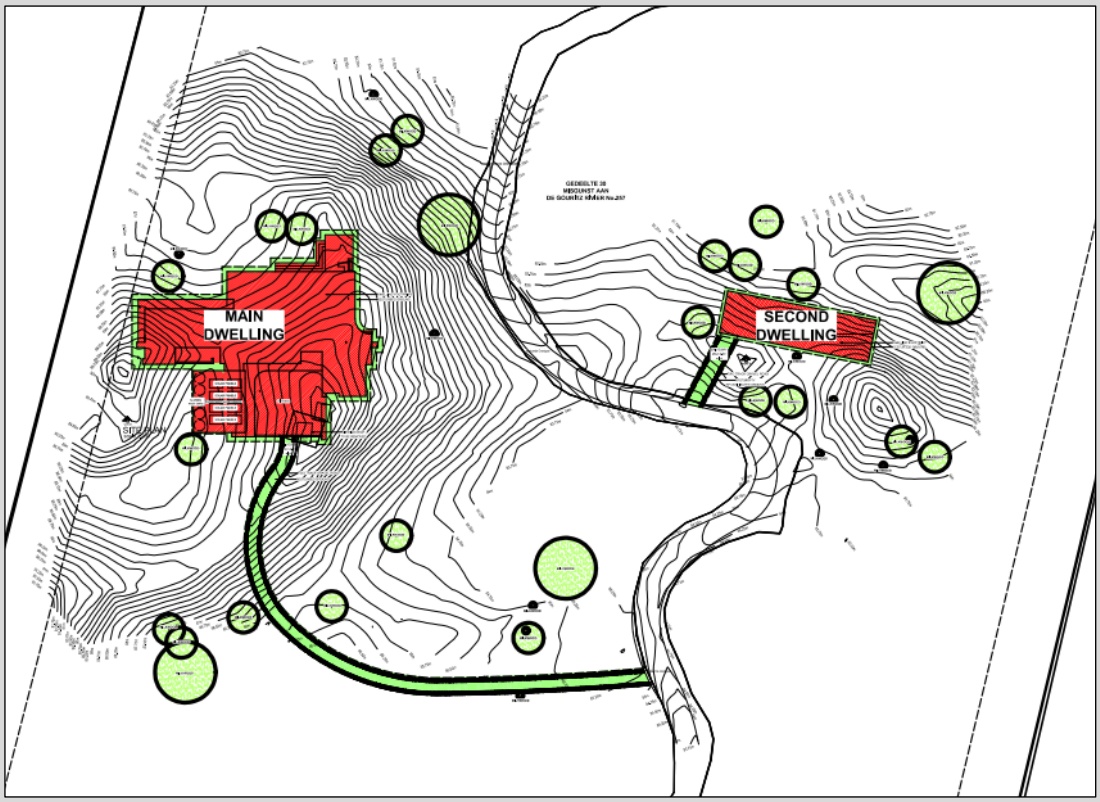


Figure 8: Non-Preferred Site Layout Alternative.

Both preferred and non-preferred alternatives are feasible and reasonable alternatives that are acceptable for the fauna and botanical/biodiversity specialists.

Kindly note that the area (m^2) for the preferred and non-preferred development footprints are very similar (difference of ±36m^2). For the non-preferred, guest rooms will be within the secondary dwelling while for the preferred, guestooms will be within the primary dwelling, hense the reason behind the similiar development footprints. The preferred is the best environmental option considering that it is not located near intact ticket vegetation (suitable habitat for the Knysna Wabler). The non-preferred will result in temporary indirect impacts on the Knysna Wabler during the construction phase. The non-preferred might result in the disturbance of more protected tree species compared to the preferred.

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

The property is accessible via the external District Road 4979.

The existing internal road extends from property's northern to southern boundary from where a short section of new internal track will be created to the location of the proposed dwelling. The new

track will be less than 4m wide with the road reserve which will vary from 3.5 to 6m (depending on the steepness of the slope that may require additional stabilising) (Figure 5).																						
4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:	C	0	5	1	0	0	0	0	0	0	0	0	0	2	5	7	0	0	0	3	0

4.7.	Coordinates of the proposed site(s) for all alternatives:			
	Latitude (S)	34°	17′	48.54″
	Longitude (E)	21°	55′	28.88″

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

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

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

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

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"). If yes, attach a copy of the comment from the relevant competent authority as Appendix E4 and the pre-approval for the reclamation of land as Appendix E19.	~~YES~~	NO
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA"). If yes, attach a copy of the comment from Heritage Western Cape as Appendix E1.	~~YES~~	NO
The National Water Act, 1998 (Act No. 36 of 1998) ("NWA"). If yes, attach a copy of the comment from the DWS as Appendix E3. **Borehole – Schedule 1 water use**	YES	~~NO~~
The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"). If yes, attach a copy of the comment from the relevant authorities as Appendix E13.	~~YES~~	NO
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	~~YES~~	NO
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	~~YES~~	NO
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	~~YES~~	NO
The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). If yes, attach comment from the relevant competent authority as Appendix E5.	~~YES~~	NO

3. Other legislation

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

National Forestry Act (Act 84 of 1998)

Milkwood trees were recorded on-site.

Although the SDP has been Mitigated to avoid the surveyed protected tree species, a Forestry Permit must be obtained should any protected trees require trimmed/removal at the time of construction.

Although the need for such permit is not predicted at this point in time, it is noted that construction may be delayed for various reasons and existing trees may be larger, or new trees may have seeded depending on when construction will commence.

Forestry Permit can take 4 – 5 months to obtain once building plans are approved. Applications must therefore be submitted well in advance of when a tree must be trimmed/removed to ensure compliance.

4. Policies

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

Western Cape Provincial SDF (2014)

The property is zoned as Agriculture Zone I which allows for the construction of a primary dwelling. The PSDF reflects this region as a rural development node, with agricultural activities of grain and pastures highlighted.

The applicant has no intention of exercising agriculture rights (ploughing, crop production, livestock production etc.) on the property, but will rather follow the management prescripts promoting the Fransmanshoek Conservancy within which it is located.

The proposed dwelling and associated infrastructure align with **Policy R1: Protect Biodiversity and Ecosystem Services**. According to the fauna specialist, the primary dwelling is located away from the thicket areas which **avoid** any potential indirect temporary impacts on the Knysna Warbler that may prefer this habitat (during the construction phase). Given the ecosystem treat status of the vegetation type, a reduced footprint with only a primary dwelling (instead of two dwellings) is preferred and better aligned with the objective and outcomes of the Western Cape Biodiversity Spatial Development Framework for sensitive areas. In addition to the reduced footprint, most of the associated infrastructure (water reservoir, services and artificial wetland) will be located within previously disturbed areas.

5. Guidelines

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

Guideline on Need and Desirability, DEA (2017)

Refer to section E(12) for a detailed Need & Desirability project description.

Guideline on Alternatives (March 2013)

Two (2) **feasible and reasonable** site layout alternatives have been considered. The preferred design alternative ensures the Best Practicable Environmental Option. This Guideline has been used in their consideration. Although mandatory to consider, the No-Go (status quo) is not deemed reasonable/feasible since it would prevent the Applicant from exercising his primary property right.

Guideline for the Review of Specialist input in the EIA process (June 2005)

The guideline was followed to:

- Ensure that the specialists inputs meet the terms of reference.
- Ensure that specialist inputs are provided in a form and quality that can be incorporated into the integrated report and can be understood by non-specialists.

Guideline for Environmental Management Plans (June 2005)

The EMPr has been included with this Draft Basic Assessment to provide practical and implementable actions to ensure that the development maintains sustainability and minimise impacts through all its phases. The document is finalised as per the Guidelines and requirements of NEMA.

Guideline on generic terms of Reference for EAPs and Project Schedules (March 2013)

Followed guidance on:

- Generic Requirements for EAPs (what an EAP must manage).
- Generic Requirements for persons compiling a specialist report.
- Scope of Work (project description, primary responsibility, anticipated inputs etc.).

Guideline for determining the scope of specialist involvement in the EIA process (June 2005)

This Guideline was used to determine the timing, scope and quality of specialist inputs in the EIA process.

Guideline for Public Participation (2013)

The PPP for this process is based on this Guideline and it also includes any updated regulations.

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

According to the DE&ADP series of guidelines for the involvement of specialists in the EIA process (2005), one of the underpinning generic principles is to eliminate the unnecessary specialist involvement through proactive project planning and design to avoid or sufficiently reduce negative impacts.

Another is to maximise the use of existing relevant information prior to involving a specialist. This includes the input from the EAP and specialists, in the form of site photographs and site inspections. These principles apply to the specialist studies that have been identified in the screening tool and motivated as not necessary in this report.

The Screening Tool identified the following studies as potentially being applicable to the proposed development:

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme			X	
Animal Species Theme			X	
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme				X
Civil Aviation Theme				X
Defence Theme				X
Paleontology Theme			X	
Plant Species Theme			X	
Terrestrial Biodiversity Theme	X			

Agriculture Theme

The Screening Tool identifies the agricultural sensitivity theme as "Medium".

The property is zoned Agriculture I and it is the applicant's primary right to construct one (1) dwelling on the property.

The construction of this dwelling will not have any detrimental impacts on the agricultural resources or potential of the property:

- Of the 8.6ha, only 0.1ha (1%) will be utilised for this purpose leaving 99% of the property with the primary use of agriculture as is.
- The zoning of the property will remain Agriculture I (no rezoning required since the development of one dwelling is a primary right).

In addition to the above, a SACNASP registered specialist (Reg. no. 400268/12) conducted a site sensitivity verification and **confirmed** the overall **medium sensitivity** classification by the Screening Tool.

The **land capability** of the site ranges from **4 to 6** which verifies it as being of medium agricultural sensitivity in terms of the land capability component of sensitivity (Table 1).

Table 1: Relationship between land capability, agricultural sensitivity, and rainfed cropping suitability provided by the agricultural specialist (Johann Lanz, SoilZa, 2024).

<table>
<tr><th rowspan="2">Land capability value</th><th rowspan="2">Agricultural sensitivity</th><th colspan="2">Rain-fed cropping suitability</th></tr>
<tr><th>Summer rainfall areas</th><th>Winter rainfall areas</th></tr>
<tr><td>1 - 5</td><td>Low</td><td rowspan="2">Unsuitable</td><td rowspan="2">Unsuitable</td></tr>
<tr><td>6</td><td>Medium</td></tr>
<tr><td>7</td><td>Medium</td><td rowspan="3">Suitable</td><td rowspan="3">Suitable</td></tr>
<tr><td>8 - 10</td><td>High</td></tr>
<tr><td>11 - 15</td><td>Very High</td></tr>
</table>

According to the agricultural specialist, the site is completely **unsuitable for viable rainfed crop production** and its potential is assessed as **Very Low** for the following reasons:

- The dryland cropping potential is limited by the combination of climate & soil constraints.
- The property's location which is isolated from another farmland.
- The lack of any existing cropping infrastructure.

The **overall negative agricultural impact** of the development is assessed here as being of **Low** significance. Therefore, it is the opinion of the agricultural specialist that the level of agricultural assessment required is an **Agricultural Compliance Statement** (Appendix G1).

The **Department of Agriculture** has been approached for comment.

Animal Species Theme

The screening tool identified the sensitivity for animal species (fauna) as "Medium" (Table 2) for the following species:

Table 2: Animal Species Sensitivity Features.

Sensitivity	Feature(s)
Medium	Aves-Circus ranivorus
Medium	Aves-Circus maurus
Medium	Aves-Stephanoaetus coronatus
Medium	Aves-Neotis denhami
Medium	Aves-Bradypterus sylvaticus
Medium	Insecta-Lepidochrysops littoralis
Medium	Sensitive species 8
Medium	Invertebrate-Aneuryphymus montanus

The presence or likely presence of fauna SCC identified by the screening tool was investigated through a desktop analysis & on-site inspection by fauna specialists Mr Willem Matthee & Prof. Jan A Venter (Reg. no. 400111/14).

The outcome of the site sensitivity verification **disputes** the **medium sensitivity** and confirms that it should be **Low** for the following main reasons:

- Habitat being unsuitable for any of the fauna SCC to occur within the study area i.e., proposed development footprint within the preferred site.
- No flagged fauna SCC were found during the site inspection and their presence within the study area is confirmed to be unlikely.
- The proposed development leaves enough natural vegetation to act as ecological corridors and habitats for fauna species.

In summary (confirmed by the fauna specialist):

Fauna SCC	Presence on-site during site investigation	Likelihood of Occurrence	Motivation
Circus ranivorus	Not present	Very Low	Unsuitable habitat Occurs mainly near large inland water bodies and estuaries which is absent from the study area.
Circus maurus	Not present	Very Low	Unsuitable habitat Prefers open vegetation such as agricultural fields.
Stephanoaetus coronatus	Not present	Very Low	Unsuitable habitat Occurring in forests and dense woodlands which is absent from the study area.
Neotis denhami	Not present	Very Low	Unsuitable habitat Prefers open and man-made vegetation (pastures and agricultural fields) which is absent.
Bradypterus sylvaticus	Not present	Low	Unsuitable habitat. Vegetation within the study area is not dense and stratified enough to support this species.
Lepidochrysops littoralis	Not present	Low	Unsuitable habitat Inhabits rocky ridges which is absent from the study area.
Sensitive Species 8	Not present	Low	Unsuitable habitat Occurs mainly in indigenous forests and thicket vegetation. The site has some thicket vegetation present. However, it is short coastal thicket, which has sporadic distribution on the property (not ideal habitat).
Aneuryphymus montanus	Not present	Very Low	Unsuitable habitat Prefers arid fynbos on rocky substrates, neither of which are present on the property.

