



**BASIC ASSESSMENT REPORT
IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107
OF 1998) AND ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS
AMENDED)**

October 2017

PROJECT TITLE

**CLEARING OF INDIGENOUS VEGETATION FOR CULTIVATION ON ERF 1929, RIEBEEK
WEST**

08 February 2019

REPORT TYPE CATEGORY	REPORT REFERENCE NUMBER	DATE OF REPORT
Pre-Application Basic Assessment Report (if applicable) ¹	2242/18/PA	22/02/2019
Draft Basic Assessment Report		
Final Basic Assessment Report		

Notes:

1. In terms of Regulation 40(3) potential or registered interested and affected parties, including the Competent Authority, may be provided with an opportunity to comment on the Basic Assessment Report prior to submission of the application but must again be provided an opportunity to comment on such reports once an application has been submitted to the Competent Authority. The Basic Assessment Report released for comment prior to submission of the application is referred to as the "Pre-Application Basic Assessment Report". The Basic Assessment Report made available for comment after submission of the application is referred to as the "Draft Basic Assessment Report". The Basic Assessment Report together with all the comments received on the report which is submitted to the Competent Authority for decision-making is referred to as the "Final Basic Assessment Report".
2. In terms of Regulation 19(1)(b) if significant changes have been made or significant new information has been added to the Draft Basic Assessment Report, which changes or information was not contained in the Draft Basic Assessment Report consulted on during the initial public participation process, then a Final Basic Assessment Report will not be submitted, but rather a "Revised Basic Assessment Report", which must be subjected to another public participation process of at least 30 days, must be submitted to the Competent Authority together with all the comments received.

DEPARTMENTAL REFERENCE NUMBER(S)

Pre-application reference number:	16/3/3/6/7/1/F5/21/2242/18
File reference number (EIA):	
NEAS reference number (EIA):	
File reference number (Waste):	
NEAS reference number (Waste):	
File reference number (Air Quality):	
NEAS reference number (Air Quality):	
File reference number (Other):	
NEAS reference number (Other):	

CONTENT AND GENERAL REQUIREMENTS

Note that:

1. The content of the Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), any subsequent Circulars, and guidelines must be taken into account when completing this Basic Assessment Report Form.
2. This Basic Assessment Report is the standard report format which, in terms of Regulation 16(3) of the EIA Regulations, 2014 (as amended) must be used in all instances when preparing a Basic Assessment Report for Basic Assessment applications for an environmental authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the EIA Regulations, 2014 (as amended) and/or a waste management licence in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) ("NEM:WA"), and/or an atmospheric emission licence in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA") when the Western Cape Government: Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority/Licensing Authority.
3. This report form is current as of October 2017. It is the responsibility of the Applicant/ Environmental Assessment Practitioner ("EAP") to ascertain whether subsequent versions of the report form have been released by the Department. Visit the Department's website at <http://www.westerncape.gov.za/eadp> to check for the latest version of this checklist.
4. The required information must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The tables may be expanded where necessary.
5. The use of "not applicable" in the report must be done with circumspection. All applicable sections of this report form must be completed. Where "not applicable" is used, this may result in the refusal of the application.
6. While the different sections of the report form only provide space for provision of information related to one alternative, if more than one feasible and reasonable alternative is considered, the relevant section must be copied and completed for each alternative.
7. Unless protected by law, all information contained in, and attached to this report, will become public information on receipt by the competent authority. If information is not submitted with this report due to such information being protected by law, the applicant and/or EAP must declare such non-disclosure and provide the reasons for believing that the information is protected.
8. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this report must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.
9. This Report must be submitted to the Department and the contact details for doing so are provided below.
10. Where this Department is also identified as the Licencing Authority to decide applications under NEM:WA or 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: 021-483-2756 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 2798 and fax: 021 483 3254) at the same postal address as the Cape Town Office.

DEPARTMENTAL DETAILS

CAPE TOWN OFFICE		GEORGE REGIONAL OFFICE
REGION 1 (City of Cape Town & West Coast District)	REGION 2 (Cape Winelands District & Overberg District)	REGION 3 (Central Karoo District & Eden District)
Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1) Private Bag X 9086 Cape Town, 8000 Registry Office 1 st Floor Utilitas Building 1 Dorp Street, Cape Town Queries should be directed to the Directorate: Development Management (Region 1) at: Tel.: (021) 483-5829 Fax: (021) 483-4372	Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 2) Private Bag X 9086 Cape Town, 8000 Registry Office 1 st Floor Utilitas Building 1 Dorp Street, Cape Town Queries should be directed to the Directorate: Development Management (Region 2) at: Tel.: (021) 483-5842 Fax: (021) 483-3633	Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530 Registry Office 4 th Floor, York Park Building 93 York Street George Queries should be directed to the Directorate: Development Management (Region 3) at: Tel.: (044) 805-8600 Fax: (044) 805 8650

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ACRONYMS USED IN THIS BASIC ASSESSMENT REPORT AND APPENDICES:

BAR	Basic Assessment Report
BGCMA	Breede Gouritz Catchment Management Agency
CBA	Critical Biodiversity Area
DEA	National Department of Environmental Affairs
DEA&DP	Western Cape Government: Environmental Affairs and Development Planning
DWS	National Department of Water and Sanitation
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
ESA	Ecological Support Area
HWC	Heritage Western Cape
I&APs	Interested and Affected Parties
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NEM:AQA	National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)
NEM:ICMA	National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008)
NEM:WA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999)
PPP	Public Participation Process

DETAILS OF THE APPLICANT

Applicant / Organisation / Organ of State:	De Gift Boerdery		
Contact person:	Mr. Eduard Haumann Brink		
Postal address:	P.O. Box 1, Riebeeck West		
Telephone:	022 461 2445	Postal Code:	7306
Cellular:	082 872 0442	Fax:	NA
E-mail:	de_giff@telkomsa.net		

DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

Name of the EAP organisation:	Eco Impact Legal Consulting (Pty) Ltd		
Person who compiled this Report:	Lauren Abrahams		
EAP Reg. No.:	SACNASP 100126/12		
Contact Person (if not author):	NA		
Postal address:	P.O. Box 45070, Claremont		
Telephone:	021 671 1660	Postal Code:	7735
Cellular:	NA	Fax:	021 671 9976
E-mail:	admin@ecoimpact.co.za		
EAP Qualifications:	B Tech Oceanography: Cape Peninsula University of Technology (2010)		

Please provide details of the lead EAP, including details on the expertise of the lead EAP responsible for the Basic Assessment process. Also attach his/her Curriculum Vitae to this BAR.

Ms Lauren Abrahams

Lauren Abrahams has completed her professional registration in terms of section 20(3) (b) of the Natural Scientific Professions Act, 2003 (Act 27 of 2003) as a Candidate Natural Scientist in the field of practice Biological Science (Registration number 100126/12). She obtained her B Tech in Oceanography at the Cape Peninsula University of Technology in 2010.

Lauren has trained as an Environmental Assessment Practitioner since July 2015 and has been involved in the compilation, coordination and management of Basic Assessment Reports, Environmental Impact Assessments, Environmental Management Programmes, Waste Licence Applications, Water Use Licence Applications and Baseline Biodiversity Surveys for numerous clients.

EXECUTIVE SUMMARY OF THE BASIC ASSESSMENT REPORT:

The proposal is for the clearing of 18.6 ha of indigenous vegetation for the cultivation of crops on sites A- C as per the SDP located in Appendix B.

Erf 1929 is located approximately 3km northwest of Riebeeck West, West of the R311. The property is agricultural land that has been used as such in the past. The property is surrounded by reservoirs, agriculture and residential property on the north; agriculture on the south; agriculture, the R311 and residential property on the east; and a reservoir, vacant vegetated land and the Kasteelberg on the west.

Terrestrial Vegetation Characteristics:

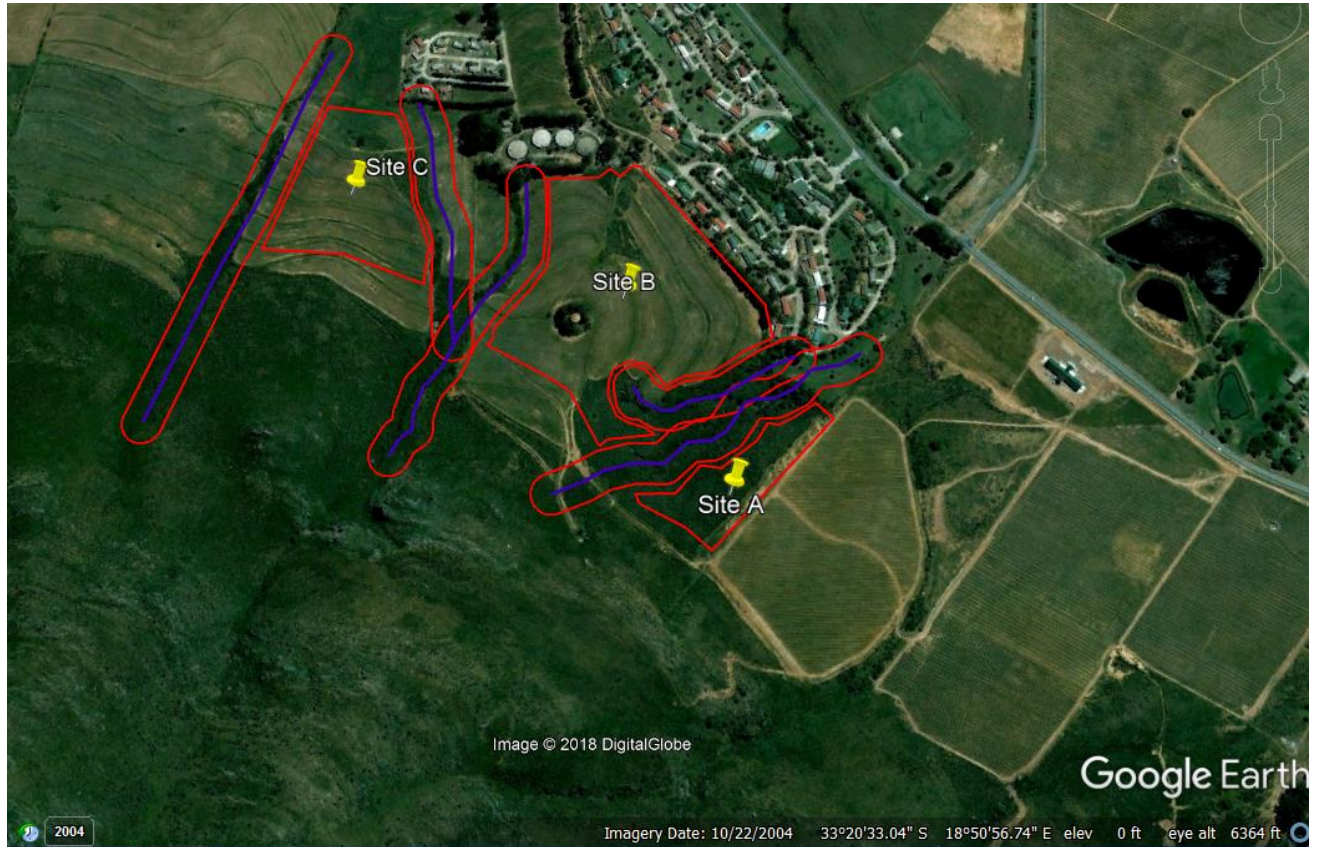
The property falls within a region that is likely to consist of Swartland Shale Renosterveld (critically endangered).

Site A

Only Site A is likely to have remnants of this vegetation type as it is relatively undisturbed and only moderately impacted on by alien vegetation. The vegetation on Site A is considered to be of high botanical conservation value (Swartland Shale Renosterveld).

Sites B to C

Sites B and C are transformed as a result of the sites having been ploughed. This is in excess of 10 years as google earth imagery indicate that it was last ploughed in 2004 (see below).



Cumulative impacts:

Positive Impacts

- Increased agricultural activities on agricultural land;
- Export of commodities will contribute to boosting the GDP and maintaining trade balance in South Africa;
- Supporting local economic development;
- Job creation;
- Job security;
- Up-skilling of previously disadvantaged individuals;
- Improvement of livelihoods of previously disadvantaged individuals;
- Food security.

Negative Impacts

- Potential impact on sensitive areas if mitigation not implemented;
- Loss of terrestrial CBA located on the development area (Site A);
- Loss of re-established indigenous vegetation (Sites B and C);
- Potential pollution of sensitive areas (watercourses).

Summary of Alternatives

Location Alternatives - Sites B and C are ideal for cultivation as they have been ploughed in the past (in excess of years ago) these areas are degraded and are not considered to be of high conservation value. Site A however is of high conservation value and the cultivation of site A would lead to the permanent loss of a portion of terrestrial CBA.

It is as a result of the environmental constraints indicated on the property that Sites A to C are proposed vegetation clearing for the purpose of cultivation.

Activity Alternatives - Activities such as residential development, industrial development, and green energy developments are not feasible for this property as it is not consistent with the existing land use of the property. The development in the form of clearing of vegetation for the cultivation of crops is the best practicable activity that should be considered as the viable and feasible option. If the property were to be declared as a private nature reserve or protected area, this would be a loss in terms of the agricultural potential that the property can offer to the economy.

Layout Alternatives –

Layout Alternative 1 [LA 1] (PREFERRED) ~ *Clearing of indigenous vegetation for cultivation on sites A - C with a collective development footprint of 18.6ha.*

Layout Alternative 2 - [LA 2] ~ *Clearing of indigenous vegetation for cultivation on sites B and C with a collective development footprint of 16.4ha.*

Discussion:

The layout of the proposed sites has taken into account the environmental constraints of the property excluding from the development areas of high conservation value. The development excludes the ESA watercourses (non-perennial rivers) as well as a 32m buffer implemented around the identified non-perennial rivers.

It must be noted that a terrestrial CBA is located on Site A and the development of site A would result in the permanent loss of natural indigenous vegetation considered to be of high botanical conservation value (Swartland Shale Renosterveld).

Sites B and C have a low conservation value as they have been previously ploughed (in excess of 10 years) and are considered to be degraded and disturbed.

The development of sites B and C will have a low impact however the development of Site A will have a high impact. The development of Site A is not in line with the development objectives as defined in the WCBSP 2017.

As such the preferred alternative is NOT the best environmentally practicable alternative in terms of this development proposal and it would be a better alternative to only develop sites B and C as per Layout Alternative 2.

Technology Alternatives - No feasible or reasonable technological alternatives exist for the activities proposed.

Operational Alternatives - The EMPr has been developed taking into account all of the mitigation measures and recommendations included in the specialist study (Botanical Assessment). The EMPr will provide specific guidelines to avoid negative impacts and to mitigate any unavoidable negative impacts during the construction and operational phases of the development. The Vegetation clearing is to be done in strict adherence to the EMPr especially in terms of the demarcation of the no-go areas to protect sensitive areas (non-perennial rivers). Best practices together with the EMPr are encouraged during the operational phase of the project to avoid negative impacts associated with the activity.

The EMPr serve as guidelines for activities during construction and operational phases to minimise the activities negative impacts.

The No-Go Option - The No-Go option will result in the site remaining as is presently. The property is zoned as Agriculture, and as such the primary land use for the proposed development site would be agricultural related activities in this instance the cultivation of crops.

Preferred Alternative:

The preferred alternatives have been informed by the natural landscape features, sensitive environmental features adjacent to the development areas and specialist inputs and recommendations. Cognisance of the need and desirability as manifested in the Swartland Municipality IDP and SDF has been assessed and forms part of the driving factors for the proposed development.

