



24G APPLICATION FORM & ASSESSMENT

for
KELLERSHOOGTE FARM

on
A portion of Portion 4 of Farm 172 Kellershoogte
In terms of the

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

Prepared for Applicant: Mooiplaas Trust

Date: 14 February 2024

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PURPOSE OF THIS REPORT:

SECTION 24G Application & Impact Assessment

APPLICANT:

Mooiplaas Trust

CAPE EAPRAC REFERENCE NO:

0UD670/03

SUBMISSION DATE

14 February 2024

SECTION 24G APPLICATION FORM & ASSESSMENT

in terms of the

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

Kellershoogte Farm

A portion of Portion 4 of Farm 172 (Kellershoogte)

Submitted for:

Stakeholder Review & Comment

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IMPORTANT: Kindly ensure that this checklist is completed and attached to the NEMA SECTION 24G Application.

Please indicate by ticking the following below to serve as confirmation that the required information has been included in the application.

No.	Application Requirements	Please tick for confirmation	
1.	Requirements of Preliminary Advertisement (pre-application public participation requirements including register of all I&APs), in accordance with Annexure A, Section D of the Section 24G Fine Regulations. (Note: Failure to meet the Regulation 8 will result in rejection of the application)	✓	
2.	Application form has been completed and attached, which includes among others:		
	2.1. A list of all listed activities and/or waste management activities that was triggered when the development activity was commenced with.	✓	
	2.2. A list of all similarly listed activities in terms of the current EIA regulations (if applicable).	✓	
	2.3. A description of the receiving environment before commences of the activity(ies).	✓	
	2.4. A description of the receiving environment after commences of the activity(ies).	✓	
	2.5. All appendices and annexures:	✓	
	2.5.1. Locality map	✓	
	2.5.2. Site plans or/and Layout plan	✓	
	2.5.3. Building plans (if applicable)	N/A	
	2.5.4. Colour photographs	✓	
	2.5.5. Biodiversity overlay map	✓	
	2.5.6. Permit(s) / license(s) from any other organ of state including service letters from the municipality	✓	
	2.5.7. Public participation information: including a copy of the register of interested and affected parties, the comments and responses report, proof of notices, advertisements, Land owner consent and any other public participation information	✓	
	2.5.8. Environmental Management Programme	✓	
2.5.9. Certified copy of Identity Document of Applicant	This is not available to the public in terms of POPI Act		
2.5.10. Certified copy of the title deed (or title deeds in the case of linear activities)			
2.6. Signed declaration forms.	✓		
3.	Are any specialist assessments required: e.g. Botanical, Hydro-geological, soil, socio-economic?	YES	NO
	3.1. If yes, has the specialist assessment report been attached to the application?	✓	
4.	An assessment of the impacts of the activity or activities in terms of the following categories:		
	• Socio-economic	✓	
	• Biodiversity	✓	
	• Sense of place &/or Heritage/ Cultural	✓	
	• Any pollution or environmental degradation which has been, is being, is being or may be caused	N/A	
5.	A methodology of how the investigation into the impacts associated with the unlawful activity was undertaken.	✓	
6.	Completed and attached representations of Annexure A, Section A (Directives) in terms of the S24G Fine Regulations: Information/ Representation submitted in terms of any Directives the Minister/ decision maker may issue in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA) s24G(1)(b)(i)-(viii).	✓	
7.	Completed and attached representations in terms of Annexure A, Section B (Deferral) of the S24G Fine Regulations.	✓	

8.	Completed and attached representations in terms of Annexure A, Section C, Part 1 (Fine Quantum based on the assessment as specified above (4).	✓
	Confirmation that Annexure A, Section C, Part 1 has been completed by an environmental assessment practitioner (EAP)	✓
9.	Compliance history of the applicant:	
	9.1. Completed Annexure A, Section C, Part 2 and 3; namely:	✓
	9.1.1. Whether or not administrative enforcement notices, including pre -notices where appropriate, have previously been issued to the applicant in respect of a contravention of section 24F(1) of the NEMA and/or section 20(b) of the National Environmental Management: Waste Act (Act 59 of 2008) (NEM: WA).	✓
	9.1.2. Whether or not the applicant has previously been convicted in respect of a contravention of section 24F(1) of the Act and /or section 20(b) of the NEM: WA;	✓
	9.1.3. Whether or not the applicant has previously submitted a section 24G application in respect of an activity or activities which commenced prior to the activity or activities that are the subject of the current application; and	✓
	9.1.4. Whether the applicant is a firm or a natural person. (see Section 24G Fine Regulations for definition of "firm")	✓
	9.2. Provided information or whether or not any of the directors of the applicant firm are, or were, at the relevant time, directors of a firm to whom the above (9.1.1. - 9.1.3.) applies;	✓
	9.3. Advise on whether an applicant who is a natural person is, or was, at the relevant time a director of a firm to whom the above (9.1.1.- 9.1.3.) may apply.	✓
10.	Consultation with relevant State departments in terms of section 24O(2) & 24O(3) of the NEMA.	✓
	10.1 Proof of Consultation with relevant State departments, including, <i>inter alia</i> , notices, adverts etc.	
	10.2 Copies of comments and responses included in the application. Note that original submissions are excluded from the documents made available for public review and comment ito the POPIA – submissions are however included with the documentation submitted to the Competent Authority.	
	10.2 Comments and Response report attached to the application (not included in copy for public review ito POPIA requirements)	
11.	Public Participation Process undertaken in terms of Chapter 6 of the Environmental Impact Assessment Regulations, 2014 ("EIA Regulations, 2014") (GN No. R.326 of 7 April 2017)	

Section 24G Application Form for the consequences of unlawful commencement of listed activity/ies in terms of the:

- **National Environmental Management Act, 1998 (Act No. 107 of 1998), (“NEMA”);**
- **National Environmental Management: Waste Act, 2008 (Act 59 of 2008) (“NEM: WA”)**

OCTOBER 2022

Form Number S24GAF/10/2022

Kindly note that:

1. This application must be submitted where a person has commenced with a listed or specified activity without an environmental authorisation in contravention of section 24F(1) of NEMA (i.e. where the person commenced with an activity listed or specified in terms of section 24(2) (a) or (b) of NEMA - the activities contained in the EIA Listing Notices) or has commenced, undertaken or conducted a waste management activity without a waste management licence in terms of section 20 (b) of the NEM:WA.
2. This **Application Form** must be completed for all section 24G applications, by an Independent and Registered Environmental Assessment Practitioner (“EAP”).
3. This Application Form is current as of 10 October 2022. It is the responsibility of the Applicant/EAP to ascertain whether subsequent versions of the Application Form have been published or produced by the competent authority. Note that this Application Form replaces all the previous versions. This updated Application Form must be used for all new applications submitted from 10 October 2022.
4. **The contents of this Application Form include the following:**
 - PART 1 -**
 - Section A: Background Information**
 - Section B: Activity Information**
 - Section C: Description of Receiving Environment**
 - Section D: Need and Desirability**
 - Section E: Alternatives**
 - Section F: Impact Assessment, Management, Mitigation and Monitoring Measures**
 - Section G: Assessment Methodologies and Criteria, Gaps in Knowledge, underlying Assumptions and Uncertainties**
 - Section H: Recommendations of the EAP**
 - Section I: Representations - Response to an Incident or Emergency Situation**
 - Section J: Public Participation Process**
 - PART 2 –**
 - ANNEXURE A of Fine Regulations**
 - Section A: Directives**
 - Section B: Deferral of the Application**
 - Section C: Quantum of the section 24G fine**
 - Section D: Preliminary advertisement**
 - PART 3 –**
 - Appendices and Declarations**
 - PART 4 –**
 - ANNEXURE B: Waste Management Activity Supporting Information (if relevant)**
5. An **Independent and Registered EAP** must be appointed to complete the required sections (in terms of NEMA and its Regulations) of the Application Form on behalf of the applicant; the declaration of independence must be completed by the independent EAP and submitted with this Application Form. If a specialist report is required, the specialist will also be required to complete the declaration of independence. **Copies of the EAPS and Specialists Registration Certificates be submitted with this application.**

6. Two hard copies (including the original) and one electronic copy (CD/DVD/Flash drive) of this application form must be submitted. Email copies to be submitted
7. The required information must be typed within the spaces provided. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. The space provided extend as each space is filled with typing. **A legible font type and size must be used when completing the form.** A digital copy of the Application Form is available on the Department's website <https://www.westerncape.gov.za/eadp/>
8. The use of "not applicable" in the Application Form must be done with circumspection.
9. Unless protected by law, all information contained in and attached to this application will become public information on receipt by the competent authority. Please note that, unless exemption has been granted in terms of the National Exemption Regulations published under GN R994 in GG 38303 of 8 December 2014, any Interested and Affected Party should be provided with the information contained in and attached to this Application Form as well as any subsequent information submitted.
10. This Application Form must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department.

PROCESS TO BE FOLLOWED:

- a) **Prior to submission of an Application Form**, the applicant is required to undertake a pre-application public participation process in terms of Regulation 8 of the Regulations relating to the procedure to be followed and criteria to be considered when determining an appropriate fine in terms of section 24G published in the Government Gazette on 20 July 2017, Gazette No 40994, No. R. 698 ("Section 24G Fine Regulations").
- b) Together with the submission of a section 24G Application Form, the form **must include Proof of compliance of with Regulation 8** of the Section 24G Fine Regulations, including, but not limited to, proof of the pre-application advertisement in a local newspaper and register of I&APs.
- c) The Department will acknowledge receipt of the application (within 14 days) and provide the Applicant / EAP with the relevant application reference number to be used in all future correspondence and the application public participation processes.
- d) Upon receipt of the application, the MEC/Competent Authority may direct the applicant in terms of section 24G of the NEMA (as amended).
- e) After submission of the application, **consultation with organs of state in terms of section 24O of the NEMA** will be required and public participation with interested and affected parties to inform the application. Any comments received must be compiled in a Comments and Response Report.
- f) In terms of the provisions of section 24G of NEMA, the applicant must pay an administrative fine up to a maximum of R5 million before the MEC/Competent Authority decides on the application.
- g) The applicant **must within 14 days** of receipt of the determination of the quantum of the fine, ensure that all registered interested and affected parties are notified of the determination of the quantum of the fine, including the reasons and provided with access to the determination.
- h) The administrative fine **must be paid within the time period stipulated** in the determination. Failure to pay the fine within the specified period, will result in the lapse of the application and any partial amounts paid in will not be refunded.
- i) **Proof of payment of the fine must be submitted to the Department.** Upon payment of the administrative fine, the MEC/Competent Authority may-
 - refuse to issue an environmental authorisation; or
 - issue an environmental authorisation to such person to continue, conduct or undertake the activity subject to such conditions as may be deemed necessary, which environmental authorisation shall only take effect from the date on which it has been issued; or
 - direct the applicant to provide further information or take further steps prior to making a decision provided for above;
 - together with the above decision the MEC/Competent Authority may direct a person to rehabilitate the environment within such time and subject to such conditions as may deem necessary or take any other steps necessary under the circumstances.

CIRCULARS, GUIDELINES AND TOOLS:

1. The Department's latest Circulars pertaining to the "One Environmental Management System" and the EIA Regulations and guidelines must be taken into account when completing this Application Form.
2. The Screening Tool developed by the National Department of Environmental Affairs must be used to generate a screening report. Please use the Screening Tool link <https://screening.environment.gov.za/screeningtool> to generate the Screening Report. The Screening Report must be attached to this Application Form as an Appendix.

PLEASE NOTE THE FOLLOWING:

1. Failure to comply with a directive may result in the institution of appropriate legal action as is deemed necessary and as provided for in the legislation.

2. The submission of an application or the granting of an environmental authorisation shall in no way derogate from—
 - (a) the environmental management inspector's or the South African Police Services' authority to investigate any transgression in terms of NEMA or any specific environmental management Act;
 - (b) the National Prosecuting Authority's legal authority to institute any criminal prosecution.
3. If, at any stage after the submission of an application it comes to the attention of the Minister, Minister for mineral resources or MEC that the applicant is under criminal investigation for the contravention of or failure to comply with section 24F(1) or section 20(b) of the *National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)*, the Minister, Minister for mineral resources or MEC may defer a decision to issue an environmental authorisation until such time that the investigation is concluded and—
 - (a) the National Prosecuting Authority has decided not to institute prosecution in respect of such contravention or failure;
 - (b) the applicant concerned is acquitted or found not guilty after prosecution in respect of such contravention or failure has been instituted; or
 - (c) the applicant concerned has been convicted by a court of law of an offence in respect of such contravention or failure and the applicant has in respect of the conviction exhausted all the recognised legal proceedings pertaining to appeal or review.
4. A person is guilty of an offence if that person:
 - Prior to submission of a section 24G application:
 - o fails, in terms of Regulation 8(1), to place a preliminary advertisement in a local newspaper in circulation in the area in which the activity was, or activities were, commenced and on the applicant's website, if any or
 - o fails, in terms of Regulation 8(2), to comply with the advertisement requirements set out in Annexure A, section D or
 - o fails, in terms of Regulation 8(3), to open and maintain a register of interested and affected parties)); or
 - o fails, in terms of Regulation 8(4), to attach to the application form the register of interested and affected parties, which must be included in the report, or form part of the information submitted in terms of section 24G(1) of NEMA.
 - Provides incorrect, false or misleading information in any form, including in any document submitted to a competent authority in terms of the Section 24G Fine Regulations or omits information that may have an influence on the outcome of a recommendation of the fine committee or determination of the competent authority.
5. A person convicted of an offence in terms of these Regulations is liable to a fine not exceeding R5 million or to imprisonment for a period not exceeding 5 years, and in the case of a second or subsequent conviction to a fine not exceeding R10 million or to imprisonment for a period not exceeding 10 years, and in both instances to both such fine and such imprisonment.

DISCLAIMER

With regards to the Protection of Personal Information Act, 2013 (Act 4 of 2013) (POPIA), please note that all personal information is being voluntarily submitted for the purposes of your participation in this environmental application process. The information will be held by EAP on behalf of the Applicant and will be submitted to the Competent Authority for the decision on the application. Personal information may also be made available to the Appellant/s so that they may participate in the appeal process in the event that the decision on the application is appealed. Personal information may also be made available to third-party auditors so that you can be notified of future audits of the environmental decision.

DEPARTMENTAL DETAILS

The Application Form must be sent to the following details:

Western Cape Government
 Department of Environmental Affairs and Development Planning
 Attention: Directorate: Environmental Governance
 Private Bag X 9086
 Cape Town,
 8000

Registry Office
 1st Floor Utilitas Building
 1 Dorp Street,
 Cape Town

Queries should be directed to the Sub-directorate: Rectification
at:
Tel: (021) 483-5827
Fax (021) 483-4033

DEPARTMENTAL REFERENCE NUMBER(S) (for official use)

File Reference number (S24G)	
Administrative Fine Reference	

DEPARTMENTAL REFERENCE NUMBER(S) (to be completed by the EAP)

File Reference number (Enforcement), if applicable	14/1/1/E3/10/2/3/L1134/20
File reference number (S24G), if applicable:	14/2/4/2/3/D7/9/0007/24
File reference number (Waste), if applicable:	
File reference number (Other (specify)):	

View the Department's website on <http://www.westerncape.gov.za/eadp> for the latest version of the documents

PART 1

PROJECT TITLE AND GENERAL DESCRIPTION OF THE DEVELOPMENT

KELLERSHOOGTE S24G APPLICATION & IMPACT ASSESSMENT

During the first quarter of 2020 (March), the Applicant **unlawfully commenced** with activities associated with agricultural practices on a portion of **Portion 4 of Farm 172 Kellershoogte**, by installing **services/infrastructure**, as well as **preparing and converting +/-13ha natural vegetation** to orchards as part of a commercial agricultural venture.

The Applicant planned to establish +/-70ha of new orchards, however he received a Pre-Compliance Notice issued to him into the National Environmental Management Act (NEMA, Act 107 of 1998, as amended) advising that he has commenced with activities that required prior Environmental Authorisation (EA) at which point the Applicant ceased the activity of further clearing/removal of natural vegetation.

Portion 4 of the Farm Kellershoogte 172, measuring 439,7994 ha, registered to **Mooiplaas Trust**, is held under Title Deed 606/1998 and situated within the jurisdiction of the **Oudtshoorn District and Municipality, Western Cape**. The property is situated ±13km south of Oudtshoorn, ±36km north of the coastal town Great Brak River and ±7km southeast of the sprawling rural settlement, Armoed. Part of the northern cadastral boundary follows the alignment of the R328.



Figure 1: Site location in proximity to Oudtshoorn.

Installation of infrastructure (irrigation pipeline crossing a watercourse), excavation of and/or moving material within a watercourse (installation of irrigation pipeline), as well as cultivation of land that has not been lawfully transformed for a period of ten (10) years or more, require *prior* Environmental Authorisation (EA) in terms of the National Environmental Management Act (NEMA, as amended and the Environmental Regulations 2014, amended 2017).

Although previously cultivate to some extent coupled with extensive ostrich grazing in the study area, fallow/old agricultural areas not actively farmed i.e. soil disturbance, during the preceding ten (10) years, is

deemed to be 'virgin land' in terms of the Conservation of Agricultural Resources Act (CARA), whilst at the same time such areas is then also deemed 'natural vegetation' into the NEMA.

Mooiplaas Trust, hereafter referred to as the Applicant, commenced with the following activities, without the necessary prior Environmental Authorisation:

- **Underground installation of a 200mmØ water pipeline (inside a 250mmØ sleeve) over a distance of +/-1.1km** from boreholes on Portion 19/Farm 170, across Remainder Farm 172, Portion 11/170 and Portion 3/Farm 172 (**through a non-perennial tributary of the Kandelaars River**), to Portion 4/Farm 172 (disturbing approximately 563m² of habitat);
- **installation of an underground 220V 10mm² electric power cable (inside a 63mmØ sleeve) along the same route** as the water pipeline to supply electricity to the pumps and irrigation system installed for the orchards;
- the **ripping, clearing and planting** of +/-13ha orchard/vegetables in furtherance of plans to transform 70ha in the same manner (note that this area has since been reduced to +/-56ha in response to the outcome of the S24G investigation).