The fauna specialists **dispute** the **medium sensitivity** rating and confirm that it should be **Low**, and that a **Terrestrial Animal Species Compliance Statement** is required (Appendix G2).

CapeNature has been approached for comment.

Aquatic Biodiversity Theme

The screening tool classified the site as being "Very High" due to its location with a Freshwater Ecosystem Priority Area (FEPA) (Figure 5):

Sensitivity	Feature(s)
Very High	FEPA Subcatchment

An Aquatic Site Sensitivity Verification was conducted by Dr Dabrowski (Reg. no. 1144084) who confirmed the following:

- There are no clear areas of natural drainage on the property.
- There are no hydro-geomorphological landscape features (depressions, confined valleys, channels etc.) indicating the presence of a watercourse (i.e. stream, river or wetland).
- No freshwater features were identified within the footprint of the property or within 500m of the property.
- Although the development site falls within a FEPA (Figure 5), the site falls well outside the catchment area of the closest river reach for which the FEPA status was initially determined.

For the reasons stipulated above, Dr Dabrowski **disputes** the very high aquatic sensitivity and confirms that it is **Low**.

Dr Dabrowski compiled an **Aquatic Compliance Statement** which is submitted with this Draft BAR (Appendix G3).

BOCMA has been approached for comment.

Figure 9: Location of site (yellow circle) relative to FEPAs.

Archaeological, Heritage and Palaeontological Themes

The screening tool identified the Archaeological & Cultural Heritage theme as being "low" and the Palaeontological theme as being "medium".

According to Stefan de Kock (Perception Planning), who conducted a **NHRA Applicability Checklist** (Appendix G4), the proposed development **does not constitute** the undertaking of any of the

categories of development set out in Section 38(1) of the National Heritage Resources Act. Therefore, a Notice of Intent to Develop (NID) will not be submitted to Heritage Western Cape (HWC). Kindly note that the NHRA Applicability Checklist refers to Portion 10 instead of 30. The heritage specialist confirmed that it is a typing error which will be corrected for the Final BAR.

According to the Screening Tool, the site has a Medium Palaeontology sensitivity. According to the Geological Map of South Africa, the property is situated within the Strandveld Formation, which is characterized as unconsolidated, calcareous wind-blown sands that record the most recent aeolian phase of the Bredasdorp Group (youngest formation of the Bredasdorp Group) (Johnson *et al*., 2008) (Figure 10). After a site investigation by the EAP, it is confirmed that the study area consists of loose dune sand.

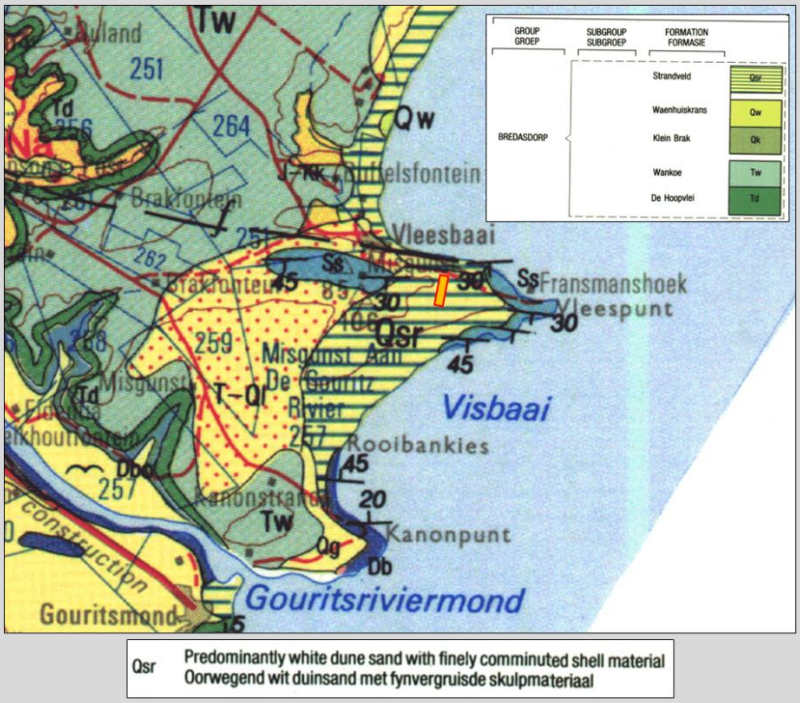


Figure 10: Geological Map of Ptn 30 / 257 Misgunst aan de Gouritz, Fransmanshoek Conservancy (red outline with yellow fill).

The Palaeontological sensitivity of the **Strandveld Formation** dune sands is not rated on the SAHRIS Palaeo-Map as it differs between dune fields depending on the extends of exposures of underlying palaeosurfaces.

Dr Peter Nilssen conducted a Desktop Palaeontology Assessment on a property in proximity to Ptn 30/257 in 2022 (i.e., Ptn 19/257) which is also situated within the **same Geological Formation** (Strandveld Formation of the Bredasdorp Group) (Appendix L). The proposed development on 19/257 is similar to the proposed development on 30/257 which involves the construction of a dwelling with additional infrastructure (access & services).

According to Dr Peter Nilssen, the fossil potential of the **Strandveld Formation** sands is **poor**. The shallow excavations entailed in the proposed construction of one (1) dwelling, access and services will only affect the upper loose dune sands of the Strandveld Formation which are not expected to have an impact on fossil heritage resources due to the **Low to Marginal palaeontological sensitivity** of these modern dune sands.

Although fossil bones of large mammals are occasionally found in young dune-sand mines, the relatively small scale of the excavated subsurface volume for this primary dwelling, renders the likelihood of intersecting the very sparsely distributed fossil bones as low.

In case of the unexpected recovery of fossil bones in the dune sands, it is recommended that a protocol for finds of potential fossil material, the Fossil Find Procedure (FFP), be implemented for the construction phase of the project (included in the EMPr). In summary, if bones are uncovered during excavations for foundations and other installations, stop work at that location and report to Heritage Western Cape. In addition to the FFP, it is recommended that the field supervisor/foreman and workers involved in digging excavations be encouraged and informed of the need to watch for potential fossils and to immediately report such occurrences to the appointed ECO.

The EAP therefore **disputes** the **Medium** palaeontological sensitivity and **confirms** it should be **Low** considering the **confirmed Low fossil potential** of the **Strandveld Formation**. In the unlikely event that fossil bones are uncovered during excavation, the Fossil Find Procedure must be implemented.

Heritage Western Cape has been approached for comment.

Plant Species & Terrestrial Biodiversity Themes

The screening tool identified the **Plant Species** theme as "Medium" and the **Terrestrial Biodiversity** Theme as "Very High".

A botanical/biodiversity specialist (Reg. no. 141757) (Confluent Environmental) conducted a plant species site sensitivity verification (desktop & field Assessment). The specialist **disputes** the **medium sensitivity** and **confirms** that the plant species theme is **Low** within the study area:

- No plant SCC was found within the study area during the site inspection.
- It is unlikely that any plant SCC can occur within the study area as no suitable habitat is present.

The specialist confirms the "Very High" sensitivity as some of the above sensitivity features highlighted above were present on the site:

- The entire property is mapped as a terrestrial CBA 1.
- The site is mapped as part of Hartenbos Dune Thicket (endangered ecosystem), and the site assessment confirms the presence of this coastal vegetation type.
- The proposed development will not affect FEPAs.

The outcome of the site sensitivity verification demonstrates that the property has a high site ecological importance (SEI) which means that adherence to the mitigation hierarchy is essential to preserve the biodiversity and habitat resilience.

A Botanical & Biodiversity Impact Assessment (IA) was compiled and submitted with this Draft BAR (Appendix G5). The IA includes mitigations measures to minimise potential impacts to a degree where the impacts are either minor, or negligible negative.

SECTION D: APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

~~Activity No(s):~~	~~Provide the relevant **Basic Assessment Activity(ies)** as set out in **Listing Notice 1**~~	~~Describe the portion of the proposed development to which the applicable listed activity relates.~~
Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Listing Notice 3**	Describe the portion of the proposed development to which the applicable listed activity relates.
4	The development of a road wider than 4m with a reserve less than 13,5m. (i) Areas zoned for use as public open space or equivalent zoning. **ii. Areas outside urban areas;** **(aa) Areas containing indigenous vegetation.** (bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or iii. Inside urban areas; (aa) Areas zoned for conservation use; or (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.	The new track will be less than 4m wide with a road reserve which will vary from 3.5 to 6m (depending on the steepness of the slope) to create a stable cut- to- fill embankment. Stabilising may be outside the 4m road surface, within the 6m reserve. The proposed new track will be outside an urban area within an area containing indigenous vegetation.
12	The clearance of an area of 300m^2 or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. **i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEM:BA 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.**	The clearance of ±1498m^2 (permanent) and ±298m^2 (temporary) of indigenous vegetation. According to CapeFarmMapper (2024), the entire property consists of endangered **Hartenbos Dune Thicket.** The Botanical / Biodiversity Specialist confirms the presence of this coastal vegetation type across the entire property i.e., **Hartenbos Dune Thicket (EN).** The entire Farm portion is mapped as a terrestrial **CBA 1** (with small patches mapped as **CBA2**).

	ii. **Within critical biodiversity areas identified by bioregional plans.** iii. Within the littoral active zone or 100m inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; or iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning or On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.	

Note:

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

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

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

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

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

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1.	Provide a description of the preferred alternative.

Preferred Property Alternative

Portion 30 of Farm Misgunst aan de Gouritz no. 257, Fransmanshoek Conservancy, Vleesbaai, Mossel Bay Municipal District, Western Cape Province.

Preferred Activity Alternative

The Applicant wishes to exercise his primary right to construct a primary residential dwelling on the property.

Prefer Design Alternative

- One (1) x Primary Dwelling
- One (1) x Access Road
- One (1) x Water Tank Reservoir
- Ten (10) x 5000 litre Supplementary Water Tanks (totalling to 50 000l)
- One (1) x Off Grid Solar System
- One (1) x Artificial Wetland System
- Services: Water, Sewer and Tele-communication infrastructure.

The development footprint of the preferred alternative amounts to **±1 498m²** including the dwelling and additional infrastructure (access road, water tanks, water reservoir, biogas digester, artificial wetland and solar system).

The water reservoir, artificial wetland and services are all positioned in previously disturbed areas (**±166m²**). Work areas around these features will be rehabilitated post construction.

Approximately **± 298m²** will be temporarily disturbed around the proposed dwelling to provide temporary space for construction related activities i.e. stockpiling of material/worker areas.

The existing gravel **access road** extends from property's northern to southern boundary (Figure 1). It is proposed to construct a short link track, extending from this existing gravel access road to the proposed dwelling. The track itself will be less than 4m wide and will be in the form of a 2-spoor track with a road construction area varying from 3.5m - 6m (depending on the steepness of the slope for final design).

Preferred Services

Water Supply: Existing Municipal Ø25mm water pipeline and Existing Borehole.

Electrical Supply: Off Gride Solar System (Solar Panels & Batteries).

Sewage: Biogas Digester (Black Water) and Artificial Wetland (Grey Water).

Solid Waste: Delivered to the closest refuse collection point outside Boggoms Bay. Garden refuse will be managed on-site by the Applicant.

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.
Primary rights for Agriculture I allow for a main dwelling.	
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.
Existing Approvals: Not to the knowledge of the EAP.	
4.	Explain how the proposed development will be in line with the following?
4.1	The Provincial Spatial Development Framework.
The property is zoned as Agriculture Zone I which allows for the construction of a primary dwelling. The PSDF reflects this region as a rural development node, with agricultural activities of grain and pastures highlighted. The applicant has no intention of exercising agriculture rights (ploughing, crop production, livestock production etc.) on the property, but will rather follow the management prescripts promoting the Fransmanshoek conservancy within which it is located.	
4.2	The Integrated Development Plan of the local municipality.
The construction of the single residential dwelling on the property does not conflict with the 2022 – 2027 IDP of the municipality.	
4.3.	The Spatial Development Framework of the local municipality.
The property is zoned Agriculture I and the Applicant is proposing the implementation of this zoning by constructing a single residential dwelling on the property.	
4.4.	The Environmental Management Framework applicable to the area.
There is no gazetted EMF for this area, however as part of the Fransmanshoek Conservancy, the management plans and HOA requirements are applicable to this property.	
5.	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.
All comments received in response to the Draft BAR will be incorporated and responded to in the Final BAR.	
6.	Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.

According to the botanical specialist, the entire Portion 30 / 275 is mapped as a terrestrial and CBA 1 with small sections of CBA2 are also mapped. The applicable reasons for its assignment of the BSP layers in this area are listed below:
 	
• **Endangered (EN) Hartenbos Dune Thicket**
  o Portion 30 / 275 is Hartenbos Dune Thicket according to the vegetation map of South Africa.
• **Coastal habitat types, including Cape Seashore Vegetation (LT)**
  o The development is mapped as part of coastal vegetation. According to the specialist, vegetation is coastal, but it does not represent seashore vegetation.
• **Coastal Resource Protection – Eden**
  o This area was included as part of the Coastal Management Lines for the Eden district. Mr Vernon Gibbs-Halls, Eden's Environmental Control Coordinator has stated that the "Delineation of coastal set-back lines must be undertaken in accordance with the National Environmental Management: Integrated Coastal Management Act (Act No. 24 of 2008) (ICM Act), the National Environmental Management Act (Act No. 107 of 1998) (NEMA), Environmental Impact Assessment (EIA) Regulations, 2010, as well	

as the Western Cape Provincial Spatial Development Framework (PSDF). Coastal setbacks are proposed to facilitate improved planning and management of sensitive and often vulnerable coastal areas."

