



LORNAY
ENVIRONMENTAL CONSULTING

Draft Pre-Application Basic Assessment Report

Erf 1995, McGregor, Robertson RD
January 2025



Consultant:

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**Western Cape
Government**

Department of Environmental Affairs and
Development Planning

BASIC ASSESSMENT REPORT

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

APRIL 2024



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APRIL 2024

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

GENERAL PROJECT DESCRIPTION

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

The proposed project entails the cultivation of agricultural land for the establishment of new vineyard blocks on Hout Baai Farm, situated on Erf 1995, just outside the town of McGregor within the Langeberg Municipality. This project seeks to expand existing viticultural operations on the farm through the establishment of two additional vineyard blocks, further strengthening the farm's role in the local wine industry.

Hout Baai Farm is situated within a dynamic agricultural landscape on the immediate outskirts of near McGregor, an area characterized by a mixture of vineyards, orchards, and natural habitats that adds to economic value of the Langeberg region. This particular location is ideal for viticulture due to its temperate climate and nutrient-rich alluvial soils, both of which are essential for producing grapes of exceptional quality. The area is renowned for supporting a vibrant wine industry that benefits from these unique agricultural conditions.

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

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

3. *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)
<p>The completed Form must be sent via electronic mail to: DEADPEIAAdmin@westerncape.gov.za</p> <p>Queries should be directed to the Directorate: Development Management (Region 1) at: E-mail: DEADPEIAAdmin@westerncape.gov.za Tel: (021) 483-5829</p> <p>Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1) Private Bag X 9086 Cape Town, 8000</p>	<p>The completed Form must be sent via electronic mail to: DEADPEIAAdmin.George@westerncape.gov.za</p> <p>Queries should be directed to the Directorate: Development Management (Region 3) at: E-mail: DEADPEIAAdmin.George@westerncape.gov.za Tel: (044) 814-2006</p> <p>Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530</p>

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:	<p>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:</p> <ul style="list-style-type: none"> • 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. <p>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.</p> <p>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.</p>
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:	<p>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:</p> <ul style="list-style-type: none"> • 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.

	<ul style="list-style-type: none"> • Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): <ul style="list-style-type: none"> ○ 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 <p>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.</p>
Site photographs	Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as Appendix C . The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.
Biodiversity Overlay Map:	A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as Appendix D .
Linear activities or development and multiple properties	GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system. Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix. For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as Appendix A3 .

ACRONYMS

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

ATTACHMENTS

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

The following checklist of attachments must be completed.

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

	Appendix :	Comment from WCG: DoH	N/A
	Appendix E:	Comment from DEA&DP: Pollution Management	N/A
	Appendix E11:	Comment from DEA&DP: Waste Management	
	Appendix E12:	Comment from DEA&DP: Biodiversity	N/A
	Appendix E13:	Comment from DEA&DP: Air Quality	N/A
	Appendix E14:	Comment from DEA&DP: Coastal Management	Pending
	Appendix E15:	Comment from the local authority	Pending
	Appendix E16:	Confirmation of all services (water, electricity, sewage, solid waste management)	Pending
	Appendix E17:	Comment from the District Municipality	Pending
	Appendix E18:	Copy of an exemption notice	N/A
	Appendix E19	Pre-approval for the reclamation of land	N/A
	Appendix E20:	Proof of agreement/TOR of the specialist studies conducted.	-
	Appendix E21:	Proof of land use rights	-
	Appendix E22:	Proof of public participation agreement for linear activities	N/A
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) APP G Botanical Assessment		✓
Appendix H:	EMPr		✓
Appendix I:	Screening tool report		✓
Appendix J:	The impact and risk assessment for each alternative		
Appendix K:	Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline		
Appendix.....	Any other attachments must be included as subsequent appendices		

SECTION A: ADMINISTRATIVE DETAILS

Highlight the Departmental Region in which the intended application will fall	CAPE TOWN OFFICE: REGION 1		GEORGE OFFICE: REGION 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	Imperative Link Trade 22 cc		
Name of Applicant/Proponent:	Imperative Link Trade 22 cc		
Name of contact person for Applicant/Proponent (if other):	Alwyn Llewellyn Krull		
Company/ Trading name/State Department/Organ of State:	Imperative Link Trade 22 cc		
Company Registration Number:	CK 2011/085952/23		
Postal address:	PostNet Suite 27, PO Box 662,		
	Gonubie, East London	Postal code: 5256	
Telephone:	()	Cell: 082 854 3617	
E-mail:	joan@barvallei.co.za	Fax: ()	
Company of EAP:	Lornay Environmental Consulting		
EAP name:	Michelle Naylor		
Postal address:	Unit 5/1F Hemel and Aarde Wine Village		
	Hermanus	Postal code: 7200	
Telephone:	()	Cell: 083 245 6556	
E-mail:	michelle@lornay.co.za	Fax: ()	
Qualifications:	Master of Science (Rhodes University)		
EAP registration no:	2019/698		

<p>Duplicate this section where there is more than one landowner</p> <p>Name of landowner:</p> <p>Name of contact person for landowner (if other):</p> <p>Postal address:</p> <p>Telephone:</p> <p>E-mail:</p>	Alwyn Krull	
	Alwyn Krull	
	PostNet Suite 27, PO Box 662,	
	Gonubie	Postal code: 5256
	()	Cell: 083 650 4845
	alwyn@suneggs.co.za	Fax: ()
<p>Name of Person in control of the land:</p> <p>Name of contact person for person in control of the land:</p> <p>Postal address:</p> <p>Telephone:</p> <p>E-mail:</p>	Imperative Link Trade cc	
	Alwyn Krull	
	As above	
	-	Postal code: -
	()	Cell: -
	-	Fax: ()
<p>Duplicate this section where there is more than one Municipal Jurisdiction</p> <p>Municipality in whose area of jurisdiction the proposed activity will fall:</p> <p>Contact person:</p> <p>Postal address:</p> <p>Telephone</p> <p>E-mail:</p>	Langeberg Municipality	
	Tracy Brunings	
	Private Bag X2,	
	Ashton	Postal code: 6715
	023 614 8000	Cell:
	tbrunings@langeberg.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	x
2.	Is the proposed site(s) a brownfield of greenfield site? Please explain.				
<p>The proposed site can be classified as a greenfield site. This classification is based on the presence of indigenous vegetation across the proposed cultivation areas. While certain portions of the site exhibit a somewhat degraded state due to historical disturbances, the lack of development on the site confirms the site as natural and thus maintaining a greenfield status.</p>					
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.	—m ²			
3.3.	Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.				
3.4.	Indicate how access to the proposed routes will be obtained for all alternatives.				
3.5.	SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives				
3.6.	Starting point co-ordinates for all alternatives				
	Latitude (S)	°	'	"	
	Longitude (E)	°	'	"	
	Middle point co-ordinates for all alternatives				
	Latitude (S)	°	'	"	
	Longitude (E)	°	'	"	
	End point co-ordinates for all alternatives				
	Latitude (S)	°	'	"	
	Longitude (E)	°	'	"	
Note: For Linear activities or developments longer than 500m, a map indicating the co-ordinates for every 100m along the route must be attached to this BAR as Appendix A3.					
4.	Other developments				
4.1.	Property size(s) of all proposed site(s):				394 676.8 m ² (39.5 ha)
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):				139 133.8 m ² (13.9 ha)
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:				Block 1: 16 500 m²

		(1.65 ha)
		Block 2: 20 700 m ²
		(2.07 ha)
		Total footprint required = 37200 m²
		(3.8 ha)

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 applicant already has an established vineyard in the site and wishes to expand its production. The farm operates under an organically driven philosophy and the wines produced are branded under the popular Solara Organic Wines. the following approach to farming is already implemented on site in line with their organic branding:

- Restore the land by eliminating the application of artificial fertilisers, insecticides, herbicides and all unnatural substances, and ensure all inputs are compatible with organic practice.
- Encourage natural plant growth and the restoration of native fauna, to balance the environment, literally from the sky down to the smallest microbes in the soil.
- Use weeds, hand and machine cut, for compost, mulch and feeding worms for vermicast fertilisation and compost tea.
- Protect the indigenous flora in natural areas to create biodiversity.
- Establish tree barriers to protect the land from 'neighbourly' contamination.
- Ensure corridors for free migration of fauna.
- Halt erosion with natural barriers
- Install predator bird perches
- Cultivate worm farms

The farm is certified organic wine by the Lacon Institute in Germany.

The proposed development involves the establishment of two additional vineyard blocks on the existing agricultural zoned land of Erf 1995, McGregor. This involves the clearance and cultivation of approximately 3.72 hectares of indigenous vegetation for the construction of these two additional vineyards blocks as well as the placement of irrigation pipes, as illustrated in **Figure 1** below.

→ **Block 1:** A clearance of approximately 1.7 ha (17000 m²).

→ **Block 2:** Clearance of 2.1 ha (21000m²).

Alternative One - Preferred



AREA	HA
Block 1	1.7
Block 2	2.1
Total	= 3.8 ha



Figure 1: Preferred site layout plan

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

The site is accessible via Voortrekker Street.

4.6. SG Digit code(s) of the proposed site(s) for all alternatives: C 0 6 5 0 0 0 1 0 0 0 0 1 9 9 5 0 0 0 0 0

Coordinates of the proposed site(s) for all alternatives:			
Block 1			
Latitude (S)	33°	57'	29.98"
Longitude (E)	19°	48'	54.72"
Block 2			
Latitude (S)	33°	57'	33.17"
Longitude (E)	19°	49'	4.44"

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

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

Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes, include a copy of the exemption notice in Appendix E18.	YES	NO x
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2. Is the following legislation applicable to the proposed activity or development.

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

3. Other legislation

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

4. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.
<p><u>Western Cape Provincial Spatial Development Framework (2014)</u></p> <p>This framework advocates for sustainable land use practices that balance the needs of development with the conservation of agricultural and natural resources. The proposed activity aligns with the Western Cape Provincial framework's principles by prioritizing the preservation and utilization of arable agricultural land for cultivation. By carefully selecting the two blocks for cultivation on areas suitable for vineyard farming the proposal adheres to the framework's directive to optimize agricultural potential while preventing land degradation and promoting long-term sustainability. Furthermore, the activity supports rural economic development and food security objectives outlined in the framework, contributing to the region's overall agricultural viability.</p> <p><u>Langeberg Municipality Draft Spatial Development Framework (2023-2024)</u></p> <p>The Draft SDF emphasizes the impotence of agricultural development as a fundamental driver of local economic growth, while it is also advocating for environmental stewardship. The proposed cultivation activity directly responds to this policy by leveraging the identified arable land, based on a detailed soil analysis conducted on the farm. This ensures that the most suitable land is utilized for two additional vineyard blocks, thereby optimizing productivity and preventing unnecessary encroachment on non-arable or environmentally sensitive areas. Additionally, the activity is consistent with the spatial planning zones designated for agriculture, reinforcing the framework's strategic objectives of promoting agricultural diversification and sustainable land use.</p>

By adhering to these policies, the proposed cultivation activity demonstrates a commitment to the sustainable development and optimization of agricultural resources, prioritizing high-value agricultural land while supporting local economic development. This alignment underscores the Department of Agriculture's broader goals of promoting agricultural productivity and sustainability in the region.

Langeberg Municipality Integrated Development Plan (LMIDP) 2023

The Langeberg Municipality Integrated Development Plan (IDP) 2023 underscores the critical importance of preserving soils with greater depths, particularly in the region between McGregor and Bonnievale. These deep soils are considered highly valuable for agricultural land use, supporting sustainable farming practices and ensuring food security. The conversion of such land to non-agricultural purposes presents a significant threat to the region's agricultural productivity and long-term economic sustainability.

The proposed development aligns with the objectives of the LMIDP by utilizing identified preferred development areas on the property for the establishment of two additional vineyard blocks. These areas were selected based on a comprehensive on-site soil analysis study, which indicated these areas suitable for vineyard cultivation. This approach not only supports sustainable agricultural practices but also ensures optimal use of the region's valuable soil resources.

5. Guidelines

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

1. Guideline on Alternatives (March 2013)

The soil analysis study guided the selection of the two blocks, ensuring that only arable land with high agricultural potential was prioritized in line with the specific type of wine to be made

2. Guideline on Environmental Management Plans (June 2005)

The proposed development incorporates mitigation measures that will enable management of the project risks and impacts in the EMP. The inclusion of these measures ensures the cultivation activity is conducted sustainably.

3. Guidelines on Need and Desirability (2017)

The cultivation proposal responds to the identified need for optimized agricultural land use within the Langeberg Municipality. The activity supports local economic development by enhancing agricultural productivity and creating employment opportunities. It also addresses food security and aligns with the spatial planning objectives of promoting agriculture as a key economic driver.

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 Screening Tool the following themes have been identified:

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

Agricultural Theme – Medium Sensitivity – The proposed activity is in line with agricultural zoning and is located within existing agricultural land. No further assessment is required under this theme.

Animal Species Theme – Medium Sensitivity – The proposal is for the expansion of existing agricultural operations on an approximately 40 ha property. The site already experiences a range of disturbances through day-to-day agricultural operations and residential use. The site is located on the main road exiting McGregor and directly alongside the town of McGregor. The proposal is for the development of 2 small vineyard blocks with no additional hard built structures. The vineyard blocks will be separated by natural vegetation and large areas on natural habitat will remain after the development of the vineyards. The farm is also a certified organic farm and will therefore not use any pesticides or other practices which may negatively impact fauna. Given the reasons outlined above we motivate that an Animal Species Assessment is not required for the proposal. It is recommended that a site walk is conducted ahead of land preparation

Aquatic Biodiversity Theme – Low sensitivity – The proposed development area does not intersect with wetlands, rivers, or watercourses. Given the absence of aquatic biodiversity features within the development footprint, no further assessment is required under this theme.

Archaeological and Cultural Heritage Theme – Very high sensitivity – A Notification of Intent to Develop (NID) has been submitted to Heritage Western Cape (HWC). Written confirmation from HWC indicated that no heritage resources would be impacted by the proposed vineyard establishment. No further heritage impact assessment is required.

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

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

Paleontology – Very high – A Notification of Intent to Develop (NID) has been submitted to Heritage Western Cape (HWC). Written confirmation from HWC indicated that no paleontological resources would be impacted by the proposed vineyard establishment. Consequently, no further assessment is required.

Plant Species Theme – Medium – A Specialist has been appointed. The Terrestrial Biodiversity Assessment includes a detailed evaluation of plant species assessment on site. Two plant species of conservation concern were identified on site.

Terrestrial Biodiversity Theme – Low Sensitivity – A Specialist has been appointed. See above.

Specialist assessments identified by the Screening Tool:

Landscape/ Visual Impact Assessment - Heritage Western Cape confirmed that a Heritage Impact Assessment is not required, as the vineyard establishment is not expected to significantly affect the landscape or visual characteristics of the area. No further assessment is therefore required.

Archaeological and Cultural Heritage Impact Assessment – The NID was submitted to HWC and it was determined that no further assessment is required.

Palaeontological Impact Assessment – The proposed activity involves minor surface-level disturbances, which are unlikely to impact significant palaeontological resources. Partial fossil impressions, if encountered, are unlikely to hold substantial value.

Terrestrial Biodiversity Impact Assessment – A Specialist has been appointed. This assessment also included plant species theme and terrestrial biodiversity theme.

Aquatic Biodiversity Impact Assessment – There are no wetland or watercourses identified on the proposed site.

Socio-economic Assessment – The proposed expansion of the vineyard aligns with local agricultural development in the area.

Plant Species Assessment – The assessment is integrated into the terrestrial biodiversity assessment to comprehensively evaluate potential impacts and propose mitigation measures if needed.

Animal Species Assessment – The EAP conducted a site visit. The site is located on Voortrekker Road and minor road on the edge of the built-up urban area of McGregor. During the site visit no notable faunal species were seen. In addition, the site is located directly alongside the town of McGregor and within a well-established agricultural landscape. There are no watercourses or wetlands on site and no nests or burrows were recorded. In addition, the development proposal is for two specific blocks with the remaining area undisturbed and natural, therefore providing adequate remaining habitat and / or movement corridors for species. It is recommended that a site walk be undertaken prior to soil disturbance to relocate any slow-moving species such as tortoises.

SECTION D: APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 1	Describe the portion of the proposed development to which the applicable listed activity relates.
27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for— (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	For the proposed expansion, a total footprint of approximately 3.72 hectares of natural vegetation will be cleared. The vegetation type is classified as Least Threatened.
Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 3	Describe the portion of the proposed development to which the applicable listed activity relates.
12	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.	A total footprint of more than 300m ² of indigenous vegetation will be cleared.
<p>Note:</p> <ul style="list-style-type: none"> The listed activities specified above must reconcile with activities applied for in the application form. The onus is on the Applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, a new application for Environmental Authorisation will have to be submitted. Where additional listed activities have been identified, that have not been included in the application form, and amended application form must be submitted to the competent authority. 		

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

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

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

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

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1. Provide a description of the preferred alternative.

The preferred property alternative for the proposed new vineyards is located on Erf 1995, McGregor, an existing viticulture farm situated to the south of the town of McGregor. The northern section of the property, which is currently undeveloped, has been identified as a suitable area for the establishment of the proposed vineyard blocks. This section offers ideal conditions for expansion, as the southern part of the farm is already in agricultural production, specifically dedicated to vineyards.