The preferred alternative is the clearing of vegetation on Sites A – C as indicated by the Site Development Plan in Appendix B.

The layout of the proposed sites has taken into account the environmental constraints of the property excluding from the development areas of high conservation value. The development excludes the ESA watercourses (non-perennial rivers) as well as a 32m buffer implemented around the identified non-perennial rivers.

It must be noted that a terrestrial CBA is located on Site A and the development of site A would result in the permanent loss of natural indigenous vegetation considered to be of high conservation value.

Sites B and C have a low conservation value as they have been previously ploughed (in excess of 10 years) and are considered to be degraded and disturbed.

The development of sites B and C will have a low impact however the development of Site A will have a high impact. The development of Site A is not in line with the development objectives as defined in the WCBSP 2017.

Summary of positive and negative impacts:

ALTERNATIVE 1 (PREFERRED)

DEVELOPMENT PHASE

- Soil erosion and dust (**low impact prior to mitigation and low impact with mitigation**)
- Increase in stormwater runoff (**low impact prior to mitigation and low impact with mitigation**)
- Loss of indigenous vegetation (**high impact prior to mitigation and high impact with mitigation**)
- Impact on sensitive environments ESA (non-perennial rivers) (**medium impact prior to mitigation and low impact with mitigation**)
- Increased Jobs (**Low- POSITIVE**)
- The potential impact of the proposed development on archaeological, paleontological and heritage remains (**low impact prior to mitigation and low impact with mitigation**)

OPERATIONAL PHASE

- Soil erosion and dust (**low impact prior to mitigation and low impact with mitigation**)

- Increase in stormwater runoff (**low impact prior to mitigation and low impact with mitigation**)
- Impact on sensitive environments ESA (non-perennial rivers) (**low impact prior to mitigation and low impact with mitigation**)
- Increased Jobs (**Low- POSITIVE**)

DECOMMISSIONING AND CLOSURE PHASE

Similar to that in development (construction) phase.

ALTERNATIVE 2

DEVELOPMENT PHASE

- Soil erosion and dust (**low impact prior to mitigation and low impact with mitigation**)
- Increase in stormwater runoff (**low impact prior to mitigation and low impact with mitigation**)
- Loss of indigenous vegetation (**medium impact prior to mitigation and medium impact with mitigation**)
- Impact on sensitive environments ESA (non-perennial rivers) (**medium impact prior to mitigation and low impact with mitigation**)
- Increased Jobs (**Low- POSITIVE**)
- The potential impact of the proposed development on archaeological, paleontological and heritage remains (**low impact prior to mitigation and low impact with mitigation**)

OPERATIONAL PHASE

- Soil erosion and dust (**low impact prior to mitigation and low impact with mitigation**)
- Increase in stormwater runoff (**low impact prior to mitigation and low impact with mitigation**)
- Impact on sensitive environments ESA (non-perennial rivers) (**low impact prior to mitigation and low impact with mitigation**)
- Increased Jobs (**Low- POSITIVE**)

DECOMMISSIONING AND CLOSURE PHASE

Similar to that in development (construction) phase.

EAP Recommendation:

All possible impacts on the environment have been assessed and the outcome of the assessment has led to Alternative 2 being the better environmental practicable situation for the proposed development as opposed to Alternative 1 (PREFERRED).

It is the recommendation of the EAP that only Sites B and C be included in the development proposal which will result in the overall development having a low negative impact on the environment.

The assessment did not lead to any fatal flaws if the development (Alternative 2) is approved, provided that the facility is operated in terms of all relevant applicable legislation and the EMPr management activities implemented.

SECTION A: PROJECT INFORMATION

1. ACTIVITY LOCATION

Location of all proposed sites:	Erf 1929 is located approximately 3km northwest of Riebeek West, West of the R311.
Farm / Erf name(s) and number(s) (including Portions thereof) for each proposed site:	Erf 1929
Property size(s) in m ² for each proposed site:	1374560.4m ²
Development footprint size(s) in m ² :	Approximately 18.6ha
Surveyor General (SG) 21 digit code for each proposed site:	C04600110000192900000

2. PROJECT DESCRIPTION

(a) Is the project a new development? If "NO", explain:

YES

NO

NA

(b) Provide a detailed description of the scope of the proposed development (project).

The proposal is for the clearing of 18.6 ha of indigenous vegetation for the cultivation of crops.

Please note: This description must relate to the listed and specified activities in paragraph (d) below.

(c) Please indicate the following periods that are recommended for inclusion in the environmental authorisation:

(i) the period within which commencement must occur,	5 years
(ii) the period for which the environmental authorisation should be granted and the date by which the activity must have been concluded, where the environmental authorisation does not include operational aspects;	10 years
(iii) the period that should be granted for the non-operational aspects of the environmental authorisation; and	10 years
(iv) the period that should be granted for the operational aspects of the environmental authorisation.	Unlimited

Please note: The Department must specify the abovementioned periods, where applicable, in an environmental authorisation. In terms of the period within which commencement must occur, the period must not exceed 10 years and must not be extended beyond such 10 year period, unless the process to amend the environmental authorisation contemplated in regulation 32 is followed.

(d) List all the listed activities triggered and being applied for.

Please note: The onus is on the applicant to ensure that all the applicable listed activities are applied for and assessed as part of the EIA process. Please refer to paragraph (b) above.

EIA Regulations Listing Notice 1, 2014 (as amended):

Listed Activity No(s):	Describe the relevant Basic Assessment Activity(ies) in writing as per Listing Notice 1 (GN No. R. 983)	Describe the portion of the development that relates to the applicable listed activity as per the project description.	Identify if the activity is development / development and operational / decommissioning / expansion / expansion and operational.
27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation.	The proposal is for the clearing of 18.6ha of indigenous vegetation for the cultivation of crops.	Development.
Listed	Describe the relevant Basic	Describe the portion of the	Identify if the activity is

Activity No(s):	Assessment Activity(ies) in writing as per Listing Notice 3 (GN No. 325)	development that relates to the applicable listed activity as per the project description.	development / development and operational / decommissioning / expansion / expansion and operational.
12	The clearance of an area of 300 square metres or more of indigenous vegetation i. Western Cape i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; ii. Within critical biodiversity areas identified in bioregional plans.	The proposal is for the clearing of 18.6ha of indigenous vegetation for the cultivation of crops.	Development.

Waste management activities in terms of the NEM: WA (GN No. 921):

Category A Listed Activity No(s):	Describe the relevant <u>Category A</u> waste management activity in writing as per GN No. 921	Describe the portion of the development that relates to the applicable listed activity as per the project description
NA	NA	NA

Note: If any waste management activities are applicable, the **Listed Waste Management Activities Additional Information Annexure** must be completed and attached to this Basic Assessment Report as **Appendix I**.

Atmospheric emission activities in terms of the NEM: AQA (GN No. 893):

Listed Activity No(s):	Describe the relevant atmospheric emission activity in writing as per GN No. 893	Describe the portion of the development that relates to the applicable listed activity as per the project description.
NA	NA	NA

(e) Provide details of all components (including associated structures and infrastructure) of the proposed development and attach diagrams (e.g., architectural drawings or perspectives, engineering drawings, process flowcharts, etc.).

Buildings Provide brief description below:	YES	NO
NA		
Infrastructure (e.g., roads, power and water supply/ storage) Provide brief description below:	YES	NO
NA		
Processing activities (e.g., manufacturing, storage, distribution) Provide brief description below:	YES	NO
NA		
Storage facilities for raw materials and products (e.g., volume and substances to be stored) Provide brief description below:	YES	NO
NA		
Storage and treatment facilities for effluent, wastewater or sewage: Provide brief description below:	YES	NO
NA		
Storage and treatment of solid waste Provide brief description below:	YES	NO
NA		
Facilities associated with the release of emissions or pollution. Provide brief description below:	YES	NO
NA		
Other activities (e.g., water abstraction activities, crop planting activities) – Provide brief description below:	YES	NO
The proposal is for the clearing of 18.6ha of indigenous vegetation for the cultivation of crops.		

3. PHYSICAL SIZE OF THE PROPOSED DEVELOPMENT

(a) Property size(s): Indicate the size of all the properties (cadastral units) on which the development proposal is to be undertaken	1374560.4	m ²
(b) Size of the facility: Indicate the size of the facility where the development proposal is to be undertaken	NA	m ²
(c) Development footprint: Indicate the area that will be physically altered as a result of undertaking any development proposal (i.e., the physical size of the development together with all its associated structures and infrastructure)	±186000	m ²
(d) Size of the activity: Indicate the physical size (footprint) of the development proposal	±186000	m ²
(e) For linear development proposals: Indicate the length (L) and width (W) of the development proposal	(L) NA	m
	(W) NA	m
(f) For storage facilities: Indicate the volume of the storage facility	NA	m ³
(g) For sewage/effluent treatment facilities: Indicate the volume of the facility (Note: the maximum design capacity must be indicated)	NA	m ³

4. SITE ACCESS

(a) Is there an existing access road?	YES	NO
(b) If no, what is the distance in (m) over which a new access road will be built?	m	

(c) Describe the type of access road planned:

NA

Please note: The position of the proposed access road must be indicated on the site plan.

5. DESCRIPTION OF THE PROPERTY(IES) ON WHICH THE LISTED ACTIVITY(IES) ARE TO BE UNDERTAKEN AND THE LOCATION OF THE LISTED ACTIVITY(IES) ON THE PROPERTY

5.1 Provide a description of the property on which the listed activity(ies) is/are to be undertaken and the location of the listed activity(ies) on the property, as well as of all alternative properties and locations (duplicate section below as required).

Erf 1929 is located approximately 3km northwest of Riebeeck West, West of the R311. The property is agricultural land that has been used as such in the past. The property is surrounded by reservoirs, agriculture and residential property on the north; agriculture on the south; agriculture, the R311 and residential property on the east; and a reservoir, vacant vegetated land and the Kasteelberg on the west.

Coordinates of all the proposed activities on the property or properties (sites):	Latitude (S): (deg.; min.; sec)			Longitude (E): (deg.; min.; sec.)		
Site A	33°	20'	23.04"	18°	50'	34.42"
Site B	33°	20'	12.53"	18°	50'	28.74"
Site C	33°	20'	06.02"	18°	50'	11.86"

Note: For land where the property has not been defined, the coordinates of the area within which the development is proposed must be provided in an addendum to this report.

5.2 Provide a description of the area where the aquatic or ocean-based activity(ies) is/are to be undertaken and the location of the activity(ies) and alternative sites (if applicable).

NA

Coordinates of the boundary /perimeter of all proposed aquatic or ocean-based activities (sites) (if applicable):	Latitude (S): (deg.; min.; sec)			Longitude (E): (deg.; min.; sec)		
	°	'	"	°	'	"
	°	'	"	°	'	"
	°	'	"	°	'	"
	°	'	"	°	'	"

5.3 For a linear development proposal, please provide a description and coordinates of the corridor in which the proposed development will be undertaken (if applicable).

NA

For linear activities:	Latitude (S): (deg.; min.; sec)			Longitude (E): (deg.; min.; sec)		
• Starting point of the activity	°	'	"	°	'	"
• Middle point of the activity	°	'	"	°	'	"
• End point of the activity	°	'	"	°	'	"

Note: For linear development proposals longer than 1000m, please provide an addendum with co-ordinates taken every 250m along the route. All important waypoints must be indicated and the GIS shape file provided digitally.

5.4 Provide a location map (see below) as **Appendix A** to this report that shows the location of the proposed development and associated structures and infrastructure on the property; as well as a detailed site development plan / site map (see below) as **Appendix B** to this report; and if applicable, all alternative properties and locations. The GIS shape files (.shp) for maps / site development plans must be included in the electronic copy of the report submitted to the competent authority.

Locality Map:	<p>The scale of the locality map must be at least 1:50 000. For linear 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; • a linear scale; • the prevailing wind direction (during November to April and during May to October); and • GPS co-ordinates (to indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection). <p>For an 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>Coordinates must be provided in degrees, minutes and seconds using the Hartebeesthoek94; WGS84 co-ordinate system.</p>
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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 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. • The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be indicated on the site plan. • The position of each element of the application 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 development <u>must</u> be indicated on the site plan. • Servitudes and an indication of the purpose of each servitude must be indicated on the site plan. • Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): <ul style="list-style-type: none"> ○ Watercourses / Rivers / Wetlands - including the 32 meter set back line from the edge of the bank of a river/stream/wetland; ○ Flood lines (i.e., 1:100 year, 1:50 year and 1:10 year where applicable); ○ Ridges; ○ Cultural and historical features; ○ 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> <p>The GIS shape file for the site development plan(s) must be submitted digitally.</p>
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6. SITE PHOTOGRAPHS

Colour photographs 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 as **Appendix C** to this report. 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.

SECTION B: DESCRIPTION OF THE RECEIVING ENVIRONMENT

Site/Area Description

For linear development proposals (pipelines, etc.) as well as development proposals that cover very large sites, it may be necessary to complete copies of this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area that is covered by each copy on the Site Plan.

1. GRADIENT OF THE SITE

Indicate the general gradient of the sites (highlight the appropriate box).

Sites A - C	Flat	Flatter than 1:10	1:10 – 1:4	Steeper than 1:4
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2. LOCATION IN LANDSCAPE

(a) Indicate the landform(s) that best describes the site (highlight the appropriate box(es)).

Sites A - C	Ridgeline	Plateau	Side slope of hill / mountain	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Sea-front
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(b) Provide a description of the location in the landscape.

The property is located at the foot of the Kasteelberg adjacent to the Ongegund residential community situated approximately 3km northwest of Riebeek West, West of the R311. The site is traversed by a number of non-perennial watercourses, for which a 32 meter buffer has been implemented for each of the non-perennial rivers.

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

(a) Is the site(s) located on or near any of the following (highlight the appropriate boxes)?

Shallow water table (less than 1.5m deep)	YES	NO	UNSURE
Seasonally wet soils (often close to water bodies)	YES	NO	UNSURE
Unstable rocky slopes or steep slopes with loose soil	YES	NO	UNSURE
Dispersive soils (soils that dissolve in water)	YES	NO	UNSURE
Soils with high clay content	YES	NO	UNSURE
Any other unstable soil or geological feature	YES	NO	UNSURE
An area sensitive to erosion	YES	NO	UNSURE
An area adjacent to or above an aquifer.	YES	NO	UNSURE
An area within 100m of a source of surface water	YES	NO	UNSURE
An area within 500m of a wetland	YES	NO	UNSURE
An area within the 1:50 year flood zone	YES	NO	UNSURE
A water source subject to tidal influence	YES	NO	UNSURE

(b) If any of the answers to the above is "YES" or "UNSURE", specialist input may be requested by the Department. (Information in respect of the above will often be available at the planning sections of local authorities. The 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

(c) Indicate the type of geological formation underlying the site.

Granite	Shale	Sandstone	Quartzite	Dolomite	Dolorite	Other (describe)
Provide a description.						

Sites A - C consists of land type Ad8.

Geology:

Mainly schist and greywacke of the Berg River Formation, as well as quartz schist with phyllite of the Klipplaat Formation, both of the Malmesbury Group.

Soil:

Red-yellow apedal, freely drained soils; yellow, dystrophic and/or mesotrophic.

Class: soils with a strong texture and contrast.

These soils are described as soils with a marked clay accumulation, strongly structured and a non-reddish colour. In addition one or more of vertic, melanic and plinthic soils may be present.

Depth: >=450mm and <750mm

Clay: <15%

Erodibility: Moderate with an erodibility factor of 0.37.

***Sources:**

Soils and Geology (ENPAT). <https://gis.elsenburg.com/apps/cfm/#>. 30/01/2019.