BSP Layer	Definition	Objective
CBA1	Areas in a natural condition. Required to meet biodiversity targets for species, ecosystems or ecological processes and infrastructure.	Maintain in a natural or near-natural state, with no further loss of habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land uses are appropriate.
CBA2	Areas in a degraded or secondary condition. Required to meet biodiversity targets for species, ecosystems or ecological processes and infrastructure.	Maintain in a functional, natural, or near-natural state, with no further loss of habitat. Degraded areas should be rehabilitated.

The Applicant is proposing a single residential dwelling. This is not a high impact activity. This would fall into the category of Rural Accommodation as defined in the Handbook. The property forms part of the Fransmanshoek Conservancy and will not be utilised for any agricultural activities. Thus, it is being considered here as part of the Conservation areas defined in the Handbook.

The Applicant appointed various independent specialists (botany/biodiversity, fauna, aquatic, agriculture) to best inform the site selection footprint, to either avoid and/or manage/mitigate potential negative environmental impacts.

The botanical specialist compiled a revised map for the entire property and confirmed the following (Figure 11) (Figure 12):

- The vegetation across the farm property is consistent with strandveld thicket – fynbos mosaic.
- Numerous protected milkwood trees were found on-site.
- There is some evidence of Rooikrans clearing on-site, and the existing sandy road is well defined and maintained.
- One (1) threatened plant species was observed during the site assessment; however, it was not found within the proposed development footprint. This SCC is *Agathosma muirri* (the heart buchu which has a vulnerable status).

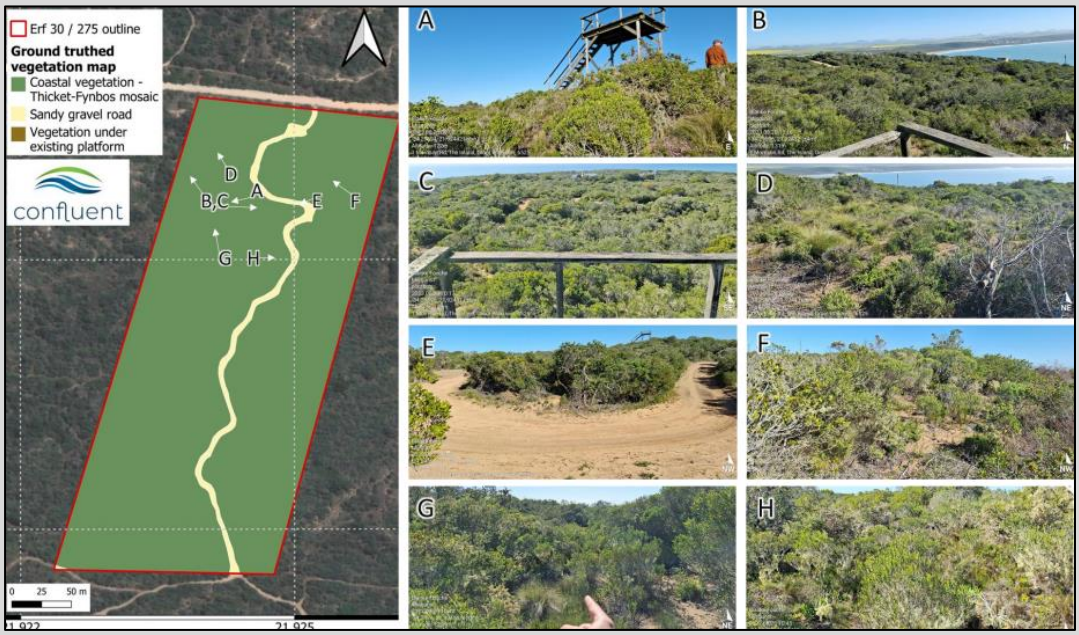


Figure 11: Revised vegetation map for the entire Farm 30/257, including a selection of photos that were taken on the site (source: Confluent).

Figure 12: Photos of Milkwood trees and heart buchu (taken by Confluent).

According to the botanical specialist, the entire farm property has a High Site Ecological Importance (Figure 13).

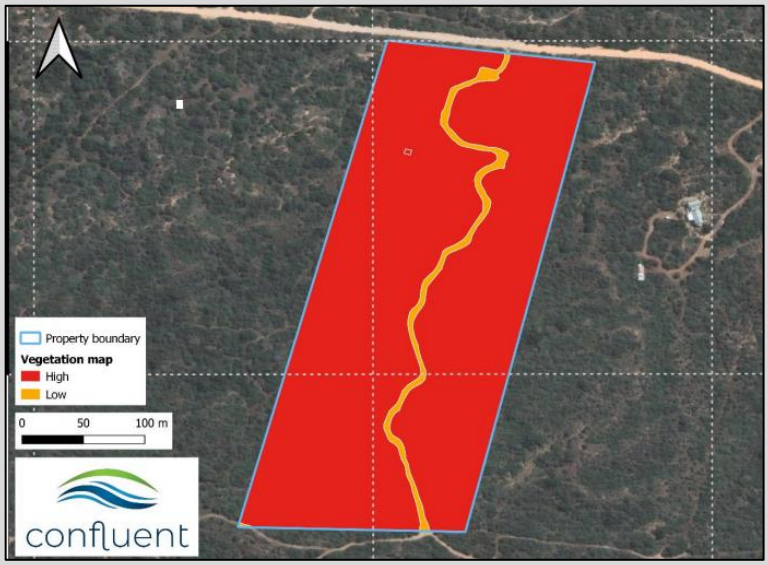


Figure 13: The SEI map of Ptn 30/257 (source: Confluent).

The botanical specialist compiled a botanical/biodiversity impact assessment which is required due to the high sensitivity and SEI that was calculated for both the Terrestrial Biodiversity and Plant Species Themes. For any impact assessment, the mitigation hierarchy (avoid/prevent, minimise, rehabilitate/restore, compensate/offset) is important. If mitigation measures are likely to be ineffective at minimising large impacts, then avoidance mitigation must be implemented. If an impact cannot be prevented, then minimisation is preferred.

While the proposed dwelling and associated infrastructure will lead to the loss of habitat, the mitigation measures outlined in the impact assessment aim to minimise these impacts to a degree where the impacts are either **minor, or negligible negative**. The overall residual impact of the dwelling is therefore **Minor negative**.

7.	Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.
The proposed development does not fall within the Coastal Protection Zone.	
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 report has not changed from the one submitted with the application form.	
9.	Explain how the proposed development will optimise vacant land available within an urban area.
The property is not located within an urban area.	

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

- Access to the farm property will be via an existing District Road, into the Fransmanshoek Conservancy, and an existing gravel road traversing the property.
- The dwelling will make use of an existing municipal water line with a link pipeline to the house along with supplementary rainwater storage and if needed can supplement further with blended/diluted/mixed groundwater from on-site borehole.

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

The Applicant intend to connect to the existing municipal water pipeline within the road reserve of the District Road running along the northern boundary of the property. Confirmation of water services capacity from Mossel Bay Municipality will be provided in the Final BAR.

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

Need (time)

Is the land use considered within the timeframe intended by the existing approved Spatial Development Framework (SDF)? (I.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP?

Yes, the proposed single residential dwelling is allowable in terms of the zonation and land use, as well as the location. It is a low impact, low density development.

Should the development occur here at this point in time?

The applicant bought the property with the intention of utilising it for low impact rural residential use.

Does the community / area need the activity, and the associated land use concerned?

The development of the single residential dwelling does not support any community needs. However, the intention to retain the environment and not implement any agriculture or higher density development ensures retention and continuity of the natural status of the area and its ongoing association with the Fransmanshoek Conservancy.

Are the necessary services with adequate capacity currently available?

The proposal is to connect to the existing Municipal water supply line. The Applicant is aware that water availability from the existing water pipeline is not always assured, depending on the time of the year, especially during peak holiday periods. Therefore, it is proposed to provide additional storage capacity throughout so that there is no additional pressure is added during peak period on the municipal supply. The existing borehole will be able to supply water for fire use and if necessary to be able to mix/dilute with municipal/rainwater for household use, but otherwise the borehole water alone is not sufficient for domestic drinking water.

Sewage on the property will be provided for by means of a small bio-reactor system that must treat domestic sewage on a daily basis. Because there are already existing boreholes in the area that are in use, a septic system is not supported due to the risk of groundwater system.

The dwelling will not connect to the municipal electrical line. De Villiers & Moore Consulting Engineers compiled an Electrical Services Report for the proposed dwelling. According to the report, the proposed dwelling will be supplied from a suitable sized inverter, battery, photo voltaic system which will be integrated into the house. The off grid solar system will be augmented by a suitably sized generator to assist with battery charging during days not conducive to solar generation.

Is this development provided for in the infrastructure planning of the municipality?

No.

Is this project part of a national programme to address an issue of national concern or importance?

No.

Desirability (place)

Is the development the best practicable environmental option for this land / site?

Yes. The proposal is consistent with spatial policies and objectives in relation to primary dwelling rights on agriculturally zoned land.

The proposed Preferred Alternative takes into consideration the environmental sensitivities/slopes and the requirements of the applicant and is considered to be a low to negligible significance.

Would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?

No. The proposal is not inconsistent with spatial policies and objectives in relation to primary dwelling rights on agriculturally zoned land.

Would the approval of this application compromise the integrity of the existing approved environmental management priorities for the area?

No. The property forms part of the Fransmanshoek Conservancy (FMH) and the development of the single residential dwelling and the environmental management of the property will be done in terms of the management principles and objectives of the conservancy. The dwelling must comply with the FMH Homeowners Association Constitution.

How will the activity or the land use associated with the activity applied for, impact on sensitive natural and cultural areas?

The proposed development will have a low to negligible impact on the environment with potential sensitive natural/cultural component having been avoided and/or mitigation provided for to minimise impacts.

How will the development impact on people's health and wellbeing?

The site will not negatively impact on people's health and wellbeing. It is private property, and the activities are consistent with the current rural residential land use within the conservancy.

Will the proposed activity or the land use associated with the activity applied for, result in unacceptable opportunity costs?

No. The property will be owned and managed by the Applicant and the activity applied for constitutes primary rights which have accounted for environmental aspects in the broad definitiion.

Will the proposed land use result in unacceptable cumulative impacts?

No. The applicant joins the homeowner's association of the Fransmanshoek Conservancy which aids in further environmental management of the greater area. The applicant has no intention of developing any agricultural activities on the property which may cause disruption of pattern and process in the environment. The proposed single residential dwelling is in keeping with the zoning for the property. The residual impact of this activity is deemed to be minor negative.

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.~~

~~(a)~~	~~fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of -~~			
~~(i)~~	~~the site where the activity to which the application relates is or is to be undertaken; and~~		~~YES~~	~~EXEMPTION~~
~~(ii)~~	~~any alternative site.~~		~~YES~~	~~EXEMPTION~~
~~(b)~~	~~giving written notice, in any manner provided for in section 47D of the NEMA, to –~~			
~~(i)~~	~~the occupiers of the site and, if the applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;~~		~~YES~~	~~EXEMPTION~~
~~(ii)~~	~~owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;~~		~~YES~~	~~EXEMPTION~~
~~(iii)~~	~~the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;~~		~~YES~~	~~EXEMPTION~~
~~(iv)~~	~~the municipality (Local and District Municipality) which has jurisdiction in the area;~~		~~YES~~	~~EXEMPTION~~
~~(v)~~	~~any organ of state having jurisdiction in respect of any aspect of the activity; and~~		~~YES~~	~~EXEMPTION~~
~~(vi)~~	~~any other party as required by the competent authority;~~	~~N/A~~	~~YES~~	~~EXEMPTION~~
~~(c)~~	~~placing an advertisement in -~~			
~~(i)~~	~~one local newspaper; or~~		~~YES~~	~~EXEMPTION~~
~~(ii)~~	~~any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;~~	~~N/A~~	~~YES~~	~~EXEMPTION~~
~~(d)~~	~~placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken.~~	~~N/A~~	~~YES~~	~~EXEMPTION~~
~~(e)~~	~~using reasonable alternative methods, as agreed to by the Department, in those instances where a person is desirous of but unable to participate in the process due to— (i) illiteracy; (ii) disability; or (iii) any other disadvantage.~~	~~N/A~~	~~YES~~	~~EXEMPTION~~

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

Refer to Appendix F for copies of notifications & stakeholder register. Report will be updated with comments received once the comment period on Draft BAR ends.

- Neighbouring property owners were identified using CapeFarmMapper,
- Select neighbouring property owners were compiled into a list sent to the Mossel Bay Municipality for confirmation of contact details,
- Key Authorities were identified according to whether or not they have a mandated interest in the area/site;
- Local Councillor was verified with the Mossel Bay Municipality;
- Site Notices were placed on site calling for I&APs to register and review the DBAR;
- Written notifications were sent to all potential I&APs via email/post informing of the availability of the DBAR and the opportunity to register as an I&AP;
- Advert appears in the *Mossel Bay Advertiser* for I&AP's to register and submit comment on the DBAR.

Comments received in response to the **Draft BAR** will be considered and incorporated in the **Final BAR**.