The proposed expansion involves the establishment of two new cultivation blocks for vineyards:

- **Block 1:** 1.7 ha
- **Block 2:** 2.1 ha

These blocks will be located on the northern portion of the property (**Figure 3a**), facilitating the expansion of the viticulture area. The decision to focus on this area for expansion was primarily informed by the results of the soil analysis conducted on-site. The soil testing revealed that the conditions in these blocks are optimal for vineyard expansion, ensuring the production of high-quality grapes and specific high-quality wines. Key factors such as suitable soil types, mineral content, and drainage properties, which are essential for healthy vine growth and the production of premium grapes, were all identified as being ideal in these areas (**Figure 3b**). Topography of the site is also important and these flatter areas were identified between steeper sections on the farm.

Expanding the vineyards in this area will enable the farm to maintain consistent agricultural productivity by leveraging the favourable environmental conditions, while preserving the integrity of the existing operations. Moreover, the proposed expansion will contribute to the long-term sustainability and economic growth of the farm, supporting local agricultural development and enhancing the broader viticulture industry.

Bulk infrastructure:

- **Electricity:** The proposed expansion of the farming activities does not require electricity.
- **Water:** Water rights for the proposed expansion are pending. A General Authorisation for the abstraction of groundwater from a borehole, has been submitted to BOCMA.
- **Sewage:** No expansion or increase in sewage requirements necessary.

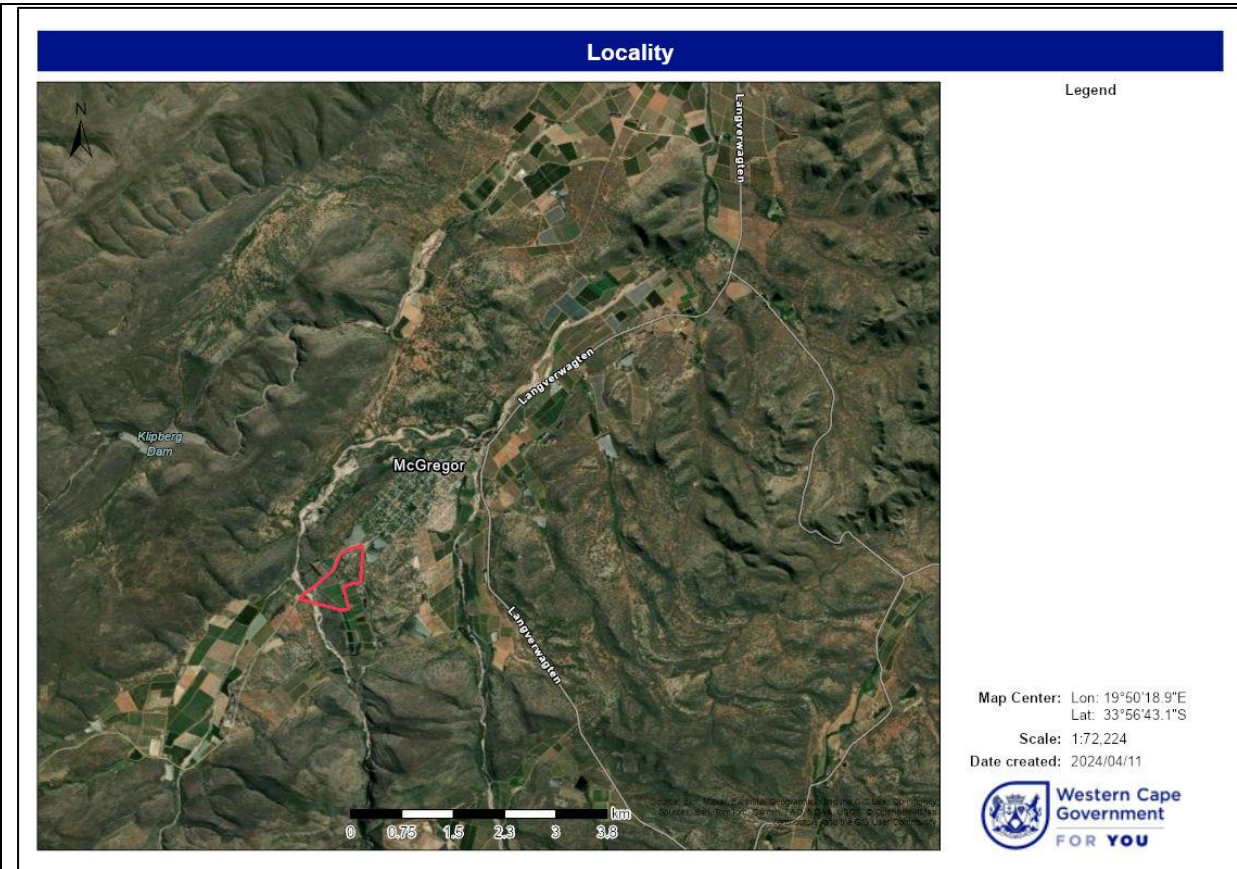


Figure 2: The location of the site.

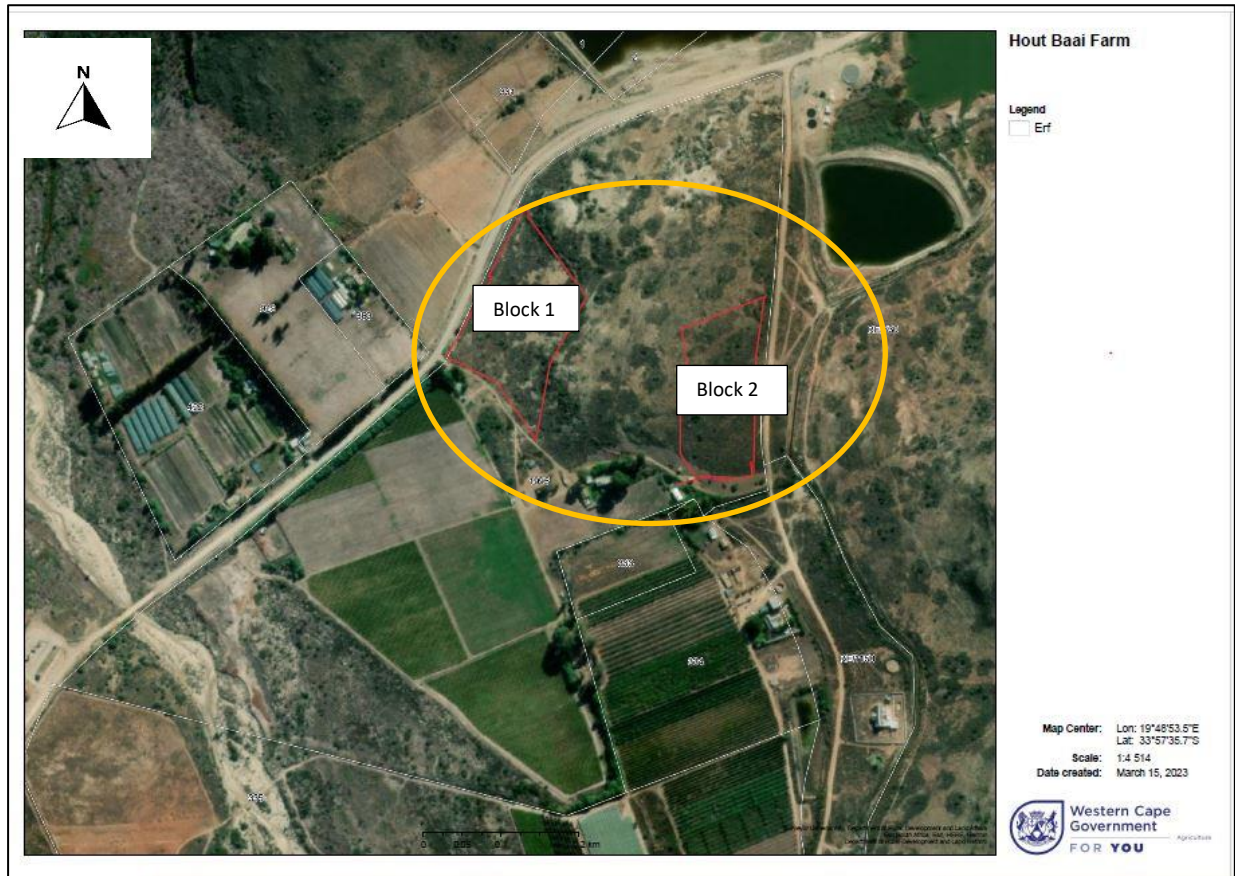


Figure 3a: The site location and a view of the property highlighting the northern portion, marked in orange, which is designated for the proposed cultivation.

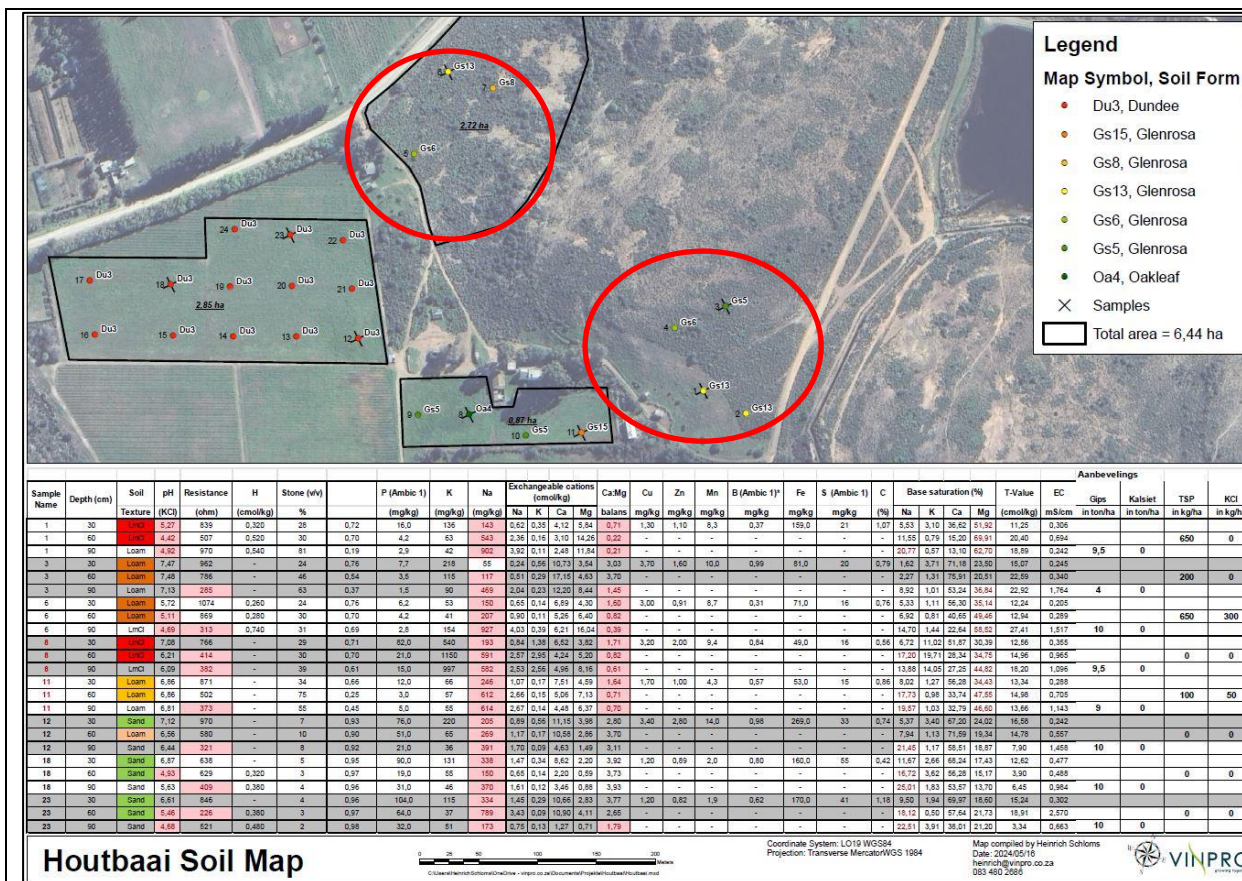


Figure 3b: Soil analysis results.

2. Explain how the proposed development is in line with the existing land use rights of the property as you have indicated in the NOI and application form? Include the proof of the existing land use rights granted in Appendix E21.

The proposed development is in line with the existing land use rights of the property, as indicated in the Notice of Intent (NOI). The property is currently zoned for agricultural purposes, and the proposal involves the expansion of existing agricultural activities, specifically the establishment of additional vineyard blocks. This aligns with the property's existing land use rights, as the development seeks to expand on the current vineyard operations already taking place on the property.

The existing land use rights granted for the property allow for agricultural farming, and the proposed expansion of the vineyard activity falls within this designation.

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.

Refer to the above section.

4. Explain how the proposed development will be in line with the following?

4.1 The Provincial Spatial Development Framework.

The proposed expansion of vineyards on Erf 1995, McGregor, aligns with the objectives of the Western Cape Provincial Spatial Development Framework (PSDF), particularly in supporting the sustainable use of provincial assets. The PSDF emphasizes the importance of agricultural resources in reinforcing the Western Cape's economic foundation, with agriculture contributing significantly to food security, rural livelihoods, and income generation within the region (Western Cape Government, 2014). Expanding grape cultivation on the proposed site enhances these agricultural assets by making productive use of undeveloped farmland, thereby strengthening local agricultural activities and supporting regional agri-processing industries, which are vital to the province's industrial sector.

The PSDF advocates for sustainable farming practices that yield socio-economic benefits while minimizing environmental risks. By situating the new blocks on previously unused portions of Erf 1995, the project aligns with this

sustainable approach, promoting efficient land use without extending the development footprint into sensitive environmental areas (Western Cape Government, 2014). Moreover, as the PSDF calls for coherent land use planning aligned with Provincial Strategic Objectives, this development integrates effectively with regional planning policies by enhancing the productive capacity of agricultural land without encroaching on natural landscapes of scenic or cultural importance.

In terms of landscape integrity and connectivity, the PSDF highlights the necessity of maintaining the continuity of agricultural landscapes, along with ecological corridors and green linkages, to preserve the character of rural areas and protect against fragmentation from unstructured urbanization (Western Cape Government, 2014). The proposed expansion respects these principles by ensuring that the agricultural landscape remains intact and that the development is embedded within the rural setting of McGregor, thus preserving the integrity and character of the provincial landscape.

Finally, the PSDF's spatial implications prioritize maintaining the natural landscape as a 'container' for rural and urban settlements. The proposed development on Erf 1995 aligns with this by ensuring that the expansion harmonizes with the existing farm operations and the rural surroundings, maintaining the scenic and cultural backdrop essential to the Western Cape's tourism and lifestyle offerings (Western Cape Government, 2014).

4.2 The Integrated Development Plan of the local municipality.

4.2.8 Agriculture

This section of the report focuses on the role of the agricultural sector in the economy of Langeberg Local municipality, which forms part of the Cape Winelands District municipality, with reference to the broader Western Cape. The intention is to provide an overview of the trends in agriculture within the Langeberg municipal area and to establish the economic value of agriculture to the municipality, particularly with regard to the pressure of an urban edge.

4.2.8.1 Land Capability

Figure 3.2.8.1 of the Langeberg Municipality IDP, (2023) shows the land capability based on the soil classification only. This shows that soil suitable for arable agriculture are mostly located east of Robertson and east and west of Bonnievale. The majority (95.56%) of the municipality is suitable for grazing.

Table 3.2.8.2a of the Langeberg Municipality IDP, (2023) shows the composition of permanent crops in the municipality. The largest of these crops are wine grapes, dry and table grapes. To a much lesser extent apples, apricots, pears, plums, peaches, olives and citrus are produced.

Table 3.2.8.2a Enterprise composition – Permanent crops (*source*; LMIDP, 2023)

Item	%	Hectares
Apple	0.52%	138
Apricot	5.91%	1 558
Wine grapes	57.67%	15 210
Dry & Table Grapes	19.92%	5 254
Pear	1.66%	438
Plum	2.87%	758
Peaches	9.07%	2 393
Olives	0.69%	183
Citrus	1.68%	442
TOTAL	100.0%	26 374

4.2.8.2 Agricultural Land Use Pattern

Figure 3.2.8.2 of the Langeberg Municipality IDP, (2023) shows the different types of agricultural/farming practices in the municipality. The agricultural land use map shows that 17.36% of the land has been cultivated. These most intensely cultivated areas are located between Robertson and Ashton and also around and to the east of Bonnievale.

4.2.8.6 Food security

The Langberg Municipal area is well endowed in terms of its natural resources for the production of a number of agricultural produce and livestock farming. In terms of food security this area is a contributor in terms of not only the local supply within Langberg but also as national supply.

- Approximately 17.36% of the land in the municipality, i.e. 78450ha is cultivated.
- It is estimated that 28142ha of land is required for food security in the langeberg municipality. In terms of dietary requirements for plants, 5493ha is required and 22649ha is required for animal foods. There is thus more than sufficient land available to supply for the needs of the current population of the municipality.
- There are indications that the current formal food and grocery distribution network, mainly in the form of corner shops, supermarkets and shopping centres, will come under increasing pressure as a result of food inflation and decreasing purchasing power among most income groups but particularly the poor.