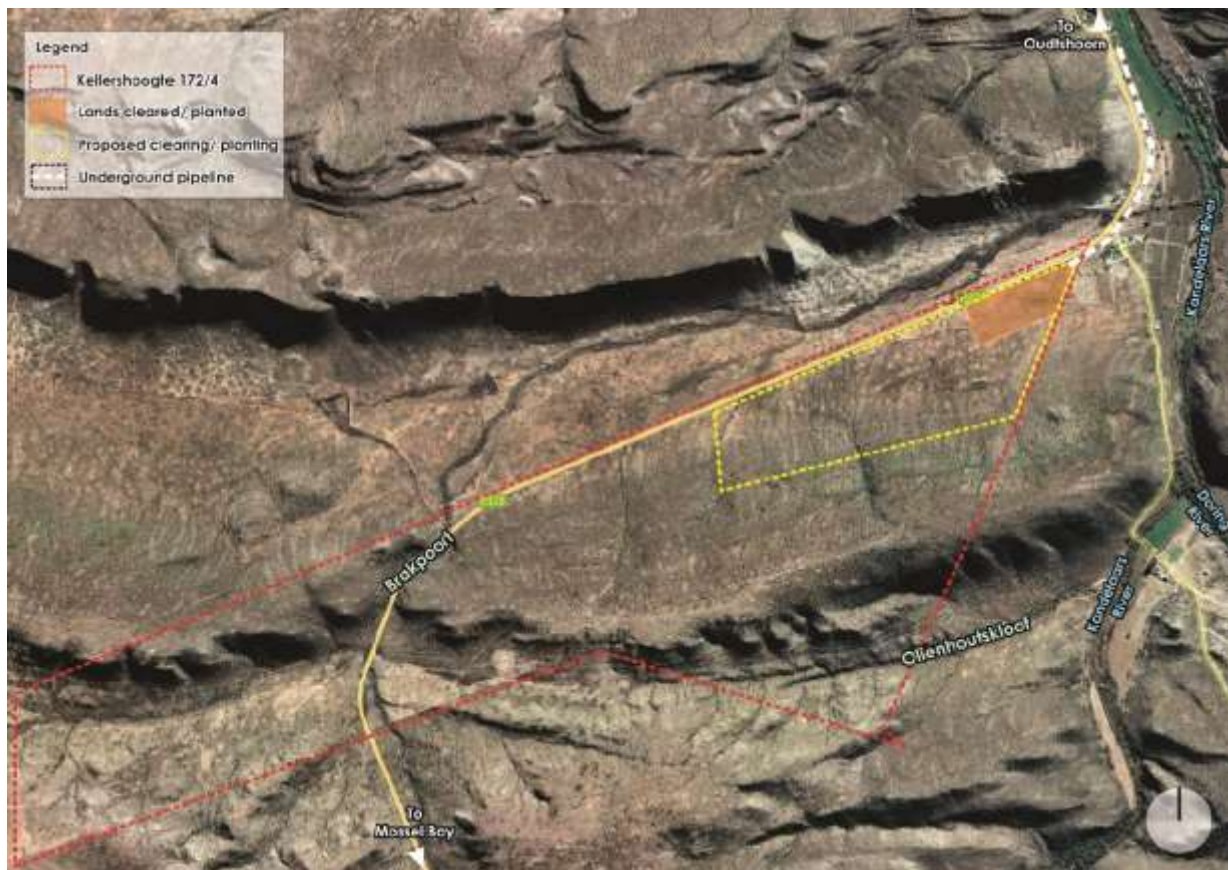


Figure 2: Site orientation map (Source: Google Earth 2020 edited by Perception Planning indicating the original 70ha in relation to the larger property boundary).

With water and electrical **services capacity installed** for approximately 70ha of orchard, it was the Applicant's intention to transform the full 70ha in a similar manner as the +/-13ha cleared without prior authorisation.

The clearing activities were reported to the Department and on 30 October 2020 and 25 January 2021 respectively, the Applicant was issued with a **Pre-Compliance Notice** and a **Compliance Notice** by the Department of Environmental Affairs & Development Planning (DEADP), informing of the unlawful commencement (**REF: 4/1/1/E3/10/2/3/L1134/20**).

Following receipt of said notices, the Applicant considered his option namely to either rehabilitation, or undertake a retrospective impact assessment by applying for the necessary environmental rights. According to "Succulent Karoo Ecosystems (M Cadman (ed) Fynbos Forum Ecosystem Guidelines for

Environmental Assessment in the Western Cape, Edition 2" (Helme, 2016) it is deducted that rehabilitation of the transformed areas is likely to have little or no biodiversity benefit in the semi-arid region of the study area, since low rainfall and sensitive soil types represent a significant limiting factor on post-disturbance ecological recovery. The Applicant halted the activity of clearance/planting and on 5 November 2020 appointed Cape EAPrac as independent environmental assessment practitioner (EAP), to facilitate the Section 24G Rectification investigation and assessment.

Following further investigation, the Breede-Olifants Catchment Management Agency (BOCMA¹) on 31 May 2021, issued a **Notice of Intention to issue a Directive** in terms of Section 53(1) of the National Water Act (NWA) for unauthorized water use activities associated with the farming project (taking water from new boreholes, as well as working with a watercourse i.e. diverting flow, altering the bed, banks, course or characteristics of a watercourse).

Confluent Consulting was subsequently appointed to apply for the necessary **Water Use License (WULA)** in support of the agricultural activities.

According to Confluent Consulting, BOCMA acknowledged the WULA on 8 November 2023 and confirmed that the WULA application is deemed complete (to enable review and decision-making) on 22 November 2023. BOCMA has 90-days to evaluate and conclude their review process in order to issue a decision. Given the specified review timeframe, it is likely that BOCMA will take their decision on the WULA prior to the S24G process concluding. This is viewed as a best practice approach since the agricultural activity applied for does rely on a lawful water source, as well as surety of supply from said water resource. Furthermore this Draft S24G will be available to the BOCMA Case Officer during the final phase of review to ensure informed decision-making.

In determining the original 70ha area for cultivation, the Applicant considered the historical wheat farming on a portion thereof, alongside extensive ostrich grazing, to be sufficient transformation to re-cultivate². The Applicant did not however consider specialist constraints mapping / zones of exclusion / buffer areas / no-go areas and all possible water uses as part of planning for the project, or the requirement for prior Environmental Authorisation.

Amongst others, key concerns associated with the activities include:

- potential impacts arising from ploughing, resulting in the **loss/transformation of vegetation/habitat**;
- potential **adverse** changes to local run-off dynamics by disrupting seasonal flows to tributaries of the Kandelaars River;
- erodible sediments may also be washed into downstream watercourses and wetlands, thereby compromising water quality and contributing to the **build-up of sediment deposits** in the Doring and Kandelaars rivers which are under pressure from farming-related pressures and infestations by indigenous reeds/invasive alien vegetation;
- the need for additional flushing of the cultivated areas (due to saline irrigation water) could potentially **increase water demand**, in addition to **water volumes used for additional irrigation** that may **impact on available water resources and farming practices** of other downstream lawful water users.

Having considered inputs received from various stakeholders and Authorities, as well as the outcome of the various specialist investigations informing the Section 24G process and WULA, several hectares (14ha) within the original 70ha area earmarked for cultivation by the Applicant, were subsequently **excluded** on account of being too steep, or deemed sensitive i.e. **cultivating the full 70ha will result in unacceptable environmental impacts**.

Thus, based on the outcome of the S24G assessment, there is **no reasonable/feasible motivation for implementation of the original 70ha cultivation area and it was not assessed further**.

Within the original 70ha footprint however, **56ha which is not affected by the identified constraints/sensitivities**, can be considered for cultivation. According to Confluent Consultants, irrigating

¹ Name changed from Breede-Gourits Catchment Management Agency to BOCMA.

² First distinguishable aerial image dating 1957 confirms the presence of two (2) dams, as well as a water furrow/canal in support of historical wheat farming within the development footprint (Source: Perception Planning heritage consultant, 2022).

the 56ha will not compromise other lawful water users and water resources, and based on specialist results, will not result in unacceptable environmental impacts.

It is for these primary reasons, that the various listed activities under consideration not only considers the clearance of vegetation (less and more than 20ha), but also that of phased development and associated infrastructure to complete the project that was initiated with the unlawful clearing.

The S24G Application is therefore undertaken for the preferred alternative, as a **reduced 56ha** (inclusive of **13ha** already cultivated/transformed in furtherance), in addition to the applicable activities under the NWA covering **water registrations** and **water uses** for new boreholes/structures/infrastructure within a watercourse.

RELEVANT REGION IN WHICH THE ACTIVITY COMMENCED

Cross out the appropriate box "☒" in which region the unlawful activity/ies has commenced.

REGION 1 City of Cape Town and West Coast District	REGION 2 Cape Winelands District and Overberg District	REGION 3 Central Karoo District and Eden District
		✓



SECTION A: BACKGROUND INFORMATION

1. APPLICANT PROFILE INDEX

Cross out the appropriate box "☒".

1.1	The applicant is a Natural Person (individual)								NO
1.2	The applicant is a Firm (i.e. any body incorporated by, or established in terms of, any law as well as any partnership, trust, parastatal or organ of state)								✓
1.2.1	If a firm, please tick the relevant box below:								
	Body Corporate		Partnership		Trust	✓	Organ of State		Parastatal
	Directors of a Company		Members of a Board		Other, please specify:				

Applicant's details (duplicate this section where there is more than one applicant)	
Applicant Name:	Mooiplaas Trust
Name of Firm (if applicable):	
Trust Registration Number:	IT4119/97
Contact Person at the Trust:	Mr J.E.D. (Viljee) Keller
List of all (as applicable at the relevant time):	Please insert the names and RSA ID numbers of the relevant persons below – (In the list below, delete the firms that are not applicable to this application)
<ul style="list-style-type: none"> ● Directors of a company; or ● Members of the board; or ● Executive committee or other managing body of a corporate body or parastatal; or ● Members of close corporation; or ● Partners of a partnership; or ● Trustees of a trust 	Name: Name: Name: Name: Name: Name: J.E.D. Keller on behalf of the Mooiplaas Trust

Firm Registration Number:	IT4119/97
Contact Person:	Mr J.E.D. (Viljee) Keller
Trustees of a trust	Name: Mr J.E.D. (Viljee) Keller RSA ID No. (in terms of the POPI Act this is not available to the public)

Postal address:	[REDACTED]	Postal code:	6620
Telephone:		Cell:	[REDACTED]
E-mail:	[REDACTED]	Fax:	
Project Consultant	Same as EAP details.		
Contact person:			
Postal address:		Postal code:	
Telephone:		Cell:	
E-mail:		Fax:	
Name of the Environmental Assessment Practitioner ("EAP") responsible for the application:	Ms Louise-Mari van Zyl (Director)		
Company name (if any):	Cape Environmental Assessment Practitioners (Cape EAPrac)		
Postal address:	P.O. Box 2070		
	George	Postal code:	6530
Telephone:	(044) 874 0365	Cell:	
E-mail:	louise@cape-eaprac.co.za	Fax:	(044) 874 0432
EAP Qualifications	Louise-Mari van Zyl: MA Geography and Environmental Science (Director)		
EAP Registrations/Associations	Louise-Mari van Zyl is a Registered Environmental Assessment Practitioner with the Environmental Assessment Practitioners of South Africa, EAPSA, Registration Number 2019/1444 .		
Name of the Landowner:	Mooiplaas Trust		
Name of the contact person for the land owner (if other):	Mr J.E.D. (Viljee) Keller		
Postal address:	See Applicant details (note POPIA restrictions apply to private contact details)	Postal code:	
Telephone:		Cell:	
E-mail:		Fax:	
Person in control of land:	Mooiplaas Trust		
Contact person:	Mr J.E.D. (Viljee) Keller		
Postal address:	See Applicant details (note POPIA restrictions apply to private contact details)	Postal code:	
Telephone:		Cell:	
E-mail:		Fax:	



Please note:

- In instances where there is more than one landowner, please attach a list of landowners with their contact details to the back of this form.
- A certified copy of the applicant's (if natural person), alternatively a director's (as defined), Identity Document must be attached to the application.
- A certified copy of the title deed of the property/s on which the unlawful listed activity/ies has commenced must be attached to the application.

Municipality in whose area of jurisdiction the activity falls:	Oudtshoorn		
Contact person, if known:	Mr Thomas Matthee (Director: Community Services)		
Postal address:	PO Box 255	Postal code:	6620
Telephone	044 203 3922	Cell:	
E-mail:	nickey@oudtmun.co.za	Fax:	044 203 3104

Please note:

In instances where there is more than one Municipality involved, please attach a list of Municipalities with their respective contact details to the form.

A certified copy of the applicant's (if natural person), alternatively a director's (as defined), Identity Document must be attached to the application.

A certified copy of the title deed of the property/s on which the unlawful listed activity/ies has commenced must be attached to the application.

Property location(s):	The property is located adjacent to the R328, approximately 13.5km southwest of the town of Oudtshoorn.
Farm/Erf name(s) & number(s) including portion(s)	Portion 4 of Farm 172 (Associated activities include boreholes on Portion 19 of Farm Gamtoosberg 170 with a water pipeline/electric cabling traversing Remainder Farm 172, Portion 11 of Farm 170 and Portion 3 of Farm 172 to supply water for cultivation on the study site).
Property size(s) (m ²)	Approximately 439.80 hectares (ha)
Development footprint size(s) (m ²)	Approximately 56 ha (preferred alternative)
SG21 Digit code(s)	C05400000000017200004

Property boundary:

Point	Latitude (S)	Longitude (E)
1	33° 43' 46.11" S	22° 06' 00.98" E
2	33° 42' 12.20" S	22° 09' 03.11" E
3	33° 43' 21.13" S	22° 08' 28.25" E
4	33° 43' 24.01" S	22° 08' 32.47" E
5	33° 43' 10.13" S	22° 07' 40.58" E
6	33° 43' 40.58" S	22° 06' 01.10" E

The co-ordinates for the site boundary are:

Point	Latitude (S)	Longitude (E)
1	33° 43' 46.11" S	22° 06' 00.98" E
2	33° 42' 12.20" S	22° 09' 03.11" E
3	33° 43' 21.13" S	22° 08' 28.25" E
4	33° 43' 24.01" S	22° 08' 32.47" E
5	33° 43' 10.13" S	22° 07' 40.58" E
6	33° 43' 40.58" S	22° 06' 01.10" E

Please note: Where numerous properties/sites are involved (e.g. linear activities), attach a list of property descriptions and street addresses to the consultation form.



Street address:	The property is located adjacent to the R328, approximately 13.5km southwest of the town of Oudtshoorn.		
Magisterial District or Town:	Oudtshoorn		
Closest City/Town:	Oudtshoorn	Distance	± 13.5 km
Zoning of Property:	Agriculture Zone 1		

Please note: In instances where there is more than one zoning applicable, please attach a list or map of the properties indicating their respective zoning to the Application Form.

Was the property rezoned after commencement of activities? If yes, what was the previous zoning?	YES	NO
Is a rezoning application required?	YES	NO
Is a consent use application required?	YES	NO
Locality map:	<p>A locality map must be attached to the Application Form as an appendix. The scale of the locality map must be at least 1:50 000. For linear activities 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; • the prevailing wind direction; and • GPS co-ordinates (Indicate the position of the proposed 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 WGS-84 spheroid in a national or local projection) <p>Please see Appendix A.</p>	
Landowner(s) Consent:	<p>If the applicant is not the owner or person in control of the land on which the activity has been undertaken, he/she must obtain written consent from all landowners or persons in control of the land (of the site and all alternative sites). This must be attached to this document as Appendix G. Such consent must indicate whether or not the owner or person in control of the land would support approval of the application and that the land need not be rehabilitated.</p> <p>Note: The consent of the landowner or person in control of the land is not required for: a) linear activities; b) an activity directly related to prospecting or exploration of a mineral and petroleum resource or extraction and primary processing of a mineral resource; or c) strategic integrated projects ("SIPs") as contemplated in the Infrastructure Development Act, 2014 (Act No. 23 of 2014).</p>	

2. APPLICATION HISTORY

(Cross out the appropriate box "☒" and provide a description where required).

Has any national, provincial or local authority considered any development applications on the property previously?	YES	NO
If so, please give a brief description of the type and/or nature of the application/s as well as a reference number, if applicable: (In instances where there was more than one application, please attach a list of these applications)		
<p>It was brought to the attention of the EAP by a registered stakeholder that there is record of a prior contravention into the environmental legislation on Prt of Portion 4 Farm 172.</p> <p>It was follow-up up and confirmed that there was previously an application for the (retrospective) establishment of ostrich camps on the far eastern portion of Portion 4 of Farm 172 (removed from the study site and not related to the orchard activities applied for ito this S24G).</p> <p>A Section 24G Assessment process (REF: 14/2/1/D7/9/Farm 172/4, Oudtshoorn) was facilitated by Sharples Environmental Services during the course of 2012 for the unauthorised establishment of ostrich camps.</p> <p>The following has been noted:</p> <ul style="list-style-type: none"> • The Applicant for this historic 2012 S24G application process was PJ Keller en Seuns (Pty) Ltd represented by HJ Keller. Thus not the same entity as for this application for cultivation to establish orchards. 		



<ul style="list-style-type: none"> The listed activity applied for is 'the concentration of animals'. Thus not the same as for this application for cultivation to establish orchards. 		
Which authority considered the application:		
Western Cape Department of Environmental Affair & Development Planning, Cape Town office		
Has <u>any</u> one of the previous application/s on the property been approved or refused? If so provide a list of the successful and unsuccessful application/s and the reasons for decision(s).	YES	NO
The S24G Directorate will have records of the outcome of the S24G for the ostrich camps and should it have implications for this S24G application for establishment of orchards, the Competent Authority will take such into consideration.		
Provide detail on the period of validity of decision and expiry dates of the above applications/ permits etc.		
Unknown		



SECTION B: ACTIVITY INFORMATION

1. ACTIVITIES APPLIED FOR

I hereby apply in terms of section 24G of the National Environmental Management Act (Act 107 of 1998) for the regularisation of the unlawful commencement or continuation of the listed or waste management activities as specified in Section B:1 below.