Soil Types. Department of Agriculture Fisheries and Forestry. <https://gis.elsenburg.com/apps/cfm/#>. 30/01/2019.

Soil Erodibility. SA Atlas of Climatology and Agrohydrology (R.E. Schulze, 2009). <https://gis.elsenburg.com/apps/cfm/#>. 30/01/2019.

4. SURFACE WATER

(a) Indicate the surface water present on and or adjacent to the site and alternative sites (highlight the appropriate boxes)?

Perennial River	YES	NO	UNSURE
Non-Perennial River	YES	NO	UNSURE
Permanent Wetland	YES	NO	UNSURE
Seasonal Wetland	YES	NO	UNSURE
Artificial Wetland	YES	NO	UNSURE
Estuarine / Lagoon	YES	NO	UNSURE

(b) Provide a description.

The property is traversed by a number of non-perennial rivers for which a 32 meter buffer has been implemented. The proposed development still falls within the Regulated Area as defined by the National Water Act. As such a water use license must be obtained from the licensing authority.

Comment from DWS is required in this regard.

5. THE SEAFRONT / SEA

(a) Is the site(s) located within any of the following areas? (highlight the appropriate boxes).

If the site or alternative site is closer than 100m to such an area, please provide the approximate distance in (m).

AREA	YES	NO	UNSURE	If "YES": Distance to nearest area (m)
An area within 100m of the high water mark of the sea	YES	NO	UNSURE	
An area within 100m of the high water mark of an estuary/lagoon	YES	NO	UNSURE	
An area within the littoral active zone	YES	NO	UNSURE	
An area in the coastal public property	YES	NO	UNSURE	
Major anthropogenic structures	YES	NO	UNSURE	
An area within a Coastal Protection Zone	YES	NO	UNSURE	
An area seaward of the coastal management line	YES	NO	UNSURE	
An area within the high risk zone (20 years)	YES	NO	UNSURE	
An area within the medium risk zone (50 years)	YES	NO	UNSURE	
An area within the low risk zone (100 years)	YES	NO	UNSURE	
An area below the 5m contour	YES	NO	UNSURE	

An area within 1km from the high water mark of the sea	YES	NO	UNSURE	
A rocky beach	YES	NO	UNSURE	
A sandy beach	YES	NO	UNSURE	

(b) If any of the answers to the above is "YES" or "UNSURE", specialist input may be requested by the Department. (The 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

6. BIODIVERSITY

Note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed development. To assist with the identification of the biodiversity occurring on site and the ecosystem status, consult <http://bgis.sanbi.org> or BGIShelp@sanbi.org. Information is also available on compact disc ("cd") from the Biodiversity-GIS Unit, Tel.: (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) must be provided as an overlay map on the property/site plan as **Appendix D** to this report.

- (a) Highlight the applicable biodiversity planning categories of all areas on preferred and alternative sites and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category. Also describe the prevailing level of protection of the Critical Biodiversity Area ("CBA") and Ecological Support Area ("ESA") (how many hectares / what percentages are formally protected).

Systematic Biodiversity Planning Category	CBA	ESA	Other Natural Area ("ONA")	No Natural Area Remaining ("NNR")
If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan and the conservation management objectives	<p>The biodiversity areas as mapped for the application area are indicated in the biodiversity overlay map included as Appendix D. According to the 2017 Western Cape Biodiversity Spatial Plan the site is mapped as follows:</p> <ul style="list-style-type: none"> • Site A is mapped as a Terrestrial Critical Biodiversity Area (Category 1 and 2). • The watercourses are mapped as Ecological Support Areas (Res) [ESA2: Restore from other resource use]. <p>Critical Biodiversity Areas: Areas in a natural condition that is required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.</p> <p>The desired management objective for CBA1 is to maintain in a natural or near-natural state, with no further loss of natural habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land uses are appropriate.</p> <p>The desired management objective CBA2 is to maintain a functional, natural or near-natural state, with no further loss of natural habitat. These areas should be rehabilitated.</p> <p>Watercourses: The property is traversed by several non-perennial watercourses. These watercourses are defined as Ecological Support Areas (Res) [ESA2: Restore from other resource use]. These watercourses are defined as areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs and are often vital for delivering ecosystem services.</p> <p>The objective of these areas is to restore and/or manage to minimize impact on ecological processes and ecological infrastructure functioning, especially soil and water-related services, and to allow for faunal movement.</p>			

	<u>It must be noted that the Watercourse ESAs are completely excluded from the development footprint.</u>
Describe the site's CBA/ESA quantitative values (hectares/percentage) in relation to the prevailing level of protection of CBA and ESA (how many hectares / what percentages are formally protected locally and in the province)	86% of Site A and 1.4% of Site B is classified as Terrestrial CBAs. This equates to 11% of the proposed 18.6ha development area is classified as CBAs and will be lost as a result of the proposed activities. None of the ESAs will be impacted upon by the proposed development.

(b) Highlight and describe the habitat condition on site.

Habitat Condition	Percentage of habitat condition class (adding up to 100%) and area of each in square metre (m ²)		Description and additional comments and observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing/harvesting regimes, etc.)
Natural	0%	0m ²	NA
Near Natural (includes areas with low to moderate level of alien invasive plants)	12%	22000m ²	The vegetation on Site A is considered to be of high botanical conservation value (Swartland Shale Renosterveld).
Degraded (includes areas heavily invaded by alien plants)	0%	0m ²	NA
Transformed (includes cultivation, dams, urban, plantation, roads, etc.)	88%	164000m ²	The vegetation on sites B and C have been previously ploughed (in excess of 10 years) and are considered to have a low botanical conservation value, with low rehabilitation potential due to the lack of vegetation in the immediate area, and a long history of ploughing and grazing. The fields have been fallow for a number of years.

(c) Complete the table to indicate:

- (i) the type of vegetation present on the site, including its ecosystem status; and
- (ii) whether an aquatic ecosystem is present on/or adjacent to the site.

Terrestrial Ecosystems		Description of Ecosystem, Vegetation Type, Original Extent, Threshold (ha, %), Ecosystem Status
Ecosystem threat status as per the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)	Critically	Swartland Shale Renosterveld Status 2016: CR (A1 & D1) Status 2014: Critically Endangered (CR) Status 2011: CR
	Endangered	
	Vulnerable	
	Least Threatened	

Aquatic Ecosystems						
Wetland (including rivers, depressions, channelled and unchannelled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline	
YES	NO	UNSURE	YES	NO	YES	NO

(d) Provide a description of the vegetation type and/or aquatic ecosystem present on the site, including any important biodiversity features/information identified on the site (e.g. threatened species and special habitats). Clearly describe the biodiversity targets and management objectives in this regard.

Terrestrial Vegetation Characteristics:

The property falls within a region that is likely to consist of Swartland Shale Renosterveld (critically endangered).

Site A

Only Site A is likely to have remnants of this vegetation type as it is relatively undisturbed and only moderately impacted on by alien vegetation. The vegetation on Site A is considered to be of high botanical conservation value (Swartland Shale Renosterveld).

Sites B to C

Sites B and C are transformed as a result of the sites having been ploughed. This is in excess of 10 years as google earth imagery indicate that it was last ploughed in 2004 (see below).





Biodiversity Assessment, N.Hanekom, 2018.

A site visit and survey by Nicolaas Hanekom of the areas proposed to be cleared was conducted on the 8 November 2018. Please take note that this survey was done after flower season and it was not possible to identify all species. Most of the proposed area to be cleared burned recently so it was accessible. This survey was however deemed appropriate and sufficient to verify the findings that Nick Helme made during his September 2006 survey, although Nick Helme's survey was conducted 10 years ago.

The study area lies immediately southwest of Ongegund village, southwest of the PPC mine west of Riebeeck Wes. Pulpit Rock wine state lies to the south. A large part of the study area has been regularly cultivated (for cereals) prior to 2004. A much bigger portion of the same property lies outside the proposed area to be cleared and consists of a steep mountain land. These upper parts of the site are ecologically well connected to the adjacent Kasteelberg, which is one of the largest areas of natural vegetation within the heavily transformed Swartland region. This transformation from Shale Renosterveld to Sandstone Fynbos is regarded as an ecological important gradient and interface (Von Hase et al 2003; De Villiers et al 2005) and should be conserved. This is what is known as an edaphic (soil) interface, as well as being upland – lowland gradient. Many of these transitions in the Swartland have been lost due to agriculture, but in this case most of the transition is still intact. The lower parts of the site border on agricultural and residential areas, and are thus poorly connected to Kasteelberg, except where high conservation value corridors of natural vegetation occur.

The species composition and structure were clearly visible after the recent fire during the November 2018 survey. The proposed cleared and previously disturbed area classified by Nick Helme as having low botanical conservation value was compared with the non-disturbed and high botanical conservation value areas identified by Nick. Plant rest such as geophytes and other were used to determine species diversity between the low botanical conservation value and high botanical conservation value areas. The high botanical conservation value areas had signs of higher species diversity which was visible in the plant regrowth observed during the survey. The species composition and botanical conservation value of the previously ploughed and planted area did not change since 2006.



Photo 1: Low botanical conservation value area. Area dominated by pioneer species and an indicator of disturbance and low species diversity. Area not identified as a CBA.



Photo 2: Low botanical conservation value area. Area dominated by grass species which is pioneer species and an indicator of disturbance and low species diversity. Area not identified as a CBA.



Photo 3: Low botanical conservation value area. Area dominated by grass species which is pioneer species and an indicator of disturbance and low species diversity. Area not identified as a CBA.



Photo 4: Low botanical conservation value area. Area dominated by grass species which is pioneer species and an indicator of disturbance and low species diversity. Area not identified as a CBA.



Photo 4: Low botanical conservation value area. Area dominated by grass species which is pioneer species and an indicator of disturbance and low species diversity. Area not identified as a CBA. The area not burn in the photo is the high botanical conservation value area that will not be cleared.



Photo 5: Low botanical conservation value area. Area dominated by grass species which is pioneer species and an indicator of disturbance and low species diversity. Area not identified as a CBA.



Photo 6: High botanical conservation value area. Species diversity clearly visible. The area is identified as a CBA. A portion of this area is included in the proposed area to be cleared.



Photo 7: High botanical conservation value area. Species diversity clearly visible. The area is identified as a CBA. A portion of this area is included in the proposed area to be cleared.



Photo 8: High botanical conservation value area in the foreground of the photo with the low botanical conservation value area in the background of the photo. The difference in species diversity between the low and high botanical conservation value areas is clearly visible in the area. The low botanical conservation value area and a portion of the high botanical conservation area is included in the area proposed for clearing. The high botanical conservation value area is identified as a CBA.



Photo 9: High botanical conservation value area. Species diversity clearly visible if compared to low botanical conservation value areas. The area is identified as a CBA. The area is not included in the proposed area to be cleared.



Photo 10: High botanical conservation value area. Species diversity clearly visible. The area is identified as a CBA. The area is included in the proposed area to be cleared.



Photo 11: High botanical conservation value area. The *Babiana* sp recorded in the high botanical conservation value area is most likely *Babiana villosa* (near threatened conservation status) which is found on the clay soils from Tulbagh to Malmesbury.

The conclusions and recommendations made by Nick Helme (**Appendix K2**) is still applicable. The areas identified as low and high botanical conservation value area as per Figure 1 in his report is still applicable.

7. LAND USE OF THE SITE

Note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed development.

Untransformed area	Low density residential	Medium density residential	High density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial
Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism and Hospitality facility
Open-cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical centre	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes and more)	Airport
Harbour	Sport facilities	Golf course	Polo fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archaeological site
Other land uses (describe):	NA			

(a) Provide a description.

The property is zoned Agriculture, the primary land use for agricultural purposes.

8. LAND USE CHARACTER OF THE SURROUNDING AREA

(a) Highlight the current land uses and/or prominent features that occur within +/- 500m radius of the site and neighbouring properties if these are located beyond 500m of the site.

Note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed development.

Untransformed area	Low density residential	Medium density residential	High density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial
Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism and Hospitality facility
Open-cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical centre	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes and more)	Airport
Harbour	Sport facilities	Golf course	Polo fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archaeological site
Other land uses (describe):	NA			

(b) Provide a description, including the distance and direction to the nearest residential area, industrial area, agri-industrial area.














North: reservoirs, agriculture, residential.
 South: Agriculture.
 East: Residential, R311 and agriculture.
 West: Reservoir, vacant vegetated land, Kasteelberg.

9. SOCIO-ECONOMIC ASPECTS

- a) Describe the existing social and economic characteristics of the community in the vicinity of the proposed site, in order to provide baseline information (for example, population characteristics/demographics, level of education, the level of employment and unemployment in the area, available work force, seasonal migration patterns, major economic activities in the local municipality, gender aspects that might be of relevance to this project, etc.).

The proposed development is located on the outskirts of Ongegend (urban area within the Riebeek Valley) which is situated in Ward 3 of the Swartland Municipality.