4.3. The Spatial Development Framework of the local municipality.

Extract from the Langeberg Municipality Draft Spatial Development Framework (LMSDF) (2023-2028):

Chapter 6 of the LMSDF identifies land and soil as critical natural resources that underpin agricultural opportunities in the region and provides specific guidelines for their conservation, protection, and use.

Conserve and preserve high potential agricultural land:

- Protect and preserve agricultural resources (productive land and landscapes): High potential unique agricultural land, Agricultural land of significant (medium) value, Other Agricultural Areas, Smallholdings and agricultural uses.
- Prohibit any development that will contradict or may have a significant impact on the cultivation of land with high and significant (medium) agricultural potential (e.g. settlement development and mining).
- Strengthen agricultural value chain and support the preparation of agricultural produce for distribution (e.g pack sheds and cool storage) and - tourism development on farms.
- Promote and protect agricultural units of different sizes where appropriate (smaller units: Klaas Voogds – tourism, along water sources, larger units: Langeberg north).

Approximately 6% (26 610 ha) of the Langeberg municipal area is being cultivated. Agricultural cultivation is mostly intensive, comprising irrigated vineyards, orchards and pastures. Crop cultivation according to subregion: Keisie: vineyards (dry climate, naturally limed soils, high slopes and on fertile alluvial soil along riverbanks) and olives; Anysberg: honey bush tea and conservation; Wabooms Valley or Brakrivier Valley: wheat and Proteas; Breede River: large scale fruit, wine, tomatoes, pumpkin variants, vegetables, and melons; McGregor and north of Riviersonderend Mountains: extensive vineyards. Koo Valley: apples, pears, apricots and peaches. Dairy farming has been reduced drastically and milk is imported from the Overberg District.

Agri-processing and agriculture are Langeberg Municipality's major economic activities and employer. Substantial volumes of cultivated produce are dried or canned. In 2019 Agriculture, Forestry & Fishing contributed 10.9% to Langeberg Municipality's GVA along with 25.9% to employment. Agriculture is one of the five biggest contributors to Langeberg Municipality's economy, yet agriculture's contribution is slowly decreasing as do the number of commercial farming entities.

Proposed cultivation of the farm is in line with the LMSDF in the following ways:

- The proposed vineyard blocks are situated on arable land identified as having high agricultural potential. By using the productive agricultural land, the proposed development supports the LMSDF's objective to protect and preserve agricultural resources, including high-potential unique agricultural land.
- The expansion of vineyards contributes to strengthening the agricultural value chain, as it supports primary agricultural production that can be further processed or prepared for distribution. This aligns with the LMSDF's focus on enhancing agricultural productivity and value-adding activities, such as packing and storage facilities.
- The cultivation of vineyards is consistent with the agricultural activities prevalent in the Langeberg Municipality, particularly in regions where vineyards dominate agricultural production. By contributing to the existing agricultural profile, the project sustains the region's agricultural identity and economic contribution.
- Agriculture is a cornerstone of the Langeberg economy, contributing 10.9% to the municipality's Gross Value Added (GVA) and 25.9% to employment (2019 data). The proposed vineyard cultivation directly supports this economic sector by enhancing agricultural productivity, creating employment opportunities, and sustaining the viability of the municipality's agricultural economy.

4.4.	The Environmental Management Framework applicable to the area.
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No EMF in place.

5.	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.
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None that the EAP is aware of.

6.	Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.
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The Western Cape Biodiversity Spatial Plan (WCBSBP) identifies areas requiring conservation to achieve biodiversity targets, including Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs), which are prioritized for protection. While some degree of environmental impact may be permissible in ESAs under specific circumstances, the same does not apply to CBAs, which require stringent conservation efforts.

The subject property is classified within Other Natural Areas (ONAs), according to the WCBSBP. These areas are not recognized as current conservation priorities but retain much of their natural character and play critical roles in supporting biodiversity and ecological functions.

The WCBSBP identifies areas requiring conservation to achieve biodiversity targets, including Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs), which are prioritized for protection. While some degree of environmental

impact may be permissible in ESAs under specific circumstances, the same does not apply to CBAs, which require stringent conservation efforts.

In light of the WCBSB guidelines, the proposed expansion of vineyards has been designed to minimise negative impacts on the natural environment. Alternative 1 of the site layout plan, particularly block 2 situated on the eastern part of the property it falls within high sensitivity area, as identified by the specialist. The specialist findings indicate that any development in this area could lead to significant loss of natural and partly natural vegetation within the new agricultural development footprint.

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

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.
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Not changed from the one submitted.

9.	Explain how the proposed development will optimise vacant land available within an urban area.
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The site proposed is located outside of an urban area.

10.	Explain how the proposed development will optimise the use of existing resources and infrastructure.
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→ There is existing road infrastructure in place to accommodate the proposed development.

→ The farm has existing water rights to support the proposed development.

→ The farm will optimise the available arable land on the property for agricultural purposes, mainly vineyards.

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).
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Pending.

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.
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The proposed expansion of vineyards on Erf 1995, McGregor, aligns with both the need and desirability criteria as outlined in the Department of Environmental Affairs' (DEA) Integrated Environmental Management Guideline on Need and Desirability (2013). By introducing two new blocks of vineyards, this development supports economic and agricultural growth in the area, contributing to local food production and rural economic stability.

Need

The need for the proposed vineyard expansion is justified by the increasing demand for high-quality agricultural products, particularly within the Western Cape, which is recognized for its wine production. Expanding grape cultivation addresses this demand and supports the broader agricultural sector, which is a critical component of both the local and provincial economy. This aligns with the DEA's guideline emphasis on ensuring developments fulfill an essential community or economic need by supporting agricultural outputs that contribute to food security, employment opportunities, and export revenue. Furthermore, expanding these vineyards allows the farm to remain economically competitive, bolstering its sustainability within a global and regional market that relies on continuous and productive agricultural use of land (DEA, 2013).

Desirability

The desirability of the vineyard expansion is reinforced by the development's compatibility with the surrounding agricultural landscape and the Western Cape's reputation for wine tourism. The DEA's guideline on desirability

encourages developments that complement existing land use, contribute positively to the local economy, and align with provincial land-use frameworks. By expanding vineyards on an already operational farm, the proposed activity supports the agricultural character of the McGregor area without disrupting ecological or scenic values, thus preserving the integrity of the rural landscape.

The expansion also enhances the long-term viability of the farm, promoting sustainable land use in line with the Provincial Spatial Development Framework's objectives of reinforcing agricultural assets and preventing landscape fragmentation. This development thus not only meets the need for expanded agricultural production but also adds economic and cultural value, benefiting the community and aligning with provincial goals for sustainable agricultural growth.

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.

Pending.

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

Will be included after PPP1

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

Pending

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

Langeberg Municipality
Cape Winelands District Municipality
DEA&DP: Land Use
Western Cape Department of Agriculture
BOCMA
Cape Nature

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

N/A

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

PPP will be submitted

Note:

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

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

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

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

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

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

- a site map showing where the site notice was displayed, dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;

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

SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

1. Groundwater

1.1.	Was a specialist study conducted?	YES	NO x
1.2.	Provide the name and or company who conducted the specialist study.		
	N/A		
1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.		
	N/A		
1.4.	Indicate the depth of groundwater and explain how the depth of groundwater and type of aquifer (if present) has influenced your proposed development.		
	N/A		

2. Surface water

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

3. Coastal Environment

3.1.	Was a specialist study conducted?	YES	NO x
3.2.	Provide the name and/or company who conducted the specialist study.		
	N/A		
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were taken into account and explain how this influenced your proposed development.		
	N/A		
3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.		
	N/A		
3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.		

4. Biodiversity

4.1.	Were specialist studies conducted?	YES x	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		
	Nick Helme – Nick Helme Botanical Surveys		
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.		
	<p>The vegetation in the study area was surveyed on foot, and all plant species were noted in the field, and various digital photographs were taken, using a gps enable Xiaomi cellphone, and a Fuji XT2 mirrorless camera. The biodiversity website iNaturalist.org was consulted for additional records from the area, and my photographs were also uploaded to this website. Mapping on site was done directly onto imagery on the Field Area Measure gps enabled app and was then downloaded to Google Earth for final presentation mapping. Conclusions were drawn based on this documentation and twenty-five years of professional experience in the area and the region.</p>		

According to the Botanical Assessment the site original natural vegetation is Robertson Karoo, this was also confirmed through SA Vegetation Map (2018). This vegetation type is considered Least Threatened in terms of its ecosystem threat status. This unit has less than 84% of its total original extent still remaining, <1% is formally conserved, and the national conservation target is 16% (Rouget et al 2004). The low level of formal conservation means that the unit is vulnerable to further habitat loss, notably from agriculture and mining, as most of the land is in private ownership, and is experiencing rapid ongoing habitat loss (pers. obs.).

The central part of the area has thin soils with exposed shale, and even some ledges and small cliffs. Depper soils are located in the west, east and southeast of the site.

Areas with thin soils are dominated by *Brianhantleya intrusa*, *Drosanthemum speciosum*, *Pteronia paniculata*, *Mesembryanthemum longistylum*, *Crassula tetragona*, *C. atropurpurea* and *Moraea polyanthos*.

Areas with deeper soils are dominated by *Pteronia incana*, *Pentzia incana*, *Dicerotheramnus rhinocerotis*, *Oxalis pes-caprae*, *Eriosephalus africanus*, *Arctotheca calendula*, *Oncosiphon suffruticosus*, *Euphorbia mauritanica* and *Ruschia carolii*.

Additional indigenous species noted include *Ruschia approximata*, *Euphorbia burmanii*, *Gazania krebsiana*, *Oxalis flava*, *O. obtusa*, *Indigofera heterophylla*, *Anisodonteia elegans*, *Cyanella lutea*, *Ornithogalum thyrsoides*, *Drosanthemum asperulum*, *Rhynchopsidium pumilum*, *Freesia refracta*, *Gladiolus permeabilis*, *Searsia pallens*, *Lapeirousia pyramidalis*, *Roepera spinosa*, *Ursinia anthemoides*, *Cotyledon orbiculata*, *Arctotheca calendula*, *Tetragonia sarcophylla*, *Oedera squarrosa*, *Leysera gnaphalodes*, *Berkheya rigida*, *Curio radicans*, *Tulista pumila*, *Othonna auriculifolia*, *Crassula nudicaulis*, *C. muscosa*, *C. cotyledonis*, *Adromischus marianae*, *Aizoon africanum*, *Cotula turbinata*, *Chrysocoma ciliata*, *C. valida*, *Aspalathus lactea* ssp. *breviloba*, *Felicia tenella*, *Moraea gawleri*, *Pelargonium karroicum*, *Sebaea solaris*, *Polygala affinis*, *Osteospermum sinuatum*, *Roepera spinosa*, *Tylecodon paniculatus*, *Euclea undulata*, *Carissa haematocarpa*, *Oedera squarrosa*, *Macladium spinosum*, *Cynanchum viminalis*, *Gasteria disticha*, *Ruschia tenella*, *Lobostemon echioides*, *Aloe microstigma*, *Helichrysum cymosum*, *H. rosum*, *Albuca tortilis*, *Thesium spicatum*, *Albuca cooperi*, *Ehrharta calycina*, *Bulbine frutescens*, *Anthospermum galioides*, *Pentzia incana*, *Atriplex lindleyi* (invasive alien), *Mesembryanthemum junceum*, *Hermannia amoena*, *H. scabra*, *H. alnifolia*, *Holothrix aspera*, *Chaenostoma* sp., *Tripteris aghillana* and *Lycium ferocissimum*.

Two plant Species of Conservation Concern (SoCC) were recorded in the study area, and there is a moderate likelihood of one or two other species being present in low numbers.

Brianhantleya intrusa is a vygie Redlisted as Near Threatened (Raimondo et al 2004), as it is restricted to thin shale soils in a fairly small area from just west of Robertson to Bonnievale. The species is very common on the rocky, central parts of the site (see Plate 3), with a population of about 1000 plants, and this is regarded as a significant population.

Botanical Conservation Value

The botanical conservation value of an area is a product of plant species diversity, plant community composition, rarity of habitat, degree of habitat degradation, rarity of species, ecological viability and connectivity, restoration potential and reversibility of threats.

About 10ha of the study area (63%) is deemed to be of High botanical sensitivity (see Figure 2). This area supports the two plant SoCC recorded on site, as well as being home to the bulk of the plant diversity (>70%). The remainder of the site (about 5ha) is deemed to be of Medium botanical sensitivity and includes the area of deeper soil along the western boundary and the previously disturbed area in the north.

Factors informing this assessment include the following: 1) the underlying vegetation type is Least Threatened on a national basis, but is poorly conserved, and under constant threat of further loss; 2) no mapped Critical Biodiversity Areas occur within the study area; 3) the recorded presence of at least two plant Species of Conservation Concern, one of which has at least 1000 plants on site; 4) disturbance history and 5) higher plant species and structural diversity in some areas.

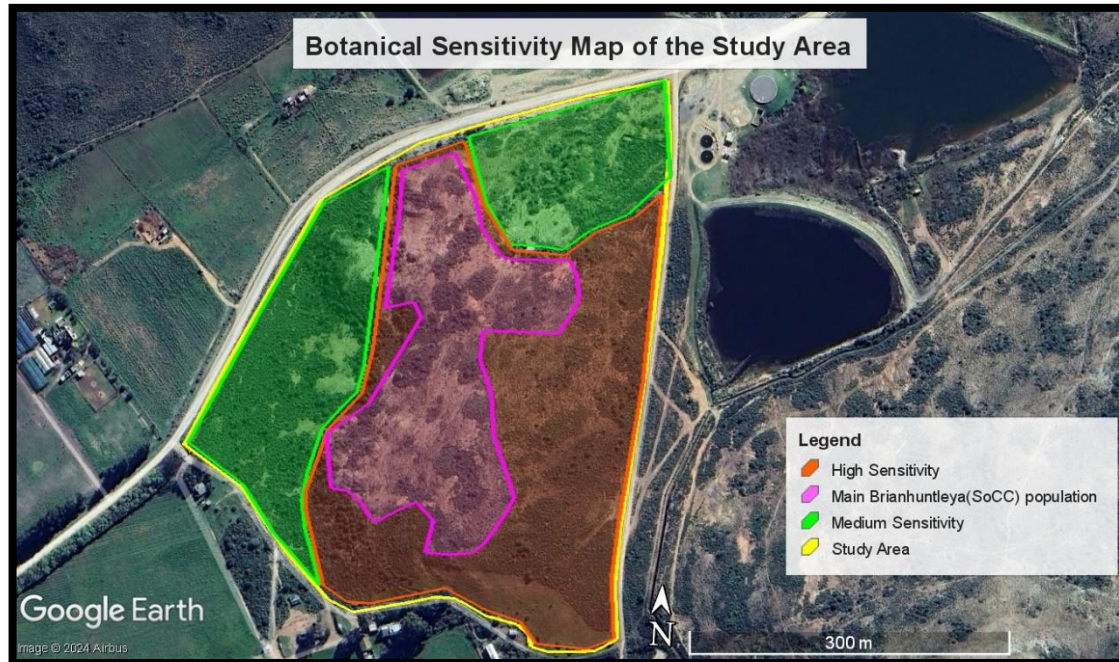


Figure 4: Botanical sensitivity map of the study area. (source: Helme, 2024)

Impact Assessment

The primary botanical impacts are those associated with the permanent loss of the approximately 3.7-4ha area of natural and partly natural vegetation within the two proposed development areas. All areas in the study area are either of Medium or High botanical sensitivity. An additional impact for Alternative 1 would be the loss of a small part (<10%) of the large site population of a single plant Species of Conservation Concern (*Brianhuntleya intrusa*; Near Threatened). The population of *Aspalathus lactea ssp. breviloba* population (Vulnerable) will not be impacted by either of the proposed development areas.

All botanical impacts are negative.

Primary mitigation involves the avoidance of all areas of mapped High sensitivity vegetation, with relocation of the development area within High sensitivity vegetation into an area of Medium sensitivity (as per Figure 2), which will also result in conservation of essentially all the site subpopulation of *Brianhuntleya intrusa* (Near Threatened), and all of the site population of *Aspalathus lactea ssp. breviloba* population (Vulnerable).

Construction phase impacts

Alternative 1 (preferred)

In the case of this project the primary construction phase impact is loss of natural vegetation and partly natural vegetation within the new agricultural development footprint.

For purposes of this assessment it is assumed that about 1.65ha of Medium sensitivity vegetation and about 2.1ha of High sensitivity vegetation will be lost in the Alternative 1 construction phase. This will occur within a vegetation type classified as Least Threatened on a national basis (Robertson Karoo), but which is very poorly conserved (<1%) and subject to ongoing cumulative agricultural impacts.

An additional impact will be the loss of <10% of the large site population of one recorded plant Species of Conservation Concern (*Brianhuntleya intrusa*; Near Threatened).