Applicant (Full names): _____

Signature: _____

Place: _____

Date: _____

EAP (Full names): Louise-Mari van Zyl on behalf of Cape EAPrac (Pty) Ltd

Signature:




Place: _____

Date: _____

All listed activities associated with **the development** must be indicated below.

1.1 Applicable EIA listed activities

ECA EIA Contraventions: between 08 September 1997 and end of 09 May 2002			
Activities commenced with on or after 08 September 1997 and before end 09 May 2002: EIA regulations promulgated in terms of the ECA, Act 73 of 1989			
Government Notice No. ("GN") R1182 Activity No(s):	Describe the relevant listed activity as per GN No. 1182 of 1997	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
None identified.			
ECA EIA Contraventions: between 10 May 2002 and end of 02 July 2006			
Activities unlawfully commenced with on or after 10 May 2002 and before end 02 July 2006: EIA regulations promulgated in terms of the ECA, Act 73 of 1989,			
None identified.			
NEMA EIA Contraventions: between 03 July 2006 and end of 01 August 2010			
Activities unlawfully commenced with on or after 03 July 2006 and before end 01 August 2010: EIA regulations promulgated in terms of the NEMA			
GN R386 Activity No(s): (Listing Notice 1 of 2006)	Describe the relevant listed activity as per GN No. R. 386 of 2006	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
None identified.			
GN. R387 Activity No(s): (Listing Notice 2 of 2006)	Describe the relevant listed activity as per GN No. R. 387 of 2006	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
None identified.			
NEMA EIA Contraventions: between 02 August 2010 and end of 07 December 2014			
Activities unlawfully commenced with on or after 02 August 2010 and before end 07 December 2014: EIA regulations promulgated in terms of the NEMA, Act 107 of 1998,			
GN R. 544 Activity No(s): (Listing Notice 1 of 2010)	Describe the relevant listed activity as per GN R. 544 of 2010	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
None identified.			
GN No. R. 545 Activity No(s): (Listing Notice 2 of 2010)	Describe the relevant listed activity as per GN No. R. 545 of 2010.	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
None identified.			
GN No. R. 546 Activity No(s): (Listing Notice 3 of 2010)	Describe the relevant listed Activity(ies) in writing as per GN No. R. 546 of 2010	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
None identified.			

NEMA EIA Contraventions: on or after 08 December 2014			
Activities unlawfully commenced with on or after 08 December 2014: EIA regulations promulgated in terms of the NEMA, Act 107 of 1998,			
GN R. 327 Activity No(s): (Listing Notice 1 of 2014)	Describe the relevant listed activity(ies) in writing as per GN No. R.327 of 2014	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
Activity 12 (Listing 1) was considered for installation of infrastructure exceeding 100m² within 32m from a watercourse, however the threshold of 100m² was not exceeded. As such this listed activity has not been assessed.			
The installation of a 25cm (250mm) and 6.3cm (63mm) sleeves across a distance of 64m (32m either side of the watercourse) amounts to an estimated 20m² of infrastructure installation which falls below the minimum threshold of this activity.			
			
Figure 3: Shallow trench dug for installation of water pipeline and electric cable (Source: De Villiers, 26/08/2020).			
The Pre-Compliance Directive cites Activity 19 of Listing Notice 1. However, the placement of the pipeline and power cable did not trigger the 10m³ threshold of this activity.			
A trench of 0.5m wide and 0.5m deep was excavated to install a 250mm sleeve (accommodating a 200mm water pipeline) as well as a 63mm sleeve (accommodating a 220 V power cable) across a non-perennial watercourse over a distance of approximately 25m, from Remainder Farm 172 across Portion 11 of 170, Portion 3 of Farm 172 to Portion 4 of Farm 172 to get water from the registered water source to the new orchards. The volume of excavated material is roughly 6.25m³ which is below the minimum threshold of 10m ³ . Furthermore the installation was done within the footprint of an existing farm road that crosses the non-perennial watercourse.			
Furthermore the natural surface drainage lines identified within the preferred 56ha footprint area of the orchard is submitted to have a 5m buffer, as such, movement of material within these identified areas will be limited to not exceed this threshold.			
The Pre-Compliance Directive cites Activity 27 of Listing Notice 1.			
27	The clearance of an area of 1 ha or more, but less than 20ha of indigenous vegetation, except where such clearance of indigenous vegetation is required for – (i) The undertaking of a linear activity; or	An area of 70ha was set aside of which ±13ha was cleared unlawfully for the development of orchards. The clearing is in furtherance of a total of 56ha preferred area. Accounting	The clearing activities commenced in 2020 in an effort to diversify agricultural activities on the

	Maintenance purposes undertaken in accordance with a maintenance management plan.	for installation of infrastructure also.	property and develop 70ha of orchard.
GN R. 325 Activity No(s): (Listing Notice 2 of 2014)	Describe the relevant listed activity(ies) in writing as per GN No. R.325 of 2014	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
15	The clearance of an area of 20ha or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for – (i) The undertaking of a linear activity; or Maintenance purposes undertaken in accordance with a maintenance management plan.	An area of ±13ha was cleared unlawfully for the development of crop production in the form of almond trees. The clearing was done in furtherance of a total of 70ha of which 56ha has since been indicated as the preferred reduced area suitable for cultivation. Accounting for installation of infrastructure also.	The clearing activities commenced in 2020 in an effort to diversify agricultural activities on the property.
GN R. 324 Activity No(s): (Listing Notice 3 of 2014)	Describe the relevant listed activity(ies) in writing as per GN No. R.324 of 2014	Describe the portion of the development as per the project description that relates to the applicable listed activity.	State the date of commencement of each activity
12	The clearance of an area of 300m ² or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.	At the time of initial clearance of +/-13ha, the ecosystem threat status of Eastern Little Karoo vegetation occurring on the site had a threat status of 'least threatened'. This ecosystem threat status has since been amended to 'endangered' with the 2022 SANBI revision. Accounting for installation of infrastructure also.	2020 – in furtherance of clearance of 70ha.

Listing Notice 14 was considered, however since the area where infrastructure was installed across a non-perennial watercourse does not fall within (ff) a critical biodiversity area or ecosystem service area, this listed activity is not deemed applicable.

26	Phased activities for all activities (i) listed in this Notice and as it applies to a specific geographical area, which commenced on or after the effective date of this Notice, where any phase of the activity was below a threshold but where a combination of the phases, including expansion or extensions, will exceed a specific threshold.	Clearance of +/-13ha of vegetation done in furtherance of the initial 70ha as planned. The clearance of the reduced (56ha footprint) following the outcome of the S24G investigation) as further phases when exceeding 20ha. Accounting for installation of infrastructure also.	Initial clearing of +/-13ha undertaken in early 2020 in furtherance of 70ha.
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Please ensure that you have provided the similarly listed activities if the listed activities were commenced before the period the EIA Regulations came into effect, i.e., before 08 December 2014.

1.2 Applicable Waste Management Activities

List the relevant waste management activity/ies applied for:

Waste Management Activity Contraventions: On or after 03 July 2007 up to end of 28 November 2013			
Activities unlawfully commenced with in terms of GNR 718 of 03 July 2009 under the National Environmental Management Waste Act, Act 59 of 2008			
GN No. 718 – Category A Activity No(s):	Describe the relevant <u>Category A</u> waste management activity/ies in writing.	Describe the portion of the development as per the project description that relates to the applicable waste activity.	State the date of commencement of each activity

None identified.			
GN No. 718— Category B Activity No(s):	Describe the relevant <u>Category B</u> waste management activity/ies in writing.	Describe the portion of the development as per the project description that relates to the applicable waste activity.	State the date of commencement of each activity
None identified.			
Waste Management Activity Contraventions: On or after 29 November 2013			
Activities unlawfully commenced with in terms of GNR 921 of 29 November 2013 under the National Environmental Management Waste Act, Act 59 of 2008,			
GN No. 921— Category A Activity No(s):	Describe the relevant <u>Category A</u> waste management activity/ies in writing.	Describe the portion of the development as per the project description that relates to the applicable waste activity.	State the date of commencement of each activity
None identified.			
GN No. 921— Category B Activity No(s):	Describe the relevant <u>Category B</u> waste management activity/ies in writing.	Describe the portion of the development as per the project description that relates to the applicable waste activity.	State the date of commencement of each activity
None identified.			

Please note:

- The National Department of Environmental Affairs is the competent authority for activities regarded as hazardous waste. Such activities must be indicated as hazardous waste in the abovementioned lists.
- Only those activities listed above shall be considered for authorisation. The onus is on the applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, an application for amendment or a new application for Environmental Authorisation will have to be submitted.

1.3 Activities listed similarly in terms of the EIA Regulations

Kindly indicate the listed activities in terms of the EIA Regulations that is listed similar to the unlawfully commenced activities. The descriptions provided below must clearly state why the activity/development is still similarly listed in terms of the EIA Regulations, 2014.

The similarly listed activities in terms of the EIA Regulations promulgated in terms of the NEMA, Act 107 of 1998,		
GN No. R. 327 Activity No(s): (Listing Notice 1 of 2014)	Describe the relevant listed activity(ies) in writing as per GN R.327 of 2014	Describe the portion of the development as per the project description that relates to the applicable listed activity.
GN No. R. 325 Activity No(s): (Listing Notice 2 of 2014)	Describe the relevant listed activity(ies) in writing as per GN No. R.325 of 2014	Describe the portion of the development as per the project description that relates to the applicable listed activity.
GN No. R. 324 Activity No(s): (Listing Notice 3 of 2014)	Describe the relevant listed activity(ies) in writing as per GN No. R.324 of 2014	Describe the portion of the development as per the project description that relates to the applicable listed activity.

Please note: Where approvals for the activity have been obtained in terms of any other legislation (e.g., National Water Act, Act 36 of 1998), certified copies of such approvals must be attached to this form.

2. ACTIVITY DESCRIPTION

Is/are the activity(ies) complete or is/are the activity(ies) still to be completed?	COMPLETED	INCOMPLETE
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(a) Is/was the project a new development or an upgrade of an existing development? Also indicate the date (e.g., 2 August 2010) when the activity commenced as well as the original date of commencement if the application is an upgrade.

NEW

UPGRADE

Some of the intended 70ha area (earmarked for cultivation by the Applicant) was previously used for extensive agricultural activities, including grazing (ostriches) and wheat farming, but has been lying fallow for more than 10 years. The farm has been in the same family for some generations and the grandfather and father cultivated wheat and kept ostriches on portions of the property, including the study site.

The presence of two (2) small off-stream farm dams with an existing furrow / canal diverting sheet flow (surface runoff) to the bottom dam is evidence of historical agricultural activities on the property. Transformation of natural/indigenous vegetation that have not been lawfully transformed/cleared requires *prior* Environmental Authorisation to the National Environmental Management Act (NEMA).

By commencing without obtaining the necessary approvals, the activity (of clearing/transformation) is considered "new" in terms of NEMA. The area that has already been cleared is a portion of the total preferred area of 56ha (initially 70ha) that the applicant wants to utilised for crop production.

Approximately 13 ha was ripped and transformed for amongst others almond nut tree production under drip irrigation. Of the 13ha approximately 7ha has been planted and approximately 6ha was disced and ripped (but not yet planted) prior to the Competent Authority having issued Notices informing of the unregulated activities.

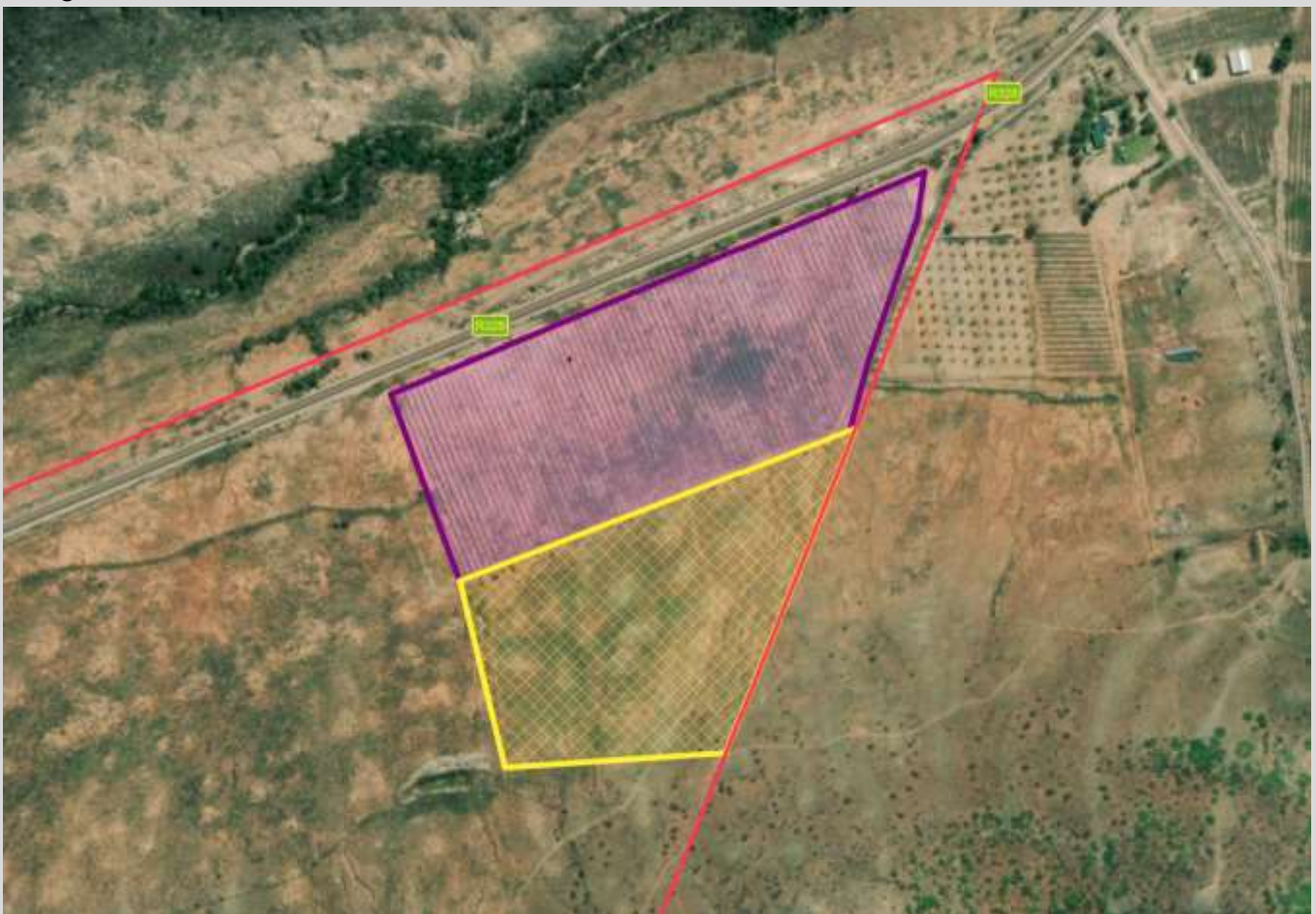


Figure 4: Area indicated in light purple represents the +/-7ha planted pecan trees with cash crops for groundcover whilst the yellow hashed area represents the +/-6ha land parcel already disced and ripped in preparation of planting of almond trees.

A 200 mm pipeline inside a 250 mm sleeve and a 220 V power cable inside a 63 mm sleeve was laid from Portion 19 of Farm Gamtoosberg 170 by means of a pipeline across Remainder Farm 172, Portion 11 of 170, Portion 3 of Farm 172 to Portion 4 of Farm 172 to provide drip irrigation to the planned 70ha orchard. The

pipeline crosses a non-perennial tributary to the Kandelaars River. The sleeves were placed in an earth trench that follows an existing farm track that traverse the unnamed tributary and crosses a District Road³. The pipeline is approximately 1.1 km in length from its starting point at the boreholes on Portion 19/Gamtoosberg170 to Portion 4/172.

(b) Clearly describe the activity and associated infrastructure commenced with, indicating what has been completed and what must be completed.

The installation of the 200 mm pipeline and electric cable placed in an earth trench to provide irrigation water and power for irrigation to the orchards, is complete.

Approximately 13 ha of land has been transformed of which roughly 7ha has been planted and another 6ha was ripped (but not yet planted) before the Applicant ceased the activities in response to receiving Notice that the activities were unregulated.



Figure 5: Ripping of study area (Source: De Villiers, 26/08/2020).



Figure 6: Area ripped on the left half of the image with remnant natural ground cover on the right side of the image (Source: De Villiers, 26/08/2020).

It is submitted that infrastructure capacity of the irrigation pipeline was installed for implementation of an earmarked 70ha of orchard and implementation of said orchard commenced. Assessment of the remaining 43ha plus the already converted 13ha (56ha – 13ha = 43ha) is considered in terms of this S24G application process.

In support of the Applicant's intention to convert a total of 70ha to orchards, the Applicant supplied a copy of his initial irrigation scheme design plans dated 2020, that provides for a 200mm water pipe to supply the full 70ha. This 200mm water pipeline was installed at the outset of the project with sufficient capacity for the full development.

³ District Roads Authority authorised installation of the infrastructure underneath the road surface subject to conditions of installation and maintenance (REF: TPW 27956, dated 30 October 2020).