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

- Mossel Bay Municipality
- Garden Route District Municipality
- Cape Nature
- Department of Transport: Provincial
- Heritage Western Cape
- SACAA
- Department of Agriculture
- BOCMA (Breede-Olifants Management Catchment Agency – Water Affairs)
- Department of Forestry
- Oceans & Coast

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

Department of Defence – The EAP is of the opinion that the theme is not applicable to this application. Since there is no provision in the Protocols for 'not applicable' the lowest possible rating level of Low applies, however it more appropriate and reasonable to work with a Very Low/Insignificant level. There are no reasonable grounds to conduct any specialists' studies to affirm this and further consultation with the Department of Defence is not necessary.

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

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.

Issued raised by I&APs will be incorporated and responded to in the Issues & Response Report with the Final BAR.

Note:

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

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

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

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

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

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

- a site map showing where the site notice was displayed, dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
- in terms of the written notices given, a copy of the written notice sent, as well as:
  - if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);

- if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
- if a facsimile was sent, a copy of the facsimile Report;
- if an electronic mail was sent, a copy of the electronic mail sent; and
- if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and

- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

1. Groundwater

1.1.	Was a specialist study conducted?	YES	~~NO~~
1.2.	Provide the name and or company who conducted the specialist study.		

Groundwater Complete compiled a Geohydrological Report for the Preferred Property to investigate and describe the groundwater conditions and more specifically the potential of groundwater to supply the property, as well as water quality.

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

According to the Geohydrological Report (2024), the most likely aquifer to exist on the Preferred Property is a secondary fractured rock aquifer hosted within the sedimentary rocks of the Cape Supergroup. The aquifer is regarded as a minor aquifer system:

These can be fractured or potentially fractured rocks that do not have a primary permeability, or other formations of variable permeability. Aquifer extent may be limited and water quality variable. Although these aquifers seldom produce large volumes of water, they are important both for local suppliers and in supplying base flow for rivers.

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.

The Groundwater Vulnerability Classification System used in the groundwater study was developed as a first order assessment tool to aid in the determination of an aquifer's vulnerability/susceptibility to groundwater contamination.

Results: Depth of groundwater level = Rating 1, Groundwater Quality = Rating 1 and Aquifer Type = Rating 2 (Figure 14).

Rating	***4***	***3***	***2***	***1***
Depth to groundwater level	0 – 3 m	3 – 6 m	6 – 10 m	>10 m
Groundwater quality *(Domestic WQG*)*	Excellent (TDS < 450 mg/l)	Good (TDS > 450 < 1 000 mg/l)	Marginal (TDS > 1 000 < 2 400 mg/l)	Poor (TDS > 2 400 mg/l)
Aquifer type *(Parsons Aquifer Classification)*	Sole aquifer system	Major aquifer system	Minor aquifer system	Non-aquifer system

Figure 14: Groundwater vulnerability classification for the study area.

The study area achieved a score of 4 and the underlying aquifer can therefore be regarding as having a **low vulnerability/susceptibility** to groundwater contamination and as such there is little risk of contamination from treated effluent from the artificial wetland infiltration impacting on the groundwater resource.

2. Surface water

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

According to the Aquatic Compliance Statement (2024), the site falls within a Primary Catchment K Area and in quaternary catchment K10A. No freshwater features are mapped to occur within the footprint of the property or within close proximity to the property.

The aquatic biodiversity within the site has been identified as Very High on the basis that the site falls within a **Freshwater Ecosystem Priority Area** (FEPA). For river FEPAs, the whole sub-quaternary catchment is identified as a FEPA, although the FEPA status only applies to the actual river reach within such a sub-quaternary catchment (SQC).

The property is within SQC 9292, and the main unnamed river reach for which a FEPA status was assigned runs south of the Petro SA refinery into the Indian Ocean (Figure 15). Given its coastal location, the SQC includes additional minor coastal rivers and streams that flow directly into the Indian Ocean, most of which do not flow into the main river reach that has been identified as a FEPA.

The study area falls well **outside the catchment** area of this main river reach. The Very High sensitivity, as specified by the screening tool, is therefore **not applicable** to all freshwater features that fall within the SQC.

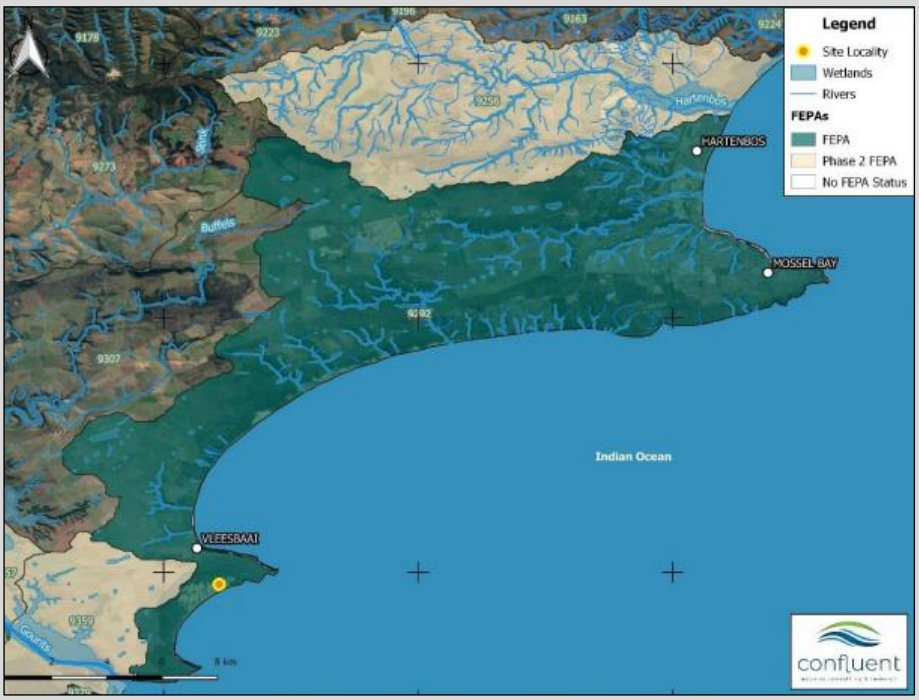


Figure 15: Location of site relative to FEPAs

In addition to the above, the aquatic specialist confirmed the following findings:

- There are no clear areas of natural drainage on the property.
- No hydro-geomorphological landscape features (i.e., depressions, confined valleys, channels) indicating the presence of a watercourse was observed on the property.
- No freshwater features were identified within the footprint of the property or within 500m of the property.

The sensitivity of aquatic biodiversity of the entire farm property must be regarded as **Low**.

3. Coastal Environment

3.1.	Was a specialist study conducted?	~~YES~~	NO
~~3.2.~~	~~Provide the name and/or company who conducted the specialist study.~~		
~~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.~~		
~~3.4.~~	~~Explain how estuary management plans (if applicable) has influenced the proposed development.~~		
~~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.~~		

4. Biodiversity

4.1.	Were specialist studies conducted?	YES	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		
Confluent Environmental (Bianke Fouche) – Botanical & Terrestrial Biodiversity Willem Matthee – Terrestrial Animals			
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.		
• DFFE Screening Tool • iNaturalist • The 2018 updated South African National Vegetation Map from SANBIs Biodiversity GIS (BGIS) database, and the National Biodiversity Assessment report of 2018 (Skowno et al., 2018). • Shapefiles for the Western Cape Biodiversity Spatial Plan (WC-BSP) i.e., information on PAs, CBAs, ESAs, and ONAs were downloaded from BGIS database (CapeNature, 2017; Pool-Sandvliet et al., 2017). • Cape Farm Mapper for additional spatial information required for the site. • Chief Directorate: National Geo-spatial Information (CD: NGI) Geospatial Portal and Google Earth for the acquisition of historical aerial imagery of the site. • The conservation status of ecosystems was found in the Revised National List of Ecosystems that are Threatened and in need of protection, published under the National Environmental Management: Biodiversity Act (Act No. 10, 2004, as revised in Nov. 2022), and also using The Vegetation of South Africa, Lesotho, and Swaziland (Mucina & Rutherford, 2006).			
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.		
According to the botanical specialist, the entire Portion 30 / 275 is mapped as a terrestrial and CBA 1 with small sections of CBA2 are also mapped. The applicable reasons for its assignment of the BSP layers in this area are listed below:			

- **Endangered (EN) Hartenbos Dune Thicket**
    - Portion 30 / 275 is Hartenbos Dune Thicket according to the vegetation map of South Africa.
- **Coastal habitat types, including Cape Seashore Vegetation (LT)**
    - The development is mapped as part of coastal vegetation. According to the specialist, vegetation is coastal, but it does not represent seashore vegetation.
- **Coastal Resource Protection – Eden**
    - This area was included as part of the Coastal Management Lines for the Eden district. Mr Vernon Gibbs-Halls, Eden's Environmental Control Coordinator has stated that the "Delineation of coastal set-back lines must be undertaken in accordance with the National Environmental Management: Integrated Coastal Management Act (Act No. 24 of 2008) (ICM Act), the National Environmental Management Act (Act No. 107 of 1998) (NEMA), Environmental Impact Assessment (EIA) Regulations, 2010, as well as the Western Cape Provincial Spatial Development Framework (PSDF). Coastal setbacks are proposed to facilitate improved planning and management of sensitive and often vulnerable coastal areas."

BSP Layer	Definition	Objective
CBA1	Areas in a natural condition. Required to meet biodiversity targets for species, ecosystems or ecological processes and infrastructure.	Maintain in a natural or near-natural state, with no further loss of habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land uses are appropriate.
CBA2	Areas in a degraded or secondary condition. Required to meet biodiversity targets for species, ecosystems or ecological processes and infrastructure.	Maintain in a functional, natural, or near-natural state, with no further loss of habitat. Degraded areas should be rehabilitated.

The Applicant is proposing a single residential dwelling. This is not a high impact activity. This would fall into the category of Rural Accommodation as defined in the Handbook. However, the property forms part of the Fransmanshoek Conservancy and will not be utilised for any agricultural activities. Thus, it is being considered here as part of the Conservation areas defined in the Handbook.

The Applicant also appointed various specialists (botany/biodiversity, fauna, aquatic, agriculture) to best inform the Site Development Plan to either avoid and/or manage potential negative environmental impacts.

The botanical specialist compiled a revised map for the entire property and confirmed the following (Figure 16) (Figure 17):

- The vegetation across the farm property is consistent with strandveld thicket – fynbos mosoic.
- Numerous protected milkwood trees were found on-site.
- There is some evidence of Rooikrans clearing on-site, and the existing sandy road is well defined and maintained.

- One (1) threatened plant species was observed during the site assessment; however, it was not found within the proposed development footprint. This SCC is *Agathosma muirri* (the heart buchu which has a vulnerable status).

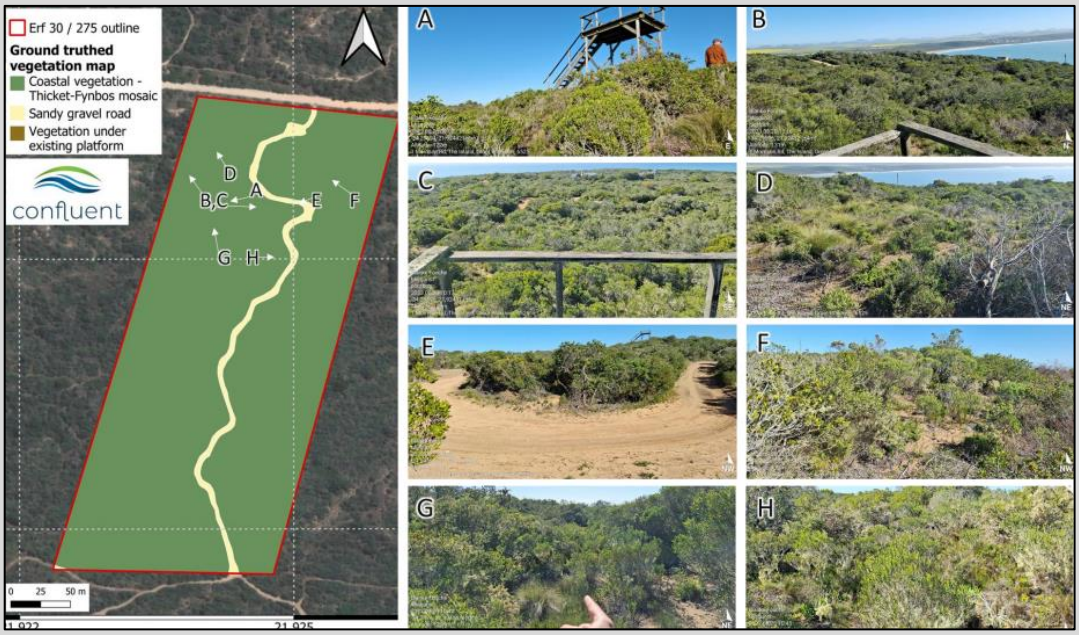


Figure 16: Revised vegetation map for the entire Farm 30/257, including a selection of photos that were taken on the site (source: Confluent).

Figure 17: Photos of Milkwood trees and heart buchu (taken by Confluent).

According to the botanical specialist, the entire farm property has a High Site Ecological Importance (Figure 18).