The loss of about 1.7 ha of natural vegetation of Medium conservation value is likely to be of Low to Medium negative botanical significance, whereas the loss of another 2.1ha of High sensitivity natural vegetation is likely to be of Medium negative botanical significance, before mitigation.

Table 1: Impact table for Construction Phase botanical impacts associated with the proposed cultivation alternatives, and the No Go. Impacts include loss of natural vegetation, plus loss of portion of local sub-population of at least one plant Species of Conservation Concern (SCC; Alternative 1). (source: Helme, 2024)

<u>Alternative</u>	<u>Extent of impact</u>	<u>Duration of impact</u>	<u>Intensity</u>	<u>Probability of occurrence</u>	<u>Degree of confidence</u>	<u>Significance</u>
Alternative 1	Local	Permanent	High	Definite	High	Medium negative
Alternative 2	Local	Permanent	High	Definite	High	Low to Medium negative
No Go alternative	Local	Unknown; possibly temporary	Low (but unknown)	Low	Medium	Neutral

Operational Phase Impacts

The most obvious operational phase impact is likely to be increased habitat fragmentation and loss of current levels of terrestrial ecological connectivity across the cultivated parts of the currently natural study area. The overall intensity of this change is likely to be low in a regional context, as there will still be fairly good ecological connectivity in the central part of the site (both Alternatives). However, there is currently cultivation to the west, north and south of the site, so ecological connectivity in the study area has already been compromised and restricted.

The proposed cultivation will not result in the loss of any mapped CBAs or ESAs.

The project is not likely to have a negative impact on ecological processes in the region, as it does not impact on any major ecological corridors, wetlands or climate change corridors.

Pesticide and fertigation drift (under windy conditions often prevalent during spraying) into the adjacent natural veld is known to have a significant negative effect on the natural insect life and consequently on the pollination and seed set of various plants (Knight et al 2005; Pretorius 2010), and is thus likely to be an issue on this site, and although its magnitude is very difficult to assess it is likely to be relatively low. Runoff of excess fertiliser typically induces a rapid growth of weeds, which soon outcompete the natural vegetation in any areas where this occurs. This can be seen on the existing edges of cultivation in many areas.

The long-term conservation of the High sensitivity natural vegetation in the study area could be viewed as a minor positive impact that takes place over the operational phase of the project, and in this regard, it helps to reduce the negative operational phase impacts.

On balance Alternative 2 is likely to have a slightly lower operational phase botanical impact than Alternative 1, mainly because both cultivation areas are then situated adjacent to existing disturbed areas in the form of the road and existing cultivation. Overall, combined, operational phase botanical impacts are likely to be of Low to Medium negative significance for Alternative 1, and Low negative for Alternative 2.

Table 2: Impact table for Operational Phase botanical impacts associated with the proposed cultivation. Impacts include habitat fragmentation and pesticide and fertigation drift from fields into adjacent natural areas. (source: Helme 2024).

<u>Alternative</u>	<u>Extent of impact</u>	<u>Duration of impact</u>	<u>Intensity</u>	<u>Probability of occurrence</u>	<u>Degree of confidence</u>	<u>Significance</u>
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	Alternative 1	Local	Permanent	Medium	Very likely	High	Low to Medium negative
	Alternative 2	Local	Permanent	Low - Medium	Very likely	High	Low negative
	No Go alternative	Local	Unknown; possibly temporary	Low (but unknown)	Low	Medium	Neutral
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.						
<p>The overall site is classified as an Other Natural Area (ONA), which, according to the Western Cape Biodiversity Spatial Plan (WCBSP, 2015), does not have a strict requirement to meet biodiversity targets. Nonetheless, ONAs are recognized for their ecological value, and the guidelines emphasize minimizing habitat and species loss to preserve ecosystem functionality.</p> <p>In line with these guidelines, the assessment of the proposed development has identified that the areas designated for expansion are primarily located within regions of Medium or High botanical sensitivity. These areas are significant for their plant diversity and the presence of species of conservation concern. According to the Botanical Specialist findings, approximately 1.65 ha of Medium sensitivity vegetation and 2.1 ha of High sensitivity vegetation will be impacted during the construction phase under Alternative 1. Additionally, the development will result in the loss of less than 10% of the large population of <i>Brianhuntleya intrusa</i>, a plant species listed as Near Threatened.</p>							
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.						
<p>The proposed vineyard expansion is expected to have impacts on the site-specific features within the Biodiversity Spatial Plan designation of Other Natural Areas (ONA). Approximately 3.7 ha of natural and partly natural vegetation on development areas identified as Medium and High botanical sensitivity will be permanently loss. Another important feature on the site that is identified by the botanist includes two species of conservation concern such as large population of <i>Brianhuntleya intrusa</i> (Near Threatened) and <i>Aspalathus lactea ssp. Breviloba</i> (Vulnerable). Based on the specialist findings, both species are located outside the proposed cultivation areas, which mitigates the direct impact on these specific species.</p>							
4.6.	If your proposed development is located in a protected area, explain how the proposed development is in line with the protected area management plan.						
N/A							
4.7.	Explain how the presence of fauna on and adjacent to the proposed development has influenced your proposed development.						
No fauna habitat observed on site.							

5. Geographical Aspects

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

6. Heritage Resources

6.1.	Was a specialist study conducted?	YES x	NO
6.2.	Provide the name and/or company who conducted the specialist study.		

A Notice of Intent to Develop was drafted by Jonathan Kaplan. Heritage Western Cape has confirmed that no further assessment is required.

6.3. Explain how areas that contain sensitive heritage resources have influenced the proposed development.

Heritage Western Cape confirmed that the proposed cultivation of vineyards will not impact on heritage resources, therefore, no further assessment is required. See comment attached as **Appendix E** in this report.

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.

Refer to the above.

8. Socio/Economic Aspects

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

McGregor is a small, rural town with a close-knit community, typically characterized by a mixture of long-term residents and newcomers, including retirees and individuals seeking a quieter lifestyle. The population is relatively small, and the area has a strong sense of local identity, with many people having lived in the area for generations. There is also a seasonal influx of tourists and visitors, which impacts the local population during peak periods, especially over weekends and holiday seasons.

The economy of McGregor is primarily based on agriculture, with a focus on wine production, fruit farming, and small-scale horticulture. The surrounding areas are known for their vineyards, and agriculture remains a central aspect of local livelihoods. Tourism also plays a significant role in the local economy, with McGregor attracting visitors due to its scenic beauty, cultural heritage, and proximity to nature reserves. The local economy is supported by hospitality-related businesses such as guesthouses, restaurants, and artisanal shops, catering to both domestic and international tourists.

McGregor has a vibrant cultural scene, with local festivals, arts and crafts, and a strong sense of community. The town is known for its historical architecture, local markets, and music festivals, attracting both residents and visitors to participate in social and cultural activities. The town has a number of social organizations, churches, and community groups that contribute to social cohesion. There is a strong sense of pride in the town's heritage, and many activities center around maintaining and celebrating McGregor's historical and cultural identity.

Like many rural towns, McGregor faces challenges such as limited employment opportunities, seasonal unemployment, and economic vulnerability tied to agriculture and tourism. There may also be challenges related to access to healthcare, education, and social services, particularly for more vulnerable populations such as the elderly and those living in outlying areas.

8.2.	Explain the socio-economic value/contribution of the proposed development.
<p>The development will provide both temporary and permanent employment opportunities. During the construction phase, jobs will be created for workers involved in building infrastructure, land preparation, and other construction-related activities. Following construction, the operational phase of the vineyard will generate employment in various roles such as farm workers, vineyard managers, agricultural technicians, and administrative support staff. This will help reduce unemployment levels in the local community, benefiting individuals and families in McGregor and surrounding areas.</p> <p>The vineyard expansion will stimulate the local economy through the creation of direct and indirect economic activity. Direct contributions include wages paid to workers, which will increase local spending power. Indirectly, local businesses such as suppliers of agricultural equipment, materials, and services (e.g., irrigation systems, fertilizers, and machinery) will experience increased demand.</p> <p>The development of new vineyard blocks will contribute to the region's agricultural output, enhancing the economic sustainability of McGregor, an area known for its agricultural industry. The expansion of vineyards will strengthen the local agricultural base, making it more resilient to market fluctuations and increasing the region's competitiveness in the global wine market.</p> <p>The proposed development aims to incorporate sustainable agricultural practices, such as water conservation, soil preservation, and eco-friendly pest management. This may contribute to the long-term environmental sustainability of the region, which can, in turn, support the area's agricultural future.</p>	
8.3.	Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.
<p>The applicant has not proposed any specific social initiatives aimed at addressing the needs of the community or uplifting the area at this stage. But the most crucial initiative that the employer will implement is job provision during construction and post-construction phases.</p>	
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.
<p>Positive</p> <ul style="list-style-type: none"> → The development will enhance agricultural production, which will support the local economy and generate employment opportunities during both construction and operational phases. This will contribute positively to the well-being of the local community by improving livelihoods. → By utilizing suitable soil for vineyard farming, the project enhances the agricultural character of the area, reinforcing the sense of place and contributing to sustainable land use in an agriculturally zoned region. → The site's location within an agricultural area ensures that the activities associated with the proposed development align with the existing land use, thereby avoiding any significant intrusion or disturbance to surrounding communities. → The expansion to existing vineyard indicates the success of the existing and the need for expansion <p>Negative</p> <ul style="list-style-type: none"> → Minor noise impacts from machinery and vehicles will occur during the construction phase. However, these impacts are short-term, localized, and will not exceed permissible levels. Mitigation measures, such as restricting construction activities to daylight hours, will further reduce the noise impact. → The transformation of the site from its current wilderness-like appearance to an area of cultivated vineyards may alter the visual character slightly. However, it is important to note that this change occurs within an existing agricultural setting, mitigating the sense of significant visual or sense-of-place disruption and will create an improved aesthetic for the outskirts of the town of McGregor → Construction activities may generate dust, which could temporarily impact air quality. Dust suppression methods, such as regular watering of exposed surfaces, will minimize this impact. 	

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.
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Provide a description of the preferred property and site alternative.

The preferred property and site alternative for the proposed vineyard expansion is located on Erf 1995, McGregor. This established agricultural property, positioned south of McGregor, is already used for farming and is well-suited to vineyard expansion due to its alignment with the current land use and agricultural zoning.

The northern section of Erf 1995, which has not been previously developed and is covered with natural and semi-natural vegetation, has been chosen as the optimal area for the vineyard expansion. This decision was based on its soil quality and favourable environmental conditions for grape cultivation, both crucial for achieving optimal vineyard output. Soil sampling and scientific analysis conducted on-site, confirmed the suitability of these specific blocks on the property, making it an ideal choice for agricultural development without needing to disturb other parts of the property.

The expansion includes the establishment of two vineyard blocks on the northern part of the property:

- **Block 1:** 1.7 ha
- **Block 2:** 2.1 ha

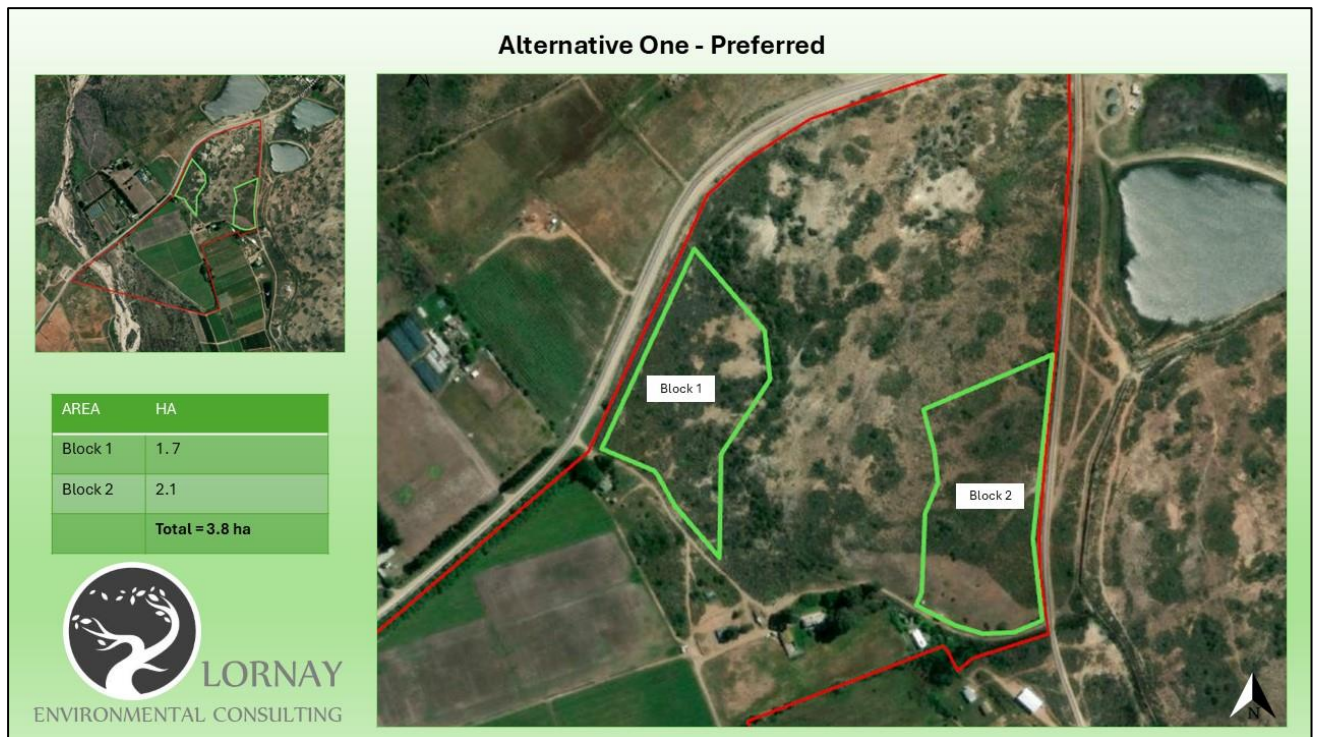


Figure 5: Alternative one (preferred) site layout based on soil analysis and topography of the property

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

No alternative properties or sites were investigated for the proposed vineyard expansion. The project is specifically intended to occur within the boundaries of the subject farm alongside the existing vineyard on Erf 1995, McGregor. Given

that the expansion aims to build upon the established agricultural operations on this property, no additional sites or properties were considered for development.

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

The preferred property and site alternative for the vineyard expansion on Erf 1995, McGregor, was selected based on ownership, existing land use, and the suitability of on-site resources and infrastructure.

The applicant owns Erf 1995, and the project focuses on expanding the vineyard within the existing agricultural property. This eliminates the need to seek additional properties, simplifying logistical and legal processes associated with the expansion. The property is already zoned and utilized for agricultural purposes, aligning with the proposed use.

The property currently has essential services and infrastructure, including access roads and irrigation systems. Utilizing these existing services reduces the environmental footprint of the project, as it minimizes the need for additional development or installation of new infrastructure. Soil analysis highlighted this area as having optimal soil conditions for grape cultivation, supporting the project's agricultural objectives

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

The selection of the preferred site alternative for the expansion of vineyards on Erf 1995, McGregor, was guided by an evaluation of site-specific factors such as soil type, essential for grape cultivation as well as topography and location to the existing infrastructure and access on site. Since the objective of the project is to expand within the existing vineyard property, no additional properties or alternative sites were considered.

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

The decision to focus on expanding the existing agricultural operations on the property lies solely on these factors:

- The current farm is already zoned and designated for agricultural purposes and is mainly focusing on grape harvesting for wine production. Expanding the vineyard within this existing agricultural land use is both practical and compliant with zoning regulations, allowing the project to proceed without additional permitting complexities associated with land use conversion.
- A soil study, including soil sampling and analysis, was conducted on vacant available land within the existing farm. This analysis identified specific areas within the vacant available land, with soil conditions ideal for vineyard cultivation. The soil characteristics in these areas, including composition and drainage, support grape production, making them the most suitable sites for expansion without the need to investigate other locations.
- In addition to the soil profiles, the topography of the areas proposed for cultivation, is another critical point of consideration. The land use requires relatively flat and even terrain to allow large agricultural machinery to be able to access and tun in these farmed areas.
- Developing a new property would likely require land conversion, which could disrupt Ecological Support Areas (ESA) or Critical Biodiversity Areas (CBA) in areas which may be relatively intact. By focusing on an expansion within the current farmed property, the project avoids disturbing other undisturbed, sensitive areas, thereby minimizing potential impacts on biodiversity and preserving important ecological functions in the region.
- Expanding onto a new site would introduce additional expenses, including land acquisition, infrastructure development, and potential relocation costs. In contrast, expanding on the existing farm allows the project to leverage existing infrastructure, such as irrigation systems and access roads, which are already in place. This approach not only reduces the financial burden but also minimizes resource demand, aligning with sustainable agricultural practices.

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

Positive impacts

- Expanding the vineyards within the existing farm minimises the need to convert undeveloped land in other areas, thereby reducing habitat loss and fragmentation that could otherwise occur if new land were developed.

- By utilising existing infrastructure, the project reduces the need for new construction, which may otherwise disrupt the environment and increase the development footprint.
- The selected area's favourable slope and soil type make it highly suitable for vineyard cultivation, promoting efficient and sustainable use of land resources.
- Expanding the vineyards on this farm utilizes already arable soil, thereby preserving valuable land resources specifically for farming and supporting long-term agricultural productivity.