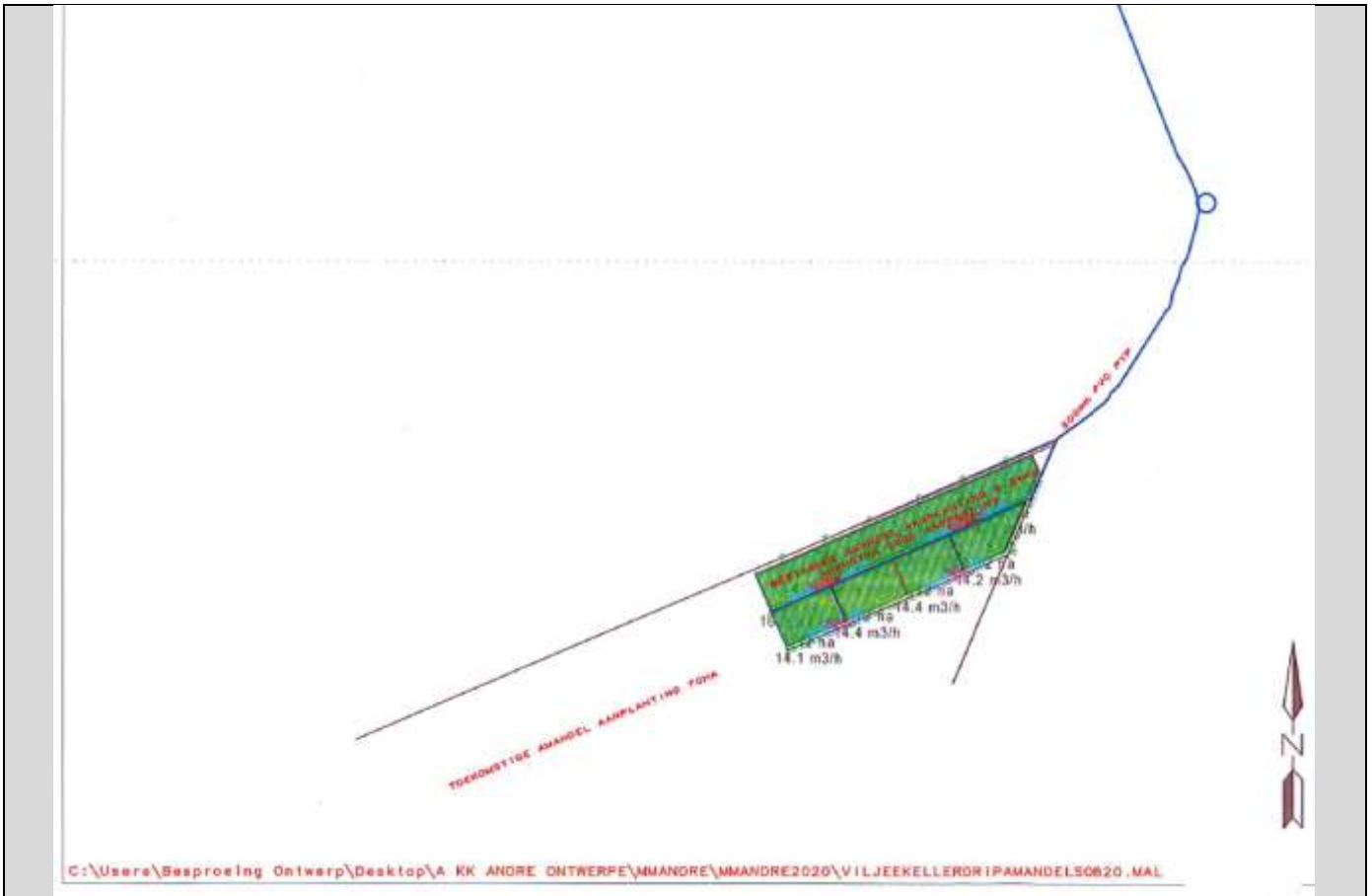


Figure 7: Irrigation design plan for the full extent of the project at 70ha (Source: Applicant).



Figure 8: Schematic indication of the original extent planned for 70ha (indicated with white polygon) compared to the reduced 56ha (bright green) and the 13ha already transformed (indicated with red polygon).



Figure 9: Preferred Alternative of 56ha excluding the site constraints.

(c) Please provide details of all components of the activity and attach diagrams (e.g. architectural drawings or perspectives, engineering drawings, process flow charts etc.).

Buildings - provide brief description:	YES	NO
Infrastructure (e.g. roads, power and water supply/ storage) - provide brief description:	YES	NO

Water supply (pipeline) and electrical supply (cable) installed for irrigation of 70ha of new orchard.
 A Water Use License (WULA) is underway in parallel to the S24G to assess the water demand associated with the activity from existing, as well as new boreholes and surface water into existing lawful use (ELU) volumes.

Processing activities (e.g. manufacturing, storage, distribution) - provide brief description:	YES	NO
Storage facilities for raw materials and products (e.g. volume and substances to be stored) - provide brief description:	YES	NO
Storage and treatment facilities for solid waste and effluent generated by the project - provide brief description:	Yes	NO

(d) Other activities (e.g. water abstraction activities, crop planting activities) - provide brief description:

YES No
 A water use license (WULA) is under way for registration of water uses associated with abstraction of water from existing as well as two (2) new boreholes from where water is transferred to the study site where orchards are planted/proposed.
 As of 14/02/2024 the status on the WULA application is that the BOCMA has acknowledged and accepted the submitted document as complete. The BOCMA has 90 days (from 22 November 2023) to complete their review and issue a decision about the WULA.

3. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical spatial size of the activity as well as associated infrastructure (footprints):	+/-56 ha preferred orchard +/- 0.5ha for infrastructure
---	--

Indicate the area that has been transformed / cleared to allow for the activity as well as associated infrastructure	+/-13 ha +/- 0.5ha for infrastructure
Total area:	All phases implemented = +/-57 ha for preferred orchard area/infrastructure combined consisting of +/-13.5ha for already transformed areas (inclusive of the infrastructure and orchards)

4. SITE ACCESS

Was there an existing access road?	YES	NO
If NO, what was the distance over which the new access road was built? Please indicate the length and width of the new road.	(L) m	
	(W) m	
Describe the type of access road constructed:		

Please Note: Indicate the position of the access road on the site plan (See Section 5 below)





5. SITE PHOTOGRAPHS

Colour photographs of the site and its surroundings (taken of the site and from the site), both before (if available) and after the activity commenced, with a description of each photograph, must be attached to this application. 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 past and recent aerial photographs. It should be supplemented with additional photographs of relevant features on the site. Date and source of photographs must be included. Photographs must be attached as an **appendix** to this form.

Refer to Appendix for more detailed site photographs.

Please note: Should the relevant photographs not be included in the application the application may be deemed insufficient and further information in this regard will be requested.



Figure 10: Initial site photographs post clearing and planting of trees.



Figure 11: Recent photograph supplied by the Applicant of the area where trees were planted previously.

See Appendix D.

6. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

Please list all legislation, policies and/or guidelines that were or are relevant to this activity.

LEGISLATION	ADMINISTERING AUTHORITY	TYPE Permit/ license/ authorisation/comment	DATE (if already obtained):
National Environmental Management Act (Act 107 of 1998)	DEA&DP	Environmental Authorisation	Pending
National Heritage Resources Act (Act 25 of 1999)	Heritage Western Cape	Approved	03 November 2022
National Water Act (Act 36 of 1998)	Department of Water & Sanitation	Water Use Licence Application	Pending
Conservation of Agricultural Resources (CARA)	Department of Agriculture	CARA Permit	Pending

POLICY/ GUIDELINES	ADMINISTERING AUTHORITY
National Environmental Management Act (Act 107 of 1998 as amended)	DEA&DP - NEMA requires a Basic Assessment process be undertaken for which environmental authorisation is required for the triggered listed activity in terms of the NEMA EIA Regulations, 2014 (as amended). Since the applicant commenced with the activity unlawfully, without environmental authorisation, Section 24G of NEMA is applicable.
Section 24G Fine Regulations, 2017	DEA&DP – Since a S24G process is being undertaken, public participation is also being undertaken in terms of Regulation 8 of the

	Section 24G Fine Regulations that requires applicants to undertake public participation prior to the submission of the S24G application and thereafter.
National Environmental Management Laws Amendment Act (Act 25 of 2014)	DEA&DP - The public participation requirements must form part of the application allowing for an integrated process between the WULA and NEMA processes.
Guideline for involving biodiversity specialists in the EIA process (June 2005)	DEA&DP - Several specialist studies has been undertaken for the proposal.
Guideline for environmental management plans (June 2005)	DEA&DP - This guideline was consulted in the drafting of the EMPr.
Guideline on Alternatives (March 2013)	DEA&DP - The consideration of alternatives is mandatory, however given that this application is for the rectification of an unlawful activity that commenced in furtherance of a total development the alternatives reflect both that which has been undertaken and that which forms part of the total development.
Guideline on Need & Desirability (March 2013)	DEA&DP - This guideline was consulted along with the relevant IDP and SDP documentation to determine the need for the development.
Guideline on Public Participation (March 2013)	DEA&DP - The consultation process was undertaken in terms of these guidelines and the legislated requirements for PPP.

7. APPLICATIONS IN TERMS OF NEMA AND SPECIFIC ENVIRONMENTAL MANAGEMENT ACTS (“SEMAS”)

If not specifically applied for in terms of this application, does the development require an application for a waste management license in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)?	YES	NO
If yes, has an application been submitted to the licensing authority?	YES	NO
Does the proposed project require an application for a water use license in terms of the National Water Act, 1998 (Act No. 36 of 1998)?	YES	NO
<p>An application has been submitted to the BGCMA for the installation of and use of groundwater from boreholes, ELU as well as the pipeline crossing the non-perennial tributary, and a section of the drainage line in the field lost as a result of the preparation of the fields.</p> <p>For the abstraction of water, a licence application has been submitted for two (2) new boreholes located on Portion 19 of Farm Gamtoosberg 170. Water supply to the orchards have been considered by a geohydrologist and freshwater specialist. Their combined input, in addition to the findings and recommendation of the agricultural specialist, indicates that the reduced activity (+/-56ha) can be supported through surety of (water) supply.</p> <p>The latest Compliance Monitoring report compiled by Confluent Consulting (November 2023) that reflects on water use (in terms of the ELU volumes registered) indicates that water use over the past 2.5 years have been roughly 106 000 cubic metres. The annual registered water use volume is roughly 147 000m³ (per year). Confluent Consulting is therefore satisfied that additional water volume is available within the ELU to cover additional water demand associated with the proposed activity.</p>		
If yes, has an application been submitted to the licensing authority?	YES	NO
If no, please provide evidence of existing water use rights (if applicable) with this application form.		
Does the proposed project require an application for an atmospheric emissions license in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)?	YES	NO

If yes, has an application been submitted to the licensing authority?	YES	NO
Does the proposed project require an application in terms of the National Environmental Management: Integrated Coastal Management Act ("NEM: ICMA")?	YES	NO
If yes, has an application been submitted to the relevant competent authority?	YES	NO
If yes, provide more details of the application submitted/to be submitted in terms of the NEM: ICMA		

8. APPLICATIONS IN TERMS OF OTHER LEGISLATION

Is any permission, licence or other approval required in terms of any other legislation?		YES	NO
If yes, please complete the table below:			
Type of approval required (List the applicable legislation & approval required):	Name of the authority responsible for administering the applicable legislation	Application submitted (Yes / No)	Status of application (e.g. pending/ granted/ refused)
Water Use Licence	BGCMA	yes	pending
HWC approval	HWC	yes	approved
CARA application	Department of Agriculture	no	pending

SECTION C: DESCRIPTION OF RECEIVING ENVIRONMENT

Site/Area Description

For linear activities (pipelines, etc.) as well as activities 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 C and indicate the area which is covered by each copy No. on the site plan.

Section C Copy No. (e.g. 1, 2, or 3):

1. GEOLOGICAL FORMATIONS UNDERLYING THE SITE

Granite		Quartzite	
Shale	✓	Dolomite	
Sandstone	✓	Dolerite	
OTHER (specify)			

According to CapeFarmMapper, the soil types and geology of the site are as follows:



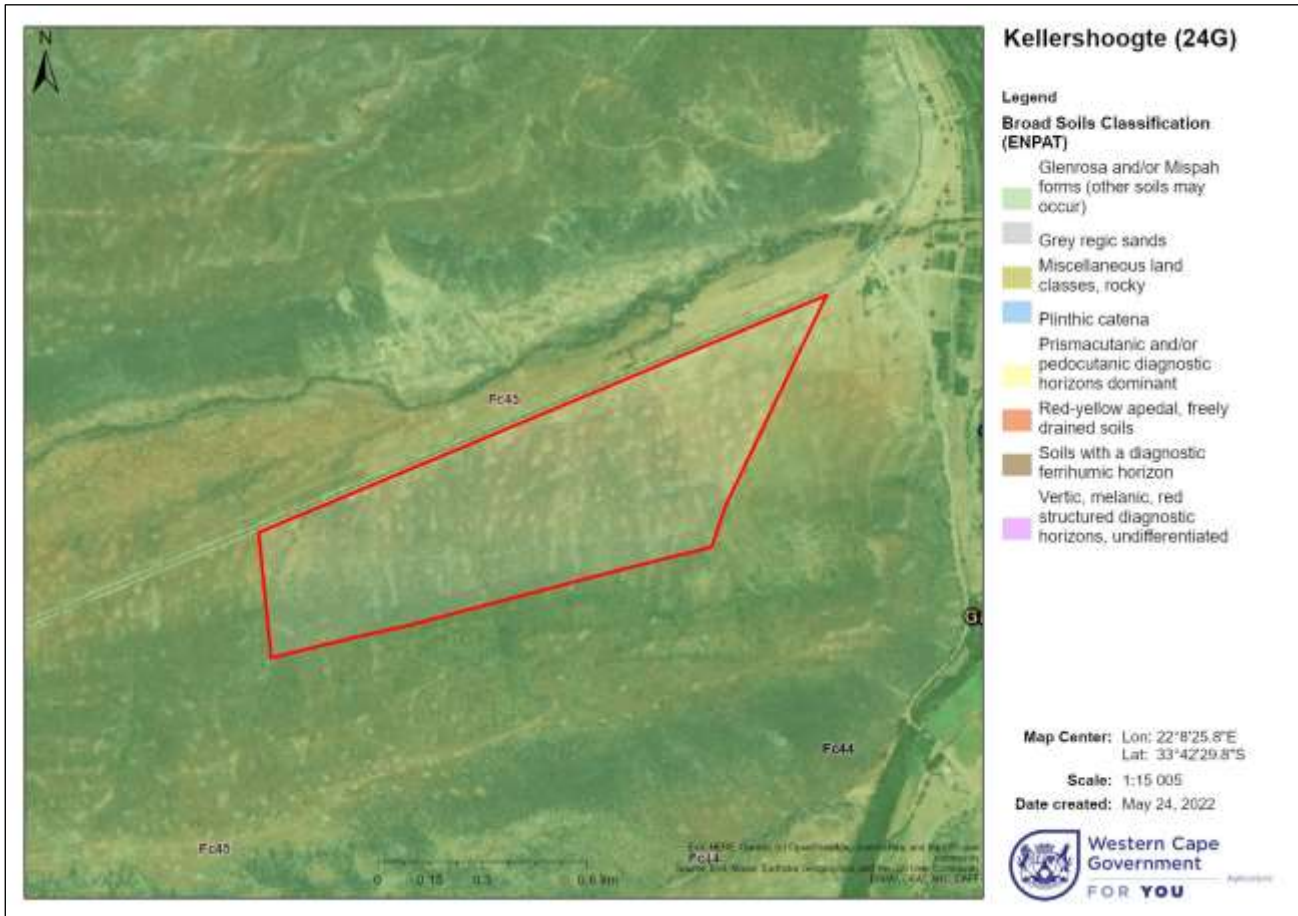


Figure 12: Soil Types (CapeFarmMapper, 2022)

Soils & Geology (ENPAT)

Land Type:	Fc45
Soil:	Glenrosa and/or Mispah forms (other soils may occur), lime generally present in the entire landscape
Geology:	Siltstone, shale and argillaceous sandstone of the Bokkeveld Group, Cape Supergroup.

Soil Erodibility

Erodibility:	High
Erodibility Factor:	0.54

Soil Clay & Depth, and Soil Types

Symbol:	EB
Class:	Soils with limited pedological development
Description:	Soils with minimal development, usually shallow on hard or weathering rock, with or without intermittent diverse soils. Lime generally present in part or most of the landscape
Depth:	< 450 mm
Clay:	< 15%

In addition to the broadscale description obtained from CapeFarmMapper, the soil and agricultural specialists appointed, Dr Johann Lanz conducted soil samples across the property and confirmed the geology to siltstone, shale and argillaceous sandstone of the Bokkeveld Group.

According to Lanz (2022) almost all the soils in the land type are shallow on underlying weathered rock and this is the same across the site where shallow soils predominantly of the Glenrosa soil form were identified. The clay content of the topsoil was estimated at 15%.

Lanz (2022) confirmed that when the weathered rock of such Glenrosa soils is sufficiently broken by ripping during soil preparation (as has been done for the +/-13ha already transformed), the resultant soil, even though it is very rocky, is **highly suitable as a rooting medium for orchard trees**.

The geohydrological tests indicate groundwater with **high salinity levels**. Lanz (2022) deems the available borehole water to be too saline, if it were the only source of water, to sustain orchard production in the long term.

However, low salinity *leibeurt* water is available from the Kandelaars River into the ELU (when the river has flow) and the intention of the Applicant is to use this, when it is rightfully available, in order to **irrigate the orchards with good quality water when possible** to help prevent salt build up in the soil.

Lanz (2022) has noted that the young orchard (approximately 7ha already planted) has performed well, despite been irrigated predominantly with borehole water that has higher salinity. Since the S24G process started, the planted trees have performed well and grown to expectation with irrigation from the boreholes.

However, the Department of Agriculture in their comment about the application reflected on the fact that although the orchards are growing well (despite the higher salinity levels in the irrigation water), these (young) orchards have not been exposed to extended times of irrigating with higher saline water. The potential impact of irrigation with such high saline water is likely to become more visible over a longer period of time.