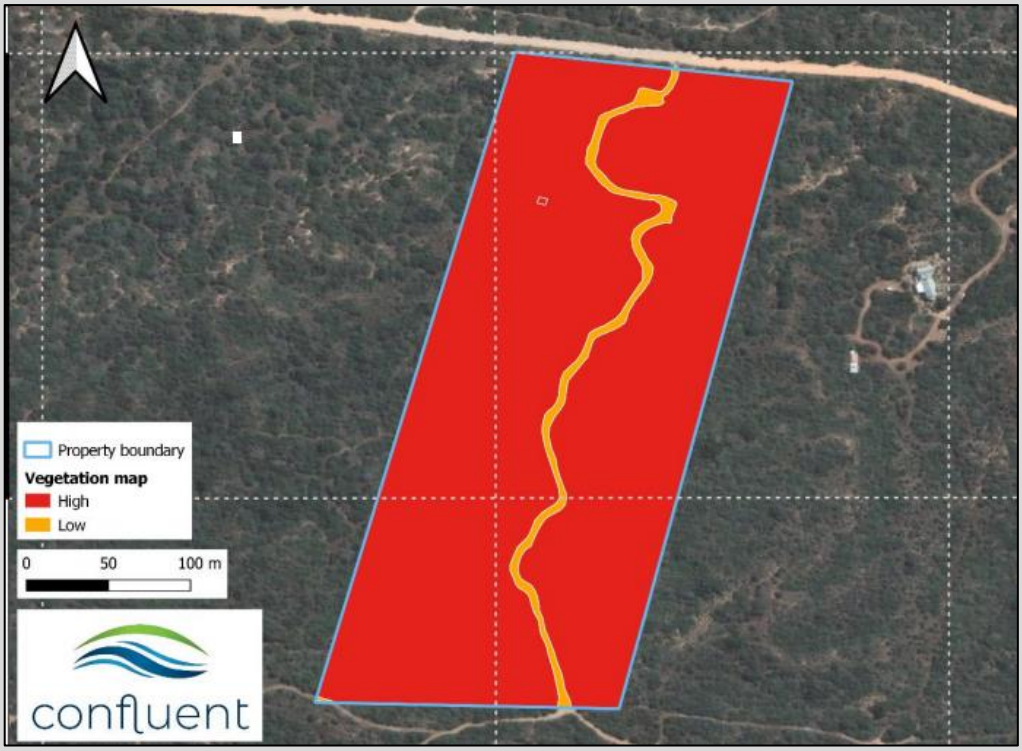


Figure 18: The SEI map of Ptn 30/257 (source: Confluent).

The botanical specialist compiled a botanical/biodiversity impact assessment which is required due to the high sensitivity and SEI that was calculated for both the Terrestrial Biodiversity and Plant Species Themes. For any impact assessment, the mitigation hierarchy (avoid/prevent, minimise, rehabilitate/restore, compensate/offset) is important. If mitigation measures are likely to be ineffective at minimising large impacts, then avoidance mitigation must be implemented. If an impact cannot be prevented, then minimisation is preferred.

While the proposed dwelling and associated infrastructure will lead to the loss of habitat, the mitigation measures outlined in the impact assessment aim to minimise these impacts to a degree where the impacts are either **minor, or negligible negative**. The overall residual impact of the dwelling is therefore **Minor negative**.

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 botanical/biodiversity specialist, the proposed development may have the following minor/moderate negative impacts:

- Permanent Loss of Terrestrial Biodiversity (Construction Phase)
- Permanent Loss of Populations of Important Plant Species (Construction Phase)
- Landscaping effects on habitats and plant species (Operational Phase)

While the proposed development will lead to the loss of habitat, including portions of the Hartenbos Dune Thicket, the mitigation measures outlined in the Botanical/Biodiversity Impact Assessment aim to minimize these impacts to a degree where the impacts are either minor, or negligible negative. The overall residual impact of the proposed development is therefore **Minor negative**.

All the mitigations measures have been included in the Draft Environmental Management Programme.

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 proposed development is not located in a protected area. The proposed development is located within the Fransmanshoek Conservancy (FMH). Although this is not a formally declared protected area in terms of NEM:PAA, the conservancy is subject to the agreement between it and CapeNature. The conservancy has a management plan in place and promotes membership by landowners within its boundaries. Members are required to abide by the management objectives and goals of the FMH.

The proposed development will be subject to the requirements of the FMH Constitution, and the management of the property (particularly alien vegetation clearing) will be done in conjunction with the FMH.

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

The development footprint of the dwelling & associated infrastructure has a **LOW** Sensitivity for the animal species theme, due to:

- No flagged fauna SCC were found during the site inspection and their presence within the study area i.e. development footprint is confirmed to be unlikely. This is due to the lack of suitable habitat at and near the study area.
- The nature of this activity (primary dwelling) is not expected to have an impact on fauna SCC beyond the boundary of the preferred site.
- The proposed development leaves enough natural vegetation to act as ecological corridors and habitats for fauna species.

5. Geographical Aspects

Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.
No geographical aspects will be affected by the proposed development.

6. Heritage Resources

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

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.
None will be affected.

8. Socio/Economic Aspects

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

The property is located within the rural area south of the village of Vleesbaai. According the Mossel Bay Municipality SDF, these areas were originally associated with livestock and fish trading. They have subsequently become coastal holiday places for inland farmers and have developed into the current holiday townships. Permanent occupants are only around 25% of the population. The are largely self-contained and Vleesbaai operates as a private township.

Due to the low-density layout of the area, the density is too low to be serviced by conventional reticulated civil services, but this does allow for a high level of biodiversity conservation. This means that most dwellings implement off grid service infrastructure. Due to the low densities, even if permanent occupation were to significantly increase, innovative off-grid infrastructure technologies should be promoted to limit the burden on municipal service provision.

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

The property is currently a vacant farm portion that is zoned as Agriculture 1 and located within the Fransmanshoek Conservancy. Surrounding land uses include the town of Vleesbaai, active farming properties and small holdings with residential dwellings. The immediately neighbouring properties have single residential dwellings within the conservancy. The socio-economic impact of the activity is limited to some small construction benefits, benefit to the applicant in terms of owning a coastal dwelling and economic and thus environmental benefit, to the Fransmanshoek (FMH) Conservancy.

The conservancy is partly funded by membership fees generated by the homeowner's association and as such it is to the benefit of both the landowner and the conservancy to be granted the right to an abode on the property.

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

Not applicable.

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

The following potential impacts may impact on people's health and well-being:

- Noise during construction – this will be mitigated by managing construction work hours and health and safety on the construction area. Due to the isolation of the property, this is likely to be extremely negligible.
- The visual impact / sense of place of the residential dwelling will be in keeping with the surrounding residential land use. Compliance with the FMH Homeowners Constitution, and the signing off the building plans by the committee ensure any impacts in this regard are negligible.

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.

Preferred Property Alternative

Portion 30 of Farm Misgunst aan de Gouritz no. 257, Fransmanshoek Conservancy, Vleesbaai.

Preferred Site Alternative

- One (1) Dwelling.
- One (1) Access.
- Associated Infrastructure (services, solar panels, water reservoir).

Figure 19: Preferred Site for Proposed Dwelling & Access Road.

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

Non-Preferred Site Alternative

- Two (2) Dwellings.
- Two (2) Accesses.
- Associated Infrastructure (services, solar panels, water reservoir).

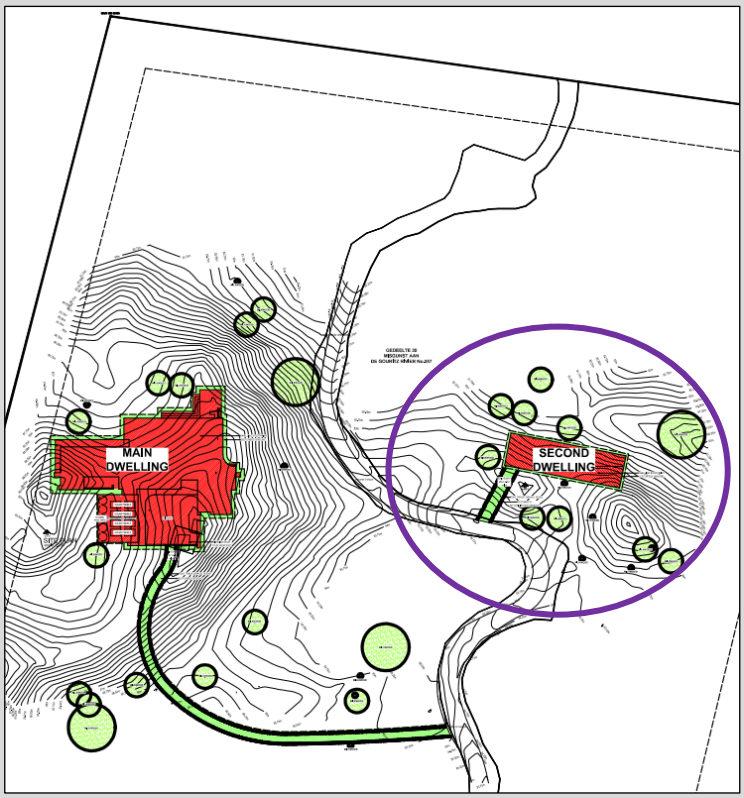


Figure 20: Non-Preferred Site Alternative (Purple Circle).

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

- The Applicant has ownership of the preferred property.
- The zoning allows for a primary residential dwelling on the preferred property.
- The development on site will add to the funding of the Fransmanshoek Conservancy.
- The preferred site is limited to max 1500m^2.
- The Preferred Alternative is best located in terms of the botanical / terrestrial biodiversity (avoid Milkwood trees), whilst the other specialists (aquatic & fauna) have no specific preference as the sensitivity of the site for their disciplines is to Low. However, according to the fauna specialist, the secondary dwelling is proposed directly adjacent to intact thicket areas which might result in indirect impacts on the Knysna Warbler that may prefer this habitat during the construction phase.
- Given the ecosystem treat status of the vegetation type, a footprint with only a primary dwelling (instead of two dwellings) is preferred and better aligned with the objective and outcomes of the Western Cape Biodiversity Spatial Development Framework (2017) for sensitive areas.
- Water use is likely to be slightly higher with an additional dwelling and considering existing constraints within the Municipal supply as well as borehole water quality, focussing on a primary dwelling only is preferred.

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

- The Applicant, in consultation with the architect developed the site plan based on their requirements for a permanent single residential dwelling.
- The Applicant appointed an EAP to run desktop sensitivities on the site. This was followed up by specialist investigations to determine the best option for the dwelling.
    - The site selection as well as layout plan has been informed by the **biodiversity site sensitivity analysis**, as well as **slope analysis**, inclusive of the position of **protected tree species** (also indicated on the SDP).

- The specialists identified two (2) sites suitable for development (preferred & non-preferred) which will cause minor / negligible impacts on the environment.
- Considering potential impacts on botany/biodiversity, Confluent compiled an Impact Assessment with specific mitigation measures to avoid and/or minimise potential impacts.

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

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

The following impacts have been identified for all feasible property & site alternatives:

Positive:

- Supporting the Fransmanshoek Conservancy as an active member.
- Supporting the local economy during construction phase, albeit on a small scale.
- Active alien invasive vegetation clearing.
- Impact of the development on the Fransmanshoek managed conservancy.

Negative:

- Loss of Hartenbos Dune Thicket.
- Temporary noise impacts during construction.
- Impact of the development on the Fransmanshoek managed conservancy.
- Establishment & Maintenance cost (Including veg. management).

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

Provide a description of the preferred activity alternative.

The applicant is proposing the construction of a single residential dwelling as per the rights allowed to the property which is zoned as Agriculture I.

Provide a description of any other activity alternatives investigated.

Although assessed, the No-Go Activity Alternative (status quo) is not deemed a reasonable alternative as it implies not permitting any development which is contrary to the applicant's constitutional property rights awarded to this zoning/property.

Provide a motivation for the preferred activity alternative.

The preferred activity is for the construction of a single residential dwelling as per the rights allowed to the property which is zoned as Agriculture I.

Provide a detailed motivation if no activity alternatives exist.

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

The following impacts have been identified for all feasible activity alternatives:

Positive:

- Supporting the Fransmanshoek Conservancy as an active member.
- Supporting the local economy during construction phase, albeit on a small scale.
- Active alien invasive vegetation clearing.
- Impact of the development on the Fransmanshoek managed conservancy.

Negative:

- Loss of Hartenbos Dune Thicket.
- Temporary noise impacts during construction.
- Impact of the development on the Fransmanshoek managed conservancy.

- Establishment & Maintenance cost (Including veg. management).

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

Provide a description of the preferred design or layout alternative.

The **Preferred Design Alternative** entails the following development components (Figure 21):

- One (1) x Primary Dwelling
- One (1) x Access Road
- One (1) x Water Reservoir
- Ten (10) x 5000 litre Rainwater Tanks (totalling to 50 000l)
- One (1) x Off Grid Solar System
- One (1) x Artificial Wetland System
- Services: Water, Sewer and Tele-communication lines.

The development footprint of the preferred alternative amounts to **±1 498m²** including the dwelling and additional infrastructure (access road, water tanks, water reservoir, biogas digester, artificial wetland and solar system).

The water reservoir, artificial wetland and services are all positioned in previously disturbed areas (**±166m²**). Work areas around these features will be rehabilitated post construction.

Approximately **± 298m²** will be temporarily disturbed around the proposed dwelling to provide temporary space for construction related activities i.e. stockpiling of material/worker areas.

The existing gravel **access road** extends from property's northern to southern boundary (Figure 1). It is proposed to construct a short link track, extending from this existing gravel access road to the proposed dwelling (Figure 2). The track itself will be less than 4m wide and will be in the form of a 2-spoor track with a road construction area varying from 3.5m - 6m (depending on the steepness of the slope for final design) (Figure 2).

The site layout plan has been informed by the **biodiversity site sensitivity analysis**, slope analysis and the position of **protected tree species** (also indicated on the SDP).

SERVICES

Water

The expected water usage will be between 1500 – 1750 litres / day.