Municipal Statistics and Demographics

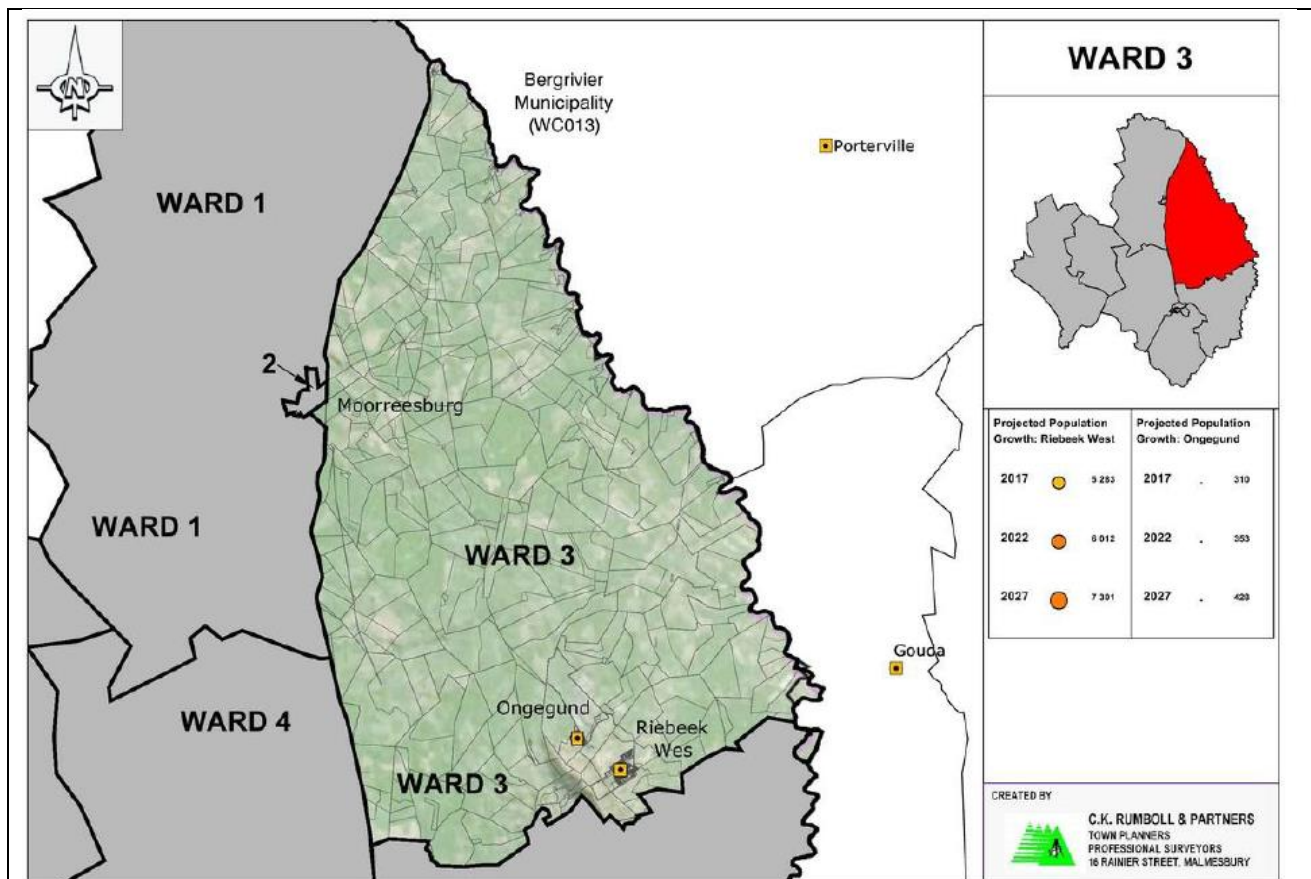
Total municipal area		Demographics in 2016 (Stats SA 2016 Community Survey)			
3 700 km ²		 Population: 133 762	 Younger than 34: 61%	 Households: 39 139	
Education in 2016 (2017 Socio-economic profile, PGWC)					
 Learner-teacher ratio: 42.5	Gr12 dropout rate: 23.2%	Matric pass rate: 89.4%	Number of schools: 31	Schools with libraries: 17	
Poverty in 2016 (2017 Socio-economic profile, PGWC)					
 Gini Coefficient: 0.58	Human Development Index: 0.69	Households with no income: 10.4%	Indigent households: 8 495		
Access to basic services in 2016 (Stats SA, 2016 Community Survey, minimum service level)					
 Piped water: 92.8%	 Refuse removal: 83.5%	 Electricity: 98.7%	 Sanitation: 96.2%		
Economy [Municipal Economic Review and Outlook (MERO), 2017]			Employment (2017 Socio-economic profile, PGWC)		
 Average annual GDP growth 2005-2015: 3.4%			 Average annual employment growth 2005-2015: 1.6%		
Three largest sectors according to GDP contribution in 2015 (2017 Socio-economic profile, PGWC)					
Manufacturing: 24.4%		Wholesale and retail trade, catering and accommodation: 17.5%		Agriculture, forestry and fishing: 14.4%	
Health in 2016 (2017 Socio-economic profile, PGWC)					
 Number of primary health care facilities: 14	Immunisation rate: 85.1%	Maternal deaths per 100 000 live births: 0	Registered patients receiving ART: 2 086	% babies born to mothers under 18: 9.3%	
Safety and security – % change between 2016 and 2017 in number of reported cases (2017 Socio-economic profile, PGWC)					
 Residential burglaries: 1.2%	Driving under the influence: 67.0%	Drug-related crime: 49.0%	Murders: -26.8%	Sexual offences: -1.7%	

Swartland municipal area is divided into 12 Wards, with recent amendments to some of the ward boundaries by the Municipal Demarcation Board for the 2016 elections. The figure on the next page shows the 2016 ward demarcation. The wards consist of urban settlements as well as the surrounding rural areas which contain agricultural and natural environments. The table below describes the urban settlements and rural areas within the different wards.

Ward	Areas included
1	Koringberg, part of Moorreesburg and rural areas
2	Moorreesburg
3	Riebeek West, Ongegund and rural areas
4	Chatsworth, Riverlands, Mount Royal (Malmesbury), Ruststasie and rural areas
5	Yzerfontein, Jakkalsfontein, Grotto Bay, Ganzekraal, western part of Darling, Dassen Island and rural areas
6	Eastern part of Darling and rural areas
7	Abbotsdale, Kalbaskraal and rural areas
8	Malmesbury South and part of Wesbank
9	llinge Lethu
10	Malmesbury North (Panorama, Tafelzicht) and West (Schoonspruit)
11	Part of Wesbank and Saamstaan
12	Riebeek Kasteel and Esterhof

Ward 3: Riebeek West, Ongegund, Miverstand Dam and Rural Areas

Wards 3 form the north eastern part of the Swartland next to the Berg River. This area contains extensive agricultural areas and includes the urban areas of Riebeek West and Ongegund in the Riebeek Valley, located along the foothills of the Kasteelberg.



Ongegund:

Ongegund is located approximately 5 kilometres north of Riebeeck West on the foothills of Kasteelberg. Ongegund was home to the employees of the PPC cement mine and factory when the cement factory was established in 1950 on Farm Ongegund no 508. In 2001 Pretoria Portland Cement Company (PPC) sold houses to residents, handed over town management to Swartland Municipality and a Homeowners Association. The unique location of the town in the Riebeeck Valley with its scenic and rural environment increases the attractiveness of the town.

Municipality's Agricultural Landscape:

The Agriculture, Forestry and Fishing sector comprised R875 million (or 17%) of the Swartland's GDP in 2015. It displayed steady growth of 3.6% per annum for the period 2005 - 2015. The sector employed 27% of the area's workforce. Over the period 2005 – 2015 there was a negative employment growth of -1.0% per annum. Employment however picked up significantly after the recession and grew at a rate of 4.6% per annum since 2010.

	2015	Trend 2005-2015	Recovery 2010-2015
GDP	R875.2 million	3.6%	1.4%
Employment:			
▪ Total	11 378	-1.0%	4.6%
▪ Skilled	396	-0.7%	5.3%
▪ Semi-skilled	1 827	-1.6%	4.4%
▪ Low skilled	7 102	-1.6%	4.6%
▪ Informal	2 053	2.5%	4.6%

According to the 2016 Stats SA Community Survey 2 297 households in the Swartland (5.9% of the total) were involved in agriculture.

Number of households involved in the different types of agricultural activities:

Type of agricultural activity	Number of households
Livestock production	1 048
Poultry production	973
Grains and food crops	486
Fruit production	381
Vegetable production	219
Industrial crops	6
Other	50

Number of households involved in the different types of farm practice for crop production:

Type of farm practice	Number of households
Irrigation	174
Dry land	568
Both irrigation and dry land	1 114

***References:**

Swartland Municipality Integrated Development Plan: 2017 - 2022, 1st Revision 30 May 2018.
Swartland Spatial Development Framework, 2017 – 2022, May 2017.

10. HISTORICAL AND CULTURAL ASPECTS

- (a) Please be advised that if section 38 of the NHRA is applicable to your proposed development, you are requested to furnish this Department with written comment from Heritage Western Cape as part of your public participation process. Heritage Western Cape must be given an opportunity, together with the rest of the I&APs, to comment on any Pre-application BAR, a Draft BAR, and Revised BAR.

Section 38 of the NHRA states the following:

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

- (a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50m in length;
- (c) any development or other activity which will change the character of a site-
 - (i) exceeding 5 000m² in extent; or
 - (ii) involving three or more existing erven or subdivisions thereof; or
 - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
 - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
- (d) the re-zoning of a site exceeding 10 000m² in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,

must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development”.

- (b) The impact on any national estate referred to in section 3(2), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii), of the NHRA, must also be investigated, assessed and evaluated. Section 3(2) states the following: “3(2) Without limiting the generality of subsection (1), the national estate may include—
- (a) places, buildings, structures and equipment of cultural significance;
 - (b) places to which oral traditions are attached or which are associated with living heritage;
 - (c) historical settlements and townscapes;
 - (d) landscapes and natural features of cultural significance;
 - (e) geological sites of scientific or cultural importance;
 - (f) archaeological and palaeontological sites;
 - (g) graves and burial grounds, including—
 - (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders;
 - (iii) graves of victims of conflict;
 - (iv) graves of individuals designated by the Minister by notice in the Gazette;
 - (v) historical graves and cemeteries; and
 - (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);

(h) sites of significance relating to the history of slavery in South Africa;

(i) movable objects, including—

(i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;

(ii) objects to which oral traditions are attached or which are associated with living heritage;

(iii) ethnographic art and objects;

(iv) military objects;

(v) objects of decorative or fine art;

(vi) objects of scientific or technological interest; and

(vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996)".

Is Section 38 of the NHRA applicable to the proposed development?		YES	NO	UNCERTAIN
If YES or UNCERTAIN, explain:	A HWC Notice of Intent was submitted to HWC in order to determine whether any heritage impact studies are required for the proposed development. As the proposed development consists of a development which will change the character of the site in excess of 5000 m ² as well as triggers the requirement for an Environmental Authorisation in terms of NEMA. The RoD received has been included in Appendix E1.			
Will the development impact on any national estate referred to in Section 3(2) of the NHRA?		YES	NO	UNCERTAIN
If YES or UNCERTAIN, explain:	The development will not impact on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999.			
Will any building or structure older than 60 years be affected in any way?		YES	NO	UNCERTAIN
If YES or UNCERTAIN, explain:	The development will not impact on any building or structure older than 60 years in any way.			
Are there any signs of culturally or historically significant elements, as defined in section 2 of the NHRA, including Archaeological or paleontological sites, on or close (within 20m) to the site?		YES	NO	UNCERTAIN
If YES or UNCERTAIN, explain:	None identified.			

Note: If uncertain, the Department may request that specialist input be provided **and** Heritage Western Cape must provide comment on this aspect of the proposal. (Please note that a copy of the comments obtained from the Heritage Resources Authority must be appended to this report as Appendix E1).

11. APPLICABLE LEGISLATION, POLICIES, CIRCULARS AND/OR GUIDELINES

(a) Identify all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks, and instruments that are applicable to the development proposal and associated listed activity(ies) being applied for and that have been considered in the preparation of the BAR.

LEGISLATION, POLICIES, PLANS, GUIDELINES, SPATIAL TOOLS, MUNICIPAL DEVELOPMENT PLANNING FRAMEWORKS, AND INSTRUMENTS	ADMINISTERING AUTHORITY and how it is relevant to this application	TYPE		DATE (if already obtained):
		Permit/license/authorisation/comment / relevant consideration (e.g. rezoning or consent use, building plan approval, Water Use License and/or General Authorisation, License in terms of the SAHRA and CARA, coastal discharge permit, etc.)		
National Water Act, 1998 (Act No. 36 of 1998) [NWA] and relevant regulations	Department of Water and Sanitation	Water Use Authorization		Pre-Application enquiry for S21(c) and (i) submitted 01/02/2019
National Environmental Management Act, 1998 (Act No. 107 of 1998)	Western Cape Department of Environmental Affairs	Environmental Authorisation Application		NA

[NEMA] and relevant regulations	and Development Planning		
National Heritage Resources Act 25 of 1999 [NHRA]	Heritage Western Cape South African Heritage Resource Agency	Notice of Intent to Develop	Final Comment Received
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) [NEMWA] and relevant regulations	Western Cape Department of Environmental Affairs and Development Planning	NA	NA
National Environmental Management: Biodiversity Act 10 of 2004 [NEMBA]	Western Cape Department of Environmental Affairs and Development Planning	NA	NA
National Environmental Management: Air Quality Act, 39 Of 2004 [NEMAQA] and Relevant Regulations	Western Cape Department of Environmental Affairs and Development Planning	NA	NA
Conservation of Agricultural Resources Act, 43 Of 1983 [CARA]	National Department of Agriculture, forestry and Fisheries Western Cape Department of Agriculture	<ul style="list-style-type: none"> • Permission to cultivate. • Weeds and the tolerance thereof. 	NA
National Health Act, 61 of 2003 [NHA]		Littering and causing a nuisance.	NA
Constitution of the Republic of South Africa, 1996		General application to individual rights of all on and adjacent to the sites.	NA
Fencing Act, 31 of 1963		NA	NA
National Building Regulations and Building Standards Act 103 of 1977 [NBRBSA] and relevant regulations		NA	NA
National Veld and Forest Fire Act 101 of 1998 [NVFFA]		NA	NA
Fertilizers, Farm Feeds, Agricultural Remedies And Stock Remedies Act, 36 Of 1947 [FFFARSRA] and Relevant Regulations	National Department of Agriculture, forestry and Fisheries Western Cape Department of Agriculture	NA	NA

POLICY/ GUIDELINES	ADMINISTERING AUTHORITY
Guideline on Public Participation	Western Cape Department of Environmental Affairs and Development Planning
Guidelines on Alternatives	Western Cape Department of Environmental Affairs and Development Planning
Guideline on Need and desirability	Western Cape Department of Environmental Affairs and Development Planning
Guideline for Environmental Management Plans (EMP's)	Western Cape Department of Environmental Affairs and Development Planning
Circular EADP 0028/2014: "One Environmental Management System"	Western Cape Department of Environmental Affairs and Development Planning
Guideline on Involving Biodiversity Specialists in	Western Cape Department of Environmental

(b) Describe how the proposed development **complies with and responds** to the legislation and policy context, plans, guidelines, spatial tools, municipal development planning frameworks and instruments.

LEGISLATION, POLICIES, PLANS, GUIDELINES, SPATIAL TOOLS, MUNICIPAL DEVELOPMENT PLANNING FRAMEWORKS, AND INSTRUMENTS	Describe how the proposed development complies with and responds:
NEMA	Various general activities, including but not limited to, the control of emergency incidents and the care and remediation of environmental damage.
NEMWA	Listed waste management activities and the requirements for a license for usage of general waste.
NEMBA	The management and conservation of biological diversity and the sustainable use of indigenous biological resources.
NEMAQA	Activities that may affect the air quality on site and the environment surrounding it.
NWA	Impacts and pollution to ground and surface water. Assessed if a water use authorisation under section 21 is required.
CARA	Weeds and the tolerance thereof; cultivation of virgin soil.
National Health Act	Littering and causing a nuisance.
Constitution of the RSA	General application to individual rights of all on and adjacent to the sites.
Fencing Act	The erection and maintenance of fences.
National Building Regulations and Building Standards Act	The erection of new buildings.
NHRA	Development of the site and dealing with graves and burial sites and any structures older than 60 years.
NVFFA	Any activities that could result in the start of veld fires.
FFFARSRA	<ul style="list-style-type: none"> • Activities associated with pest control and the use of agricultural remedies. • Activities associated with providing / manufacturing fertiliser.
Guideline on Public Participation	The public participation guideline was used to determine the best way to define and inform all relevant I&APs of the project. The guideline was also used to determine the most effective communication strategies for public participation.
Guidelines on Alternatives	The guidelines for alternatives assessment was used to develop a methodology for alternatives assessment. This methodology was applied to determine and assess the most viable alternatives to the project. The assessment was undertaken against the base environment (i.e. the no-go option).
Guideline on Need and desirability	The guideline was taken into account to determine whether the project complied according to the concept of Best Practicable Environmental Option as well as environmental and social sustainability.
Guideline for EMP's	The guideline for EMP's was taken into account to determine the most effective minimize, mitigation and management measures to minimise or prevent the impacts identified in the report
Circular EADP 0028/2014: "One Environmental Management System"	The circular was consulted to determine whether the report has been compiled in accordance with all the requirements of the 2014 EIA Regulations, as amended. The circular also provides guidance on the synchronisation of all Environmental Applications applicable for the proposed development.
Guideline on Involving Biodiversity Specialists in the EIA Process	Provided the framework for the involvement of Biodiversity Specialists.

Note: Copies of any comments, permit(s) or licences received from any other Organ of State must be attached to this report as **Appendix E**.

Section C: PUBLIC PARTICIPATION

The PPP must fulfil the requirements outlined in the NEMA, the EIA Regulations, 2014 (as amended) and if applicable, the NEM: WA and/or the NEM: AQA. This Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must also be taken into account.