To address this, the Department of Agriculture in their comment recommends the following:

- storm water furrows to be constructed above the development to safely collect and discharge the runoff into the drainage lines/valleys.
- The drainage lines must be extended to a point where they can safely discharge into a stream or river.
- The drainage lines must not be disturbed and they must promote the growth of natural vegetation to decrease the flow velocity in the drainage line. This drainage line must not be used as access roads.
- Make provision for a buffer area of minimum 3 m around the drainage lines of waterways (*noted that the aquatic specialist buffer recommendation of 5m is recommended*).
- Installation of cut-off drains every ± 50 m. This will create an easy flow path for the water when they over irrigate with fresh water from the Kandelaars River to leach out the salts from the soil and it will increase the effectiveness of the leaching as they will need less fresh water to leach out the salts and even normal rainfall can help with the leaching. This will also reduce the risk of waterlogged conditions.
- Collect and analyse quarterly water samples from utilized boreholes and the Kandelaars River to monitor the salinity/sodicity status of the water. This is necessary because local water quality varies greatly within and between seasons. Samples should also be taken whenever a salinity/sodicity problem is suspected. Water samples from the water in the cut-off drains must also be taken. This will also give them an early indication if there is any build-up of salts in the soil.
- The irrigation system design must make provision to deliver extra water in order for the soil profile to be totally saturated to make the leaching possible.

During the recent drought years there has been no water flow in the Kandelaars River but in 2022 the river had some flow again. Application of low salinity water to saline soil will cause dispersion of clay which will impede water infiltration. With **drip irrigation** however (as currently applied and proposed) water infiltration is less an issue, but it is **still recommend that mulch** be applied to the **tree rows to facilitate water infiltration**, which will be important for the infiltration of rain.

According to Confluent Consulting responsible for the WULA, the Applicant has an existing lawful use (ELU) to abstract approximately 127 500 m³ from the Kandelaars River and 19 500 m³ from two registered boreholes (KBH01 and KBH04) totalling 147 000m³.

Due to numerous dams located along the course of the river and the highly irregular rainfall in the catchment area, the applicant is unable to reliably abstract their registered volume of water from the Kandelaars River on an annual basis. Any expansion of his agricultural business (notably an additional 56ha

of orchards) is therefore dependent on the availability of a reliable water source. The applicant therefore drilled two new boreholes for this purpose.

In addition to the 10 hectares of lucerne currently irrigated on the farm plus the proposed 56ha of orchards, water will be abstracted from three (3) boreholes, two (2) of which are located on Portion 19 of Farm 170 (KBH02 and KBH03) and one which is located on Portion 9 of Farm 170 (KBH04).

- KBH04 and KBH01 are existing, registered boreholes, for which the applicant has a registered water use of 19 500 m³.
- KBH02 and KBH03 are two (2) new boreholes that have been drilled to provide additional water for the project.

According to the WULA technical report, the total sustainable yield of the three boreholes (KBH02, -3 and -4) available for pumping in the Kellershoogte area amount to a total of 422 750 m³/a.

Water from all three boreholes will be used to irrigate lucerne currently cultivated on Portions 6, 9, 11 and 19 of Farm 170 and orchards, which will be cultivated on Portion 4 of Farm 172 Kellershoogte. Water from the boreholes will be transferred to Portion 4 of 172 by means of the installed pipeline which crosses a non-perennial drainage line.

The WULA under consideration considers the following 'uses':

Water use(s) activities	Purpose	Volume (m ³ , dimension)	Property Description	Co-ordinates
Section 21(a)				
Taking of water from a borehole (KBH02)	Irrigation	131 772 m ³	Portion 19 of Farm 170	33.69422 S 22.15152 E
Taking of water from a borehole (KBH03)	Irrigation	148 244 m ³	Portion 19 of Farm 170	33.69482 S 22.15198 E
Taking of water from a borehole (KBH04)	Irrigation	37 944 m ³	Portion 9 of Farm 170	33.69930 S 22.15437 E
Section 21 (c)				
Pipeline to Transfer Water for Irrigation	Irrigation	1125 m	Portion 3 of Farm 172	33.70240 S 22.15293 E
Non-perennial drainage line covered by agricultural field	Irrigation	350 m	Portion 4 of Farm 172	33.70883 S 22.14692 E
Section 21 (i)				
Pipeline to Transfer Water for Irrigation	Irrigation	1125 m	Portion 3 of Farm 172	33.70240 S 22.15293 E
KBH02 located within the regulated area of a watercourse	Irrigation	131 772 m ³	Portion 19 of Farm 170	33.69422 S 22.15152 E
KBH03 located within the regulated area of a watercourse	Irrigation	148 244 m ³	Portion 19 of Farm 170	33.69482 S 22.15198 E
Non-perennial drainage line covered by agricultural field	Irrigation	350 m	Portion 4 of Farm 172	33.70883 S 22.14692 E

The final **recommended sustainable yields** of the sum of the three (3x) available boreholes was determined by a geohydrologist (Steenekamp, 2020) and must not exceed **422,750m³/a**.

According to Lanz (2022) this **volume is sufficient water** for the irrigation of the +-**56 hectares to be planted** considering **water that will be applied from the *leibeurt*** supply to maintain good soil conditions.





Figure 13: Image of young orchard established on approximately 7ha showing evidence of ripped soil and recovery natural vegetation as ground cover (Source: Lanz 2022).





Figure 14: Images taken of 2023 crop with the planted trees having grown well during the past year.



2. GRADIENT OF THE SITE

The site's gradient increases to the south, with the slope degrees according to CapeFarmMapper, ranging between 2.60 and 21.88. The calculation below shows the general gradient ratio as being 1:22.04 - 1:2.68. (<http://www.1728.org/gradient.htm>, accessed 28 April 2022).

INPUT Angle In Degrees: 2.6		INPUT Angle In Degrees: 21.88	
CALCULATE			
Using Rise / Run	1 in 22.022 Ratio	4.541 % Grade	
Using Rise / Hypotenuse	1 in 22.044 Ratio	4.5263 % Grade	
INPUT Angle In Degrees: 21.88		INPUT Angle In Degrees: 21.88	
CALCULATE			
Using Rise / Run	1 in 2.4901 Ratio	40.159 % Grade	
Using Rise / Hypotenuse	1 in 2.6834 Ratio	37.266 % Grade	

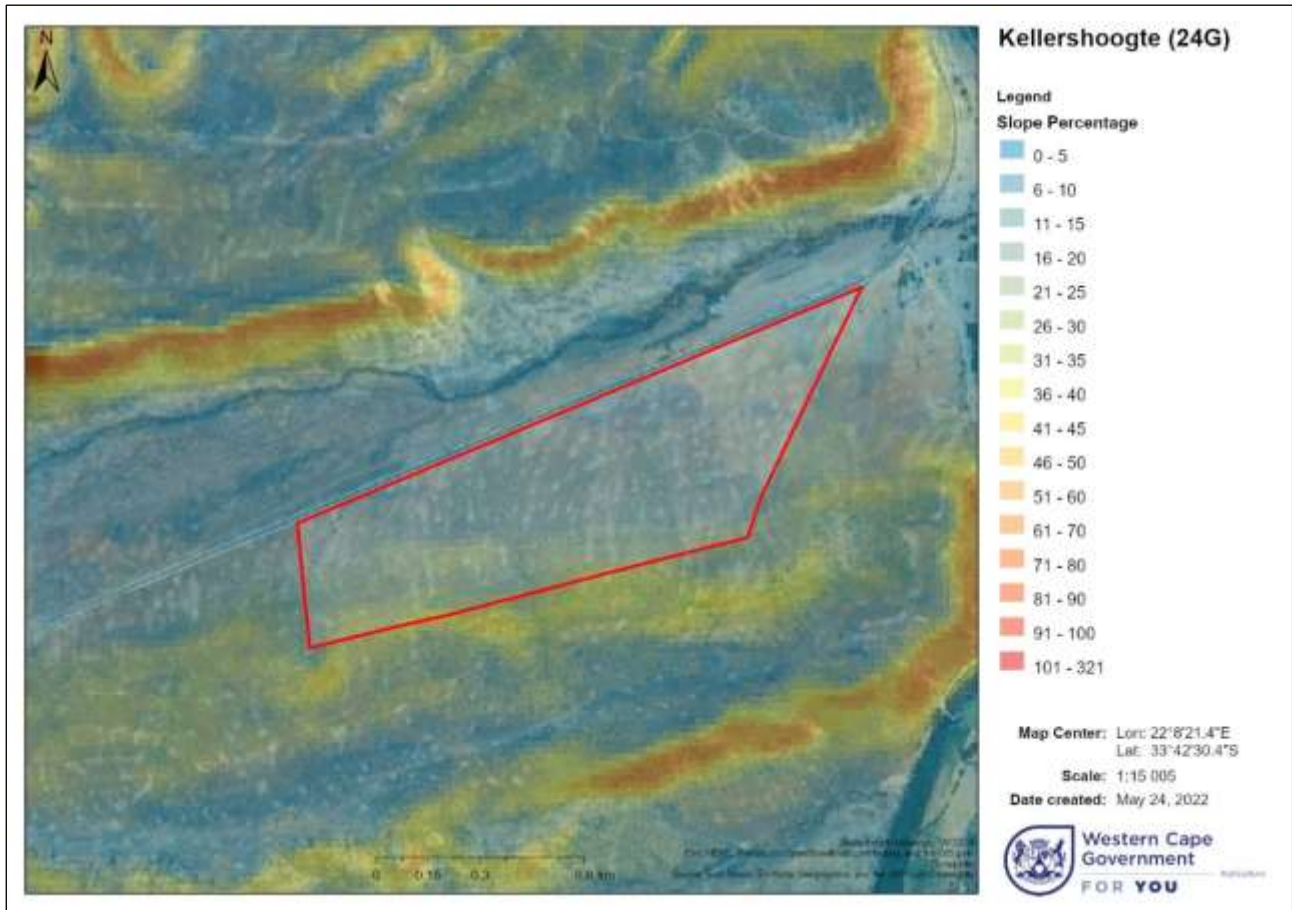


Figure 15: 5m Contours & Slope Classification (CapeFarmMapper, 2022)

Lanz (2022) as the agricultural specialist recommended that the higher lying areas of the southern portion be **excluded** from the development footprint (preferred alternative reflects this) however the gentle slope of the remainder of the property is beneficial for drainage purposes.

3. LOCATION IN LANDSCAPE

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Seafront	Other
If other, please describe									
Portion 4 of Farm 172 Kellershoogte is located on the lower slopes and plains on the north side of a low ridge.									

4. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

4.1 Groundwater, Soil and Geological stability of the site (Pre-Commencement)

Is the site(s) located on or near any of the following (cross out ("☒") 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

4.2 Groundwater, Soil and Geological stability of the site (Post-Commencement)

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

If any of the answers to the above are "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. Where it does not exist, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

5. SURFACE WATER

5.1 Surface Water (Pre-Commencement)

Indicate the surface water present on and or adjacent to the site and alternative sites (cross out ("☒") 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 / Lagoonal wetland	YES	NO	UNSURE



5.2 Surface Water (Post-Commencement)

Indicate the surface water present on and or adjacent to the site and alternative sites (cross out ("X") 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 / Lagoonal wetland	YES	NO	UNSURE

According to the Western Cape Biodiversity Spatial Plan (WCBSP) (mapped in CapeFarmMapper (2022)), and seen in Figure 4 below, the following is mapped:

- Several non-perennial watercourses cross Portion 4 of Farm 172. However, three non-perennial watercourses are located within the proposed preferred planting area.
- The non-perennial watercourses are categorised as Aquatic Ecological Support Areas 1⁴ (ESAs), and very small portions bisecting these watercourses as Aquatic ESA 2⁵ areas.
- These non-perennial watercourses flow north and into a larger non-perennial watercourse (situated on Remainder of Farm 172) which flows in an easterly direction into the Kandelaarsrivier.
- The Kandelaarsrivier is approximately 506m east of the preferred planting area.

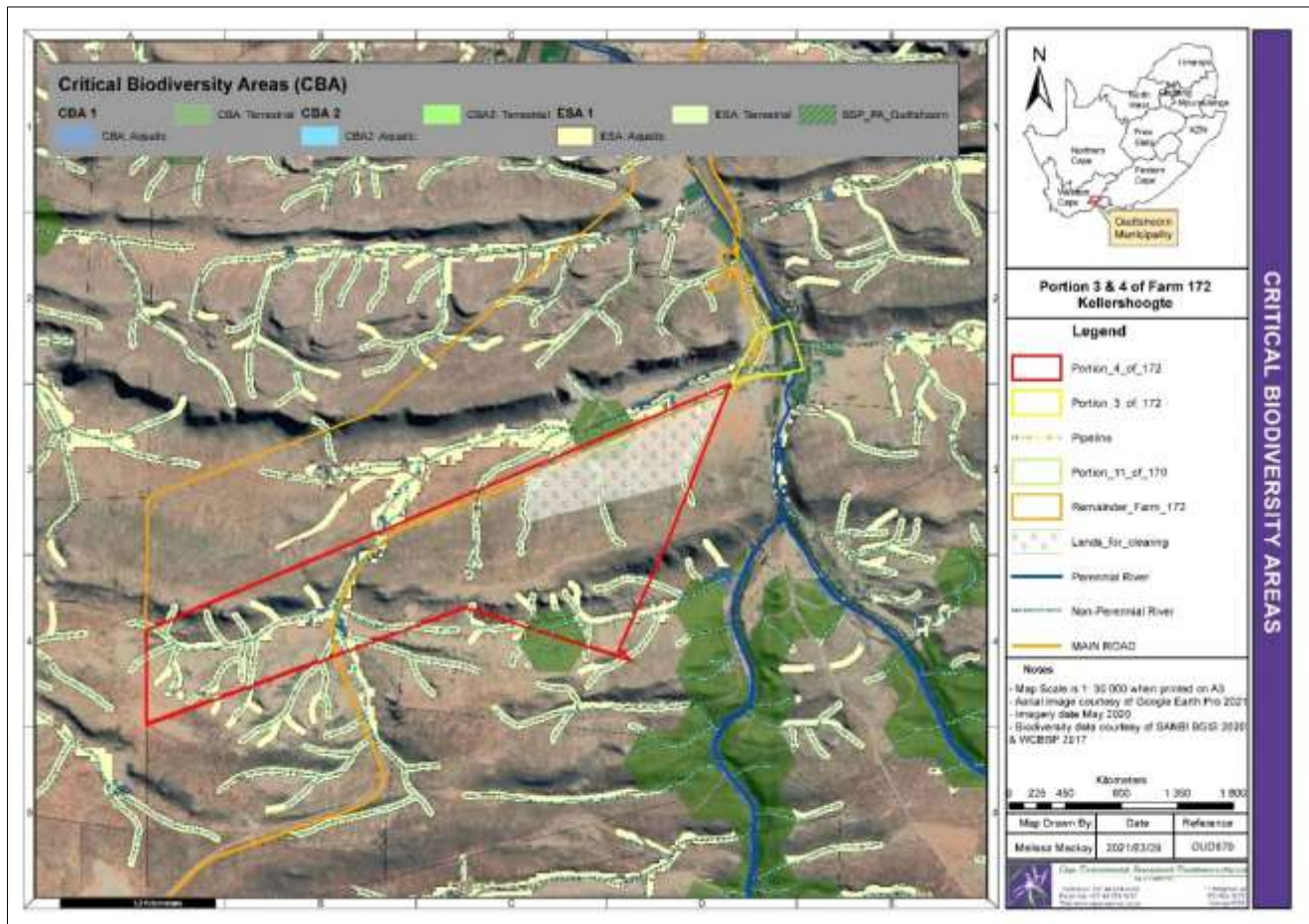


Figure 16: Watercourses crossing Portion 4 of Farm 172.

⁴ 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 service (CapeFarmMapper, 2022)

⁵ 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 (CapeFarmMapper, 2022).

In paragraphs (i) and (ii) below, the Aquatic Specialist in the Aquatic Report (**Appendix H1**) has confirmed the following:

(i.) Installation of water pipeline and boreholes

The pipeline was constructed from a borehole (borehole shown as KH03 in **figure 1 of Appendix H1: Aquatic Report**) and traverses a non-perennial watercourse (referred to as KH1 in **Appendix H1**) on Portion 3 of Farm 172. This pipeline transports water to the proposed crop production area. The borehole, KH03, is within the regulated area of the Kandelaars River since it is 100m from the river. However, it is outside of the riparian zone of the river and within the working agricultural area.

As a result of the pipeline being buried below the bed of a non-perennial watercourse, a trench crossing the watercourse had to be excavated. The alignment of the pipeline is within the footprint of an existing farm road crossing the watercourse. Since the alignment is within the footprint of the existing farm road, disturbance to the riverbanks was minimal, except a small portion along the northern bank where the riparian habitat was disturbed.

In terms of the WCBSA, the pipeline traverses an aquatic ESA2, but also the floodplain wetlands of the Kandelaarsrivier. Notably, the floodplain wetlands have been significantly modified over time and agricultural activities within the floodplain is evident since 1939. It is confirmed that at present there is **no floodplain wetland habitat** associated with the river.