Negative impacts

- According to a botanical assessment, approximately 10% of plant species of conservation concern may be impacted by the expansion. To address this, Search and Rescue operations for affected plant species will be implemented to minimise biodiversity loss.
- During the construction phase, the ploughing and preparation of previously undeveloped land may loosen soil, increasing the risk of erosion. This could lead to soil degradation if not carefully managed through appropriate erosion control measures.

1.2.	Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
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~~Provide a description of the preferred activity alternative.~~

~~Provide a description of any other activity alternatives investigated.~~

~~Provide a motivation for the preferred activity alternative.~~

~~Provide a detailed motivation if no activity alternatives exist.~~

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

1.3.	Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts
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Provide a description of the preferred design or layout alternative.

The proposed vineyard expansion project aims to increase grape production by adding new vineyard blocks on the existing farm. As vineyards are highly dependent on soil quality, slope, and climatic conditions, the design layout has been carefully considered to ensure optimal growing conditions. Due to the farm's existing operations and the constraints posed by soil suitability, limited layout alternatives are feasible on the subject property.

ALTERNATIVE LAYOUT 1 (PREFERRED)

The preferred layout alternative for the vineyard expansion on the existing farm property aims to optimize agricultural production while carefully considering environmental factors. Vineyards depend on numerous factors to thrive, including soil quality, slope orientation, and temperature. Given that the farm is already operational, the options for alternative layouts are naturally limited, as the expansion must work within the constraints of soil type and slope on the existing property. The expansion also needs to connect seamlessly with existing infrastructure, such as irrigation systems and accessible arable soil, to maximize efficiency. A soil analysis conducted on the property confirmed that certain areas are more conducive to vineyard growth, providing limited but specific layout options.

Alternative Layout 1 (Preferred) involves the establishment of two additional vineyard blocks situated adjacent to the current vineyards. This location was chosen based on the soil analysis, which identified suitable soil types required for optimal grape production. Soil conditions across the property vary, and the selected areas align with Department of Agriculture guidelines, which emphasize the importance of conserving arable soil for agriculture in South Africa. With pressures from climate change and the need for efficient use of arable land, this layout allows for responsible land use without compromising agricultural productivity.

The primary environmental concern related to this alternative involves the clearance of approximately 1.65 hectares of medium-sensitivity vegetation and 2.1 hectares of high-sensitivity vegetation during construction. Additionally, a botanical survey identified a potential impact on the *Brianhuntleya intrusa*, a plant species of conservation concern (SoCC) classified

as Near Threatened. Less than 10% of the property's population of this species may be affected. However, mitigation measures, including the transplantation of affected plants to less vulnerable areas on the property, have been recommended to offset this impact. It is worth noting that this vegetation type is classified as "Least Threatened" under the Other Natural Areas (ONA) classification, which reduces the overall conservation risk, though all efforts will be made to minimize the loss of sensitive species and habitats.

The preferred layout (Alternative 1) is also strategically close to the farm's existing irrigation systems. This proximity enables efficient water usage, reduces the need to develop new irrigation infrastructure, and minimizes further soil disturbance. By connecting to established infrastructure, the layout helps streamline operational efficiency and environmental management. The preferred layout optimizes use of soil areas identified as suitable for vineyards, thereby enhancing agricultural productivity on the farm without extensive new infrastructure requirements.

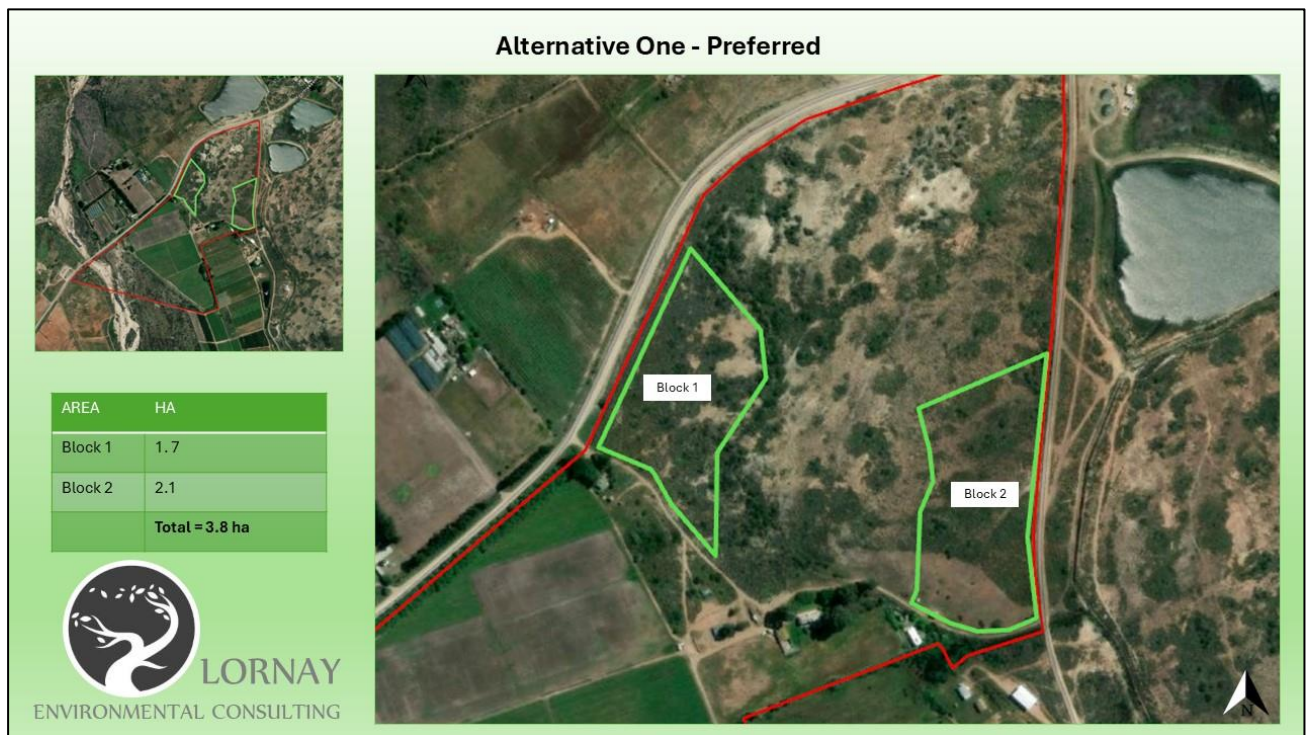


Figure 6: Proposed site layout plan – Alternative 1 (preferred).

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

Three layout alternatives were considered in this application, each evaluated with respect to the suitability of the soil for vineyard farming as well as the botanical sensitivity of the site. The botanical sensitivity of the site is characterised by medium and high botanical sensitivity, as shown in the **Figure 4** below. These factors, including soil suitability and botanical sensitivity, significantly reduced the number of viable options for the proposed development.

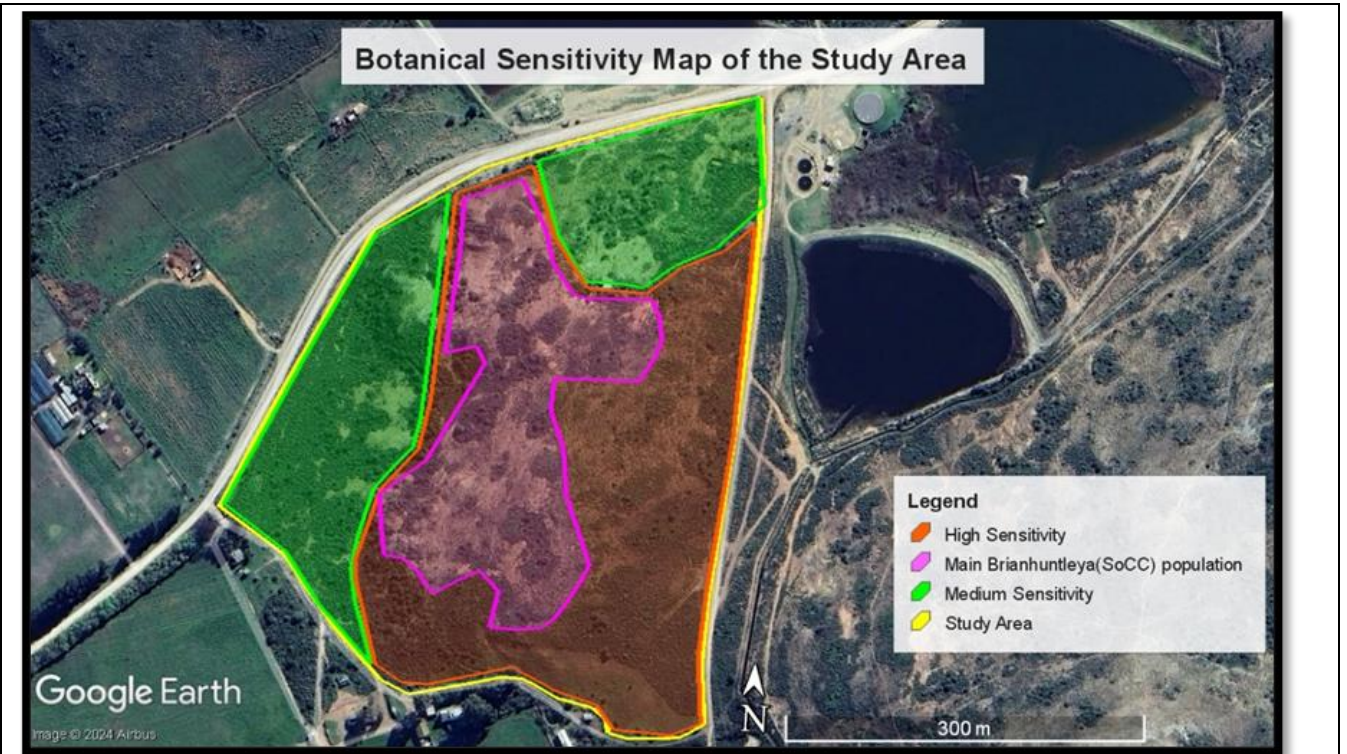


Figure 7: Botanical sensitivity map of the study area.

ALTERNATIVE 2

Alternative 2 was considered with the aim of relocating Block 2 to the northeast section of the property, an area with medium botanical sensitivity as per the botanical sensitivity map above. While this option was thoroughly assessed with input from a botanical specialist, it was ultimately not preferred due to several key factors that make it less viable compared to Alternative 1. A soil analysis conducted on site indicated that the northeast area, although somewhat degraded, presents significant challenges in terms of soil suitability for vineyard farming. This area is characterized by soil erosion occurrences and is largely inarable, which renders it unsuitable for agricultural purposes. The primary objective of this development is to create an arable space for vineyard expansion, and the northeast section does not meet the requirements for sustainable agricultural productivity. This would pose significant challenges for the proposed agricultural activities. The area's soil composition is not suitable for sustainable vineyard farming, which is the core purpose of the development.

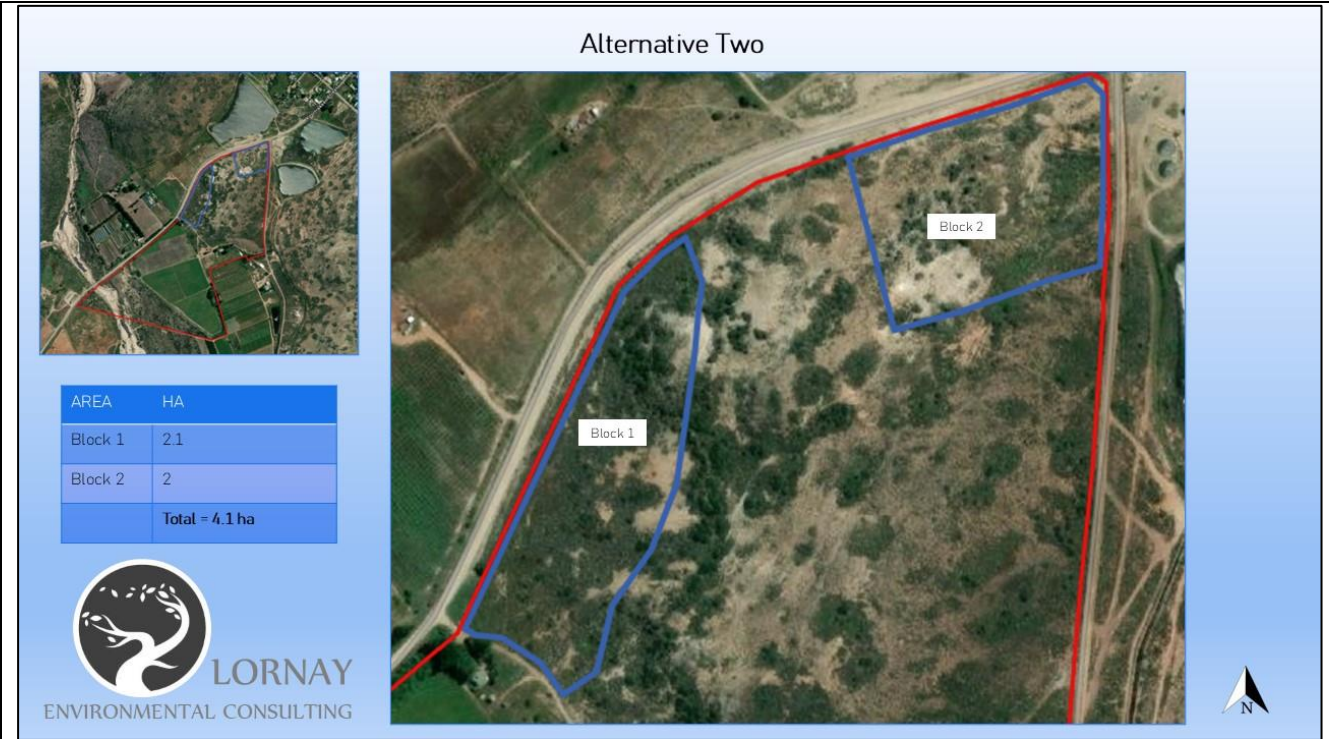


Figure 8: Alternative 2

ALTERNATIVE 3 (NO-GO)

This alternative includes the assessment of no development, no expansion of the vineyards, this is where a status quo remains. While this option eliminates any negative environmental impacts, it also prevents the farm from planned expansion and increasing production, which could limit the economic growth and long-term viability.

Provide a motivation for the preferred design or layout alternative.

ALTERNATIVE 1 (PREFERRED)

Alternative 1 was selected as the preferred design layout due to its suitability for vineyard cultivation, as determined by a thorough soil analysis conducted on the property. The analysis indicated that the soil morphology within this area is highly favourable for grape cultivation, with properties that support optimal growth conditions specific to vineyard farming. This scientifically backed suitability ensures that the chosen layout will effectively maximize agricultural productivity, leveraging the inherent soil advantages of the site.

Additionally, the Alternative 1 layout allows for integration with the existing farm infrastructure, including irrigation systems, which further enhances resource efficiency and minimizes the need for new infrastructure development. This proximity to essential services reduces the environmental footprint by avoiding additional construction that could lead to further soil disturbance. This option not only aligns with the agricultural objectives of the expansion but also supports sustainable land use practices by confining the new cultivation areas to those most suitable for farming.

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

N/A

ALTERNATIVE 1 (PREFERRED)

Positive Impacts

- The areas highlighted for the development contain suitable arable land for vineyards, as determined by the soil analysis conducted on-site.
- The vineyards will be located adjacent to the existing vineyards on the farm, further minimizing the need for additional pipelines and infrastructure, thus reducing environmental disturbance.
- Job creation for local communities during both the construction and operational phases of the vineyard expansion, contributing to local economic development.
- The expansion supports sustainable agricultural practices by optimizing the use of existing arable land, thereby reducing the pressure on undeveloped areas.

Negative Impacts

- Loss of Medium and High sensitivity vegetation that is listed as Least Threatened, which could affect local biodiversity.
- The clearance of vegetation could lead to soil erosion and habitat disruption, impacting the ecosystem services provided by the existing flora.
- Potential disturbance to local wildlife during the construction phase, which may lead to temporary displacement of species.

ALTERNATIVE 2

Positive Impacts

- By relocating Block 2 to the northeast of the property, this alternative could potentially avoid some areas of higher sensitivity vegetation, reducing the impact on those specific ecosystems.
- If the site is identified as having suitable soil, it could still support agricultural productivity, contributing to the farm's overall yield.

Negative Impacts

- The new location may still require the clearance of some vegetation, leading to loss of habitat and biodiversity, particularly if sensitive areas are disturbed.
- Increased costs and logistical challenges related to establishing new irrigation and access infrastructure further away from existing systems, which could lead to greater soil disturbance.
- Potential for reduced overall agricultural efficiency if the new area is not as suitable for vineyards as initially assessed.

ALTERNATIVE 3 (NO-GO)

Positive Impacts

- No environmental impacts associated with vegetation clearance or soil disturbance, preserving the existing natural ecosystem and maintaining local biodiversity.