- Please highlight the appropriate box to indicate whether the specific requirement was undertaken or whether there was an exemption applied for.

In terms of Regulation 41 of the EIA Regulations, 2014 (as amended) -			
(a) fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of -			
(i) the site where the activity to which the application relates, is or is to be undertaken; and	YES	EXEMPTION	
(ii) any alternative site	YES	EXEMPTION	N/A
(b) giving written notice, in any manner provided for in Section 47D of the NEMA, to -			
(i) the occupiers of the site and, if the applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	YES	EXEMPTION	N/A
(ii) owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	YES	EXEMPTION	
(iii) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;	YES	EXEMPTION	
(iv) the municipality (Local and District Municipality) which has jurisdiction in the area;	YES	EXEMPTION	
(v) any organ of state having jurisdiction in respect of any aspect of the activity; and	YES	EXEMPTION	
(vi) any other party as required by the Department;	YES	EXEMPTION	N/A
(c) placing an advertisement in -			
(i) one local newspaper; or	YES	EXEMPTION	
(ii) any official Gazette that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;	YES	EXEMPTION	N/A
(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken	YES	EXEMPTION	N/A
(e) using reasonable alternative methods, as agreed to by the Department, in those instances where a person is desirous of but unable to participate in the process due to— (i) illiteracy; (ii) disability; or (iii) any other disadvantage.	YES	EXEMPTION	N/A
If you have indicated that "EXEMPTION" is applicable to any of the above, proof of the exemption decision must be appended to this report.			
Please note that for the NEM: WA and NEM: AQA, a notice must be placed in at least two newspapers circulating in the area where the activity applied for is proposed.			
If applicable, has/will an advertisement be placed in at least two newspapers?	YES		NO
If "NO", then proof of the exemption decision must be appended to this report.			

- Provide a list of all the State Departments and Organs of State that were consulted:

PRE-APPLICATION BAR PHASE:

State Department / Organ of State	Date request was sent:	Date comment received:	Support / not in support
CapeNature			Await comment.
DEA&DP: Development Management (Deciding Authority)			
DEA&DP: Pollution and Chemicals Management			
DEA&DP: Waste Management			
Department of Agriculture, Western Cape: Land Use			

Department of Water and Sanitation	
Heritage Western Cape	
National Department of Agriculture (Bellville)	
Swartland Local Municipality	
West Coast District Municipality	

3. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated, or the reasons for not including them.
(The detailed outcomes of this process, including copies of the supporting documents and inputs must be included in a Comments and Response Report to be attached to the BAR (see note below) as **Appendix F**).

Await comment.

4. Provide a summary of any conditional aspects identified / highlighted by any Organs of State, which have jurisdiction in respect of any aspect of the relevant activity.

Await comment.

Note:

Even if pre-application public participation is undertaken as allowed for by Regulation 40(3), it must be undertaken in accordance with the requirements set out in Regulations 3(3), 3(4), 3(8), 7(2), 7(5), 19, 40, 41, 42, 43 and 44.

If the "exemption" option is selected above and no proof of the exemption decision is attached to this BAR, the application will be refused.

A list of all the potential I&APs, including the Organs of State, notified and a list of all the registered I&APs must be submitted with the BAR. The list of registered I&APs must be opened, maintained and made available to any person requesting access to the register in writing.

The BAR must be submitted to the Department when being made available to I&APs, including the relevant Organs of State and State Departments which have jurisdiction with regard to any aspect of the activity, for a commenting period of at least 30 days. Unless agreement to the contrary has been reached between the Competent Authority and the EAP, the EAP will be responsible for the consultation with the relevant State Departments in terms of Section 24O and Regulation 7(2) – which consultation must happen simultaneously with the consultation with the I&APs and other Organs of State.

All the comments received from I&APs on the BAR must be recorded, responded to and included in the Comments and Responses Report included as **Appendix F** of the BAR. If necessary, any amendments made in response to comments received must be effected in the BAR itself. The Comments and Responses Report must also include a description of the PPP followed.

The minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded, must also be submitted as part of the public participation information to be attached to the final BAR as **Appendix F**.

Proof of all the notices given as indicated, as well as notice to I&APs of the availability of the Pre-Application BAR (if applicable), Draft BAR, and Revised BAR (if applicable) must be submitted as part of the public participation information to be attached to the BAR as **Appendix F**. In terms of the required "proof" the following must be submitted to the Department:

- a site map showing where the site notice was displayed, a 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 D: NEED AND DESIRABILITY

Note: Before completing this section, first consult this Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, 2014 (as amended), any subsequent Circulars, and guidelines available on the Department's website: <http://www.westerncape.gov.za/eadp>. In this regard, it must be noted that the *Guideline on Need and Desirability in terms of the Environmental Impact Assessment (EIA) Regulations, 2010* published by the national Department of Environmental Affairs on 20 October 2014 (GN No. 891 on Government Gazette No. 38108 refers) (available at: http://www.gov.za/sites/www.gov.za/files/38108_891.pdf) also applied to EIAs in terms of the EIA Regulations, 2014 (as amended).

1. Is the development permitted in terms of the property's existing land use rights?	YES	NO	Please explain
The property is zoned as Agriculture 1, in terms of which the cultivation of agricultural land is the primary land use right.			
2. Will the development be in line with the following?			
(a) Provincial Spatial Development Framework ("PSDF").	YES	NO	Please explain
The proposed development is in line with the Western Cape's PSDF, as the proposed development is consistent with surrounding activities and the land use right / zoning for this area. The sites identified for vegetation clearing and cultivation is consistent with the Provincial aim in terms of contributing to the maintenance of a sustainable agricultural sector.			
(b) Urban edge / edge of built environment for the area.	YES	NO	Please explain
The proposed development is located inside of the urban edge as defined by the Municipal SDF, the proposed development is consistent with current farm activities and surrounding land uses.			
(c) Integrated Development Plan and Spatial Development Framework of the Local Municipality (e.g., would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF ?).	YES	NO	Please explain
The SDF has indicated the property to be identified for potential Residential development. The proposed development however is consistent with the envisaged growth as manifested in the Swartland Municipality IDP and SDF in terms of an agricultural contribution to the Ongegund community. The expansion of the cultivated land will contribute to agricultural sector through the protection and development of agricultural land.			
(d) An Environmental Management Framework (" EMF ") adopted by this Department. (e.g., Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES	NO	Please explain
No EMF adopted for the area.			
(e) Any other Plans (e.g., Integrated Waste Management Plan (for waste management activities), etc.).	YES	NO	Please explain
NA			
3. Is the land use (associated with the project being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (in other words, is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES	NO	Please explain
The proposed development is consistent with the envisaged growth as manifested in the Swartland Municipality IDP and SDF. The expansion of the cultivated land will contribute to agricultural sector through the protection and development of agricultural land.			
4. Should development, or if applicable, expansion of the town/area concerned in terms of this land use (associated with the activity being applied for) occur on the proposed site at this point in time?	YES	NO	Please explain
The proposed development is consistent with the objectives manifested in the SDF and IDP for Swartland Municipality.			
5. Does the community/area need the project and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g., development is a National Priority, but within a specific local context it could be inappropriate.)	YES	NO	Please explain
The proposed development is consistent with the envisaged growth as manifested in the Swartland Municipality IDP and SDF. The expansion of the cultivated land will contribute to agricultural sector through the protection and development of agricultural land.			
6. Are the necessary services available together with adequate unallocated municipal capacity (at the time of application), or must additional capacity be created to cater for the project? (Confirmation by the relevant municipality in this regard must be attached to the BAR as Appendix E .)	YES	NO	Please explain
No additional services is required for the proposed development.			
7. Is this project provided for in the infrastructure planning of the municipality and if not, what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant municipality in this regard must be attached to the BAR as Appendix E .)	YES	NO	Please explain

No additional Municipal services required.			
8. Is this project part of a national programme to address an issue of national concern or importance?	YES	NO	Please explain
The property is zoned as Agriculture 1, in terms of which the cultivation of agricultural land is the primary land use right. The proposed development is in-line with the development objectives as manifested by local, provincial and national government policies and plans.			
9. Do location factors favour this land use (associated with the development proposal and associated listed activity(ies) applied for) at this place? (This relates to the contextualisation of the proposed land use on the proposed site within its broader context.)	YES	NO	Please explain
The proposed activity is in line with current activities and land uses taking place on properties adjacent to the proposed development and the historical use of the property.			
10. Will the development proposal or the land use associated with the development proposal applied for, impact on sensitive natural and cultural areas (built and rural/natural environment)?	YES	NO	Please explain
The clearing and development of Site A of the proposal will result in the loss of Terrestrial Critical Biodiversity Areas. None of the watercourses will be impacted upon as a result of the proposed development as a 32-meter buffer will be implemented around all the identified non-perennial rivers.			
11. Will the development impact on people's health and well-being (e.g., in terms of noise, odours, visual character and 'sense of place', etc.)?	YES	NO	Please explain
Although the current visual character of the landscape will change, it will fully integrate with the existing surroundings as most of the adjacent property is cultivated lands.			
12. Will the proposed development or the land use associated with the proposed development applied for, result in unacceptable opportunity costs?	YES	NO	Please explain
The proposed development is consistent with the envisaged growth as manifested in the Swartland Municipality IDP and SDF. The expansion of the cultivated land will contribute to agricultural sector through the protection and development of agricultural land. Unacceptable opportunity costs as a result of the proposed development are not foreseen.			
13. What will the cumulative impacts (positive and negative) of the proposed land use associated with the development proposal and associated listed activity(ies) applied for, be?			
<p>Positive Impacts</p> <ul style="list-style-type: none"> • Increased agricultural activities on agricultural land; • Export of commodities will contribute to boosting the GDP and maintaining trade balance in South Africa; • Supporting local economic development; • Job creation; • Job security; • Up-skilling of previously disadvantaged individuals; • Improvement of livelihoods of previously disadvantaged individuals; • Food security. <p>Negative Impacts</p> <ul style="list-style-type: none"> • Potential impact on sensitive areas if mitigation not implemented; • Loss of terrestrial CBA located on the development area (Site A); • Loss of re-established indigenous vegetation (Sites B and C); • Potential pollution of sensitive areas (watercourses). 			
14. Is the development the best practicable environmental option for this land/site?	YES	NO	Please explain
The property is zoned as Agriculture 1, in terms of which the cultivation of agricultural land is the primary land use right.			
Strict adherence to the recommendations and mitigation measures defined in the EMP must be implemented, to ensure that the impact of the proposed development will be of a low negative significance.			
15. What will the benefits be to society in general and to the local communities?			Please explain
The proposed development could create primary and downstream job opportunities. The biggest socio-economic impact of the authorisation will be the positive impact on the livelihoods of the families of employees on the farms, including youth, women and the elderly. If the authorisation is not granted, the potential socio-economic benefits will continue to be forfeited on an annual basis.			
16. Any other need and desirability considerations related to the proposed development?			Please explain
The expansion of agricultural activities on land zoned as Agricultural is consistent with the promotion and maintenance of sustainable agricultural activities manifested in the local IDP and SDF, PSDF which is derived from national objectives.			

17. Describe how the **general objectives of Integrated Environmental Management** as set out in Section 23 of the NEMA have been taken into account:

All decisions during the planning and assessment by all involved for the activity promote the integration of the principles of environmental management set out in section 2 to minimize and mitigate any significant effect on the environment. All these mitigations and management measures are included and written into the EMP.

18 Describe how the **principles of environmental management** as set out in Section 2 of the NEMA have been taken into account:

NATIONAL ENVIRONMENTAL MANAGEMENT PRINCIPLES

1. Principles

(1) The principles set out in this section apply throughout the Republic to the actions of all organs of state that may significantly affect the environment and

(a) shall apply alongside all other appropriate and relevant considerations, including the State's responsibility to respect, protect, promote and fulfil the social and economic rights in Chapter 2 of the Constitution and in particular the basic needs of categories of persons disadvantaged by unfair discrimination;

(b) serve as the general framework within which environmental management and implementation plans must be formulated;

(c) serve as guidelines by reference to which any organ of state must exercise any function when taking any decision in terms of this Act or any statutory provision concerning the protection of the environment;

(d) serve as principles by reference to which a conciliator appointed under this Act must make recommendations; and

(e) guide the interpretation, administration and implementation of this Act, and any other law concerned with the protection or management of the environment.

(2) Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably. *The proposed environmental management requirements have been determined by assessing all potential impacts that the development may have on people and their needs and aims to prevent or if prevention is not possible to mitigate any potential negative impacts on the environment and people.*

(3) Development must be socially, environmentally and economically sustainable. *The proposed development has been planned, designed and assessed in such a manner as to ensure that it is socially, environmentally and economically sustainable.*

(4)

(a) Sustainable development requires the consideration of all relevant factors including the following:

(i) That the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied;

(ii) that pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;

(iii) that the disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied;

(iv) that waste is avoided, or where it cannot be altogether avoided, minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner;

(v) that the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;

(vi) that the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised;

(vii) that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions; and

(viii) that negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.

The assessment conducted aimed to identify all potential negative impacts on the environment and on people's environmental rights (as listed above and more), and where such potential negative impacts as identified and assessed could not be altogether prevented/avoided mitigation measures were recommended and incorporated into the Environmental Management Programme to minimise the significance of the potential negative impacts as far as possible. The assessment also aimed to determine whether or not the proposed development will lead to the unacceptable exploitation of renewable and non-renewable resources and associated ecosystems.

(b) Environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option.

An integrated environmental assessment approach was followed acknowledging that all elements of the environment are linked and interrelated and realising that effects of decisions may have cumulative impacts on the environment and people and that the best practicable environmental option must therefore be selected.

(c) Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons.

Environmental justice was pursued to prevent discrimination against any person, particularly vulnerable and disadvantage persons.

(d) Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human well-being must be pursued and special measures may be taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination.

Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human well-being was pursued and special measures implemented if required ensure access.

(e) Responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its life cycle.

As per the recommended EMP requirements the Applicant (as per the EA stipulations) remains responsible for the environmental health and safety consequences of the proposed activity/ies throughout its life cycle.

(f) The participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured.

Adequate and appropriate opportunity for public participation was provided and proof thereof included in Appendix F as per the guidelines and regulations in decisions that may affect the environment.

(g) Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge.

All decision regarding the proposed activity/ies took into account the interests, needs and values of all potential interested and affected parties.

(h) Community wellbeing and empowerment must be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means.

Depending on the scope of the proposed activity community awareness campaigns will be conducted as and if required.

(i) The social, economic and environmental impacts of activities, including disadvantages and benefits, must be considered, assessed and evaluated, and decisions must be appropriate in the light of such consideration and assessment.

All potential negative and positive impacts associated with the proposed development are assessed and mitigated during the assessment process.

(j) The right of workers to refuse work that is harmful to human health or the environment and to be informed of dangers must be respected and protected.

As per standard EMP requirements all relevant health and safety legislation must be adhered to during the implementation of the proposed activities.

(k) Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.

As per public participation process regulations all information relating to the proposed activities are public knowledge and available to the public for perusal and comments during the assessment process.

(l) There must be intergovernmental co-ordination and harmonisation of policies, legislation and actions relating to the environment.

(m) Actual or potential conflicts of interest between organs of state should be resolved through conflict resolution procedures.

Comments from all relevant organs of state are requested, recorded and addressed during assessment process.

(n) Global and international responsibilities relating to the environment must be discharged in the national interest.

Applied as and when relevant to the proposed activities.

(o) The environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage.

All potential impacts on environmental resources are assessed and mitigated to prevent unacceptable exploitation of renewable and non-renewable resources and associated ecosystems.