(ii.) Crop production area establishment

In terms of the WCBSA, the new agricultural fields have covered a portion of an aquatic ESA 1

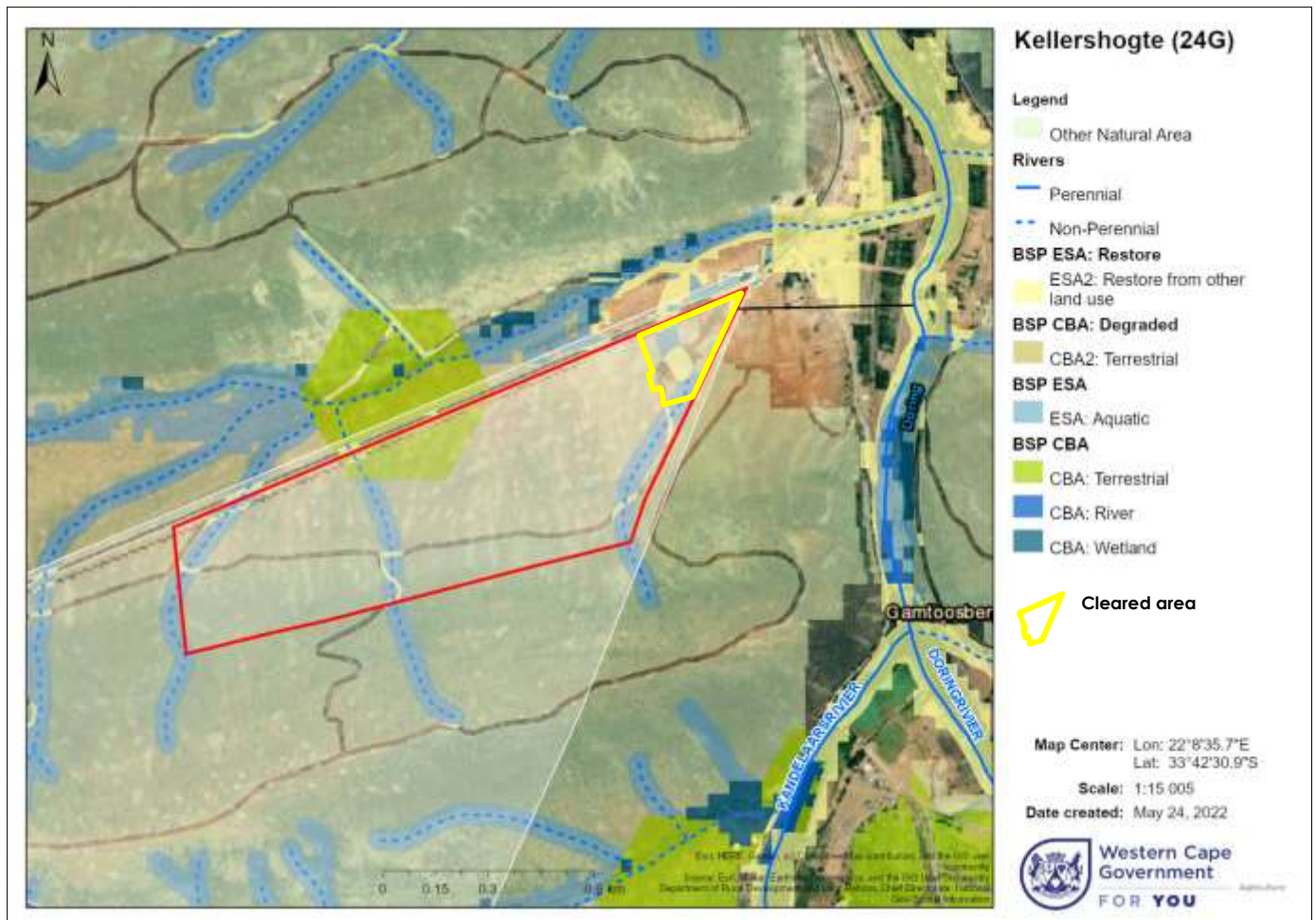


Figure 17: Biodiversity Map showing sensitivities

In the north-eastern section of Portion 4 of Farm 172 the land has been prepared for almond tree planting. In this area, a drainage line (referred to as KH2 in **Appendix H1**) has been infilled and levelled for crop production. This drainage line drained from the hills in the south in a northerly direction. This drainage line was already disconnected from the broader hydrological network prior to the land being prepared for crop production as the **water flowed into a canal** that fed a small off-stream dam within the now planted orchard footprint.



Figure 18: Google aerial image (2013) showing the small off-stream dam fed by a cut-off canal (dark line along the northern portion of the site) and unnamed tributary feeding into the off-stream dam subsequently transformed for cultivation (Source: Google Earth).

Subsequent to the land being prepared for crop production, the drainage line now discharges into the already planted orchard. Post-commencement of the activity, evidence of erosion within the agricultural area has been noted with distinct channels re-establishing through the area – please see **Appendix D: Site Photographs**.

It is important to note that the Department of Agriculture requires this drainage line to be maintained through the orchard to allow runoff to reach the lower reaches of the drainage line opposite the R328.

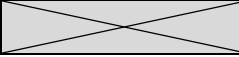
Should the full extent of the project be implemented i.e. 56ha the majority of the cut-off canal will be decommissioned.

6. VEGETATION AND/OR GROUNDCOVER


Please 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 activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult <http://bgis.sanbi.org.za> or BGIShelp@sanbi.org.za. Information is also available on compact disc ("cd") from the Biodiversity-GIS Unit, Ph (021) 799 8738. 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) and must be provided as an overlay map to the property/site plan as an **appendix** to this form.

6.1 Vegetation and/or groundcover (Pre-Commencement)

Cross out ("☒") the block **and** describe (where applicable) the vegetation types / groundcover present on the site before commencement of the activity.

Indigenous Vegetation - good condition	Indigenous Vegetation with scattered aliens		Indigenous Vegetation with heavy alien infestation
Describe the vegetation type above:	Describe the vegetation type above:		Describe the vegetation type above:
	The vegetation type of the site is Eastern Little Karoo (Vlok 2022).		
Provide ecosystem status for above:	Provide Ecosystem status for above:		Provide Ecosystem status for above:
	Least Threatened in terms of the National Environmental Management Biodiversity Act National Ecosystem List (GN 1002 of 2011) when the initial clearing of +/-13ha was undertaken. Endangered in terms of the updated Ecosystem Treat Status classification (2021 as Gazetted in 2022) and applicable to the extent of the project.		
Indigenous Vegetation in an ecological corridor or along a soil boundary / interface	Veld dominated by alien species		Distinctive soil conditions (e.g., Sand over shale, quartz patches, limestone, alluvial deposits, termitaria etc.) – describe
Bare soil	Building or other structure		Sport field
Other (describe below)	Cultivated land		Paved surface

(a) Highlight the applicable pre-commencement biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category.

Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR)	<p>The 2017 WCBSP indicates a portion of the site as a CBA – see Appendix E: Biodiversity Map. The reason given in the WCBSP is shown below.</p> 

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

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	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	%	
Near Natural (includes areas with low to moderate level of alien invasive plants)	100%	Portions of the site was previously used for ostrich grazing that has had a moderate to severe impact on the vegetation. The botanist confirms that the plant diversity on portions of the site is

		low compared to other similar sized areas that are in 'near pristine condition' further to south and west. Based on the soils, topography or previous management between the already disturbed area and the remainder of the site, the botanist has concluded that the vegetation in the disturbed area (13ha) was similar to that of the remainder of the proposed development area (56 ha) which excludes areas deemed to be more sensitive. See Appendix H3: Botanical Compliance Statement.
Degraded (includes areas heavily invaded by alien plants)		
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	%	

- (c) Complete the table to indicate:
 (i) the type of vegetation, including its ecosystem status, that was previously present on the site; and
 (ii) whether an aquatic ecosystem was previously present on site.

Terrestrial Ecosystems		Aquatic Ecosystems						
Ecosystem threat status as per the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)	Critical	Unnamed tributary			Estuary		Coastline	
	Endangered							
	Least Threatened at the time of initial clearing							
	Vulnerable							
		YES	NO	UNSURE	YES	NO	YES	NO

Terrestrial Ecosystems		Aquatic Ecosystems						
Ecosystem threat status as per the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)	Critical	Unnamed tributary			Estuary		Coastline	
	Endangered since 2021 Ecosystem Threat status amendment applicable to the remaining extent of the project.							
	Vulnerable							
	Least Threatened							
		YES	NO	UNSURE	YES	NO	YES	NO

- (d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

The botanist (Vlok 2022) confirms that large parts of the site are moderately to severely transformed as a result of mostly ostrich grazing over many years. The areas that are less transformed/affected are to the south and western (within the original 70ha area). The preferred (reduced 56ha) area has been informed by the sensitivity and subsequently avoids the more sensitive areas.





Figure 19: Botanical sensitivity of the original 70ha area (Source: Vlok 2022).

The Terrestrial Assessment Report (**Appendix H3**) identifies the habitats on site. The Screening Tool Report (**Appendix M**) identifies the terrestrial sensitivity as High.

The specialist (Hoare 2022) notes that the ridge, foot slope and kloof are identified as areas of High Site Ecological Importance (SEI), the Plains as Medium SEI, and the degraded areas and transformed (cultivated) areas as Very Low SEI – see figure 5.

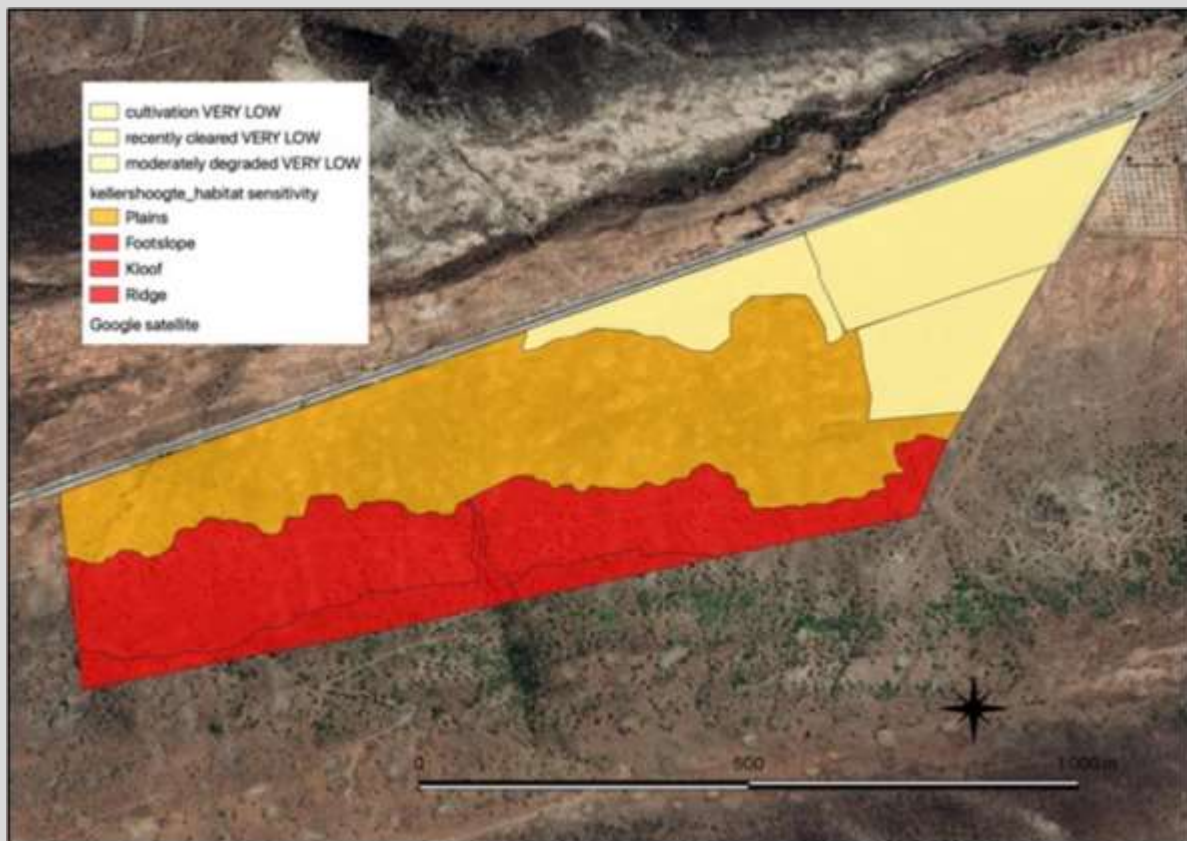


Figure 20: Map of terrestrial areas sensitivities (Extracted from Terrestrial Biodiversity Assessment Report, 2022(Appendix H6))



Based on historical imagery it is noted that there was a small off-channel dam on the property within the already transformed 13ha, and degradation associated with overgrazing. The specialist states that based on the historical imagery the already developed area is within an area categorised as very low sensitivity. The remainder of the 56ha (56ha – 13ha = 43ha) extends into an area with moderate sensitivity whilst the high sensitivity area along the footslope, kloof and ridgeline is avoided.

According to the Plant Species Compliance Statement (**Appendix H3**), the ecological state of the already affected areas transformed, although very few alien plant species on the remainder of the site. Ostrich grazing on the larger area, had a moderate to severe negative impact on the remaining vegetation. A small section of the proposed development area is mapped as a terrestrial CBA.

The remaining extent of the proposed orchard areas are also deemed moderately transformed/disturbed by the botanist.

Prior to the commencement of the pipeline and the 13 ha transformed area, the Aquatic Report (**Appendix H1**) reports the following:

- The pipeline traverses ESA 1 and ESA 2 areas.
- A tributary of the Kandelaarsrivier (KH1 in the Aquatic Report) flows across Portion 3 of Farm 172. This is a non-perennial watercourse. Prior to the construction of the pipeline, the Present Ecological State (PES) would have been C (Moderately Modified).
- The Kandelaarsrivier and the associated riparian zone and riverbanks were assessed as PES of D (Largely Modified).
- Two drainage lines flowed from south to north on Portion 4 of Farm 172. The specialist determined that the PES of the drainage line ('KH2' in the Aquatic Report) was D prior to the commencement of cultivating the portion of land.
- The Ecological Importance and Sensitivity of the Kandelaarsrivier tributary (KH1) and the drainage line (KH2) prior to any commencement activity was Low.

6.2 Vegetation and/or groundcover (Post-commencement)

Cross out ("☒") the block **and** describe (where required) the vegetation types / groundcover present on the site after commencement of the activity.

Indigenous Vegetation - good condition	Indigenous Vegetation with scattered aliens	<input checked="" type="checkbox"/>	Indigenous Vegetation with heavy alien infestation
Describe the vegetation type above:	Describe the vegetation type above:		Describe the vegetation type above:
	The vegetation type of the site is Eastern Little Karoo		
Provide ecosystem status for above:	Provide ecosystem status for above:		Provide Ecosystem status for above:
	The status of the Eastern Little Karoo vegetation type is Vulnerable in terms of the National Environmental Management Biodiversity Act National Ecosystem List (GN 1002 of 2011). Endangered in terms of the updated Ecosystem Threat Status classification (2021).		
Indigenous Vegetation in an ecological corridor or along a soil boundary / interface	Veld dominated by alien species		Distinctive soil conditions (e.g. Sand over shale, quartz patches, limestone, alluvial deposits, termitaria etc.) – describe

Bare soil	Building or other structure	Sport field
Other (describe below)	Cultivated land	Paved surface

Post-commencement, +/-13 ha of land was disced, ripped and prepared to plant almond trees within the north-eastern portion of Portion 4 of farm 172. The remainder of Portion 4 of Farm 172 Kellershoogte is indicative of the vegetation on site pre-commencement, that is, indigenous vegetation with some alien species scattered on the site.

Approximately 43ha (partially within low and medium sensitive areas) is yet to be transformed to achieve the overall project of +/- 56ha of orchards although the Applicant implemented infrastructure and commenced with clearing/planting in furtherance of a 70ha venture.

Photos reflecting the current condition of the orchard confirms that complete groundcover has established amongst the planted trees with a number of indigenous species noted. This level of ground cover will be maintained and reduces the risk of unwanted erosion / downstream siltation.





(a) Highlight and describe the **post-construction habitat** condition on site.

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	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	%	
Near Natural (includes areas with low to moderate level of alien plants)	77%	The remaining extent of the 56ha amounting to 43ha is still near mostly natural albeit degraded from ostrich grazing.
Degraded (includes areas heavily invaded by alien plants)	0%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	23%	Transformed orchard on nearly 13ha (of the greater 56ha total development footprint). It is noted from current images that groundcover within this 13ha planted orchard has re-established with numerous indigenous species noted amongst more common agricultural weeds.



- (b) How have the vegetation and/or aquatic ecosystem(s) present on site (including any important biodiversity features identified on site (e.g., threatened species and special habitats)) been affected by the commencement of the listed activity(ies)?

According to the Terrestrial Biodiversity Assessment Report (**Appendix H2**) the already cultivated orchards is within the **very low sensitivity area**. The botanist confirms that the 13ha already transformed (7ha planted, 6ha ripped) are on land that was mostly indigenous but not in pristine ecological state as a result of the extensive ostrich grazing some years ago, and the abundance of indicators of disturbance.

A total of 93 species were found within the original 70ha area of Portion 4 of Farm 172 – the list is included on page 6 of the Botanical Report (**Appendix H2**).

None of the Species of Conservation Concern listed in the Screening Tool Report (**Appendix M**) were found within the area. The Botanist (Dr Jan Vlok) notes that the species occur in different habitat types. However, the only species that may have been found in the area is *Glottiphyllum linguiforme*, but it is sensitive to trampling and most likely eradicated as a result of historical ostrich farming on the property.

Euphorbia ferox subsp. calitzdorpense is the only species that should be regarded as a threatened species. The Botanist notes that this taxon has not formally been categorised yet but warrants a status of Vulnerable.

Few alien species were noted on site with a few individual species of *Opuntia ficus-indica* and *Salsola kali* noted on the site.

The most sensitive area of the 70 ha area of Portion 4 of Farm 172 is the northern to western area of the site (best ecological condition, ESA and populations of *Euphorbia ferox subsp. Calitzdorpense*) – see Figure 8. This area has subsequently been excluded from the area (70ha) originally earmarked for cultivation) leaving approximately 56ha within low-moderate sensitive area.



Figure 21: Plant species sensitivity map (green area: most sensitive area | red polygon: 13 ha already transformed) (Extracted from the Botanical Report, Vlok 2022)

Aquatic⁶

Ongoing drought in the Karoo contributed to low flows and ultimately no flows in the Kandelaars River from 2019-2022. To substitute the registered water that could be abstracted from the river, the Applicant drilled new boreholes. These were established within 100m of the banks of the Kandelaars River, but outside the riparian zone of the river.

To get water from the existing and new boreholes to the planned orchard site, a new the pipeline was installed that disturbed a portion of an unnamed tributary of the Kandelaars River.

The pipeline was installed crosses this unnamed tributary below the riverbed. Disturbance of the banks was minimal as it was within the footprint of an existing farm road that traverse the tributary.