	<p>→ Protection of habitats for species of conservation concern, ensuring that no populations are displaced or affected by development activities.</p> <p><i>Negative Impacts</i></p> <p>→ The inability to expand the vineyards may limit the farm's production capacity and economic viability, potentially jeopardizing the long-term sustainability of the farming operation.</p> <p>→ Lack of job creation opportunities for local communities that could arise from the expansion project, which may affect the local economy negatively.</p> <p>→ Continued pressure on existing agricultural land may lead to overuse and degradation of those areas, as no alternative productive areas are being developed.</p>
1.4.	Technology alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred technology alternative:	
N/A	
Provide a description of any other technology alternatives investigated.	
N/A	
Provide a motivation for the preferred technology alternative.	
N/A	
Provide a detailed motivation if no alternatives exist.	
No technology alternatives were considered, this application is for the expansion of the vineyards which includes cultivation of land.	
List the positive and negative impacts that the technology alternatives will have on the environment.	
N/A	
1.5.	Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred operational alternative.	
Provide a description of any other operational alternatives investigated.	
Provide a motivation for the preferred operational alternative.	
Provide a detailed motivation if no alternatives exist.	
List the positive and negative impacts that the operational alternatives will have on the environment.	
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.	
Choosing the 'No-Go' option, which entails maintaining the current state and decommissioning development, is not the preferred alternative in this scenario. This choice is less favourable because it prevents progress of the farm and potential opportunities for growth and improvement and fails to address issues.	
1.7.	Provide an explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist.

The expansion of the vineyards is limited to Erf 1995 which is the applicant's property and comprises already existing vineyards and associated operations. The northern part of the property is currently unfarmed and therefore has available space for the establishment of new vineyards. Three alternatives are assessed in this application. As indicated above, the area for placement of the new vineyard blocks is constrained by soil type, topography and proximity to existing infrastructure on site as well as remaining vacant land on the property.

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

The subject property, Erf 1995 is situated on the south of the town of McGregor. The proposal includes the expansion of vineyards on the northern section of the property that is currently undeveloped. Two new vineyard blocks are proposed to be developed on the property and they will be located near or adjacent to the existing vineyard blocks on the farm. The main reason for choosing Alternative 1 as the preferred alternative, is based on the following:

Soil profile

→ A comprehensive soil analysis confirmed that the specific selected areas for vineyard expansion possess favourable soil morphology for grape cultivation. The soil conditions support the successful growth of grapevines, ensuring that the expansion will yield optimal agricultural results.

Slope and Aspect

→ Both proposed vineyard blocks in Alternative 1 are located on western-facing slopes, which are ideal for grapevine cultivation. Western-facing slopes are preferred in viticulture due to their exposure to afternoon sun, which enhances grape ripening and contributes to the production of high-quality wine grapes.

Topography

→ The two areas which have been identified for the new vineyard blocks are characterised by gentle slopes and is fairly even in terrain. The other vacant areas on the farm are undulating and / or steep and will be problematic for general operations and use of agricultural machinery.

→ The only other vacant area available on the farm is on the far southern boundary, however this is located within a drainage line which is not suitable for agriculture.

In contrast, Alternative 2 involves cultivating a section of the property located to the northeast, which is characterized by degraded land with a high susceptibility to erosion (**Photo 1**). This area has rocky and sandy soil, making it less suitable for sustainable vineyard development. The poor soil quality and erosion risks limit its agricultural potential, rendering it less viable for successful grape cultivation. The site is also located far from general farm operations and is characterised by undulating topography which is not suitable to agriculture. In addition, the location of vineyard blocks in Alternative 2 along the main road, leave these areas susceptible to theft and the impacts associated with dust of passing vehicles.

Given the soil suitability, slope aspect, and proximity to existing infrastructure, Alternative 1 is clearly the more advantageous and sustainable option for vineyard expansion. It ensures that the development aligns with best agricultural practices while minimizing environmental impacts.



Photo 1: View of the upper northern section characterized by degraded land with a high susceptibility to erosion.

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).

No no-go areas identified by the specialist.

3. Methodology to determine the significance ratings of the potential environmental impacts and risks associated with the alternatives.

Describe the methodology to be used in determining and ranking the nature, significance, consequences, extent, duration of the potential environmental impacts and risks associated with the proposed activity or development and alternatives, the degree to which the impact or risk can be reversed and the degree to which the impact and risk may cause irreplaceable loss of resources.

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

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

Nature/ Type

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

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

Significance

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

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

Likelihood- the likelihood that an impact will occur

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

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

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

Definition of significance:

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

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

Significance colour scale (if applicable):

Negative	Positive
Negligible	Negligible
Minor	Minor
Moderate	Moderate
Major	Major

Impact rating colour scale:

Negative	Positive
Negligible	Negligible
Low	Low
Medium	Medium
High	High

4. Assessment of each impact and risk identified for each alternative

Note: The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. The EAP may decide to include this section as Appendix J to this BAR.

ALTERNATIVE ONE (PREFERRED)

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	1. Socioeconomic impacts Job creation during the planning, design and construction phase
Nature of impact:	Positive
Extent and duration of impact:	Local; short-term
Consequence of impact or risk:	Improved livelihood for the community, investments in the area, influx of people in the area
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	Access to employment opportunities for the local contractors'
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High Positive
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	- Ensure labour force is sourced locally as far as possible A gender balance to be considered during employment
Residual impacts:	Improvement of the local economy, skill transfer and investment in the area.
Cumulative impact post mitigation:	Job creation and skill transfer for the local community
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High Positive
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	2. Dust impact Dust generated from the site clearing and site preparation phase is expected
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Visual impacts and nuisance for the residents adjacent to the site

Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Potential for reduced visibility, temporary visual impacts to the area
Cumulative impact prior to mitigation:	Dust may be generated as a result of earthmoving activities, vegetation removal and mixing required for construction and development.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low negative
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	<ul style="list-style-type: none"> → Maintain ground cover for as long as possible to reduce the total surface area exposed to wind. Do not clear the entire property, rather clear the building site only, as far as possible. → Ensure vehicle speeds limits on site are kept to a minimum. → Delivery vehicles to keep loads covered. → Cover fine materials stockpiles → Wet dry and dusty surfaces using non-portable water. Staff to wear correct PPE if dust is generated for long periods. Road surfaces to be swept and kept clean of sand and fine materials.
Residual impacts:	None
Cumulative impact post mitigation:	Dust generated during construction; mitigation successful
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very-Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	3. Noise impact Noise generated from the machinery moving during the construction phase.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Noise disturbance to the transient receptors, i.e motorists, pedestrians and residents.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	No resources will be impacted.
Degree to which the impact can be reversed:	High
Indirect impacts:	None
Cumulative impact prior to mitigation:	Medium negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low negative
Degree to which the impact can be avoided:	Medium- High
Degree to which the impact can be managed:	Medium- High
Degree to which the impact can be mitigated:	High

Proposed mitigation:	<ul style="list-style-type: none"> → Limit noise levels (e.g install and maintain silencers on machinery) → Provide protective wear for workers i.e ear plugs → Ensure that construction vehicles and machinery are maintained to reduce noise generation. → Restrict construction to normal working hours in line with municipal bylaws
Residual impacts:	None
Cumulative impact post mitigation:	Typical noise impacts associated with construction site
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact	4. Visual impacts Visual impacts of construction site and construction activities
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Reduce aesthetic values of the site and surroundings
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	High
Indirect impacts:	None
Cumulative impact prior to mitigation:	Short term visual impacts associated with construction
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	<ul style="list-style-type: none"> - Good housekeeping of construction site and working areas. - Screen the visual elements of the site camp with netting. - Locate the site camps in a transformed area. - Site officer to walk the site on a daily basis to check for visual impacts and general site aesthetics, particularly prior the weekends and holidays.
Residual impacts:	None
Cumulative impact post mitigation:	Typical visual impacts associated with a construction site.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very-Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact	5. Botanical impacts Permanent loss of natural and partly natural vegetation as a result of clearing.

Nature of impact:	Negative
Extent and duration of impact:	Local; Permanent
Consequence of impact or risk:	High- loss of natural vegetation plus loss of portion of local sub-population of at least one plant Species of Conservation Concern
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Loss of medium and highly sensitive vegetation and habitat fragmentation
Cumulative impact prior to mitigation:	Loss of ecological connectivity
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	<ul style="list-style-type: none"> → The approved development areas must be surveyed and clearly demarcated on the ground prior to any site development, so that no accidental disturbance of the conservation areas occurs. → No disturbance or loss of vegetation should be allowed within the Medium and High sensitivity areas outside the proposed development footprints at any stage in the future. → Search and Rescue of all translocatable bulbs and succulents from within the development footprints must be undertaken prior to any site development. All specimens of the NT <i>vygie Brianhuntleya intrusa</i> and the dwarf succulent <i>Tulista pumila</i> within the authorised footprint must be rescued. This must be undertaken by a qualified Search and Rescue contractor approved by the botanist. Some of the material should be used to help rehabilitate the previously disturbed northeastern part of the site, and the remainder can be used elsewhere (at contractor and botanist's discretion).
Residual impacts:	Continued loss of vegetation contributing to habitat loss.
Cumulative impact post mitigation:	Low-Medium – the vegetation type impacted by the development has been, and will continue to be, impacted by numerous agricultural developments and other factors (the cumulative impacts) within the region
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)
OPERATIONAL PHASE	
Potential impact and risk:	<p>1. Socioeconomic impacts</p> <p>Access to employment opportunities for the community during the operational phase, job creation, provision of housing for new residents moving into the area and investment opportunities, additional housing provided in response to need and demand</p>
Nature of impact:	Positive
Extent and duration of impact:	Local; Long term

Consequence of impact or risk:	Improved livelihood, beneficiaries
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	Access to employment for the community during the operational phase, job creation, provision of residential erven in response to provincial demand, investment in the area.
Cumulative impact prior to mitigation:	High Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	N/A
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	→ Labour must be sourced locally
Residual impacts:	Investment in the area and attraction to the area.
Cumulative impact post mitigation:	→ Investment in the area, attraction to the area. → Access to employment opportunities for the community during the operational phase, job creation, provision of housing in response to the provincial demand and investment in the area.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High (+)

OPERATIONAL PHASE

	2. Botanical impacts
Potential impact and risk:	Increased habitat fragmentation and loss of current levels of terrestrial ecological connectivity across the cultivated parts of the currently natural study area.
Nature of impact:	Negative
Extent and duration of impact:	Local; Permanent
Consequence of impact or risk:	
Probability of occurrence:	Very likely
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Low- There is currently cultivation to the west, north and south of the site, so ecological connectivity in the study area has already been compromised and restricted
Indirect impacts:	Increase fragmentation and loss of ecological connectivity
Cumulative impact prior to mitigation:	The vegetation type impacted by the development has been, and will continue to be, impacted by numerous agricultural developments and other factors (the cumulative impacts) within the region.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium

Proposed mitigation:	<p>→ The approved development areas must be surveyed and clearly demarcated on the ground prior to any site development, so that no accidental disturbance of the conservation areas occurs.</p> <p>→ No disturbance or loss of vegetation should be allowed within the Medium and High sensitivity areas outside the proposed development footprints at any stage in the future.</p> <p>→ Search and Rescue of all translocatable bulbs and succulents from within the development footprints must be undertaken prior to any site development. All specimens of the NT vygie <i>Brianhuntleya intrusa</i> and the dwarf succulent <i>Tulista pumila</i> within the authorised footprint must be rescued. This must be undertaken by a qualified Search and Rescue contractor approved by the botanist. Some of the material should be used to help rehabilitate the previously disturbed northeastern part of the site, and the remainder can be used elsewhere (at contractor and botanist's discretion).</p>	
Residual impacts:		
Cumulative impact post mitigation:	Low-Medium – The vegetation type impacted by the development has been, and will continue to be, impacted by numerous agricultural developments and other factors (the cumulative impacts) within the region	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
DECOMMISSIONING AND CLOSURE PHASE		
Potential impact and risk:	N/A	
Nature of impact:	-	
Extent and duration of impact:	-	
Consequence of impact or risk:	-	
Probability of occurrence:	-	
Degree to which the impact may cause irreplaceable loss of resources:	-	
Degree to which the impact can be reversed:	-	
Indirect impacts:	-	
Cumulative impact prior to mitigation:	-	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-	
Degree to which the impact can be avoided:	-	
Degree to which the impact can be managed:	-	
Degree to which the impact can be mitigated:	-	
Proposed mitigation:	-	
Residual impacts:	-	
Cumulative impact post mitigation:	-	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-	

ALTERNATIVE 2

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	1. Socioeconomic impacts Job creation during the planning, design and construction phase
Nature of impact:	Positive
Extent and duration of impact:	Local; short-term
Consequence of impact or risk:	Improved livelihood for the community, investments in the area, influx of people in the area
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	Access to employment opportunities for the local contractors'
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High Positive
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	- Ensure labour force is sourced locally as far as possible A gender balance to be considered during employment
Residual impacts:	Improvement of the local economy, skill transfer and investment in the area.
Cumulative impact post mitigation:	Job creation and skill transfer for the local community
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High Positive
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	2. Dust impact Dust generated from the site clearing and site preparation phase is expected
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Visual impacts and nuisance for the residents adjacent to the site
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Potential for reduced visibility, temporary visual impacts to the area

Cumulative impact prior to mitigation:	Dust may be generated as a result of earthmoving activities, vegetation removal and mixing required for construction and development.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low negative
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	<ul style="list-style-type: none"> → Maintain ground cover for as long as possible to reduce the total surface area exposed to wind. Do not clear the entire property, rather clear the building site only, as far as possible. → Ensure vehicle speeds limits on site are kept to a minimum. → Delivery vehicles to keep loads covered. → Cover fine materials stockpiles → Wet dry and dusty surfaces using non-portable water. Staff to wear correct PPE if dust is generated for long periods.
Residual impacts:	None
Cumulative impact post mitigation:	Dust generated during construction; mitigation successful
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very-Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
3. Noise impact	
Potential impact and risk:	Noise generated from the vehicles and machinery moving during the construction phase.
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Noise disturbance to the transient receptors, i.e motorists, pedestrians and residents.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	No resources will be impacted.
Degree to which the impact can be reversed:	High
Indirect impacts:	None
Cumulative impact prior to mitigation:	Medium negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low negative
Degree to which the impact can be avoided:	Medium- High
Degree to which the impact can be managed:	Medium- High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	<ul style="list-style-type: none"> → Limit noise levels (e.g install and maintain silencers on machinery) → Provide protective wear for workers i.e ear plugs → Ensure that construction vehicles and machinery are maintained to reduce noise generation.

	→ Restrict construction to normal working hours in line with municipal bylaws
Residual impacts:	None
Cumulative impact post mitigation:	Typical noise impacts associated with construction site
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact	4. Visual impacts Visual impacts of construction site and construction activities
Nature of impact:	Negative
Extent and duration of impact:	Local; Short-term
Consequence of impact or risk:	Reduce aesthetic values of the site and surroundings
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	High
Indirect impacts:	None
Cumulative impact prior to mitigation:	Short term visual impacts associated with construction
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	<ul style="list-style-type: none"> - Good housekeeping of construction site and working areas. - Screen the visual elements of the site camp with netting. - Locate the site camps in a transformed area. - Site officer to walk the site on a daily basis to check for visual impacts and general site aesthetics, particularly prior the weekends and holidays.
Residual impacts:	None
Cumulative impact post mitigation:	Typical visual impacts associated with a construction site.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very-Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact	5. Botanical impacts Permanent loss of natural and partly natural vegetation as a result of clearing.
Nature of impact:	Negative
Extent and duration of impact:	Local; Permanent
Consequence of impact or risk:	High- loss of natural vegetation plus loss of portion of local sub-population of at least one plant Species of Conservation Concern
Probability of occurrence:	Definite

Degree to which the impact may cause irreplaceable loss of resources:	High	
Degree to which the impact can be reversed:	Medium	
Indirect impacts:	Loss of medium and highly sensitive vegetation and habitat fragmentation	
Cumulative impact prior to mitigation:	Loss of ecological connectivity	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative	
Degree to which the impact can be avoided:	Low	
Degree to which the impact can be managed:	Medium	
Degree to which the impact can be mitigated:	High	
Proposed mitigation:	<ul style="list-style-type: none"> → The approved development areas must be surveyed and clearly demarcated on the ground prior to any site development, so that no accidental disturbance of the conservation areas occurs. → No disturbance or loss of vegetation should be allowed within the Medium and High sensitivity areas outside the proposed development footprints at any stage in the future. → Search and Rescue of all translocatable bulbs and succulents from within the development footprints must be undertaken prior to any site development. All specimens of the NT vygie <i>Brianhuntleya intrusa</i> and the dwarf succulent <i>Tulista pumila</i> within the authorised footprint must be rescued. This must be undertaken by a qualified Search and Rescue contractor approved by the botanist. Some of the material should be used to help rehabilitate the previously disturbed northeastern part of the site, and the remainder can be used elsewhere (at contractor and botanist's discretion). 	
Residual impacts:	Continued loss of vegetation contributing to habitat loss.	
Cumulative impact post mitigation:	Continued loss of this vegetation type	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Medium (-)
OPERATIONAL PHASE		
Potential impact and risk:	1. Socioeconomic impacts	
	Access to employment opportunities for the community during the operational phase, job creation, provision of housing for new residents moving into the area and investment opportunities, additional housing provided in response to need and demand	
Nature of impact:	Positive	
Extent and duration of impact:	Local; Long term	
Consequence of impact or risk:	Improved livelihood, beneficiaries	
Probability of occurrence:	Definite	
Degree to which the impact may cause irreplaceable loss of resources:	N/A	
Degree to which the impact can be reversed:	N/A	

Indirect impacts:	Access to employment for the community during the operational phase, job creation, provision of residential erven in response to provincial demand, investment in the area.
Cumulative impact prior to mitigation:	High Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	N/A
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	→ Labour must be sourced locally
Residual impacts:	Investment in the area and attraction to the area.
Cumulative impact post mitigation:	→ Investment in the area, attraction to the area. → Access to employment opportunities for the community during the operational phase, job creation, provision of housing in response to the provincial demand and investment in the area
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High (+)
OPERATIONAL PHASE	
2. Botanical impacts	
Potential impact and risk:	Increased habitat fragmentation and loss of current levels of terrestrial ecological connectivity across the cultivated parts of the currently natural study area.
Nature of impact:	Negative
Extent and duration of impact:	Local; Permanent
Consequence of impact or risk:	Loss of connectivity that is already been compromised and restricted in the region.
Probability of occurrence:	Very likely
Degree to which the impact may cause irreplaceable loss of resources:	High
Degree to which the impact can be reversed:	Low- There is currently cultivation to the west, north and south of the site, so ecological connectivity in the study area has already been compromised and restricted.
Indirect impacts:	
Cumulative impact prior to mitigation:	Low- the vegetation type is impacted by agricultural development and other factors within the region.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	→ The approved development areas must be surveyed and clearly demarcated on the ground prior to any site development, so that no accidental disturbance of the conservation areas occurs.