- The property has an existing borehole with a tested pump rate of 0.3l/s. Water from this borehole is saline and not necessarily suitable for human consumption unless treated but is usable for general house building requirements during the construction phase and fire-demand requirements during the operational phase.
- Based on the existing vegetation on site, the fire-risk for the proposed dwelling is regarded as low. To accommodate the required fire-flow demand, water from the existing borehole will be pumped and stored within a water reservoir (max 10 000 litres) located south of the proposed dwelling (Figure 21).
- The dwelling will also connect to the existing Ø25mm water pipeline (municipal line) in the road reserve of District Road 4979 running past this property to Fransmanshoek point. Water from this pipeline will be used for potable household supply with rainwater as supplementary source.

  According to the Engineering Services Report (2024), water availability from the existing water pipeline is not always assured, depending on the time of the year, especially during peak

holiday periods. To address this seasonal fluctuation and provide surety of supply, the engineer incorporated a potable supply storage capacity of 50 000l to accommodate high seasonal demand when there may be insufficient water supply. Ten (10) x 5000 litre water tanks (combined 50 000l) will be installed at the proposed dwelling (Figure 3). The tanks will be filled with a combination of both rainwater and potable municipal supply water from the existing Ø25mm municipal water pipeline (during off-peak periods when sufficient water is available in this network point).

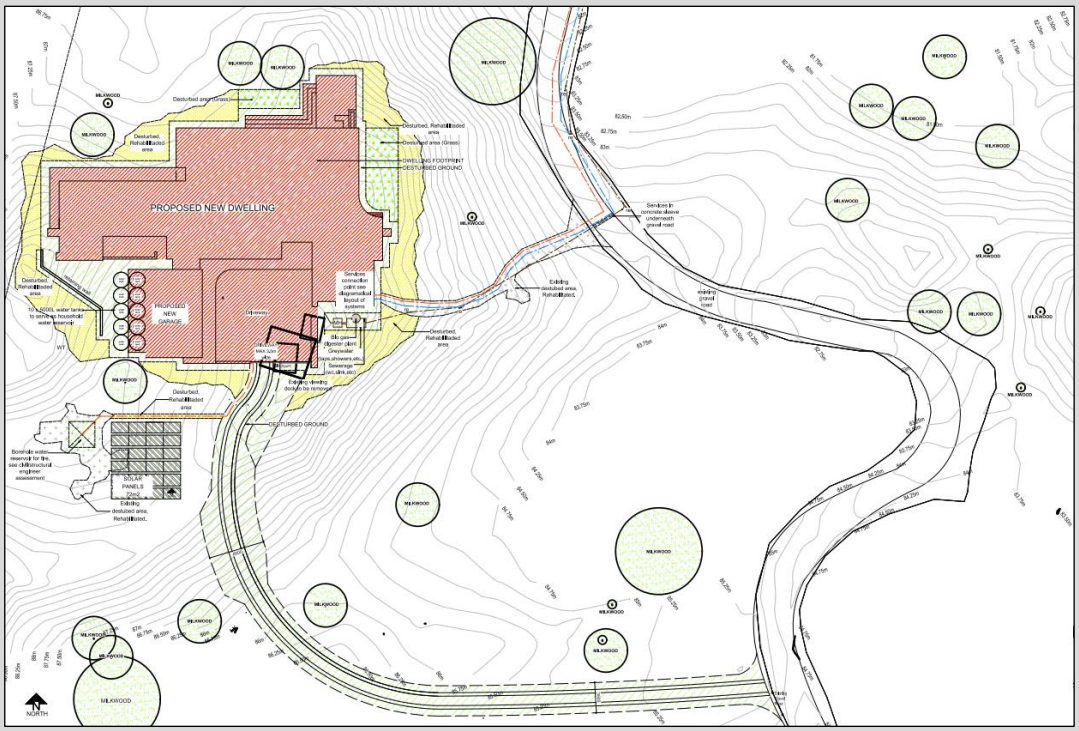


Figure 21: Detailed layout plan of the Preferred Design Alternative (source: Konka Studio).

Electricity

De Villiers & Moore Consulting Engineers compiled an Electrical Services Report for the proposed dwelling. According to the report, the proposed dwelling will be supplied from a suitable sized inverter, battery, photo voltaic system which will be integrated into the house (Figure 3).

The **off grid solar system** will be augmented by a suitably sized generator to assist with battery charging during days not conducive to solar generation.

It is proposed to install the solar panels on the roof of the proposed dwelling. However, the Applicant has provided for an extra area for solar panels, on the ground, next to the water reservoir (Figure 3) should the roof have insufficient space for the solar panels. This additional disturbance was assessed by all the specialists.

Sewage

The calculated sewerage and grey water generation from the household ranged between 500 – 750 litre / day.

Effluent from the household will be accommodated on-site as follows:

- Grey water will be diverted to a small artificial wetland for further polishing.
- Black water will be diverted to a small household bio-gas digester, with an overflow to the small artificial wetland.

- The filtered water from the artificial wetland system will be allowed to infiltrate the sand medium.

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

The Applicant initially considered the alternative to develop a primary and secondary (two dwellings) on the property (Figure 22):

- Two (2) x Dwellings (Primary & Secondary)
- Two (2) x Access Roads
- Five (5) x 2500 litre Rainwater Tanks (Totalling to 12500 litres)
- One (1) x Off Grid Solar System
- Services: Water, Sewer and Tele-communication lines.

Figure 22: Non-Preferred Design Alternative.

Provide a motivation for the preferred design or layout alternative.

- The Preferred Design will not impact on Plant / Fauna SCC.
- Although the entire property has a high SEI, impacts can be reduced from Moderate Negative to Minor / Negligible Negative.
- The overall residual impact is Minor Negative.
- The Preferred Design avoids most, if not all, protected Milkwood trees.
- The Preferred Design will not impact on any aquatic features.
- The Preferred Design will not impact on agriculture.
- The Preferred Design will not have indirect impacts on the Knysna Warbler during the temporary construction phase.

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

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

Positive Impacts for both design alternatives (Preferred & Non-Preferred)

- The design alternatives will not directly impact Plant / Fauna SCC.

- Although the entire property has a high SEI, impacts can be reduced from Moderate Negative to Minor / Negligible Negative.
- The overall residual impact is Minor Negative.
- The design alternatives will not impact on any aquatic features.
- The design alternatives will not impact on agriculture.

Negative impacts for both design alternatives (Preferred & Non-Preferred)

- Loss of Hartenbos Dune Thicket.
- Temporary noise impacts during construction.
- Establishment & Maintenance cost (Including veg. management).
- According to the fauna specialist, the non-preferred design is proposed directly adjacent to intact thicket areas which might result in indirect impacts on the Knysna Warbler that may prefer this habitat (temporarily during the construction phase).

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:

- Rooftop solar and/or heat pumps and/or gas geysers (or similar) for heating of water
- Rainwater tanks at each residential house
- LED lights only
- Dual flush toilets
- Low flow shower heads
- Low flow faucets
- Gas stoves optional, recommended for individual homes by Developer.
- Re-use of filtered grey water for irrigation and landscaping around private homes.

Provide a description of any other technology alternatives investigated.

Provide a motivation for the preferred technology alternative.

The use of solar/heat pumps/gas geysers reduces the demand on (municipal) electricity. The use of rainwater tanks provides households with water for gardening or other uses that reduces the demand on municipal water supply. The use of LED lights reduces the demand for municipal electricity. Use of low flow shower heads and duel flush toilets reduces the pressure on municipal potable water supply. The use of gas stoves in households reduces the demand on municipal electricity supply.

Provide a detailed motivation if no alternatives exist.

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

<u>Positive</u>

- Reduce water demand on municipal supply with rainwater tanks, duel flush toilets and low flow shower heads.
- Reduced electricity demand on municipal supply with use of alternatives such as solar or heat pumps/gas geysers.

<u>Negative</u>

- Reduced income generation potential for Municipality when renewable energy devices are implemented.
- Reduced income generation potential for Municipality when rainwater harvesting replaces municipal water supply.

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

Provide a description of the preferred operational alternative.

Recycling is recommended during operational phase.

Indigenous landscaping only within private open space and communal areas.

Invasive alien vegetation control always.

Provide a description of any other operational alternatives investigated.

Provide a motivation for the preferred operational alternative.

Recycle at source to reduce pressure on landfill sites.

Indigenous landscaping within open space / communal areas creates micro habitats within the development which ultimately reduces the carbon footprint of the development, it helps maintain the microclimate of the development and it encourages the return of fauna such as birds and a variety of insects/pollinators.

Long-term invasive alien control ensures that sensitive indigenous habitat does not get invaded and replaced by faster growing invasive plant species.

Provide a detailed motivation if no alternatives exist.

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

Positive

Recycling will reduce pressure on landfill sites.

Indigenous landscaping will enhance the biodiversity of the site.

Negative

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 Alternative is the option to retain the status quo i.e. not implementing the dwelling.

This implies that no development takes place at all on the property, which sterilises the property which has zoning / land use rights that allow for a residential dwelling as a minimum. The No-Go option would be contrary to implementation of the primary rights awarded to the zoning/property which would be an infringement of property owner rights.

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.

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

Preferred Property Alternative

Portion 30 of Farm Misgunst aan de Gouritz no. 257, Fransmanshoek Conservancy, Vleesbaai, Mossel Bay Municipal District, Western Cape Province.

Preferred Activity Alternative

The Applicant wishes to exercise his primary right to construct a primary residential dwelling on the property.

Prefer Design Alternative

- One (1) x Primary Dwelling
- One (1) x Access Road
- One (1) x Water Reservoir
- Ten (10) x 5000 litre Rainwater Tanks (totalling to 50 000l)
- One (1) x Off Grid Solar System
- One (1) x Artificial Wetland System
- Services: Water, Sewer and Tele-communication lines.

The development footprint of the preferred alternative amounts to **±1 498m²** including the dwelling and additional infrastructure (access road, water tanks, water reservoir, biogas digester, artificial wetland and solar system).

The water reservoir, artificial wetland and services are all positioned in previously disturbed areas (**±166m²**). Work areas around these features will be rehabilitated post construction.

Approximately **± 298m²** will be temporarily disturbed around the proposed dwelling to provide temporary space for construction related activities i.e. stockpiling of material/worker areas.

The existing gravel **access road** extends from property's northern to southern boundary (Figure 1). It is proposed to construct a short link track, extending from this existing gravel access road to the proposed dwelling. The track itself will be less than 4m wide and will be in the form of a 2-spoor track with a road construction area varying from 3.5m - 6m (depending on the steepness of the slope for final design).

Preferred Services

Water Supply: Existing Municipal Ø25mm water pipeline and Existing Borehole.

Electrical Supply: Off Gride Solar System (Solar Panels & Batteries).

Sewage: Biogas Digester (Black Water) and Artificial Wetland (Grey Water).

Solid Waste: Delivered to the closest refuse collection point outside Boggoms Bay. Garden refuse will be managed on-site by the Applicant.

2. "No-Go" areas

Explain what "no-go" area(s) have been identified during identification of the alternatives and provide the co-ordinates of the "no-go" area(s).
The identified no-go areas are all areas outside the permanent & temporary disturbance footprints of the preferred alternative for the purposes of CONSTRUCTION. The applicant retains his right to access the remainder of this property during operational phase on condition that such access requirements do not require additional authorisations ito applicable legislation as may be applicable ito the NFA and NEMA.

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.

Criteria for Assessment

These criteria are drawn from the EIA Regulations, published by the Department of Environmental Affairs and Tourism (April 1998) in terms of the Environmental Conservation Act No. 73 of 1989.

These criteria include:

- **Nature of the impact**

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

- **Extent of the impact**

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

- **Duration of the impact**

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

- **Intensity**

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

- **Probability of occurrence**

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

The impacts should also be assessed in terms of the following aspects:

- **Legal requirements**

The specialist / EAP should identify and list the relevant South African legislation and permit requirements pertaining to the development proposals. He / she should provide reference to the procedures required to obtain permits and describe whether the development proposals contravene the applicable legislation.

- **Status of the impact**

The specialist / EAP should determine whether the impacts are negative, positive or neutral ("cost – benefit" analysis). The impacts are to be assessed in terms of their effect on the project and the environment. For example, an impact that is positive for the proposed development may be negative for the environment. It is important that this distinction is made in the analysis.

- **Accumulative impact**

Consideration must be given to the extent of any accumulative impact that may occur due to the proposed development. Such impacts must be evaluated with an assessment of similar developments already in the environment. Such impacts will be either positive or negative, and will be graded as being of negligible, low, medium or high impact.

- **Degree of confidence in predictions**

The specialist / EAP should state what degree of confidence (low, medium or high) is there in the predictions based on the available information and level of knowledge and expertise.

Based on a synthesis of the information contained in the above-described procedure, you are required to assess the potential impacts in terms of the following significance criteria:

No significance: the impacts do not influence the proposed development and/or environment in any way.

Low significance: the impacts will have a minor influence on the proposed development and/or environment. These impacts require some attention to modification of the project design where possible, or alternative mitigation.

Moderate significance: the impacts will have a moderate influence on the proposed development and/or environment. The impact can be ameliorated by a modification in the project design or implementation of effective mitigation measures.

High significance: the impacts will have a major influence on the proposed development and/or environment and will result in the "no-go" option on the development or portions of the development regardless of any mitigation measures that could be implemented. This level of significance must be well motivated.

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.