Establishment of the agricultural fields on Portion 4 of Farm 172 involved soil ripping which resulted in a small portion of a non-perennial drainage line covered by the prepared field. Subsequent rainfall events have resulted in erosion along the original drainage line and have re-establishment of a drainage channel through the ripped 6ha.

The preferred footprint of +/-56ha subsequently excludes this drainage line so as not to disrupt natural surface water flow.

Post-commencement the PES of the tributary of the Kandelaars River and the drainage line (KH2) within the previously ripped 6ha is D, and the PES for the unnamed tributary (KH1) is assessed as C.

The IES for the Kandelaars River is Moderate, and Low for the tributary (KH1) and the drainage line (KH2).

6.3 Vegetation / Groundcover Management

(a) Describe any mitigation/management measures that were adopted and the adequacy of these:

Initial commencement of the clearing of +/-13 ha was undertaken without any mitigation or management measures.

Subsequent to receiving Pre-Compliance and Compliance Notices the Applicant refrained from planting any more trees (other than the 7ha already planted).

Site sensitivities subsequently identified by the soil/agricultural specialist, faunal, flora and biodiversity specialists resulted in the exclusion of 14ha as being unsuitable for cultivation. The preferred site area (+/- 56ha) avoids the identified site sensitivities and is restricted to areas with acceptable impact levels.

It is recommended that groundcover amongst the trees be maintained and allowed to re-establish as it will improve moisture content of the soil, prevent unwanted erosion and maintain a level of habitat functionality and species preservation.

It is evident from the latest site photographs that such groundcover establishment is effective and can mitigate loss of habitat/vegetation to some extent.

7. LAND USE OF THE SITE (PRE-COMMENCEMENT)

Please 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 activity/ies.

Untransformed area Natural habitat	Low density residential	Medium density residential	High density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial

⁶ Aquatic Report (Appendix H1) compiled by Dr James Dabrowski for Confluent Environmental. 2021. Establishment of Almond and Pomegranate Orchards on Portion 4 of Farm 172 Kellershoogte. Section 24G - Freshwater Assessment Report.

Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism & Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir (off-stream small farm dam)
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 or more)	Airport
Harbour	Sport facilities	Golf course	Polo fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	Non-Perennial Tributaries	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archaeological site
Other land uses (describe):				

(a) Please provide a description.

The property had previously been utilised for dryland cultivation to a lesser degree and extensive ostrich grazing for the most part, with supplementary feeding taking place. These activities resulted in some degradation of the landscape but was still maintained as natural varying from low to medium sensitivity.

The areas cleared and ripped contained a non-perennial drainage line (subsequently excluded from the preferred footprint area) as well as a small off-stream farm dam.

8. LAND USE CHARACTER OF SURROUNDING AREA (PRE-COMMENCEMENT)

Cross out ("☒") the block that reflects the past land uses and/or prominent features that occur/red within +/- 500m radius of the site and neighbouring properties if these are located beyond 500m of the site. **Please note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and impact(s) of the activity/ies.

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 & 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 or 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):				

9. LAND USE CHARACTER OF SURROUNDING AREA (POST-COMMENCEMENT)

Cross out ("☒") the block that reflects the current land uses and/or prominent features that occur(s) within +/- 500m radius of the site and neighbouring properties if these are located beyond 500m of the site. **Please note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and impact(s) of the activity/ies.



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 & 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 or 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):				



10. SOCIO-ECONOMIC CONTEXT

10.1 Socio-Economic Context (Pre-Commencement)

Describe the pre-commencement social and economic characteristics of the community in order to provide baseline information.

The socio-economic information for Oudtshoorn is from the Department of Statistics of South Africa 2011 census data⁷. The following is noted:

- The total population is approximately 95 933. The population is made of 77,3% coloured people, 12,5% white people, 10,2% is made up of other population groups.
- Of those aged 20 years and older, 36,8% have some secondary education, 25,1% have completed matric, and 6,7% have some form of higher education.
- It was recorded that there are 21 910 household within the Municipality with an average household size of 4,2 persons.
 - 36,2% of the households are headed by females.
 - 85,3% of the households have access to electricity.
 - 74,5% of the households have access to piped water inside the dwelling.
- Of the 31 168 employed or unemployed but looking for work group, 24,3% of this group is unemployed.
- Of the 14 351 economically active youth (between 15 and 35 years of age), 35,9% are unemployed.
- Agricultural household statistics:
 - The number of agricultural households are 2235
 - The agricultural household activities include vegetable (1089), poultry (787), livestock (757), other (383) and 'other' crops (297).
- According to Partridge (2020) who compiled 'Agricultural trends in the Klein Karoo and Surrounds' on behalf of the Western Cape Department of Agriculture: Macro & Resource Economics, the Klein Karoo confirms that the Oudtshoorn agricultural sector totalled R5.7 billion Gross Value Added (GVA) within the greater Eden District being the biggest economy of the Klein Karoo (second Hessequa and lastly Kannaland), however the importance of agriculture in the region (as a portion of the economic share) declined from 14% to 9% from 2008-2018. Partridge (2020) explains that despite this decline, the agricultural sector remains a primary highly labour intensive market, making the agricultural sector in the Oudtshoorn area a vital role player in reducing employment amongst local residents with implications for regional food security.
- Partridge (2020) highlights that despite the recent drought in the Klein Karoo, land under cultivation has increased from 2013 – 2018 although land being used for orchards declined by 229ha mostly in the Kannaland Municipal area resulting from a reduction in wine grapes, apricots and nuts other than almonds, macadamias and pecans. Against this reduction in other nut orchards, macadamias and almond (orchards) increased by 90ha and 58ha respectively.
- Partridge (2020) concludes that the area experiences large production shifts at specific commodity levels (which in many cases cancels each other out) suggesting that farmers in the area are not necessarily quitting farming activities are a result of the drought, but are tending to move into new crops in light of climatic conditions and resource constraints. This in turn shows a positive capacity of producers in the region to move into the production of products which are more attune to current resource constraints i.e. water constraints / more severe droughts.

10.2 Socio-Economic Context (Post-Commencement)

Describe the post commencement social and economic characteristics of the community in order to determine any change. Where differences between pre- and post-commencement exist, state which are as a result of the activity(ies) for which rectification is being applied for.

⁷ https://www.statssa.gov.za/?page_id=993&id=oudtshoorn-municipality

The socio-economic information above is applicable with some variation in the statistics since it has been more than 10 years since the 2011 census. Some socio-economic opportunities, including employment, skills development, and training will be created post-commencement should cultivation of the land be allowed to continue. It is not anticipated that cultivation will have any significant impact on the socio-economic statistics outlined pre-commencement.

Reasons why the Applicant initiated the project include (A) the global nut industry and pomegranate industry is a fast growing industry driven by the more health conscious consumer worldwide, as well as a substantial growth in the non-traditional markets i.e. China and Asian countries (<https://www.persistencemarketresearch.com/market-research/almond-market.asp>), and (B) to diversify activities on the farm that can ultimately sustain permanent employment throughout different seasonal practices.

As a whole the development of the envisaged 56ha of orchards will not increase permanent employment on the farm immediately, however it will contribute to ensuring job security of existing employees who otherwise would be dependent on mostly seasonal employment. Seasonal employment will however be notable from year six – eight, when harvesting will commence. Harvesting is typically done between June – August.

The global prediction of almond nut demand is expected to be substantial between now and 2030 with both South Africa and Australia increasing their output to supply in a growing global demand. The **South African Almond Nuts Market Report (August 2022)** confirms that popular areas for almond nut growers are regions with **very hot summers and very cold winter months**. The **South African Almond Producers Association (SAPPA)** informs that the South African market will most likely exceed 27 000 metric tonnes production in 2022. They also note that because of the growth in the non-traditional markets, most notably China, farming with almond nuts is deemed a sustainable, long-term option (<https://www.chelmerfoods.com/news/south-african-almond-nuts-market-report-august-2022/>).

According to SAPPA the projected growth in South Africa is considerable with harvest volume ranging from 1.4ha tons/hectare to 1.6 tonnes/ha depending on age of the orchard and condition of the trees.

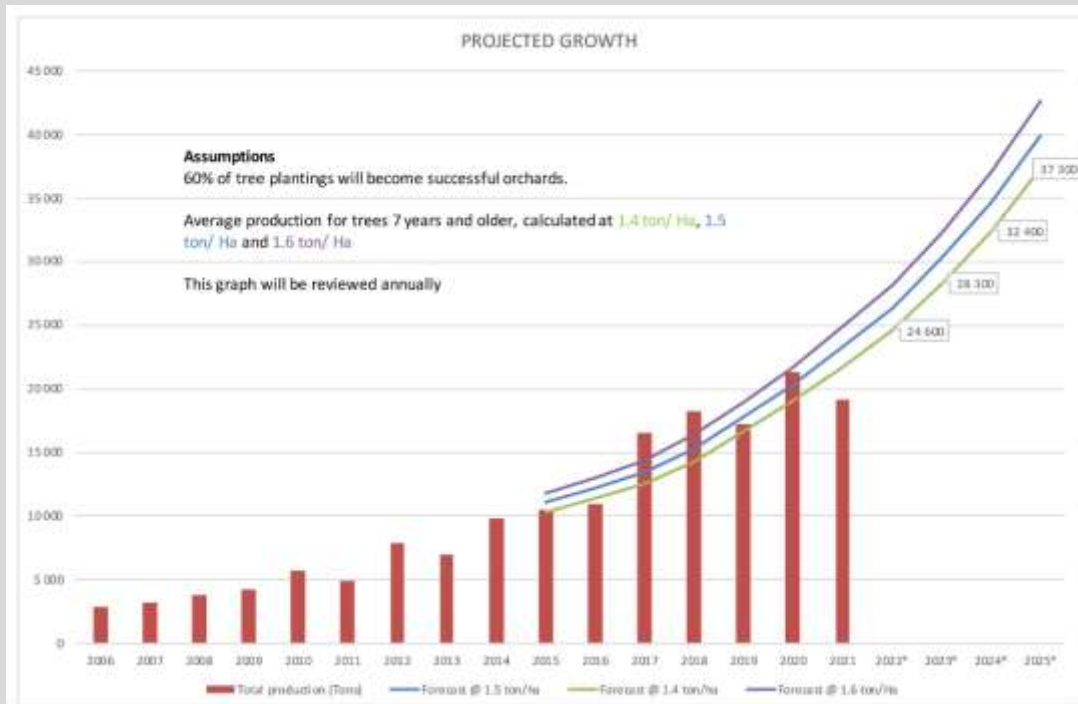


Figure 22: Projected growth forecast for almond nut production in South Africa till 2025 (Source: <https://www.sappa.za.org/>).

Indirect investment and employment opportunities are also associated with processing and packaging.

11. HISTORICAL AND CULTURAL ASPECTS

- (a) Please be advised that every application for Environmental Authorisation including an application for a Waste Management Licence, must include, where applicable the investigation, assessment and evaluation of the impact of any proposed listed or specified activity on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii) of that Act. Please be further advised that if section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), is applicable to your application, then you are requested to furnish this Department with written comment from Heritage Western Cape as part of your public participation process. Section 38 of the Act states as follows: "38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-
- (a) the construction of a road, wall, 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 5 000 m² 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 10 000 m² 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 National Heritage Resources Act, 1999 (Act No. 25 of 1999), must also be investigated, assessed and evaluated. Section 3(2) states as follows: "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—
 - (j) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - (k) objects to which oral traditions are attached or which are associated with living heritage;
 - (l) ethnographic art and objects;
 - (m) military objects;
 - (n) objects of decorative or fine art;
 - (o) objects of scientific or technological interest; and
 - (p) 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 National Heritage Resources Act, 1999, applicable to the development? If YES, explain:	YES	NO
	UNCERTAIN	
<p>The works undertaken as part of the larger orchard area triggers Section 38 of the NHRA. The following activities are triggered:</p> <ul style="list-style-type: none"> • Section 38(1)(a) - Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length. This activity is triggered because the length of the pipeline is approximately 1.1km • Section 38(1)(c) Any development or other activity which will change the character of a site <ul style="list-style-type: none"> (i) - Exceeding 5,000m² in extent. <p>Application is being made for approximately 56 ha of Portion 4 of Farm 172 to be used for almond orchards. This changes the character of the site from open land to orchards.</p> <p>A Notice of Intent to Develop (NID) and Background Information Document (BID) has been submitted to Heritage Western Cape (HWC). Please see Appendix H8: NID and BID submitted to HWC.</p>		



HWC in their final response to the NID, dated 03 November 2022, state that no further studies or 'action' is required as ".....there is no reason to believe that the proposed development...will impact on any heritage resources". Please see Appendix F2: HWC Final Response to NID.			
Did/does the development impact on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999?	YES	NO	
	UNCERTAIN		
If YES, explain:			
Did/does the development impact on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999? If YES, explain:	YES	NO	
	UNCERTAIN		

Please Note: If uncertain, the Department may request that specialist input be provided. If, yes, a copy of the Notice of Intent submitted to Heritage Western Cape must be submitted with this form.

12. COASTAL ASPECTS (SEAFRONT/SEA ENVIRONMENT)

(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	

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).

13. REGIONAL PLANNING CONTEXT

Is the activity permitted in terms of the property's existing land use rights?	YES	NO	Please explain
The current land use rights and zoning of the site is Agriculture. The activity is therefore in line with the land use rights of the property.			
Will the activity be in line with the following?			
Provincial Spatial Development Framework (PSDF)	YES	NO	Please explain
The PSDF notes that the Western Cape economy is founded on the unique assets of the province which include the farming resources that contribute to the country's agricultural exports. The PSDF also acknowledges the provinces natural assets and varied cultural resources making the Western Cape a leading tourist destination.			



<p>The proposed development is in line with the PSDF since it complements the goals that aim to enhance the Western Cape through increased productivity, competitiveness, and opportunities with the spatial economy; and strengthening the economy in rural areas.</p> <p>One of the strategic goals of the PSDF is to protect biodiversity whilst promoting agricultural resources to promote consolidation of farming areas and prevent their fragmentation, and to diversify agricultural activities.</p> <p>The proposed agricultural activity on the site supports the agricultural sector since it will ensure agricultural practices within the rural landscape, it will not fragment agricultural landscapes, and maintain and enhance agriculture diversity on the property to increase job security within the agricultural industry.</p> <p>Furthermore the Karoo is an area deemed suitable for almond nut farming given its climate with hot summers and cold winters.</p>			
Urban edge / Edge of Built environment for the area	YES	NO	Please explain
<p>The properties are not located inside an urban area as they are zoned and intended for agricultural purposes that is not compatible with land within the urban edge.</p>			
Integrated Development Plan of the Local Municipality	YES	NO	Please explain
<p>The Oudtshoorn Municipality IDP seeks to balance development and the protection of the environment that supports social development and economic development. The Oudtshoorn IDP identifies agriculture, forestry and fishery as the main economic sector in the region. The IDP also identifies agriculture as an opportunity for growth and job creation. Strategic Objective 2 and 7 are applicable to this application:</p> <ul style="list-style-type: none"> • SG 2: Build a Capacitated Workforce and Communities; and • SG 7: Growing the District Economy <p>Through this 24G process, specialist input has informed the application on natural sensitive areas to be excluded from the agricultural area to ensure protection of the natural environment. In allowing agricultural activities to continue on Portion 4 of Farm 172 Kellershoogte (albeit in a reduced scale), this will positively support local job security by diversifying agriculture and enabling permanent work force throughout various seasonal cycles, and contribute to the economy.</p>			
Spatial Development Framework of the Local Municipality	YES	NO	Please explain
<p>The proposal is in line with the Oudtshoorn SDP. Policy A3 of the SDF is applicable: Promote resilient, sustainable and inclusive agriculture and agri-processing noting that “<i>Agriculture plays a significant role in the Oudtshoorn municipality. It provides opportunities to increase employment and grow products for local and international markets</i>”.</p> <p>Other land use on agricultural land is not supported in the location being outside the urban edge. Rather, the preservation of agricultural operations, mindful of environmental constraints, should be protected and improved.</p>			
Approved Structure Plan of the Municipality	YES	NO	Please explain
<p>The property is zoned Agriculture Zone I and is an active commercial agricultural entity.</p>			
An Environmental Management Framework (EMF) adopted by the Department	YES	NO	Please explain
<p>The Garden Route EMF does not extend to and include Portion 4 of Farm 172 Kellershoogte.</p>			
Any other Plans	YES	NO	Please explain



SECTION D: NEED AND DESIRABILITY

Please Note: Before completing this section, first consult this Department's *Guideline on Need and Desirability* (March 2013) available on the Department's website (<http://www.capegateway.gov.za/eadp>).

1. Was the activity permitted in terms of the property's land use rights at the time of commencement?	YES	NO	Please explain
<p>The proposed development area is zoned Agriculture with the primary rights being associated with farming.</p> <p>A CARA permit has not been obtained from the Department of Agriculture for the clearing/cultivation of virgin land i.e. land that has not been cultivated within a period of 10 years. The Applicant is in process of applying for said permit.</p> <p>The Western Cape Department of Agriculture has however provided input to the proposal and indicated that it does not have objection to the reduced preferred Alternative on condition that the necessary CARA permit is obtained and the design parameters are adhered to.</p>			

2. Was the activity in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES	NO	Please explain
Please see Section EC (13) above.			
(b) Urban edge / Edge of Built environment for the area	YES	NO	Please explain
Please see Section C (13) above.			
(c) Integrated Development Plan and Spatial Development Framework of the Local Municipality (e.g. would the approval of this application have compromised the integrity of the existing approved and credible municipal IDP and SDF?)	YES	NO	Please explain
Please see Section C (13) above.			
(d) Approved Structure Plan of the Municipality	YES	NO	Please explain
The properties are zoned for agricultural use in the local plans.			
(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application have compromised 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
Please see Section C (13) above.			
(f) Any other Plans (e.g. Guide Plan)	YES	NO	Please explain
Please see Section C (13) above.			