(p) The costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment.

As per standard EMP requirements the applicant, as per the EA issued, will remain financially responsible for remedying any negative environmental and health effects cause by or due to the proposed activities.

(q) The vital role of women and youth in environmental management and development must be recognised and their full participation therein must be promoted.

If applicable the role of women and youth in environmental management and development related to the proposed activities will be assessed and incorporated into EMP requirements during the assessment process.

(r) Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries,

wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure. *All sensitive, vulnerable, highly dynamic or stressed ecosystems must be identified during the assessment process and the significance of any potential impacts on these systems must be determined and appropriate prevention, or if prevention is not possible mitigation measures must be incorporated into the EMP requirements.*

SECTION E: DETAILS OF ALL THE ALTERNATIVES CONSIDERED

Note: Before completing this section, first consult this Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, 2014 (as amended), any subsequent Circulars, and guidelines available on the Department's website <http://www.westerncape.gov.za/eadp>.

The EIA Regulations, 2014 (as amended) defines "alternatives" as "in relation to a proposed activity, means different means of fulfilling the general purpose and requirements of the activity, which may include alternatives to the—

(a) property on which or location where the activity is proposed to be undertaken;

(b) type of activity to be undertaken;

(c) design or layout of the activity;

(d) technology to be used in the activity; or

(e) operational aspects of the activity;

(f) and includes the option of not implementing the activity;"

The NEMA (section 24(4)(a) and (b) of the NEMA, refers) prescribes that the procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment must, *inter alia*, with respect to every application for environmental authorisation –

- ensure that the general objectives of integrated environmental management laid down in the NEMA and the National Environmental Management Principles set out in the NEMA are taken into account; and
- include an investigation of the potential consequences or impacts of the alternatives to the activity on the environment and assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity.

The general objective of integrated environmental management (section 23 of NEMA, refers) is, *inter alia*, to "identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management" set out in the NEMA.

The identification, evaluation, consideration and comparative assessment of alternatives directly relate to the management of impacts. Related to every identified impact, alternatives, modifications or changes to the activity must be identified, evaluated, considered and comparatively considered to:

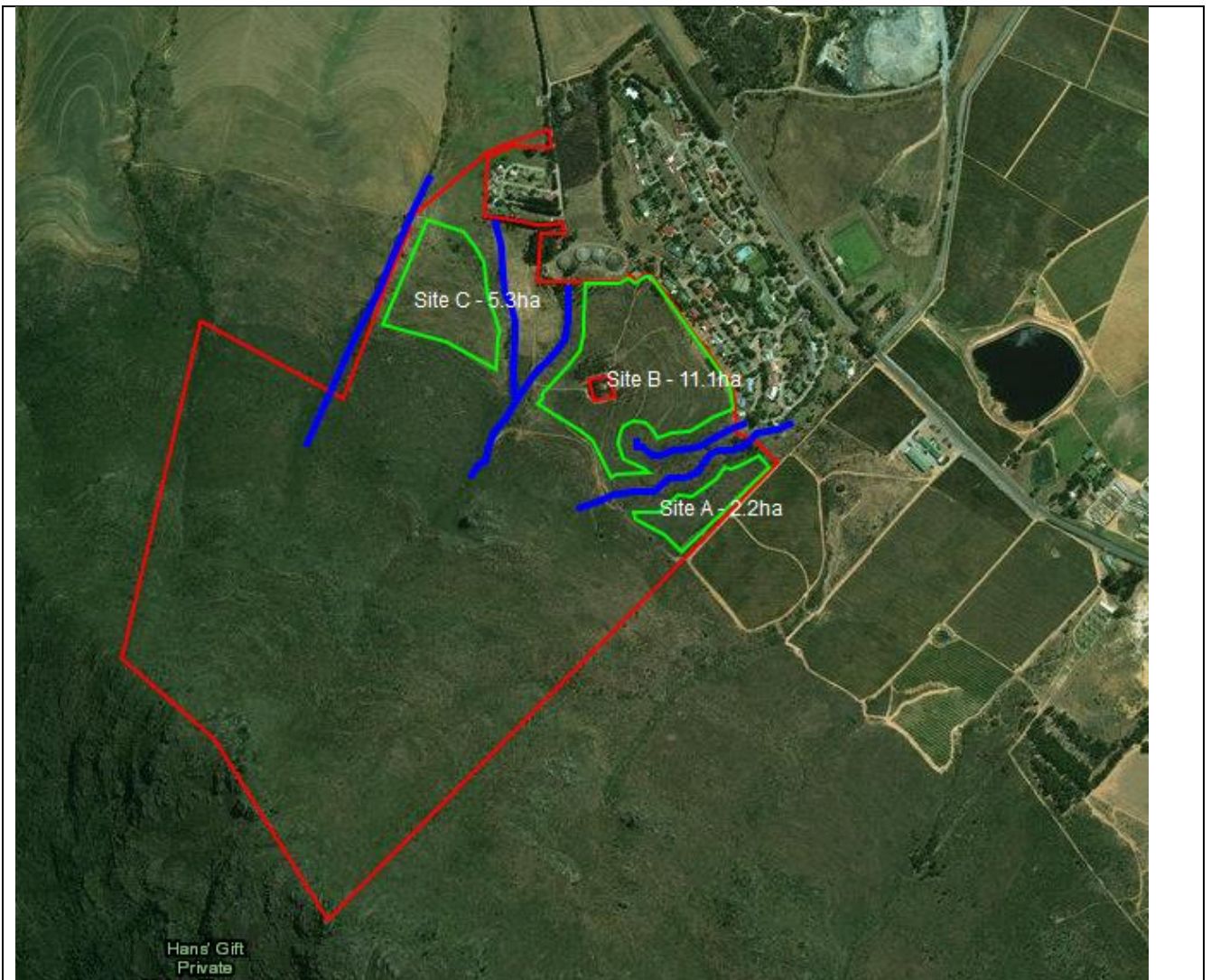
- in terms of negative impacts, firstly avoid a negative impact altogether, or if avoidance is not possible alternatives to better mitigate, manage and remediate a negative impact and to compensate for/offset any impacts that remain after mitigation and remediation; and
- in terms of positive impacts, maximise impacts.

1. DETAILS OF THE IDENTIFIED AND CONSIDERED ALTERNATIVES AND INDICATE THOSE ALTERNATIVES THAT WERE FOUND TO BE FEASIBLE AND REASONABLE

Note: A full description of the investigation of alternatives must be provided and motivation if no reasonable or feasible alternatives exists.

(a) Property and **location/site** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

The full extent of the property is indicated by the red polygon in the figure below:



The southern extent of the property is connected to the adjacent Kasteelberg, which is one of the largest areas of natural vegetation within the heavily transformed Swartland region. This southern portion of the property and its connectivity to the Kasteelberg should remain intact and not be lost to development. The northern portion of the property borders on agricultural and residential areas and are thus poorly connected to the Kasteelberg, except for areas of high conservation values such as the ESA watercourses and the terrestrial CBA located on Site A where natural vegetation still occurs.

(reference: N. Helme. 2006. Baseline Vegetation Report [Appendix K2])

Sites B and C are ideal for cultivation as they have been ploughed in the past (in excess of years ago) these areas are degraded and are not considered to be of high conservation value. Site A however is of high conservation value and the cultivation of site A would lead to the permanent loss of a portion of terrestrial CBA.

It is as a result of the environmental constraints indicated on the property that Sites A to C are proposed vegetation clearing for the purpose of cultivation.

- (b) **Activity** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

This property has been identified in the Swartland SDF for potential residential development. However the clearing of the development area for cultivation would be a more homogenous activity alternative than the development of residential erven.

As such the proposed development is considered to be the more reasonable and feasible activity for the following reasons:

- The property is zoned as Agriculture 1, and as such the primary land use for the proposed

development site would be agricultural related activities in this instance for cultivation of crops.

Activities such as residential development, industrial development, and green energy developments are not feasible for this property as it is not consistent with the existing land use of the property. The development in the form of clearing of vegetation for the cultivation of crops is the best practicable activity that should be considered as the viable and feasible option. If the property were to be declared as a private nature reserve or protected area, this would be a loss in terms of the agricultural potential that the property can offer to the economy.

- (c) **Design or layout** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

Please refer to the descriptions provided in (a) above.

Layout Alternative 1 [LA 1] (PREFERRED) ~ *Clearing of indigenous vegetation for cultivation on sites A - C with a collective development footprint of 18.6ha.*

Layout Alternative 2 - [LA 2] ~ *Clearing of indigenous vegetation for cultivation on sites B and C with a collective development footprint of 16.4ha.*

Discussion:

The layout of the proposed sites has taken into account the environmental constraints of the property excluding from the development areas of high conservation value. The development excludes the ESA watercourses (non-perennial rivers) as well as a 32m buffer implemented around the identified non-perennial rivers.

It must be noted that a terrestrial CBA is located on Site A and the development of site A would result in the permanent loss of natural indigenous vegetation considered to be of high botanical conservation value (Swartland Shale Renosterveld).

Sites B and C have a low conservation value as they have been previously ploughed (in excess of 10 years) and are considered to be degraded and disturbed.

The development of sites B and C will have a low impact however the development of Site A will have a high impact. The development of Site A is not in line with the development objectives as defined in the WCBSP 2017.

As such the preferred alternative is NOT the best environmentally practicable alternative in terms of this development proposal and it would be a better alternative to only develop sites B and C as per Layout Alternative 2.

- (d) **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, or detailed motivation if no reasonable or feasible alternatives exist:

No feasible or reasonable technological alternatives exist for the activities proposed.

- (e) **Operational** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

The EMPr has been developed taking into account all of the mitigation measures and recommendations included in the specialist study (Botanical Assessment). The EMPr will provide specific guidelines to avoid negative impacts and to mitigate any unavoidable negative impacts during the construction and operational phases of the development. The Vegetation clearing is to be done in strict adherence to the EMPr especially in terms of the demarcation of the no-go areas to protect sensitive areas (non-perennial rivers). Best practices together with the EMPr are encouraged during the operational phase of the project to avoid negative impacts associated with the activity.

The EMPr serve as guidelines for activities during construction and operational phases to minimise the activities negative impacts.

(f) The option of **not implementing** the activity (the 'No-Go' Option):

The No-Go option will result in the site remaining as is presently. The property is zoned as Agriculture, and as such the primary land use for the proposed development site would be agricultural related activities in this instance the cultivation of crops.

(g) **Other** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

No additional alternatives to avoid negative impacts were considered.

(h) Provide a **summary** of all alternatives investigated and the outcome of each investigation:

Location Alternatives - Sites B and C are ideal for cultivation as they have been ploughed in the past (in excess of years ago) these areas are degraded and are not considered to be of high conservation value. Site A however is of high conservation value and the cultivation of site A would lead to the permanent loss of a portion of terrestrial CBA.

It is as a result of the environmental constraints indicated on the property that Sites A to C are proposed vegetation clearing for the purpose of cultivation.

Activity Alternatives - Activities such as residential development, industrial development, and green energy developments are not feasible for this property as it is not consistent with the existing land use of the property. The development in the form of clearing of vegetation for the cultivation of crops is the best practicable activity that should be considered as the viable and feasible option. If the property were to be declared as a private nature reserve or protected area, this would be a loss in terms of the agricultural potential that the property can offer to the economy.

Layout Alternatives - Layout Alternative 1 [LA 1] (PREFERRED) ~ Clearing of indigenous vegetation for cultivation on sites A - C with a collective development footprint of 18.6ha.

Layout Alternative 2 - [LA 2] ~ Clearing of indigenous vegetation for cultivation on sites B and C with a collective development footprint of 16.4ha.

Discussion:

The layout of the proposed sites has taken into account the environmental constraints of the property excluding from the development areas of high conservation value. The development excludes the ESA watercourses (non-perennial rivers) as well as a 32m buffer implemented around the identified non-perennial rivers.

It must be noted that a terrestrial CBA is located on Site A and the development of site A would result in the permanent loss of natural indigenous vegetation considered to be of high botanical conservation value (Swartland Shale Renosterveld).

Sites B and C have a low conservation value as they have been previously ploughed (in excess of 10 years) and are considered to be degraded and disturbed.

The development of sites B and C will have a low impact however the development of Site A will have a high impact. The development of Site A is not in line with the development objectives as defined in the WCBSP 2017.

As such the preferred alternative is NOT the best environmentally practicable alternative in terms of this development proposal and it would be a better alternative to only develop sites B and C as per Layout Alternative 2.

Technology Alternatives - No feasible or reasonable technological alternatives exist for the activities proposed.

Operational Alternatives - The EMPr has been developed taking into account all of the mitigation measures and recommendations included in the specialist study (Botanical Assessment). The EMPr

will provide specific guidelines to avoid negative impacts and to mitigate any unavoidable negative impacts during the construction and operational phases of the development. The Vegetation clearing is to be done in strict adherence to the EMPr especially in terms of the demarcation of the no-go areas to protect sensitive areas (non-perennial rivers). Best practices together with the EMPr are encouraged during the operational phase of the project to avoid negative impacts associated with the activity.

The EMPr serve as guidelines for activities during construction and operational phases to minimise the activities negative impacts.

The No-Go Option - The No-Go option will result in the site remaining as is presently. The property is zoned as Agriculture, and as such the primary land use for the proposed development site would be agricultural related activities in this instance the cultivation of crops.

- (i) Provide a detailed **motivation for not further considering** the alternatives that were found not feasible and reasonable, including a description and proof of the investigation of those alternatives:

The proposed development is considered to be the better environmentally practicable and feasible activity for the following reasons:

- The property is zoned as Agriculture, and as such the primary land use for the proposed development site would be agricultural related activities in this instance for cultivation of crops.
- This property has been identified in the Swartland SDF for potential residential development. However the clearing of the development area for cultivation would be a more homogenous activity alternative than the development of residential erven. The development of cultivated land will contribute to agricultural sector through the protection and development of agricultural land.
- The layout of the proposed sites has taken into account the environmental constraints of the property excluding from the development areas of high conservation value. The development excludes the ESA watercourses (non-perennial rivers) as well as a 32m buffer implemented around the identified non-perennial rivers.
- It must be noted that a terrestrial CBA is located on Site A and the development of site A would result in the permanent loss of natural indigenous vegetation considered to be of high botanical conservation value (Swartland Shale Renosterveld).
- Sites B and C have a low conservation value as they have been previously ploughed (in excess of 10 years) and are considered to be degraded and disturbed.
- The development of sites B and C will have a low impact however the development of Site A will have a high impact. The development of Site A is not in line with the development objectives as defined in the WCBSP 2017.

2. PREFERRED ALTERNATIVE

- (a) Provide a **concluding statement** indicating the preferred alternative(s), including preferred location, site, activity and technology for the development.

The preferred alternatives have been informed by the natural landscape features, sensitive environmental features adjacent to the development areas and specialist inputs and recommendations. Cognisance of the need and desirability as manifested in the Swartland Municipality IDP and SDF has been assessed and forms part of the driving factors for the proposed development.

The preferred alternative is the clearing of vegetation on Sites A – C as indicated by the Site Development Plan in Appendix B.

The layout of the proposed sites has taken into account the environmental constraints of the property excluding from the development areas of high conservation value. The development excludes the ESA watercourses (non-perennial rivers) as well as a 32m buffer implemented around

the identified non-perennial rivers.

It must be noted that a terrestrial CBA is located on Site A and the development of site A would result in the permanent loss of natural indigenous vegetation is considered to be of high botanical conservation value (Swartland Shale Renosterveld).