BOTANICAL / BIODIVERSITY IMPACT ASSESSMENT

Alternative:	**Preferred Alternative (One Dwelling & Associated infrastructure)**
~~**PLANNING, DESIGN AND** **DEVELOPMENT PHASE** **& OPERATIONAL PHASE**~~	
Potential impact and risk:	Impact 1: Permanent Loss of Terrestrial Biodiversity
Nature of impact:	Negative
Extent and duration of impact:	Extend: Very Limited (with & without Mitigation) Duration: Permanent (with and without Mitigation)
Consequence of impact or risk:	The permanent loss of Hartenbos Dune Thicket because of earthworks and other construction related activities.
Probability of occurrence:	Certain (with and without Mitigation)
Degree to which the impact may cause irreplaceable loss of resources:	Moderate (with and without Mitigation)
Degree to which the impact can be reversed:	Low (with and without Mitigation)
Indirect impacts:	None
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Moderate Negative: - 84
Degree to which the impact can be avoided:	

Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	From Moderate Negative (-84) to Minor Negative (-63)
Proposed mitigation:	Prior to construction: The disturbance footprint of proposed developments should be clearly defined and demarcated to prevent unnecessary damage to the surrounding environment. Prior to construction: With the aid of a suitably qualified ECO with botanical knowledge, install protective barriers around protected tree stands (Milkwood, Sideroxylon inerme inerme) and other significant stands of SCC to prevent damage from construction activities During construction: Protection and re-use of topsoil. During construction: New roads need to be either dirt roads or must be made using the same / similar permeable surfaces
Residual impacts:	Minor (after mitigation)
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Minor Negative: - 63

Alternative:	**Preferred Alternative** **(One Dwelling & Associated infrastructure)**
~~**PLANNING, DESIGN AND** **DEVELOPMENT PHASE** **& OPERATIONAL PHASE**~~	
Potential impact and risk:	Impact 2: Permanent Loss of Populations of Important Plant Species
Nature of impact:	Negative
Extent and duration of impact:	Extend: Very Limited (with & without Mitigation) Duration: Short term (with Mitigation), Long term (without Mitigation)
Consequence of impact or risk:	The permanent loss of SCC and other important and protected plant species of the property as a result of earthworks and other construction related activities
Probability of occurrence:	Certain (with and without Mitigation)
Degree to which the impact may cause irreplaceable loss of resources:	Moderate (with and without Mitigation)
Degree to which the impact can be reversed:	Low (with and without Mitigation)
Indirect impacts:	None
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Minor Negative: - 63

Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	From Minor Negative (-63) to Negligible Negative (-35)
Proposed mitigation:	Prior to construction: A plant search and rescue must be conducted for geophytes in the defined PAOI (with a botanist / ecologist on the site to provide guidance on best practice). During construction: Materials used during construction must be sourced and transported responsibly to minimise the risk new invasive plants. During construction: Staff, if suspected may be checked when they leave to ensure no plants have been poached from the natural surrounding environment. Staff should also be told that plants may not be collected outside of the search and rescue operation. Post construction: Undertake revegetation of the disturbance envelope outside of the permanent disturbance footprint. If more plants are required for successful coverage of disturbed areas, augmentation with sourced plants can be done.
Residual impacts:	Negligible Negative
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible Negative (-35)

Alternative:	**Preferred Alternative** **(One Dwelling & Associated infrastructure)**
~~**PLANNING, DESIGN AND DEVELOPMENT PHASE &**~~ **OPERATIONAL PHASE**	
Potential impact and risk:	Impact 1: Landscaping effects on Habitats and Plant Species
Nature of impact:	Negative
Extent and duration of impact:	Extend: Very Limited (with Mitigation), Limited (without Mitigation) Duration: Brief (with Mitigation), Ongoing (without Mitigation)
Consequence of impact or risk:	Thicket-fynbos and SCC populations in these habitats negatively affected by inappropriate permanent landscaping & landscape management resulting in water attenuation problems, genetic pollution, and potential long-term biodiversity loss from the cultivation of

	species that are not indigenous to the vegetation type and surrounding landscape.
Probability of occurrence:	Almost Certain (with Mitigation), Certain (without Mitigation)
Degree to which the impact may cause irreplaceable loss of resources:	Moderate (with and without Mitigation)
Degree to which the impact can be reversed:	Low (with and without Mitigation)
Indirect impacts:	None
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Moderate Negative: - 84
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	From Moderate Negative (-84) to Negligible Negative (-30)
Proposed mitigation:	Protection of biodiversity beyond the permanent disturbance footprint, especially where the habitat is becoming increasingly invaded by Rooikrans. Control of alien & invasive plant species according to a management plan must occur over the long-term on the site. If gardens need to be considered, they can be designed to be water wise (avoid erosion) and friendly to wildlife and the greater natural habitat. Fire-proof hedges (Esler et al., 2014) can be made with indigenous species to reduce fire risk around the built environment. Clearly delineate maintenance zones and employ low-impact maintenance techniques.
Residual impacts:	Negligible Negative
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible Negative (-30)

Alternative:	**Non-Preferred Alternative** **(Two Dwellings & Associated infrastructure)**
~~**PLANNING, DESIGN AND** **DEVELOPMENT PHASE** **& OPERATIONAL PHASE**~~	
Potential impact and risk:	Impact 1: Permanent Loss of Terrestrial Biodiversity
Nature of impact:	Negative

Extent and duration of impact:	Extend: Very Limited (with Mitigation), Limited (Without Mitigation) Duration: Permanent (with and without Mitigation)
Consequence of impact or risk:	The permanent loss of Hartenbos Dune Thicket because of earthworks and other construction related activities.
Probability of occurrence:	Certain (with and without Mitigation)
Degree to which the impact may cause irreplaceable loss of resources:	Moderate (with and without Mitigation)
Degree to which the impact can be reversed:	Low (with and without Mitigation)
Indirect impacts:	None
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Moderate Negative: - 70
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	From Moderate Negative (-70) to Minor Negative (-42)
Proposed mitigation:	Prior to construction: The disturbance footprint of proposed developments should be clearly defined and demarcated to prevent unnecessary damage to the surrounding environment. Prior to construction: With the aid of a suitably qualified ECO with botanical knowledge, install protective barriers around protected tree stands (Milkwood, Sideroxylon inerme inerme) and other significant stands of SCC to prevent damage from construction activities During construction: Protection and re-use of topsoil. During construction: New roads need to be either dirt roads or must be made using the same / similar permeable surfaces
Residual impacts:	Minor (after mitigation)
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Minor Negative: - 70

Alternative:	**Non-Preferred Alternative** **(Two Dwellings & Associated infrastructure)**
~~**PLANNING, DESIGN AND** **DEVELOPMENT PHASE** **& OPERATIONAL PHASE**~~	
Potential impact and risk:	Impact 2: Permanent Loss of Populations of Important Plant Species

Nature of impact:	Negative
Extent and duration of impact:	Extend: Very Limited (with & without Mitigation) Duration: Short term (with Mitigation), Long term (without Mitigation)
Consequence of impact or risk:	The permanent loss of SCC and other important and protected plant species of the property as a result of earthworks and other construction related activities
Probability of occurrence:	Certain (with and without Mitigation)
Degree to which the impact may cause irreplaceable loss of resources:	Moderate (with and without Mitigation)
Degree to which the impact can be reversed:	Low (with and without Mitigation)
Indirect impacts:	None
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Minor Negative: - 70
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	From Minor Negative (-63) to Minor Negative (-42)
Proposed mitigation:	Prior to construction: A plant search and rescue must be conducted for geophytes in the defined PAOI (with a botanist / ecologist on the site to provide guidance on best practice). During construction: Materials used during construction must be sourced and transported responsibly to minimise the risk new invasive plants. During construction: Staff, if suspected may be checked when they leave to ensure no plants have been poached from the natural surrounding environment. Staff should also be told that plants may not be collected outside of the search and rescue operation. Post construction: Undertake revegetation of the disturbance envelope outside of the permanent disturbance footprint. If more plants are required for successful coverage of disturbed areas, augmentation with sourced plants can be done.
Residual impacts:	Negligible Negative
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible Negative (-42)

Alternative:	**Non-Preferred Alternative** **(Two Dwellings & Associated infrastructure)**
~~**PLANNING, DESIGN AND DEVELOPMENT PHASE &**~~ **OPERATIONAL PHASE**	
Potential impact and risk:	Impact 1: Landscaping effects on Habitats and Plant Species
Nature of impact:	Negative
Extent and duration of impact:	Extend: Very Limited (with Mitigation), Limited (without Mitigation) Duration: Short term (with Mitigation), Permanent (without Mitigation)
Consequence of impact or risk:	Thicket-fynbos and SCC populations in these habitats negatively affected by inappropriate permanent landscaping & landscape management resulting in water attenuation problems, genetic pollution, and potential long-term biodiversity loss from the cultivation of species that are not indigenous to the vegetation type and surrounding landscape.
Probability of occurrence:	Almost Certain (with Mitigation), Certain (without Mitigation)
Degree to which the impact may cause irreplaceable loss of resources:	Moderate (with and without Mitigation)
Degree to which the impact can be reversed:	Low (with and without Mitigation)
Indirect impacts:	None
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Moderate Negative: - 98
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	From Moderate Negative (-98) to Negligible Negative (-42)
Proposed mitigation:	Protection of biodiversity beyond the permanent disturbance footprint, especially where the habitat is becoming increasingly invaded by Rooikrans. Control of alien & invasive plant species according to a management plan must occur over the long-term on the site. If gardens need to be considered, they can be designed to be water wise (avoid erosion) and friendly to wildlife and the greater natural habitat. Fire-proof hedges (Esler et al., 2014) can be made with indigenous species to reduce fire risk around the built environment.

	Clearly delineate maintenance zones and employ low-impact maintenance techniques.
Residual impacts:	Negligible Negative
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible Negative (-42)

Alternative:	**No-Go Alternative**
~~**PLANNING, DESIGN AND DEVELOPMENT PHASE & OPERATIONAL PHASE**~~	
Potential impact and risk:	Impact 1: Permanent Loss of Terrestrial Biodiversity
Nature of impact:	Negative
Extent and duration of impact:	Extend: Very Limited Duration: Immediate
Consequence of impact or risk:	The permanent loss of Hartenbos Dune Thicket because of earthworks and other construction related activities.
Probability of occurrence:	Certain
Degree to which the impact may cause irreplaceable loss of resources:	Moderate
Degree to which the impact can be reversed:	Low
Indirect impacts:	None
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible Negative: - 21
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:	No-Go Alternative
~~PLANNING, DESIGN AND~~ DEVELOPMENT PHASE ~~& OPERATIONAL PHASE~~	
Potential impact and risk:	Impact 2: Permanent Loss of Populations of Important Plant Species
Nature of impact:	Negative
Extent and duration of impact:	Extend: Very Limited Duration: Immediate
Consequence of impact or risk:	The permanent loss of SCC and other important and protected plant species of the property as a result of earthworks and other construction related activities
Probability of occurrence:	Certain
Degree to which the impact may cause irreplaceable loss of resources:	Moderate
Degree to which the impact can be reversed:	Low
Indirect impacts:	None
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Minor Negative: - 21
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:	No-Go Alternative
~~PLANNING, DESIGN AND DEVELOPMENT PHASE~~ & OPERATIONAL PHASE	
Potential impact and risk:	Impact 1: Landscaping effects on Habitats and Plant Species
Nature of impact:	Negative
Extent and duration of impact:	Extend: Very Limited Duration: Brief
Consequence of impact or risk:	Thicket-fynbos and SCC populations in these habitats negatively affected by inappropriate permanent

	landscaping & landscape management resulting in water attenuation problems, genetic pollution, and potential long-term biodiversity loss from the cultivation of species that are not indigenous to the vegetation type and surrounding landscape.
Probability of occurrence:	Almost Certain
Degree to which the impact may cause irreplaceable loss of resources:	Moderate
Degree to which the impact can be reversed:	Low
Indirect impacts:	None
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Moderate Negative: - 24
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)	

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.

Agricultural Findings

- The agricultural assessment confirms the low to medium sensitivity rating of the site.
- The site is completely unsuitable for viable rainfed crop production and its potential is assessed as very low.
- The proposed development on this land will result in negligible loss of future agricultural production potential in terms of national food security.
- The overall negative impact of the development is assessed as being of low significance.

Aquatic Findings

- The aquatic sensitivity of the preferred farm property is low.
- While the development falls within a FEPA, the site falls well outside the catchment area of the river reach for which the FEPA status was determined.
- No freshwater features were identified within the footprint area of the site or within proximity (i.e., within 2km) of the site.

Fauna Findings

- No flagged fauna SCC were found on site and their presence within the study area i.e., development footprint is confirmed to be unlikely.
- The nature of this activity is not expected to have an impact on fauna SCC within and beyond the boundary of the preferred site.
- The activity leaves enough vegetation to act as ecological corridors and habitats for fauna species.
- Both **preferred and non-preferred alternatives** are acceptable to the fauna specialist. The non-preferred impacts might result in temporary indirect impacts on the Knysna Warbler, during the construction phase, considering it being adjacent to intact thicket vegetation (suitable habitat for the Knysna Warbler). This impact can however be mitigation by scheduling construction outside the breeding season of the Knysna Warbler.

Botanical/Biodiversity Findings

- No Plant SCC will be impacted by the proposed development.
- While the proposed development will lead to the inevitable loss of habitat, including portions of the Hartenbos Dune Thicket (EN), the mitigation measures outlined in this report aim to minimize these impacts to a degree where the impacts are either minor, or negligible negative. The overall residual impact of the dwelling proposed is therefore Minor negative.
- Both preferred and non-preferred alternatives are acceptable to the botanical/biodiversity specialist. The non-preferred alternative has a slightly higher SEI score compared to the preferred. This is mainly because of protected tree species within proximity to the second dwelling. However, potential impacts from both options can be minimised to Minor / Negligible if mitigation measures are implemented.