	<p>→ No disturbance or loss of vegetation should be allowed within the Medium and High sensitivity areas outside the proposed development footprints at any stage in the future.</p> <p>→ Search and Rescue of all translocatable bulbs and succulents from within the development footprints must be undertaken prior to any site development. All specimens of the NT vygie <i>Brianhuntleya intrusa</i> and the dwarf succulent <i>Tulista pumila</i> within the authorised footprint must be rescued. This must be undertaken by a qualified Search and Rescue contractor approved by the botanist. Some of the material should be used to help rehabilitate the previously disturbed northeastern part of the site, and the remainder can be used elsewhere (at contractor and botanist's discretion).</p>
Residual impacts:	Continued loss of ecological connectivity that is already been compromised and restricted by agricultural activities as well as other uses in the region.
Cumulative impact post mitigation:	The vegetation type will continue to be impacted by numerous agricultural developments and other factors (the cumulative impacts) within the region.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	N/A
Nature of impact:	-
Extent and duration of impact:	-
Consequence of impact or risk:	-
Probability of occurrence:	-
Degree to which the impact may cause irreplaceable loss of resources:	-
Degree to which the impact can be reversed:	-
Indirect impacts:	-
Cumulative impact prior to mitigation:	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-
Degree to which the impact can be avoided:	-
Degree to which the impact can be managed:	-
Degree to which the impact can be mitigated:	-
Proposed mitigation:	-
Residual impacts:	-
Cumulative impact post mitigation:	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-

ALTERNATIVE 3 (NO-GO)

This alternative excludes development, the status quo remains.

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact	1. Botanical impacts
	No development taking place; therefore status quo remains.
Nature of impact:	Positive
Extent and duration of impact:	Local; as long as the site is not disturbed
Consequence of impact or risk:	N/A
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	Loss of medium and highly sensitive vegetation and habitat fragmentation
Cumulative impact prior to mitigation:	N/A
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	N/A
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	N/A
Degree to which the impact can be mitigated:	-
Proposed mitigation:	-
Residual impacts:	-
Cumulative impact post mitigation:	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High (+)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact	2. Socioeconomic
	No development is proposed and the status quo remains. No job opportunities envisaged.
Nature of impact:	Negative
Extent and duration of impact:	Local
Consequence of impact or risk:	N/A
Probability of occurrence:	N/A
Degree to which the impact may cause irreplaceable loss of resources:	-
Degree to which the impact can be reversed:	-
Indirect impacts:	-
Cumulative impact prior to mitigation:	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-
Degree to which the impact can be avoided:	-
Degree to which the impact can be managed:	-
Degree to which the impact can be mitigated:	-
Proposed mitigation:	-

Residual impacts:	-
Cumulative impact post mitigation:	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High (-)
OPERATIONAL PHASE	
3. Socioeconomic impacts	
Potential impact and risk:	No job creation, provision of housing for new residents moving into the area and investment opportunities, additional housing provided in response to need and demand
Nature of impact:	Negative
Extent and duration of impact:	Local;
Consequence of impact or risk:	N/A
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	No employment for the community during the operational phase, job creation, provision of residential even in response to provincial demand, investment in the area.
Cumulative impact prior to mitigation:	High Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	N/A
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	→ Labour must be sourced locally
Residual impacts:	Investment in the area and attraction to the area.
Cumulative impact post mitigation:	→ Investment in the area, attraction to the area. → Access to employment opportunities for the community during the operational phase, job creation, provision of housing in response to the provincial demand and investment in the area
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High (-)
OPERATIONAL PHASE	
4. Botanical impacts	
Potential impact and risk:	No projected botanical impact and no loss of indigenous vegetation. Status quo remains.
Nature of impact:	Positive
Extent and duration of impact:	Local; as long as there is no development taking place.
Consequence of impact or risk:	Loss of connectivity might persist due to erosion patterns taking place up the valley
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	High

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

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.

Summary of the findings:

- The study area consists primarily of Robertson Karoo vegetation, classified as a Least Threatened ecosystem.
- Soils range from deep loamy clays to shallow loamy clays with exposed shale, ledges, and cliffs. Deeper soils are found in the western, eastern, and southeastern parts, while the central area has thin soils with exposed rock.
- No vegetation indicative of seasonal drainage lines or wetlands was observed within the study area.
- The southeastern corner has been brush-cut over an area of approximately 0.5 ha, and the northeastern corner shows signs of historical quarrying activity that ceased over two decades ago.
- There are no mapped terrestrial or aquatic Critical Biodiversity Areas (CBAs), Ecological Support Areas (ESAs), or Other Natural Areas (ONAs) within the study site.
- Two species were identified on-site: *Brianhuntleya intrusa* (Near Threatened) with a population of approximately 1,000 plants in the central area, and *Aspalathus lactea ssp. breviloba* (Vulnerable) with around ten plants also in the central region on thin soils. About 63% (10 ha) of the study area is classified as having High botanical sensitivity. The remaining areas, comprising deeper soils in the western section and historically disturbed areas in the north, are classified as Medium botanical sensitivity.

Impacts associated with the proposed development

The primary botanical impacts are related to the permanent loss of natural and semi-natural vegetation within the proposed development areas. For Alternative 1, there is an additional impact due to the loss of less than 10% of the *Brianhuntleya intrusa* population. The *Aspalathus lactea ssp. breviloba* population would remain unaffected under either alternative.

Construction phase impacts

Alternative 1 – preferred

- Loss of approximately 1.7 ha of Medium sensitivity vegetation and 2.1 ha of High sensitivity vegetation.
- An estimated loss of less than 10% of the *Brianhuntleya intrusa* population.
- Loss of Medium sensitivity vegetation may result in Low to Medium negative botanical significance, while the loss of High sensitivity vegetation is expected to have Medium negative botanical significance before mitigation.

Alternative 2

- The development footprint will be within Medium sensitivity vegetation, with no impact on High sensitivity areas.
- There will be no impact on Species of Conservation Concern.
- The loss of up to 4.0 ha of Medium sensitivity vegetation is anticipated to have a Low to Medium negative botanical significance.

Post-construction phase impacts

- The most obvious operational phase impact is likely to be increased habitat fragmentation and loss of current levels of terrestrial ecological connectivity across the cultivated parts of the currently natural study area.
- However, there is currently cultivation to the west, north and south of the site, so ecological connectivity in the study area has already been compromised and restricted.
- The project is not likely to have a negative impact on ecological processes in the region, as it does not impact on any major ecological corridors, wetlands or climate change corridors.

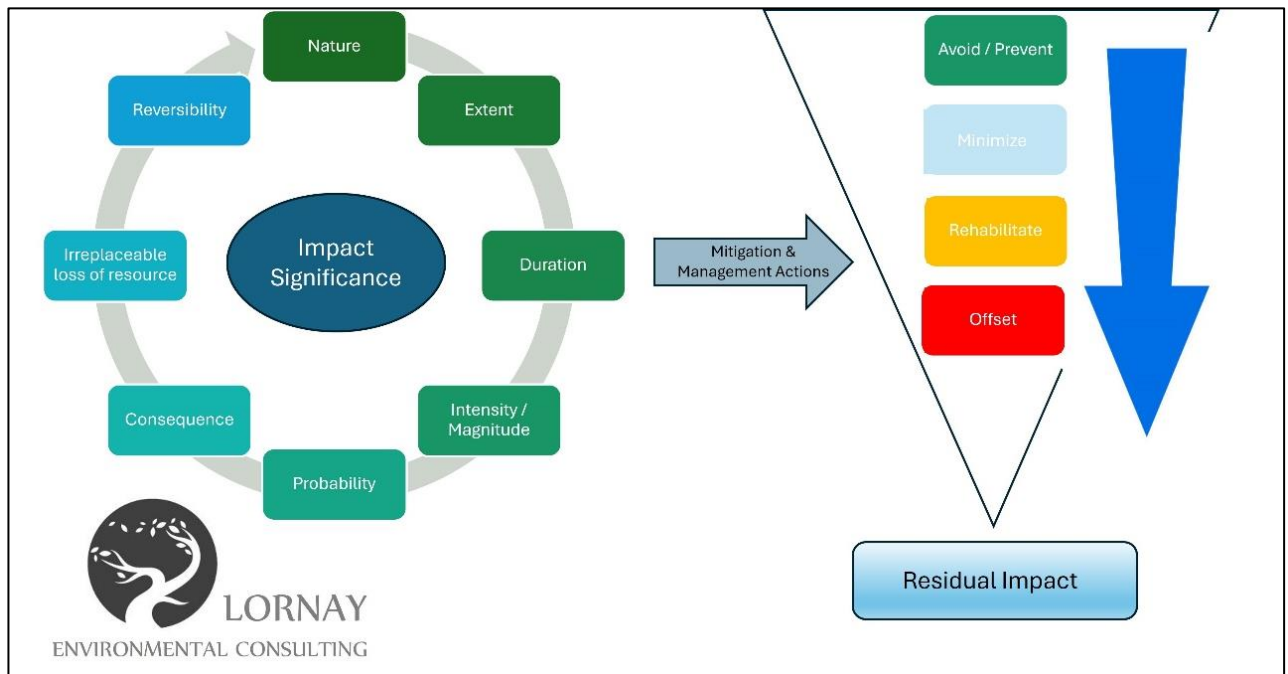
Impact management

- The approved development areas must be surveyed and clearly demarcated on the ground prior to any site development, so that no accidental disturbance of the other areas occur.

	<ul style="list-style-type: none"> → No disturbance or loss of vegetation should be allowed within the Medium and High sensitivity areas outside the proposed development footprints at any stage in the future. → Search and Rescue of all translocatable bulbs and succulents from within the development footprints must be undertaken prior to any site development. All specimens of the NT vygie <i>Brianhuntleya intrusa</i> and the dwarf succulent <i>Tulista pumila</i> within the authorised footprint must be rescued. This must be undertaken by a qualified Search and Rescue contractor approved by the botanist. Some of the material should be used to help rehabilitate the previously disturbed northeastern part of the site, and the remainder can be used elsewhere (at contractor and botanist's discretion).
2.	List the impact management measures that were identified by all Specialist that will be included in the EMPr
	<p>Botanical Assessment</p> <ul style="list-style-type: none"> → The approved development areas must be surveyed and clearly demarcated on the ground prior to any site development, so that no accidental disturbance of the conservation areas occurs. → No disturbance or loss of vegetation should be allowed within the Medium and High sensitivity areas outside the proposed development footprints at any stage in the future. → Search and Rescue of all translocatable bulbs and succulents from within the development footprints must be undertaken prior to any site development. All specimens of the NT vygie <i>Brianhuntleya intrusa</i> and the dwarf succulent <i>Tulista pumila</i> within the authorised footprint must be rescued. This must be undertaken by a qualified Search and Rescue contractor approved by the botanist. Some of the material should be used to help rehabilitate the previously disturbed northeastern part of the site, and the remainder can be used elsewhere (at contractor and botanist's discretion).
3.	List the specialist investigations and the impact management measures that will not be implemented and provide an explanation as to why these measures will not be implemented.
	N/A
4.	Explain how the proposed development will impact the surrounding communities.
	<ul style="list-style-type: none"> → The development of additional vineyards will create more jobs, especially for unskilled labour, benefiting local communities. Vineyard expansion often requires a larger workforce for planting, maintenance, harvesting, and other agricultural tasks. This can lead to a boost in employment, potentially reducing local unemployment rates and helping improve the economic stability of nearby communities. → The vineyard expansion will indirectly stimulate the local economy. With more workers employed, there will likely be an increase in spending at local businesses, contributing to economic growth in McGregor and surrounding areas. Additionally, local service providers, like suppliers of agricultural materials and equipment, could see increased demand. → As the property is within a well-established agricultural area, this expansion aligns with existing land use, minimising the potential for land-use conflicts. By intensifying agricultural use rather than converting new land, the project supports sustainable land-use practices, allowing the community to benefit from an expanded agricultural base without disrupting non-agricultural areas. → The development could lead to increased investment in local infrastructure, like roads and utilities, which would benefit the broader community. As vineyard operations grow, they might collaborate on or invest in local improvements, including housing or transportation, which can enhance the quality of life for residents. → While positive impacts are expected, there could be environmental impacts related to water use, pesticide application, and soil management. However, if the project follows sustainable vineyard practices, such as efficient water management, eco-friendly pest control, and soil conservation techniques, it can minimize these potential negative impacts.
5.	Explain how the risk of climate change may influence the proposed activity or development and how has the potential impacts of climate change been considered and addressed.
	N/A

6.	Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.
None that the EAP is aware of.	
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.
Soil and Agricultural Studies: Soil analysis has guided the selection of development areas, ensuring that agricultural potential is preserved while identifying suitable land for the proposed activity.	
8.	Explain how the mitigation hierarchy has been applied to arrive at the best practicable environmental option.

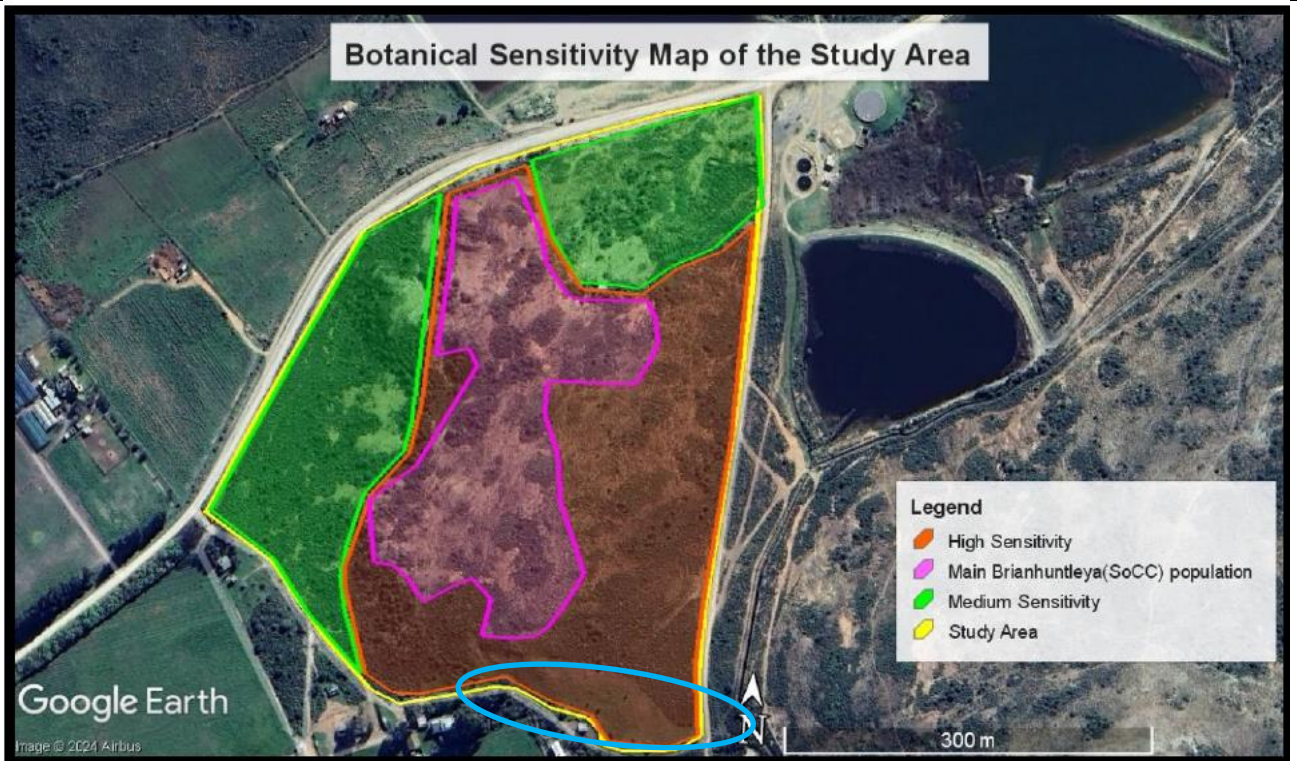
The principles of determining the Impact Significant, the management actions and the mitigation hierarchy were applied to the assessment of the best practical option for the proposed development, as follows:



A variety of factors have been used to inform the evolution of the alternatives on the site and the determination of the preferred alternative. Given the proposed development actions described herein, there are not only specific environmental factors and sensitivities which must be considered but also implementation factors to ensure that the proposed development can be viable and implementable. Factors such as soil characteristic play an important role in the quality of grapes and subsequent wine and are critical to ensuring success of the activity. In addition, factors such as dust and theft, also affect siting considerations on the property. Topography is also important as the slope of the land cannot be too undulating or too steep. Easy access to existing infrastructure on the farm as well as existing internal access roads are also important and prevent the need to extend services and roads to far reaching corners of the property. From a Biophysical point of view, the botanist assessed the available, vacant land and made recommendations relative to site sensitivities. All the above have been taken into consideration when assessing the alternatives.