Sites B and C have a low conservation value as they have been previously ploughed (in excess of 10 years) and are considered to be degraded and disturbed.

The development of sites B and C will have a low impact however the development of Site A will have a high impact. The development of Site A is not in line with the development objectives as defined in the WCBSP 2017.

SECTION F: ENVIRONMENTAL ASPECTS ASSOCIATED WITH THE ALTERNATIVES

Note: The information in this section must be DUPLICATED for all the feasible and reasonable ALTERNATIVES.

1. DESCRIBE THE ENVIRONMENTAL ASPECTS ASSOCIATED WITH THE PROPOSED DEVELOPMENT AND ITS ALTERNATIVES, FOCUSING ON THE FOLLOWING:

(a) Geographical, geological and physical aspects:

The proposed action will not have a significant adverse cumulative effect on topography, slopes, and soils, if construction and operational mitigation measures are implemented and maintained.

(b) Ecological aspects:

Will the proposed development and its alternatives have an impact on CBAs or ESAs? If yes, please explain: Also include a description of how the proposed development will influence the quantitative values (hectares/percentage) of the categories on the CBA/ESA map.	YES	NO
86% of Site A and 1.4% of Site B is classified as Terrestrial CBAs. This equates to 11% of the proposed 18.6ha development area is classified as CBAs and will be lost as a result of the proposed activities. None of the ESAs will be impacted upon by the proposed development.		
Will the proposed development and its alternatives have an impact on terrestrial vegetation, or aquatic ecosystems (wetlands, estuaries or the coastline)? If yes, please explain:	YES	NO
The property falls within a region that is likely to consist of Swartland Shale Renosterveld (critically endangered). <u>Site A</u> Only Site A is likely to have remnants of this vegetation type as it is relatively undisturbed and only moderately impacted on by alien vegetation. The vegetation on Site A is considered to be of high botanical conservation value (Swartland Shale Renosterveld). <u>Sites B to C</u> The vegetation on sites B and C have been previously ploughed (in excess of 10 years) and are considered to have a low botanical conservation value, with low rehabilitation potential due to the lack of vegetation in the immediate area, and a long history of ploughing and grazing. The fields have been fallow for a number of years. Refer to Nick Helme's report in Appendix K2.		
Will the proposed development and its alternatives have an impact on any populations of threatened plant or animal species, and/or on any habitat that may contain a unique signature of plant or animal species? If yes, please explain:	YES	NO

The property falls within a region that is likely to consist of Swartland Shale Renosterveld (critically endangered).

Site A

Only Site A is likely to have remnants of this vegetation type as it is relatively undisturbed and only moderately impacted on by alien vegetation. The vegetation on Site A is considered to be of high botanical conservation value (Swartland Shale Renosterveld).

Refer to Nick Helme's report in Appendix K2.

Describe the manner in which any other biological aspects will be impacted:

Should Site A be developed it will result in the loss of Critical Biodiversity considered to be of high botanical conservation value.

Will the proposed development also trigger section 63 of the NEM: ICMA?	YES	NO
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If yes, describe the following:

- (i) the extent to which the applicant has in the past complied with similar authorisations;
- (ii) whether coastal public property, the coastal protection zone or coastal access land will be affected, and if so, the extent to which the proposed development proposal or listed activity is consistent with the purpose for establishing and protecting those areas;
- (iii) the estuarine management plans, coastal management programmes, coastal management lines and coastal management objectives applicable in the area;
- (iv) the likely socio-economic impact if the listed activity is authorised or is not authorised;
- (v) the likely impact of coastal environmental processes on the proposed development;
- (vi) whether the development proposal or listed activity—
 - (a) is situated within coastal public property and is inconsistent with the objective of conserving and enhancing coastal public property for the benefit of current and future generations;
 - (b) is situated within the coastal protection zone and is inconsistent with the purpose for which a coastal protection zone is established as set out in section 17 of NEM: ICMA;
 - (c) is situated within coastal access land and is inconsistent with the purpose for which coastal access land is designated as set out in section 18 of NEM: ICMA;
 - (d) is likely to cause irreversible or long-lasting adverse effects to any aspect of the coastal environment that cannot satisfactorily be mitigated;
 - (e) is likely to be significantly damaged or prejudiced by dynamic coastal processes;
 - (f) would substantially prejudice the achievement of any coastal management objective; or
 - (g) would be contrary to the interests of the whole community;
- (vii) whether the very nature of the proposed activity or development requires it to be located within coastal public property, the coastal protection zone or coastal access land;
- (viii) whether the proposed development will provide important services to the public when using coastal public property, the coastal protection zone, coastal access land or a coastal protected area; and
- (ix) the objects of NEM: ICMA, where applicable.

NA

(c) Social and Economic aspects:

What is the expected capital value of the project on completion?	unknown
What is the expected yearly income or contribution to the economy that will be generated by or as a result of the project?	unknown
Will the project contribute to service infrastructure?	YES NO
Is the project a public amenity?	YES NO
How many new employment opportunities will be created during the development phase?	unknown
What is the expected value of the employment opportunities during the development phase?	unknown
What percentage of this will accrue to previously disadvantaged individuals?	100%
How will this be ensured and monitored (please explain):	
NA	
How many permanent new employment opportunities will be created during the operational phase of the project?	unknown
What is the expected current value of the employment opportunities during the first 10 years?	unknown
What percentage of this will accrue to previously disadvantaged individuals?	100%
How will this be ensured and monitored (please explain):	
Any other information related to the manner in which the socio-economic aspects will be impacted:	
The applicant makes a contribution to socio-economic development, by facilitating the following benefits:	

- i. Employment creation;
- ii. Economic empowerment of employees;
- iii. Training and skills development.

Primary and secondary job (both long term and short terms may be created by the proposed development). Employees will see a socio-economic benefit in the form of access to salaries and the concomitant economic empowerment. This will result in the upskilling of non-skilled or semi-skilled workers in the local community.

(d) Heritage and Cultural aspects:

Notice of Intent to Develop has been submitted to Heritage Western Cape to determine impacts and specialist studies required in terms of cultural and historical aspects potentially to be impacted upon. HWC has comment:

"You are hereby notified that since there is no reason to believe that the proposed clearing of the indigenous vegetation on Erf 1929, Riebeek West will not impact on heritage resources, no further action under section 38 of the National Heritage Resources Act (act 25 of 1999) is required. However, should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the excavation of the activities above, all works must be stopped immediately and Heritage Western cape must be notified without delay."

2. WASTE AND EMISSIONS

(a) Waste (including effluent) management

Will the development proposal produce waste (including rubble) during the development phase?	YES	NO
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type?	Unknown m ³	
All non-recyclable waste will be removed from site to a licensed landfill site. Waste that can be recycled will be used where possible. Cleared vegetation must be chipped where necessary and composted. Cleared vegetation can be left in heaps in order to become compost that can be worked into the cleared cultivated lands, it can be spread area but may not be burned.		

Will the development proposal produce waste during its operational phase?	YES	NO
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type?	m ³	
NA		

Will the development proposal require waste to be treated / disposed of on site?	YES	NO
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type per phase of the proposed development to be treated/disposed of?	m ³	
NA		
If no, where and how will the waste be treated / disposed of? Please explain. Indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type per phase of the proposed development to be treated/disposed of?	m ³	
NA		

Has the municipality or relevant authority confirmed that sufficient capacity exists for treating / disposing of the waste to be generated by the development proposal? If yes, provide written confirmation from the municipality or relevant authority.	YES	NO
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Will the development proposal produce waste that will be treated and/or disposed of at another facility other than into a municipal waste stream?	YES	NO
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If yes, has this facility confirmed that sufficient capacity exists for treating / disposing of the waste to be generated by the development proposal? Provide written confirmation from the facility.	YES	NO
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Does the facility have an operating license? (If yes, please attach a copy of the licence.)	YES	NO
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Facility name:		
Contact person:		

Cell:	Postal address:
Telephone:	Postal code:
Fax:	E-mail:

Describe the measures that will be taken to reduce, reuse or recycle waste:
 No waste will be generated, this application is for clearing of vegetation for cultivation.

(b) Emissions into the atmosphere

Will the development proposal produce emissions that will be released into the atmosphere?	YES	NO
If yes, does this require approval in terms of relevant legislation?	YES	NO
If yes, what is the approximate volume(s) of emissions released into the atmosphere?	NA	m ³
Describe the emissions in terms of type and concentration and how these will be avoided/managed/treated/mitigated: NA		

3. WATER USE

(a) Indicate the source(s) of water for the development proposal by highlighting the appropriate box(es).

Municipal	Water board	Groundwater	River, Stream, Dam or Lake	Other	The project will not use water
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Note: Provide proof of assurance of water supply (e.g. Letter of confirmation from the municipality / water user associations, yield of borehole)

(b) If water is to be extracted from a groundwater source, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:	NA	m ³
The applicant intends to cultivate dry crops therefore no water would be required for irrigation purposes.		

(c) Does the development proposal require a water use permit / license from DWS?	YES	NO
If yes, please submit the necessary application to the DWS and attach proof thereof to this application as an Appendix.		
The property is traversed by a number of non-perennial rivers for which a 32 meter buffer has been implemented. The proposed development still falls within the Regulated Area as defined by the National Water Act. As such a water use license must be obtained from the licensing authority.		
Comment from DWS is required.		

(d) Describe the measures that will be taken to reduce water demand, and measures to reuse or recycle water:
NA

4. POWER SUPPLY

(a) Describe the source of power e.g. municipality / Eskom / renewable energy source.

NA

(b) If power supply is not available, where will power be sourced?

NA

5. ENERGY EFFICIENCY

(a) Describe the design measures, if any, that have been taken to ensure that the development proposal will be energy efficient:

NA

(b) Describe how alternative energy sources have been taken into account or been built into the design of the project, if any:

NA

6. TRANSPORT, TRAFFIC AND ACCESS

Describe the impacts in terms of transport, traffic and access.

The proposed development constitutes the cultivation of crops and will not affect the current transport, traffic and access for adjacent land users.

7. NUISANCE FACTOR (NOISE, ODOUR, etc.)

Describe the potential nuisance factor or impacts in terms of noise and odours.

The noise and odour associated with the proposed development will be like some of the adjacent land uses within the community. As such it is not expected to have a major impact on the surrounding environment and will blend in well with the current existing land uses.

Note: Include impacts that the surrounding environment will have on the proposed development.

8. OTHER

NA

SECTION G: IMPACT ASSESSMENT, IMPACT AVOIDANCE, MANAGEMENT, MITIGATION AND MONITORING MEASURES

1. METHODOLOGY USED IN DETERMINING AND RANKING ENVIRONMENTAL IMPACTS AND RISKS ASSOCIATED WITH THE ALTERNATIVES

(a) Describe the **methodology** used in determining and ranking the nature, significance consequences, extent, duration and probability of potential environmental impacts and risks associated with the proposed development and alternatives.

The assessment criteria were developed based on the Department of Environmental Affairs' Integrated Environmental Management Series guideline documents.

Criteria	Description		
Nature	a description of what causes the effect, what will be affected, and how it will be affected.		
	Type	Score	Description
Extent (E)	None (No)	1	Footprint
	Site (S)	2	On site or within 100 m of the site
	Local (L)	3	Within a 20 km radius of the centre of the site
	Regional (R)	4	Beyond a 20 km radius of the site
	National (Na)	5	Crossing provincial boundaries or on a national / land wide scale
Duration (D)	Short term (S)	1	0 – 1 years
	Short to medium (S-M)	2	2 – 5 years
	Medium term (M)	3	5 – 15 years
	Long term (L)	4	> 15 years
	Permanent (P)	5	Will not cease
Magnitude (M)	Small (S)	0	will have no effect on the environment
	Minor (Mi)	2	will not result in an impact on processes
	Low (L)	4	will cause a slight impact on processes
	Moderate (Mo)	6	processes continuing but in a modified way
	High (H)	8	processes are altered to the extent that they temporarily cease
Probability (P) the likelihood of the impact actually occurring. Probability is estimated on a scale, and a score assigned	Very improbable (VP)	1	probably will not happen
	Improbable (I)	2	some possibility, but low likelihood
	Probable (P)	3	distinct possibility
	Highly probable (HP)	4	most likely
	Definite (D)	5	impact will occur regardless of any prevention measures
Significance (S)	Determined through a synthesis of the characteristics described above: S = (E+D+M) x P Significance can be assessed as low, medium or high		
Low: < 30 points:	The impact would not have a direct influence on the decision to develop in the area		
Medium: 30 – 60 points:	The impact could influence the decision to develop in the area unless it is effectively mitigated		
High: > 60 points:	The impact must have an influence on the decision process to develop in the area		

No significance	When no impact will occur or the impact will not affect the environment		
Status	Positive (+)		Negative (-)
The degree to which the impact can be reversed	Completely reversible (R)	90-100%	The impact can be mostly to completely reversed with the implementation of the correct mitigation and rehabilitation measures.
	Partly reversible (PR)	6-89%	The impact can be partly reversed providing that mitigation measures as stipulated in the EMP are implemented and rehabilitation measures are undertaken
	Irreversible (IR)	0-5%	The impact cannot be reversed, regardless of the mitigation or rehabilitation measures taking place
The degree to which the impact may cause irreplaceable loss of resources	Resource will not be lost (R)	1	The resource will not be lost or destroyed provided that mitigation and rehabilitation measures as stipulated in the EMP are implemented
	Resource may be partly destroyed (PR)	2	Partial loss or destruction of the resources will occur even though all management and mitigation measures as stipulated in the EMP are implemented
	Resource cannot be replaced (IR)	3	The resource cannot be replaced no matter which management or mitigation measures are implemented.
The degree to which the impact can be mitigated	Completely mitigatable (CM)	1	The impact can be completely mitigated providing that all management and mitigation measures as stipulated in the EMP are implemented
	Partly mitigatable (PM)	2	The impact cannot be completely mitigated even though all management and mitigation measures as stipulated in the EMP are implemented. Implementation of these measures will provide a measure of mitigatability
	Un-mitigatable (UM)	3	The impact cannot be mitigated no matter which management or mitigation measures are implemented.

(b) Please describe any gaps in knowledge.

EAP is only knowledgeable with regards to the environmental and ecosystems aspects.

(c) Please describe the underlying assumptions.

In undertaking the investigation and compiling this report, the following has been assumed:

- The information provided by the client is accurate and unbiased;
- The scope of this investigation is to assess the direct and cumulative environmental impacts associated with the development; and
- Should the proposed project be authorised, the applicant will incorporate the recommendations and mitigation measures outlined in this BAR, the EMP and the EA into the detailed design and construction contract specifications and operational management system for the proposed project.

(d) Please describe the uncertainties.

None at this stage.

(e) Describe adequacy of the assessment methods used.

Based on the EAP's assessment information was provided to address the concerns and assess the impacts of the proposed development on the environment. Information as provided by the applicant and as collected by the EAP during site surveys etc. has been used to inform the current development proposal.

2. IDENTIFICATION, ASSESSMENT AND RANKING OF IMPACTS TO REACH THE PROPOSED ALTERNATIVES INCLUDING THE PREFERRED ALTERNATIVE WITHIN THE SITE

Note: In this section the focus is on the identified issues, impacts and risks that influenced the identification of the alternatives. This includes how aspects of the receiving environment have influenced the selection.

(a) List the identified impacts and risks for each alternative.