Botanical/Biodiversity Recommendations / Mitigation Measures

- Prior to construction: The disturbance footprint of proposed developments should be clearly defined and demarcated to prevent unnecessary damage to the surrounding environment
    - The proposed development must have a maximum disturbance envelope of 2m around the proposed development (this is the PAOI presented in this report).
    - Construction netting and fencing must be used to clearly indicate construction areas. Shade cloth used as fencing should be hammered into the ground using wooden pegs.

- Clear signs for "no-go" areas for vehicles and personnel to be placed strategically on the site. No-go areas (for the purposes of CONSTRUCTION phase) are anywhere outside of the direct area of influence of the construction phase.
- A turning and parking area for construction and delivery vehicles may only take place in areas that are already cleared or part of the permanent disturbance footprint of the development plan

- Prior to construction: With the aid of a suitably qualified ECO with botanical knowledge, install protective barriers around protected tree stands (Milkwood, Sideroxylon inerme inerme) and other significant stands of SCC to prevent damage from construction activities
- During construction: Protection and re-use of topsoil.
  - The topsoil will be vital for the success of rehabilitation of fynbos-thicket vegetation following construction processes and must therefore be treated with care.
  - Topsoil from fynbos-thicket vegetation on the site (excluding topsoil under dense stands of invasive plants) in new excavation areas must be stripped to a depth of ca. 30cm and kept in designated piles.
  - Topsoil piles must be suitably covered and bunded (e.g., with sandbags). This will prevent the material from washing away and contaminating the substrate of the site which likely still contains useful seeds and soil organisms.
  - If the SDP of a proposed development does not have enough space for the storage and protection of topsoil within the disturbance envelope, then the Contractor must identify a non-preferred temporary stockpile area that is already transformed and where it can easily be retrieved for post-construction rehabilitation.
  - The topsoil piles must be clearly labelled so that it does not mix with subsoils excavated or any other construction material for the site.
  - During construction: New roads need to be either dirt roads or must be made using the same / similar permeable surfaces illustrated.
- Prior to construction: A plant search and rescue must be conducted for geophytes in the defined PAOI (with a botanist / ecologist on the site to provide guidance on best practice).
- During construction: Materials used during construction must be sourced and transported responsibly to minimise the risk new invasive plants.
- During construction: Staff, if suspected may be checked when they leave to ensure no plants have been poached from the natural surrounding environment. Staff should also be told that plants may not be collected outside of the search and rescue operation.
- Post construction: Undertake revegetation of the disturbance envelope outside of the permanent disturbance footprint.
- Protection of biodiversity beyond the permanent disturbance footprint, especially where the habitat is becoming increasingly invaded by Rooikrans.
  - The rehabilitation of the 2m disturbance footprint with topsoil and plants rescued on the site must occur as soon as possible after the conclusion of construction.
  - Control of alien & invasive plant species according to a management plan must occur over the long-term on the site.
- If gardens need to be considered, they can be designed to be water wise (avoid erosion) and friendly to wildlife and the greater natural habitat. Fynbos Life in Cape Town is an inspirational indigenous landscaping project with very useful tips allowing a garden to add biodiversity value, instead of detract value.
- Fire-proof hedges (Esler et al., 2014) can be made with indigenous species to reduce fire risk around the built environment.
- Clearly delineate maintenance zones and employ low-impact maintenance technique.

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

All mitigation measures that were identified by the specialist will be included in the EMPr.

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

Civil Aviation Theme

The site does not exceed the minimum height threshold as stipulated in the CAA Obstacle Guideline and therefore it is not necessary to conduct any studies in this regard. **SACAA has been approached for comment as part of the public participation process.**

Defence Theme

This theme is not relevant nor applicable to township expansion of a town. **No study is required.**

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

The proposed development will have a **Negligible to Low impact** on surrounding communities.

Other impacts are mostly temporary impacts associated with the construction phase, namely noise and potentially dust pollution. The following key mitigation measures are submitted as part of the DBAR (refer to the EMPr for more details):

- Construction activities must be limited to Mondays – Fridays (07h00 – 18h00) and Saturdays (08h00 – 13h00);
- Work may not take place on Sunday's or public holidays;
- Vegetation clearing must be done in phases to avoid large pieces of land being exposed to wind (which could result in unnecessary dust pollution);
- Make use of wetting agents should dust be a problem;
- Rehabilitation of work areas to take place as soon as possible to minimise dust pollution;
- An ECO must be appointed to oversee construction and must keep record of any complaints regarding noise/dust pollution
- Construction material must be stored on-site and construction vehicles must not obstruct traffic flows.

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.

- Water will become a very scares resource as periods of drought will be longer. The use of mandatory rainwater tanks for each house is important, however it is acknowledged that rainfall patterns may change.
- Rainfall intervals are likely to become less, but downpours may be more severe, hence the need to have storage capacity for when there is sufficient rainfall. Stormwater management on the site is important to prevent unnecessary erosion and/or flooding, however considering the sandy substrate such measures are limited to infiltration.
- Re-use of filtered grey water for landscaping/irrigation and re-use in toilets/washing contributes to resource management to conserve potable water resources.
- The use of locally indigenous and endemic vegetation for landscaping and gardening will reduce the need for increased irrigation in future when dryer climate spells affect the area.
- The use of rainwater tanks will assist with reducing flooding as it will help to retain water during periods of increased rainfall events.

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

There are no conflicting recommendations between specialists.

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.

All findings and recommendations by the specialists have been incorporated into the preferred alternative.

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

1. AVOID IMPACTS

Avoid protected tree species, thicket areas and steep slopes deemed sensitive during construction (avoidance mitigation has been applied to preferred design alternative).

Landscape with indigenous plants and incorporate endemic plants from the area into the landscaping to recreate natural areas within the open space areas of the development.

2. MINIMISE IMPACTS

Limit construction activities to specified days and times.

Clear the site in a phased manner to minimise dust pollution i.e. clear house footprints instead of entire property and only when the house will be constructed.

Only indigenous vegetation permitted in lieu of the loss of remaining on-site natural habitat/vegetation.

Appointing an ECO to oversee construction to further minimise the potential for unnecessarily direct or indirect impacts.

Implement resource conservation measures as part of the design, construction and operational phase.

Ensure that all external lighting is low level lighting to reduce the visual and night time impact on fauna and insects.

Implement the Environmental Management Plan under ECO supervision.

3. RECTIFY, REDUCE & OFF-SET

None necessary.

SECTION J: GENERAL

1. Environmental Impact Statement

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

Botany/Biodiversity

- The sensitivity of the terrestrial biodiversity theme is confirmed as Very High.
- The sensitivity of the plant species theme is confirmed as Low.
    - No Plant SCC was found and unlikely to occur within the development footprint.
- The property has a high Site Ecological Importance, which means that adherence to the mitigation hierarchy (avoid/prevent, minimise, rehabilitate/restore) is essential to preserve the biodiversity and habitat resilience. While the proposed development will impact on biodiversity, the specialist provided mitigation measures to reduce the degree of impact from Moderate Negative to Minor / Negligible Negative. The overall **residual impact** of the proposed dwelling is therefore **Minor Negative**.

- Both **preferred and non-preferred alternatives** are acceptable to the botanical/biodiversity specialist. The non-preferred alternative has a slightly higher SEI score compared to the preferred. This is mainly because of protected tree species within proximity to the second dwelling. However, potential impacts from both options can be minimised to Minor / Negligible if mitigation measures are implemented.

Fauna

- The sensitivity of the animal species theme is confirmed as **Low**:
    - No flagged fauna SCC were found on site and their presence within the study area i.e., development footprint is confirmed to be unlikely.
    - The nature of this activity is not expected to have an impact on fauna SCC within and beyond the boundary of the preferred site.
    - The activity leaves enough vegetation to act as ecological corridors and habitats for fauna species.
- Both **preferred and non-preferred alternatives** are acceptable to the fauna specialist. The non-preferred impacts might result in temporary indirect impacts on the Knysna Warbler, during the construction phase, considering it being adjacent to intact thicket vegetation (suitable habitat for the Knysna Warbler).

Aquatic

According to the Screening Tool Report, the aquatic biodiversity within the site is Very High on the basis that the site falls within a Freshwater Ecosystem Priority Area (FEPA). The specialist concluded the following findings:

- There are no clear areas of natural drainage on the property and no hydro-geomorphological landscape features indicating the presence of a watercourse.
- No freshwater features were identified within the footprint of the property or within 500m of the property.
- While development falls within a FEPA the site falls well outside the catchment area of a river reach for which the FEPA status was determined.
- The aquatic sensitivity is disputed and confirmed as **Low**.

Agriculture

According to the agricultural specialist, the site is completely unsuitable for viable rainfed crop production and its potential is assessed as very low for the following reasons:

- The dryland cropping potential is limited by the combination of climate & soil constraints.
- The property's location which is isolated from another farmland.
- The lack of any existing cropping infrastructure.

The overall negative agricultural impact of the development is assessed here as being of **Low** significance.

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 B2.

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

The following impacts have been identified:

Positive:

- Supporting the Fransmanshoek Conservancy as an active member.
- Supporting the local economy during construction phase, albeit on a small scale.
- Active alien invasive vegetation clearing for the remainder of the property.
- Impact of improved environmental management of the property within the Fransmanshoek managed conservancy.

Negative:

- Limited loss of Hartenbos Dune Thicket.
- Temporary noise impacts during construction.
- Impact of the development on the Fransmanshoek managed conservancy by addition of a dwelling.
- Establishment cost & Maintenance cost (Including veg. management).

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

- All of the mitigation measures and recommendations provided by the specialists will be included in the EMPr.
- Appoint an Environmental Control Officer (ECO) to oversee the construction phase for bulk earthworks and services.
- Implement and adhere to an approved Environmental Management Plan.
- Apply for Forestry Permits if any trimming/roots may be required during construction.
- All landscaping must be indigenous vegetation in lieu of the loss of natural vegetation/habitat (which is secondary/degraded under the current and historical land use).
- Restrict working times and hours to minimise noise/dust pollution.
- Resource conservation measures must be implemented.

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.

Please refer to 2.1, 2.3, as well as sections 3,4 & 5 below.

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

The development will have a Negligible to Low impact on the environment overall. There is no reason that it should not be considered for authorisation.

The property is zoned as Agriculture I which allows for the development of a primary residential dwelling. The site selection has undergone survey by the specialists as well as assessed in terms of the 2014 NEMA EIA Regulations.

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

The EAP assumes that the necessary approvals such as planning approvals / forestry permits / building plan approvals and contracts i.e., service level agreements, will be finalised within the initial **five (5) year commencement** period.

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.

- Construction should commence within five (05) years from date of authorisation.
- Construction should be concluded at least five (05) years from date of commencement.

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.
It is proposed that the residential unit be equipped with the following water saving technology: • Dual Flush Toilets • Low flow shower heads • Low flow faucets • Rainwater Tanks • Geyser and pipe insulation

4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.
Effective management of household waste contributes to a more sustainable implementation of landfill sites and their management. Sorting of recyclable materials at the source, i.e. in each household, causes less backlog at the landfill site and decreases the availability of material so required by scavengers to the dump site. Using biodegradable waste in a garden compost heap or an earthworm farm is far more supportive of the environment than disposing of it in the general waste. Normal household waste will be generated during the operation phase of the development. Recycling should be strongly encouraged by the development to minimise the amount of domestic waste generated. General municipal waste will be collected as per the municipal requirements at the nearby township of Vleesbaai. The following actions should be implemented: • Recycling; • Composting of organic material.

5. Energy Efficiency

8.1.	Explain what design measures have been taken to ensure that the development proposal will be energy efficient.
The dwelling will have off grid electricity provision. This will be in the form of solar panels. The following energy savings can also be considered by the Applicant although it is not mandatory ito the environmental application process because it is near impossible to audit for compliance purposes. • Solar heated water system; Energy efficient lighting; Energy efficient appliances; Solar cooling systems; Evaporative cooling systems; Geyser and pipe insulation.	

SECTION K: DECLARATIONS

DECLARATION OF THE APPLICANT

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

I.....**TEHAN COMBRINK**....., ID number .....**8208045054088**.....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.

13 November 2024

Signature of the Applicant: Date:

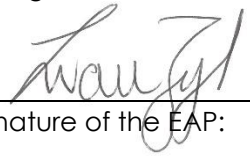
Comcor Invest (Pty) Ltd

Name of company (if applicable):

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

I ……**Louise-Mari van Zyl**……, EAP Registration number ……**2019/1444**…….. 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;



13 November 2024

Signature of the EAP: Date:

Cape Environmental Assessment Practitioners

Name of company (if applicable):

DECLARATION OF THE CANDIDATE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

I ……**Mariska Byleveld**……, EAP Registration number ……**2023/6593**…….. 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;

MByleveld — 13 November 2024

Signature of the EAP: Date:

Cape Environmental Assessment Practitioners

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 Mr Willem Matthee, 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 Specialist: Date: 13 November 2024

N/A

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

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

I Johann Lanz, 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.

13 November 2024

Signature of the Specialist: Date:

SoilZA

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

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

I Bianke Fouche, 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:  Date: 14 Nov. 2024

Confluent Environmental

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

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

I …**Dr J.M. Dabrowski**…, as the appointed Aquatic Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

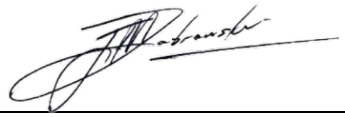
- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity;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



14 November 2024

Signature: Date:

Confluent Environmental

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):