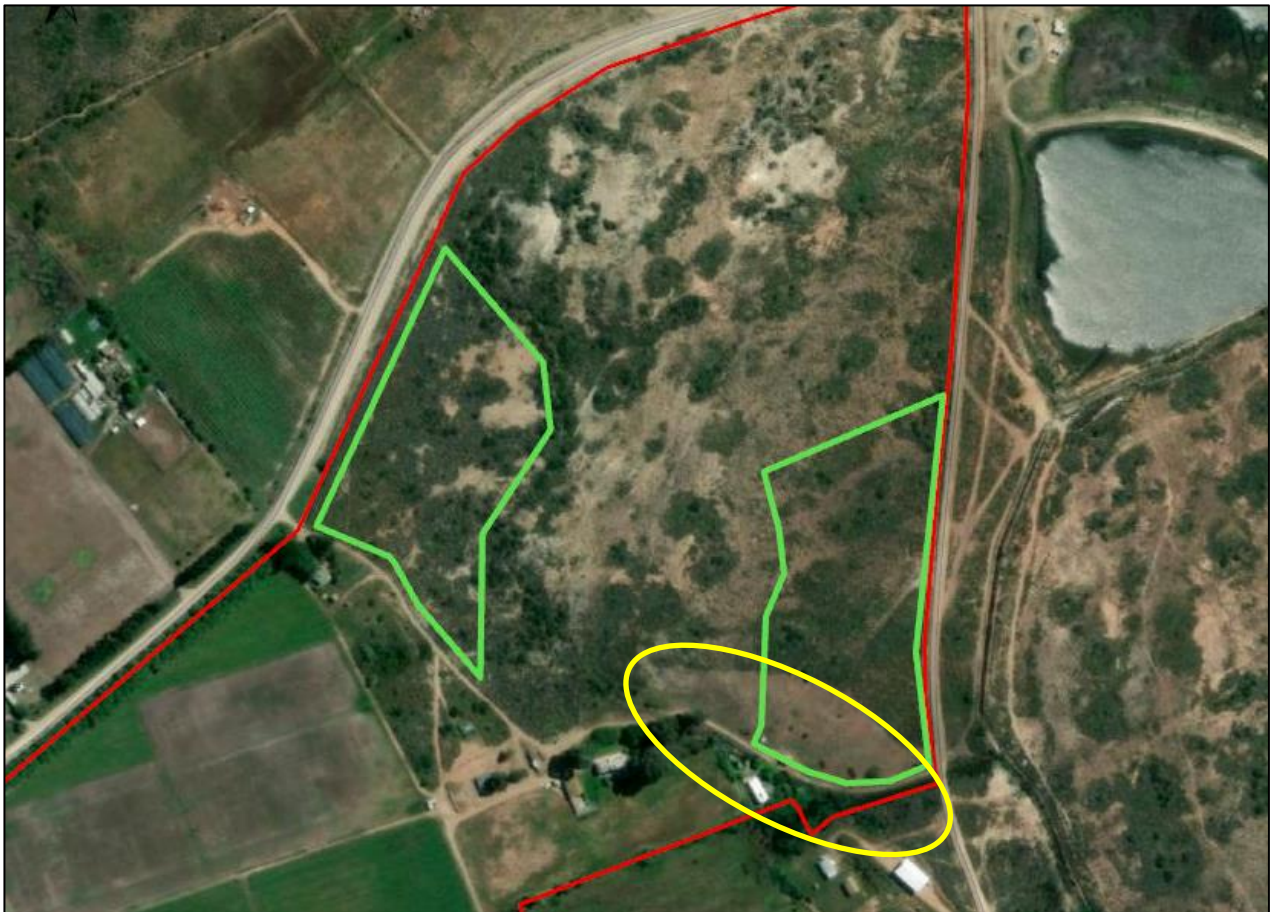
Avoidance

At the outset of the planning process, efforts were made to avoid any unnecessary environmental and biophysical impacts, areas as far as practically possible. The proposed vineyard expansion is confined to the northern section of the property, as this is the only available vacant area on the farm. Further revisions of the actual placement of the two blocks have been done in conjunction with both physical, practical and biophysical factors. These include, vacant available land, topography, access and infrastructure, security, soil profiles and biophysical status. The Terrestrial specialist mapped the northern section of the farm into three zones as follows:



All alternatives avoid the main *Brianhuntleya* (SoCC) population completely and therefore completely avoid impacting a species of Conservation Concern. However, due to the practical and physical factors listed above, the preferred alternatives do extend onto an area mapped as high botanical sensitivity. However, a large section of this area, indicated in the blue circle above, has been previously disturbed and is not representative of the natural vegetation type, as per the site photos below:





Aerial photo above with yellow circle in block 2 showing previously disturbed habitat included as Alternative 1 – Preferred.

Minimisation

Where impacts could not be fully avoided, efforts were made to minimise any negative effects through careful planning and management strategies. The proposed development area is limited to two vineyard blocks of optimal size (up to 4.0

ha in total), ensuring that land disturbance is kept to a minimum. This will reduce the overall footprint of the development, preserving the surrounding natural environment, while maximizing agricultural potential in agriculturally viable land

Rehabilitation/ Restoration

In cases where impacts are unavoidable or have already occurred, the next step in the mitigation hierarchy is rehabilitation **or** restoration of affected areas. Although the vineyard expansion aims to limit disturbance to undisturbed areas, where disturbances are inevitable, rehabilitation measures will be implemented. The areas proposed for the 2 vineyard blocks will be clearly demarcated to prevent the spread to other areas. In addition, a search and rescue are required prior to development. Search and Rescue of all translocatable bulbs and succulents from within the development footprints must be undertaken prior to any site development. All specimens of the NT vygie *Brianhuntleya intrusa* and the dwarf succulent *Tulista pumila* within the authorised footprint must be rescued. This must be undertaken by a qualified Search and Rescue contractor approved by the botanist. Some of the material should be used to help rehabilitate the previously disturbed northeastern part of the site, and the remainder can be used elsewhere (at contractor and botanist's discretion).

Offset

Offset in terms of the Biodiversity Offset Regulations is not applicable as the vegetation is least threatened even though the Residual Impact is still medium. The population of SoCC are avoided and the scale of the development is low with an agriculturally viable landscape. However the Terrestrial specialist has recommended that the applicant make a donation to the nearby Vrolikheid Nature Reserve (managed by CapeNature and conserving a similar vegetation type) in order to help mitigate the botanical impacts of the development, and this funding should be used for management on or off the Reserve, or for Reserve expansion. Since this recommendation is not tied to any specific criteria or legislation, the mechanism for this is not clear.

SECTION J: GENERAL

1. Environmental Impact Statement

1.1.	Provide a summary of the key findings of the EIA.
<p>Key findings of the EIA</p> <ul style="list-style-type: none"> → The site predominantly consists of natural vegetation, classified as Robertson Karoo, which is considered a Least Threatened ecosystem. → Botanical assessments indicate that parts of the site hold High botanical sensitivity, hosting native species and providing habitats essential for local biodiversity. → The EIA found no Critical Biodiversity Areas (CBAs) or Ecological Support Areas (ESAs) on the property, minimizing conflict with regional biodiversity priorities. → Soil conditions vary across the site, with deeper loamy clays in specific sections and thinner soils with shale exposure in central areas. This variation has implications for the site’s agricultural viability and erosion management. → The suitability of different soil areas informs both the layout and intensity of proposed vineyard activities, helping to minimize soil degradation. → The EIA found no presence of seasonal drainage lines or wetlands within the study area, suggesting low risk of impacting surface water resources. → The development is expected to provide significant social benefits through job creation, especially for unskilled labour, enhancing employment opportunities in McGregor. → Economic assessments indicate that the project would stimulate local economic growth by increasing demand for goods and services from local suppliers, thereby indirectly benefiting the surrounding communities. → The subject property lies between a well-established agricultural area, the proposed expansion aligns with existing land-use practices, reducing the likelihood of land-use conflicts. 	
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)
See Appendix B.	
1.3.	Provide a summary of the positive and negative impacts and risks that the proposed activity or development and alternatives will have on the environment and community.
<p>Positive impacts</p> <ul style="list-style-type: none"> → The development will generate employment opportunities both during the construction phase and in ongoing operations, which will benefit local communities and support economic growth. → The new vineyards will make efficient use of existing arable agricultural land. <p>Negative Impacts</p> <ul style="list-style-type: none"> → The expansion of vineyards may lead to habitat loss, particularly if areas of natural vegetation are cleared. This could impact local biodiversity and disrupt existing ecosystems. → The application of pesticides and fertilizers for vineyard management may pose risks of soil and water contamination if not properly controlled, potentially impacting surrounding ecosystems and groundwater quality. 	

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
<p>The botanical assessment recommendations are as follows; however, the EAP does not support the recommendation on the monetary contributions (donations) as this is not formally:</p> <p>Recommendations</p> <ul style="list-style-type: none"> → The development of the approximately 3.7ha of new cultivation on site is likely to have an acceptable Medium negative botanical impact at a regional scale, which would be Low to Medium negative if only the western proposed development area is cultivated. → Although the vegetation type on site (Robertson Karoo) is Least Threatened on a national basis it is still very poorly conserved (<1%), making it vulnerable to further loss (especially from agriculture, which is ongoing at pace in the region) unless steps are taken to address this. → At least two plant Species of Conservation Concern were recorded in the study area, but only one of these SoCC (<i>Brianhuntleya intrusa</i>) is likely to lose about 10% of its site population to the proposed development, with the other SoCC not likely to be impacted. → All mitigation outlined in Section 7 must be adequately and timeously implemented. → It is recommended that the applicant make a significant donation (>20% of the total development costs of the proposed cultivation and vineyard expansion) to the nearby Vrolikheid Nature Reserve (managed by Cape Nature and conserving a similar vegetation type) in order to help mitigate the botanical impacts of the development, and this funding should be used for management on or off the Reserve, or for Reserve expansion. <p>Mitigation measures:</p> <ul style="list-style-type: none"> → The approved development areas must be surveyed and clearly demarcated on the ground prior to any site development, so that no accidental disturbance of the conservation areas occurs. → No disturbance or loss of vegetation should be allowed within the Medium and High sensitivity areas outside the proposed development footprints at any stage in the future. → Search and Rescue of all translocatable bulbs and succulents from within the development footprints must be undertaken prior to any site development. All specimens of the NT vygie <i>Brianhuntleya intrusa</i> and the dwarf succulent <i>Tulista pumila</i> within the authorised footprint must be rescued. This must be undertaken by a qualified Search and Rescue contractor approved by the botanist. Some of the material should be used to help rehabilitate the previously disturbed northeastern part of the site, and the remainder can be used elsewhere (at contractor and botanist’s discretion). 	
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.
<p>The proposal is for the establishment of new vineyard blocks on the property that is already involved in vineyard farming activity.</p>	
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.
<p>It is my reasoned opinion that the proposed vineyard development as presented in Alternative 1 (Preferred) should be authorised. The project demonstrates clear socio-economic benefits, such as job creation and economic stimulation within the local community and aligns with the current agricultural land use of the area. Moreover, the proposed activity will utilize existing arable land, promoting productive use of arable agricultural land without necessitating the clearance of undeveloped or conservation worthy land elsewhere.</p> <p>The proposed development of vineyard blocks is firmly supported by detailed soil analyses conducted on-site, which provide a robust foundation for the suitability of the identified areas. The soil sampling results reveal that the selected areas possess the essential characteristics required for successful vineyard cultivation, including appropriate drainage, soil</p>	

texture, and nutrient composition. These attributes are critical in ensuring optimal grapevine growth and achieving high-quality yields, making the proposed development a viable and sustainable agricultural endeavour.

The identified soil types demonstrate compatibility with viticulture requirements, such as moderate to deep profiles that facilitate root penetration and moisture retention. Additionally, the soil pH levels are conducive to grapevine health, requiring minimal amendments to meet cultivation standards. These findings from the soil analysis highlight the inherent agricultural potential of the site, confirming that the selected areas provide the optimal conditions for vineyard establishment without compromising the surrounding environment.

The strategic selection of vineyard blocks based on soil analysis also aligns with sustainable agricultural practices. By focusing on areas with the most suitable soil characteristics, the development minimizes unnecessary land disturbance and ensures efficient use of resources. This approach not only supports the long-term productivity of the vineyard but also reduces environmental impacts, further strengthening the rationale for proceeding with the proposed development.

2.4.	Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.
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The applicant proposes an expansion of the existing vineyard farming on the farm that is already involved in vineyard farming. Specialist assessment conducted on site highlighted that the site contains Robertson Karoo indigenous vegetation type which is Least Threatened in terms of its ecosystem status. It was further highlighted that the site falls within Other Natural Areas (ONA) but is outside of the Critical Biodiversity Area (CBAs) and Ecological Support Areas (ESAs) mapped by the Western Cape Biodiversity Spatial Planning.

As per Botanical assessment, the proposed expansion will result to the loss of vegetation in areas that contain medium and high botanical sensitivity if Alternative 1 would be considered. This will take place during the construction phase. It should be noteworthy that the type of development hereto mainly depends on soil chemistry which looks at the soil suitability for the proposed site.

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.
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Five years should be the EA period. While no further information can be provided at the time of the Draft BAR, the applicant would aim to commence with construction as soon as possible once the EA is granted.

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.

The proposal is for the expansion of the vineyards, the construction phase only includes the cultivation of land for the plantation of vineyards. During the operational phase of the proposed development, Water will be required for the vineyards, particularly at the planting stage.

4. Waste

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

Waste is collected and stored onsite, there is a contractor available for taking.

5. Energy Efficiency

8.1.	Explain what design measures have been taken to ensure that the development proposal will be energy efficient.
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The project does not have high energy requirements.

SECTION K: DECLARATIONS

DECLARATION OF THE APPLICANT

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

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

- I am fully aware of my responsibilities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment ("EIA") Regulations, and any relevant Specific Environmental Management Act and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- I am aware of my general duty of care in terms of Section 28 of the NEMA;
- I am aware that it is an offence in terms of Section 24F of the NEMA should I commence with a listed activity prior to obtaining an Environmental Authorisation;
- I appointed the Environmental Assessment Practitioner ("EAP") (if not exempted from this requirement) which:
 - meets all the requirements in terms of Regulation 13 of the NEMA EIA Regulations; or
 - meets all the requirements other than the requirement to be independent in terms of Regulation 13 of the NEMA EIA Regulations, but a review EAP has been appointed who does meet all the requirements of Regulation 13 of the NEMA EIA Regulations;
- I will provide the EAP and any specialist, where applicable, and the Competent Authority with access to all information at my disposal that is relevant to the application;
- I will be responsible for the costs incurred in complying with the NEMA EIA Regulations and other environmental legislation including but not limited to –
 - costs incurred for the appointment of the EAP or any legitimately person contracted by the EAP;
 - costs in respect of any fee prescribed by the Minister or MEC in respect of the NEMA EIA Regulations;
 - Legitimate costs in respect of specialist(s) reviews; and
 - the provision of security to ensure compliance with applicable management and mitigation measures;
- I am responsible for complying with conditions that may be attached to any decision(s) issued by the Competent Authority, hereby indemnify, the government of the Republic, the Competent Authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which I or the EAP is responsible in terms of the NEMA EIA Regulations and any Specific Environmental Management Act.

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

Signature of the Applicant:

Date:

Name of company (if applicable):

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (“EAP”)

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

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

Signature of the EAP:

Date:

Name of company (if applicable):

DECLARATION OF THE REVIEW EAP

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

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

Signature of the EAP:

Date:

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

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

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

- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

Signature of the EAP:

Date:

Name of company (if applicable):

DECLARATION OF THE REVIEW SPECIALIST

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

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

Signature of the EAP:

Date:

Name of company (if applicable):