Alternative 1 Sites A – C (PREFERRED):	DEVELOPMENT PHASE
	<ul style="list-style-type: none"> • Soil erosion and dust (low impact prior to mitigation and low impact with mitigation) • Increase in stormwater runoff (low impact prior to mitigation and low impact with mitigation)

	<ul style="list-style-type: none"> • Loss of indigenous vegetation (high impact prior to mitigation and high impact with mitigation) • Impact on sensitive environments ESA (non-perennial rivers) (medium impact prior to mitigation and low impact with mitigation) • Increased Jobs (Low- POSITIVE) • The potential impact of the proposed development on archaeological, paleontological and heritage remains (low impact prior to mitigation and low impact with mitigation) <p><u>OPERATIONAL PHASE</u></p> <ul style="list-style-type: none"> • Soil erosion and dust (low impact prior to mitigation and low impact with mitigation) • Increase in stormwater runoff (low impact prior to mitigation and low impact with mitigation) • Impact on sensitive environments ESA (non-perennial rivers) (low impact prior to mitigation and low impact with mitigation) • Increased Jobs (Low- POSITIVE) <p><u>DECOMMISSIONING AND CLOSURE PHASE</u></p> <ul style="list-style-type: none"> • Similar to that in development (construction) phase.
Alternative 2 Sites B – C:	<p><u>DEVELOPMENT PHASE</u></p> <ul style="list-style-type: none"> • Soil erosion and dust (low impact prior to mitigation and low impact with mitigation) • Increase in stormwater runoff (low impact prior to mitigation and low impact with mitigation) • Loss of indigenous vegetation (medium impact prior to mitigation and medium impact with mitigation) • Impact on sensitive environments ESA (non-perennial rivers) (medium impact prior to mitigation and low impact with mitigation) • Increased Jobs (Low- POSITIVE) • The potential impact of the proposed development on archaeological, paleontological and heritage remains (low impact prior to mitigation and low impact with mitigation) <p><u>OPERATIONAL PHASE</u></p> <ul style="list-style-type: none"> • Soil erosion and dust (low impact prior to mitigation and low impact with mitigation) • Increase in stormwater runoff (low impact prior to mitigation and low impact with mitigation) • Impact on sensitive environments ESA (non-perennial rivers) (low impact prior to mitigation and low impact with mitigation) • Increased Jobs (Low- POSITIVE) <p><u>DECOMMISSIONING AND CLOSURE PHASE</u></p> <ul style="list-style-type: none"> • Similar to that in development (construction) phase.
No-go Alternative:	The No-Go option will result in the sites remaining as is presently.

(b) Describe the impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts can be reversed; may cause irreplaceable loss of resources; and can be avoided, managed or mitigated.

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 has to select the relevant impacts identified in blue in the table below for each alternative and repeat the table for each impact and risk).

Note: The EAP may decide to include this section as Appendix J to the BAR.

PLEASE SEE - APPENDIX J

(c) Provide a summary of the site selection matrix.

Layout Alternative 1 [LA 1] (PREFERRED) ~ Clearing of indigenous vegetation for cultivation on sites A - C with a collective development footprint of 18.6ha.

Layout Alternative 2 - [LA 2] ~ Clearing of indigenous vegetation for cultivation on sites B and C with a collective development footprint of 16.4ha.

Discussion:

The layout of the proposed sites have taken into account the environmental constraints of the property excluding from the development areas of high conservation value. The development excludes the ESA watercourses (non-perennial rivers) as well as a 32m buffer implemented around the identified non-perennial rivers.

It must be noted that a terrestrial CBA is located on Site A and the development of site A would result in the permanent loss of natural indigenous vegetation considered to be of high botanical conservation value (Swartland Shale Renosterveld).

Sites B and C have a low conservation value as they have been previously ploughed (in excess of 10 years) and are considered to be degraded and disturbed.

The development of sites B and C will have a low impact however the development of Site A will have a high impact. The development of Site A is not in line with the development objectives as defined in the WCBSP 2017.

As such the preferred alternative is NOT the best environmentally practicable alternative in terms of this development proposal and it would be a better alternative to only develop sites B and C as per Layout Alternative 2.

(d) Outcome of the site selection matrix.

Layout Alternative 2 - [LA 2] ~ Clearing of indigenous vegetation for cultivation on sites B and C with a collective development footprint of 16.4ha.

In terms of this development proposal and it would be a better alternative to only develop sites B and C as per Layout Alternative 2. This alternative will have the least negative impact on the environment.

3. SPECIALIST INPUTS/STUDIES, FINDINGS AND RECOMMENDATIONS

Note: Specialist inputs/studies must be attached to this report as **Appendix G** and must comply with the content requirements set out in Appendix 6 of the EIA Regulations, 2014 (as amended). Also take into account the Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, 2014, any subsequent Circulars, and guidelines available on the Department's website (<http://www.westerncape.gov.za/eadp>).

Provide a summary of the findings and impact management measures identified in any specialist report and an indication of how these findings and recommendations have been included in the BAR.

No Specialist reports have been compiled in terms of this application at this stage.

4. ENVIRONMENTAL IMPACT STATEMENT

Provide an environmental impact statement of the following:

(i) A summary of the key findings of the EIA.

Positive:

- Employment opportunities (construction and operational)

Negative:

- Soil erosion and dust
- Increase in stormwater runoff
- Loss of indigenous vegetation
- Impact on sensitive environments (non-perennial rivers)
- Impact of the proposed development on archaeological, paleontological and heritage remains

The No-Go option will result in the site remaining as is presently.

(ii) Has a map of appropriate scale been provided, 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 buffers?	YES	NO
(iii) A summary of the positive and negative impacts that the proposed development and alternatives will cause in the environment and community.		

ALTERNATIVE 1 (PREFERRED)

DEVELOPMENT PHASE

- Soil erosion and dust (**low impact prior to mitigation and low impact with mitigation**)
- Increase in stormwater runoff (**low impact prior to mitigation and low impact with mitigation**)
- Loss of indigenous vegetation (**high impact prior to mitigation and high impact with mitigation**)
- Impact on sensitive environments ESA (non-perennial rivers) (**medium impact prior to mitigation and low impact with mitigation**)
- Increased Jobs (**Low- POSITIVE**)
- The potential impact of the proposed development on archaeological, paleontological and heritage remains (**low impact prior to mitigation and low impact with mitigation**)

OPERATIONAL PHASE

- Soil erosion and dust (**low impact prior to mitigation and low impact with mitigation**)
- Increase in stormwater runoff (**low impact prior to mitigation and low impact with mitigation**)
- Impact on sensitive environments ESA (non-perennial rivers) (**low impact prior to mitigation and low impact with mitigation**)
- Increased Jobs (**Low- POSITIVE**)

DECOMMISSIONING AND CLOSURE PHASE

Similar to that in development (construction) phase.

ALTERNATIVE 2

DEVELOPMENT PHASE

- Soil erosion and dust (**low impact prior to mitigation and low impact with mitigation**)
- Increase in stormwater runoff (**low impact prior to mitigation and low impact with mitigation**)
- Loss of indigenous vegetation (**medium impact prior to mitigation and medium impact with mitigation**)
- Impact on sensitive environments ESA (non-perennial rivers) (**medium impact prior to mitigation and low impact with mitigation**)
- Increased Jobs (**Low- POSITIVE**)
- The potential impact of the proposed development on archaeological, paleontological and heritage remains (**low impact prior to mitigation and low impact with mitigation**)

OPERATIONAL PHASE

- Soil erosion and dust (**low impact prior to mitigation and low impact with mitigation**)
- Increase in stormwater runoff (**low impact prior to mitigation and low impact with mitigation**)
- Impact on sensitive environments ESA (non-perennial rivers) (**low impact prior to mitigation and low impact with mitigation**)
- Increased Jobs (**Low- POSITIVE**)

DECOMMISSIONING AND CLOSURE PHASE

Similar to that in development (construction) phase.

5. IMPACT MANAGEMENT, MITIGATION AND MONITORING MEASURES

- (a) Based on the assessment, describe the impact management, mitigation and monitoring measures as well as the impact management objectives and impact management outcomes included in the EMPr. The EMPr must be attached to this report as Appendix H.

The key mitigation measure is impact avoidance. Where adverse impacts cannot reasonably be prevented, construction should be managed through the effective implementation of the Construction EMPr with a strong emphasis on post-construction rehabilitation. Please refer to the EMPr for more details on the mitigation and management measures.

- (b) Describe any provisions for the adherence to requirements that are prescribed in a Specific Environmental Management Act relevant to the listed activity or specified activity in question.

Also note that the following activities trigger water uses in terms of the National Water Act, 1998 (Act 36 of 1998):

1. Section 21. C and I. Impeding and diverting the flow of water from a watercourse.

Comment from DWS is required.

- (c) Describe the ability of the applicant to implement the management, mitigation and monitoring measures.

The applicant is ultimately responsible for the implementation of the EMPr and the financial cost of all environmental control measures. In accordance with the requirements of the EMPr, the applicant must ensure that any person acting on their behalf complies with the conditions / specifications contained in this EMPr. In addition, an Environmental Control Officer would be appointed as the on-site implementing agent and would have the responsibility to ensure that their responsibilities are executed in compliance with the EMPr. Thus, the applicant has the ability to implement the recommended management, mitigation, and monitoring measures, as appropriate.

- (d) Provide the details of any financial provisions for the management of negative environmental impacts, rehabilitation and closure of the proposed development.

Not applicable.

- (e) Provide the details of any financial provisions for the management of negative environmental impacts, rehabilitation and closure of the proposed development.

Not applicable.

- (f) Describe any assumptions, uncertainties, and gaps in knowledge which relate to the impact management, mitigation and monitoring measures proposed.

EAP is only knowledgeable with regards to the environmental impacts, biodiversity and ecosystems aspects.

In undertaking the investigation and compiling this report, the following has been assumed:

- The information provided by the client is accurate and unbiased;
- The scope of this investigation is to assess the direct and cumulative environmental impacts associated with the development; and
- Should the proposed project be authorised, the applicant will incorporate the recommendations and mitigation measures outlined in this BAR, the EMP and the EA into the detailed design and construction contract specifications and operational management system for the proposed project.

SECTION H: RECOMMENDATIONS OF THE EAP AND SPECIALISTS

(a) In my view as the appointed EAP, the information contained in this BAR and the documentation attached hereto is sufficient to make a decision in respect of the listed activity(ies) applied for.	YES	NO
(b) If the documentation attached hereto is sufficient to make a decision, please indicate below whether, in your opinion, the listed activity(ies) should or should not be authorised:		
Listed activity(ies) should be authorised:	YES	NO
Provide reasons for your opinion		
<p>All possible impacts on the environment have been assessed and the outcome of the assessment has led to Alternative 2 being the better environmental practicable situation for the proposed development as opposed to Alternative 1 (PREFERRED).</p> <p>The development of the Preferred alternative (Alternative 1) will result in the overall development having a high negative impact on the environment, opposed to the development of Alternative 2 which will have a low negative impact on the environment.</p>		
(c) Provide a description of any aspects that were conditional to the findings of the assessment by the EAP and Specialists which are to be included as conditions of authorisation.		
<ul style="list-style-type: none"> • The relevant water use licence must be obtained from the department of water and sanitation. • The monitoring and management requirements that will be captured in the Water Use Authorization issued by the Department of Water and Sanitation to protect water resource. <p><i>Construction phase:</i></p> <ul style="list-style-type: none"> • Construction activities must be controlled and restricted to the development footprint only. • The construction area and all proposed no-go areas must be demarcated before construction starts and remain demarcated throughout construction phase. • The construction activities must be monitored by an Environmental Control Officer. • All disturbed areas should receive ongoing monitoring and management of erosion and invasive plant growth. • Construction work must be carried out in the low rainfall season (mid to late summer) and completed in that low rainfall season to minimise the impact on non-perennial rivers. • Access to roads and other areas must be controlled to avoid disturbance of areas outside the development footprint. Personnel should be restricted to the immediate construction areas only. • Monitor construction areas frequently for signs of erosion and if signs of erosion are detected implement repair and preventative measures immediately. • Care should be taken that any soil used for construction or cultivation establishment purposes that is brought onto the site does not contain the seeds of alien invasive plants. • Ablution facilities should be available for construction workers, should be located outside the non-perennial rivers and buffer zones and should be regularly serviced. • Proper on-site management for the storage and use of materials waste and pesticides/weed killers to prevent any potential pollution of the non-perennial rivers should be addressed in the Environmental Management Plan for the project. <p><i>Operational phase:</i></p> <ul style="list-style-type: none"> • All no-go areas must remain demarcated throughout the operational phase. Demarcation must be by means of basic fence i.e. standard wooden droppers with 1 to 2 wire strands. • Should any disturbance i.e. erosion occur within the no-go areas / buffer areas the affected areas should immediately be rehabilitated, and prevention measures must be put in place to ensure that the disturbance does not happen again. • All alien invasive plant species must be removed and managed on an ongoing basis from the no-go areas. Removal of alien invasive plant species must take place according to CapeNature approved methods, having the least negative impact on the environment. • Only use one existing access road to the sites for operational purposes and avoid disturbance of "new" areas outside the existing access road and infrastructure footprint. • Rehabilitate or stabilise eroded areas immediately to prevent increase in erosion. • Fertilisers used within the proposed cultivated lands must not contain any weed or alien invasive plant species seeds. • Ablution facilities should be available for operational workers, should be located outside the non-perennial rivers and buffer areas and should be regularly serviced. 		

- Proper on-site management for the storage and use of materials waste and pesticides/weed killers to prevent any potential pollution of the non-perennial rivers should be addressed in the Environmental Management Plan for the project.

These measures should be addressed, implemented and monitored in terms of the EMPr for the construction and operational phases.

(d) If you are of the opinion that the activity should be authorised, please provide any conditions, including mitigation measures that should in your view be considered for inclusion in an environmental authorisation.

Recommended that the EA prescribe that:

- Should any heritage artefacts be exposed during construction that all activities be stopped, and Heritage Western Cape contacted before any further action being permitted.
- The project implementation process should be subject to standard Environmental Management Programme prescripts and conditions under supervision of a competent and diligent ECO, during its construction and decommissioning phases.
- Independent auditing, monitoring and verification by a competent external environmental auditor during operations must be conducted at regular intervals to ensure compliance with the approved EA, EMPr, and Water Use Authorisation.

(e) Please indicate the recommended periods in terms of the following periods that should be specified in the environmental authorisation:

i.	the period within which commencement must occur;	5 years
ii.	the period for which the environmental authorisation is granted and the date on which the development proposal will have been concluded, where the environmental authorisation does not include operational aspects;	10 years
iii.	the period for which the portion of the environmental authorisation that deals with non-operational aspects is granted; and	10 years
iv.	the period for which the portion of the environmental authorisation that deals with operational aspects is granted.	Unlimited

SECTION I: APPENDICES

The following appendices must be attached to this report:

APPENDIX		Confirm that Appendix is attached
Appendix A:	Locality map	X
Appendix B:	Site development plan(s)	X
	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;	X
Appendix C:	Photographs	X
Appendix D:	Biodiversity overlay map	X
Appendix E:	Permit(s) / license(s) from any other Organ of State, including service letters from the municipality.	NA
	Appendix E1: HWC RoD	X
Appendix F:	Public participation information: including a copy of the register of I&APs, the comments and responses report, proof of notices, advertisements and any other public participation information as is required in Section C above.	X
Appendix G:	Specialist Report(s)	NA
Appendix H :	EMPr	X
Appendix I:	Additional information related to listed waste management activities (if applicable)	NA
Appendix J:	If applicable, description of the impact assessment process followed to reach the proposed preferred alternative within the site.	X
Appendix K:	Appendix K1: EAP CV Appendix K2: Baseline Botanical Assessment, 2006. N. Helme.	X

SECTION J: DECLARATIONS TO BE PROVIDED IN THE FINAL BAR