3. Was the land use (associated with the activity for which rectification is sought) considered within the timeframe intended by the existing approved Spatial Development Framework (SDF) agreed to by the relevant environmental authority (i.e. was the development in line with the projects and programmes identified as priorities within the relevant IDP)?	YES	NO	Please explain
The land use as agriculture, is deemed to be in line with the SDF and IDP in so far as it addresses the promotion of agriculture, employment and investment in the economy of the greater Oudtshoorn area.			

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) have occurred here when activities commenced?	YES	NO	Please explain
<p>The area where the activity commenced (+/-13ha) is the least sensitive of Portion 4 Farm 172. Historically wheat farming was undertaken in this area and the area has been utilised for extensive ostrich farming. It is the closest point to the existing farm access.</p> <p>It is at the location closest to the new water supply pipeline.</p> <p>It is on the flat lower lying portion of the property.</p>			



<p>5. Did the community/area need the activity and the associated land use concerned (was 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.)</p>	YES	NO	Please explain
<p>The farming activities provide employment opportunities to the those that are employed on the farm, hence it contributes to the rural economy of the area and supports a number of families that rely on farming enterprises in an area.</p> <p>There is however concern raised by downstream farmers that also form part of the local community, that water consumption associated with the proposed cultivation activity, will impact negatively on their farming operations.</p> <p>Care must be taken to ensure that water consumption associated with the proposed cultivation does not negatively impact on other, registered and lawful water users from the area.</p> <p>In order to achieve this, the sustainable yield per borehole (main supply of irrigation water for the orchards) must not be exceeded and record must be kept of consumption volumes should the WULA be authorised for the greater volume of water needed to irrigate the orchards.</p>			

<p>6. Were the necessary services with adequate capacity available (at the time of commencement), or was additional capacity created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the Application Form / additional information as an appendix, where applicable.)</p>	YES	NO	Please explain
<p>The properties do not make use of municipal services, however due to reduced water supply from existing registered boreholes and water via the <i>leibeurt</i> from the Kandelaars River (this source is not deemed sustainable enough to support the proposed activity on its one), the Applicant drilled additional boreholes to supply in the (irrigation) demand associated with the orchards.</p> <p>A subsequent geohydrological and freshwater assessment determined the sustainable yield volumes that must not be exceeded. A Water Use License (WULA) has been submitted.</p>			

Table 1: Expected demand associated with both existing as well as the proposed land use (Source: Confluent WULA application – Technical Report).

	Lucerne	Almonds	Pomegranates	TOTAL
Water Source				
	Kandelaars River & Borehole	Borehole	Borehole	
Area (ha)				
	10	10	46	66
Irrigation Method				
	Flood & Sprinkler	Drip	Drip	
Irrigation Requirement (m³)				
January	22 200	9 500	64 400	96 100
February	18 000	7 500	49 680	75 180
March	14 000	6 000	27 600	47 600
April	6 600	3 200	0	9 800
May	4 200	3 100	0	7 300
June	0	0	0	0
July	0	0	0	0
August	300	0	0	300
September	5 700	0	0	5 700
October	13 100	2 400	0	15 500
November	18 400	7 100	22 080	47 580
December	21 400	9 200	57 500	88 100
TOTAL	123 900	48 100	221 260	393 260



Confluent submit that of the overall 393 260 m³ irrigation demand, 75 300 m³ will be provided by the ELU from the Kandelaars River. The balance of the irrigation requirements (317 960 m³) will be supplied by combined abstraction from KBH02, -03 and 04.

According to the geohydrological report, the monthly irrigation requirements can be supplied by the boreholes, provided that the total sustainable yield of the borehole (of 422 750 m³) is not exceeded on an annual basis.

Importantly the following measures must be implemented:

- Groundwater levels must be measured on a monthly basis to verify the results of the sustainable yield estimations. In doing so, timely adjustments can be made to the pumping rate and/or duration of a borehole that shows signs of an unacceptable decline in water level and its imminent failure (if any).
- The above data must be captured into an electronic database for easy access, interpretation and review by the BOCMA.
- Flow volumes abstracted from each borehole must be measured and recorded at the end of each month.

7. Is/was this development provided for in the infrastructure planning of the municipality, and if not what was/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 Application Form / additional information as an appendix , where applicable.)	YES	NO	Please explain
The development does not form part of the municipal planning since it is a private entity.			

8. Was this project part of a national programme to address an issue of national concern or importance?	YES	NO	Please explain
<p>The project is not part of a specified national programme, however sustainability and improvement of existing agricultural land and agricultural activities are of national concern as it contributes to economic growth and investment in the agricultural sector which in turn supports a substantial segment of rural communities through related employment.</p> <p>It is noted that the Government's National Development Plan: Vision for 2023 specifically mentioned strengthening of the rural agricultural sector through labour intensive farming projects and exports as one of its 'growth plan' actions.</p>			

9. Did location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the land use on this site within its broader context.)	YES	NO	Please explain
<p>The land was previously used for extensive agricultural activities, and located on land identified for agricultural activities.</p> <p>The site is located in proximity to a Provincial Road which enables easy transportation of the end product to respective markets.</p> <p>Almonds in particular prefers hot summer and cold winter temperatures for which the Karoo is well known.</p>			

10. How did/does the activity or the land use associated with the activity applied for, impact on sensitive natural and cultural areas (built and rural/natural environment)?	YES	NO	Please explain
According to the 2021 Ecosystem Threat status classification (published post commencement) the vegetation is classified as being Endangered. Having considered this (at the time anticipated) increase in			

the threat status of this vegetation type, the botanist considered the impact and provided guidance on the preferred area for the activity to exclude areas of higher sensitivity vs areas that do reflect a level of degradation and historical transformation.

Assessment of the impact(s) associated with infilling/installation of infrastructure within unnamed, non-perennial watercourses by an aquatic specialist confirm the level of impact to be low. However the preferred 56ha footprint excludes the unnamed tributaries that traverse the study site and these features have been buffered to act as additional mitigation measures.

Additional specialist input was obtained to identify any potential biodiversity / landscape constraints and how best to avoid or minimise any impacts associated with such disciplines.

As a result the preferred 56ha is limited to low-moderate sensitive areas only and avoids areas deemed to have high biodiversity/habitat value.

Given the rural agricultural character of the landscape it is deemed a suitable land use and the heritage authority has confirmed that no further studies are necessary.

11. How did/does the development impact on people's health and wellbeing (e.g. in terms of noise, odours, visual character and sense of place, etc.)?	YES	NO	Please explain
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The property is located a significant distance from any urban settlements where so-called agricultural nuisance activities i.e. dust, noise, lighting typically causes conflict. According to the findings of the WULA (which included input from a geohydrologist and freshwater specialist) the activity is not anticipated to result in negative impacts on people's health and/or wellbeing on condition that (A) local employment be given preference with both permanent and seasonable job opportunities and (B) that the sustainable yield volumes of the boreholes and the lawful/registered water volumes from the Kandelaars River not be exceeded ever.

This is very important as exceeding the sustainable yields and not monitoring abstraction / usage volumes, has the potential to negatively impact on other lawful, registered water user in the area.

12. Did/does the proposed activity or the land use associated with the activity applied for, result in unacceptable opportunity costs?	YES	NO	Please explain
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Not allowing the activity to continue would result in opportunity costs as it will result in reduced job security for employees that are otherwise dependent on seasonable employment more so than permanent employment that's associated with a diversified agricultural sector/practice.

The loss of opportunities associated with economic contribution to the local economy is also noted for both direct and indirect opportunities associated with preparation of the lands, purchasing stock i.e. trees, payment of taxes/levies for use of water (for irrigation) and salaries for seasonal employees (during harvest periods).

13. What were the cumulative impacts (positive and negative) of the land use associated with the activity applied for?	YES	NO	Please explain
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- Positive:
- Improved job security of existing farm labourers with a diversified agricultural practice that improves seasonal employment;
 - Development of new skills set for existing farm labourers;
 - Increase in seasonable workers during harvest/packing months (mostly June – August for harvesting and then a further month for packaging and distribution);
- Negative:
- Loss of natural vegetation/habitat
 - Increased pressure on non-renewable resources most notably water sources



14. Is/was the development the best practicable environmental option for this land/site?	YES	NO	Please explain
<p>The property is zoned for agricultural use, and was previously used for extensive agricultural activities.</p> <p>The application of agriculture on farm land designated for agricultural use is deemed to be optimising the land use that's permissible in terms of primary rights.</p> <p>The site has a gentle slope resulting in good drainage and considering the local climate as optimal for almond nut production, the land use is deemed a practical land use.</p> <p>Importantly the preferred area of 56ha has been informed by environmental constraints both to avoid negative impacts i.e. excluding sensitive areas, as well as adjusting the original 13ha area to exclude a non-perennial surface drainage line from the already ripped footprint area.</p> <p>In addition the sourcing of water has been investigated and verified by a geohydrologist and surface water specialist with specific conditions and recommendations of not exceeding sustainable yield volumes as such actions have the potential to (A) impact negatively on the water resource and (B) impact negatively on other registered, lawful water users in the area.</p>			

15. What are/were the benefits to society in general and to the local communities?	Please explain
<p>Continued agricultural activities will benefit the local community through improving the employment security level of existing employees of the farm through diversifying the agricultural activities on the farm. Introducing crops that have a different seasonal peak period i.e. harvesting/packaging ensures that farm labourers are occupied and employed for extended periods of time vs only seasonable employment. When the project will be in full operational phase (from year 6 – 10 onwards) the seasonable employment opportunities will increase exponentially, along with optimising agricultural development, and skills development.</p> <p>SAPPA confirms that almond nut demand (locally but especially globally) is growing very fast for a number of reasons, most notably the demand from non-traditional markets (China and Asian countries) and the growth of a more health conscious consumer. Production of almond nuts in South Africa and Australia (similar climate regions) are increasing exponentially with both the local and export markets benefitting from</p>	

16. Any other need and desirability considerations related to the activity?	Please explain
<p>None.</p>	

<p>17. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA were taken into account:</p>
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This 24G application identifies, predicts and evaluates the impacts associated with the proposed development. Specialists have been appointed to identify and assess potential impacts, and have provided input into avoiding and/or minimising the impacts identified.

Relevant guidelines and policies have been considered in this application. The application provides sufficient information for the competent authority to make an informed decision.

The impact of the activities on the environment have been considered through specialist investigations that have informed the preferred alternative to (A) avoid unnecessary negative impacts and (B) optimise areas not deemed to be sensitive for agricultural beneficiation.

An Environmental Management Programme (EMPr) has been compiled to ensure least impact of the proposed activities on the natural environment. Specialist input has been incorporated into the EMPr.

Public participation is being undertaken in terms of the 2014 EIA Regulations.

18. Please describe how the **principles of environmental management** as set out in section 2 of NEMA were taken into account:

Through this 24G process, the proposed development is assessed against the requirements of sustainable development to ensure that development is socially, economically and environmentally sustainable.

Since the activities commenced without environmental authorisation, impacts on the watercourse were not avoided or minimised. However, through this process, specialist input has guided how best to reduce the impact on the watercourse post-commencement.

Furthermore, this process acknowledges that various elements of the natural environment are linked with the triple bottom line (social, economic and the environment) that must be balanced without compromising on the one or the other to ensure a sustainable development.

The impacts identified and assessed ensure that one impact does not impact negatively on another aspect and subsequently the preferred alternative has been determined as the best practicable environmental option based on specialist input.

It is not believed that the proposed development will discriminate against persons of disadvantage.

Organs of State who have jurisdiction will be invited to comment on the proposed development during the public participation process (PPP) to ensure that what is presented for decision making considers all necessary policies and guidelines.

During the PPP, disadvantaged individuals who are unable to read or write or who otherwise need special assistance to submit their comment are invited to contact Cape EAPrac to assist them to record their comments, and or to have the application explained to them to better understand what is proposed.

The PPP is undertaken to provide Organs of State and potential I&APs with all the necessary information to provide comment, and/or to make a decision on the application. The PPP will be undertaken as outlined in Section J of this application.

Importantly the input from stakeholders will be considered as issues/impacts not thought of, or not investigated remain a possibility. Should such issues/impacts be identified or highlighted through the public participation process it is a requirement of the best practice principles that such be considered and responded to where necessary.



Most importantly the long-term sustainability of the activities is directly linked to the sustainable yield of water resources that may not be exceeded as it would result in the unwanted negative impact on other lawful, registered water users and the water resource itself.

Through this 24G process, specialist assessments have been undertaken to inform any further requirements to mitigate any impacts as a result of the commenced activities, and future impacts should development continue. The impacts – social, economic and environmental impacts – have been identified and assessed.

The development and its impacts consider both the negative and the positive impacts.

An EMPr has been compiled to ensure best practises are adopted, implemented, and are considered as a risk-averse approach during the construction and operation phase. The EMPr provides input into how to avoid, minimise and remediate identified impacts, and to negate any pollution or degradation of the environment.

The proposed development will not exploit non-renewable natural resources on condition that sustainable yield (for water resources) is not exceeded and the natural environment (identified as sensitive) is not transformed beyond the parameters used to inform the preferred alternative.

It will also not hinder access to any environmental resources, benefits and services. The proposed development is not anticipated to impact or disturb any cultural heritage resources.



SECTION E: ALTERNATIVES

Please Note: Before completing this section, first consult this Department's *Guideline on Alternatives* (March 2013) available on the Department's website (<http://www.capegateway.gov.za/eadp>).

"Alternatives", in relation to an activity, means different means of meeting the general purposes and requirements of the activity, which may include alternatives to –

- (a) the property on which, or location where, it is to undertake the activity/the activity was undertaken;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

The NEMA 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 NEMA and the National Environmental Management Principles set out in NEMA are taken into account; and (where applicable)
- 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 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 NEMA.

1. In the sections below, please provide a description of any considered alternatives and alternatives that were found to be feasible and reasonable.

Please note:

- Detailed written proof of the investigation of alternatives must be provided. If no reasonable or feasible alternative exists, a motivation must be provided.
- Alternatives considered for a Section 24G application are used to determine if the development was the best practicable alternative (environmentally, socially and economically) for the site or property.
- In respect of a section 24 application, the option of not implementing the activity ("no-go"), includes the option of ceasing the activity, not implementing continuation of the activity, refusal of the commenced activity and complete rehabilitation of the affected site.

(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:

No property alternatives were considered since the property is owned by the applicant and is suitable for agricultural activities.

(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:

No activity alternatives were considered as the applicant wishes to undertake agricultural activities on agricultural land, specifically orchards.

(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:



Layout alternatives were considered for this application.

Three main layout alternatives have been considered of which the latter two have been eliminated:

- Alternative 1 (preferred alternative): Cultivation of an area of 56 ha accommodating specialist constraints;
- Alternative 2: Cultivation of a total area of 70 ha as was the initial intent when the initial 13ha was cleared;
 - This alternative has been eliminated due to the fact that it will result in acceptable direct and indirect impacts.
- Alternative 3: Cultivation of only the 13ha area already transformed in preparation and establishment of the orchards.
 - This alternative has been eliminated due to the fact that water supply is deemed to be sufficient without compromising environmental systems/lawful water users downstream and the preferred alternative covers an area which is not deemed to be sensitive (on condition that drainage lines be avoided as prescribed).

Please see E(h) below.

- (d) Technology alternatives (e.g. to reduce resource demand and 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:

Efficient water use through a drip irrigation system is being implemented.

- (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:

No operational alternatives have been considered as the applicant has commenced with and wishes to continue agricultural activities on the property.

- (f) The option of ceasing the activity (the refusal of the activity(ies) and/or rehabilitation of the site):

The property is zoned for agricultural use. Before lying fallow, the property was actively utilised for extensive agriculture activities including ostrich grazing and wheat farming. Ceasing the activity will mean that no agricultural activities may continue on the property. However, this is not preferred as the application wishes to continue with the agricultural operations of orchards.

The no-go option would be to rehabilitate the 13 ha already cultivated land which would entail the removal and destumping of already planted 7ha of trees which would be a substantial economic loss for an area that is not deemed environmentally sensitive according to specialist findings. No only will it imply a loss of the R1.5 million already spent on establishing the 7ha orchard, but it will jeopardise the employment of permanent labourers and eliminate the seasonal employment opportunities once the trees could be harvested.

Ceasing the activity will most definitely be necessary under the following conditions:

- Unacceptable loss of natural habitat/species/environment;
- Uncontrolled water use to the detriment of the environment/lawful water users.

When taking into account that the preferred option (reduced footprint of 56ha to accommodate environmental constraints), can be implemented within an area deemed environmentally least sensitive and with a combination of water from existing lawful use (ELU), as well as additional water sources (yet to be authorised) that have been investigated and verified by a geohydrologist/freshwater specialist, as being within the limit of sustainable yield (i.e. limited to no impact on the receiving environment and registered, lawful water users), then the option of ceasing the activity cannot be justified.

Specialists have identified and assessed continuing the activity which is deemed acceptable under the following two main conditions (not ignoring the other recommendations and findings of this S24G process):

- Continuous monitoring and measurement of water usage within water use rights and volumes (if awarded);
- Limiting the footprint of the orchards to the reduced 56ha.

It is recommended that consideration can be given to a **phased implementation** of the total 56ha, especially to ensure **appropriate record keeping** and **monitoring of water use** which has been identified as a **key concern** to participating downstream stakeholders.

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

No other alternatives other than what has been described in this S24G report has been identified or recommended by stakeholders.

- (h) Please provide a summary of the alternatives investigated and the outcomes of such investigation:

Please note: If no feasible and reasonable alternatives exist, the description and proof of the investigation of alternatives, together with motivation of why no feasible or reasonable alternatives exist, must be provided.



Alternative 1 is the initial proposed 70 ha agricultural area for planting– see figure 10 and Appendix B1. This alternative is what the Applicant initiated by implementing 13ha prior to ceasing under the Pre-Compliance and Compliance Notifications. This alternative does not consider any environmental sensitivities on the site and does not take into account water balance and sustainable yield restrictions.

Not only does this alternative have the potential to over exploit the water resource since it will exceed what has since been determined as the sustainable yield volume, it will also result in the transformation of sensitive areas/habitat identified by specialists as no-go or exclusion areas.

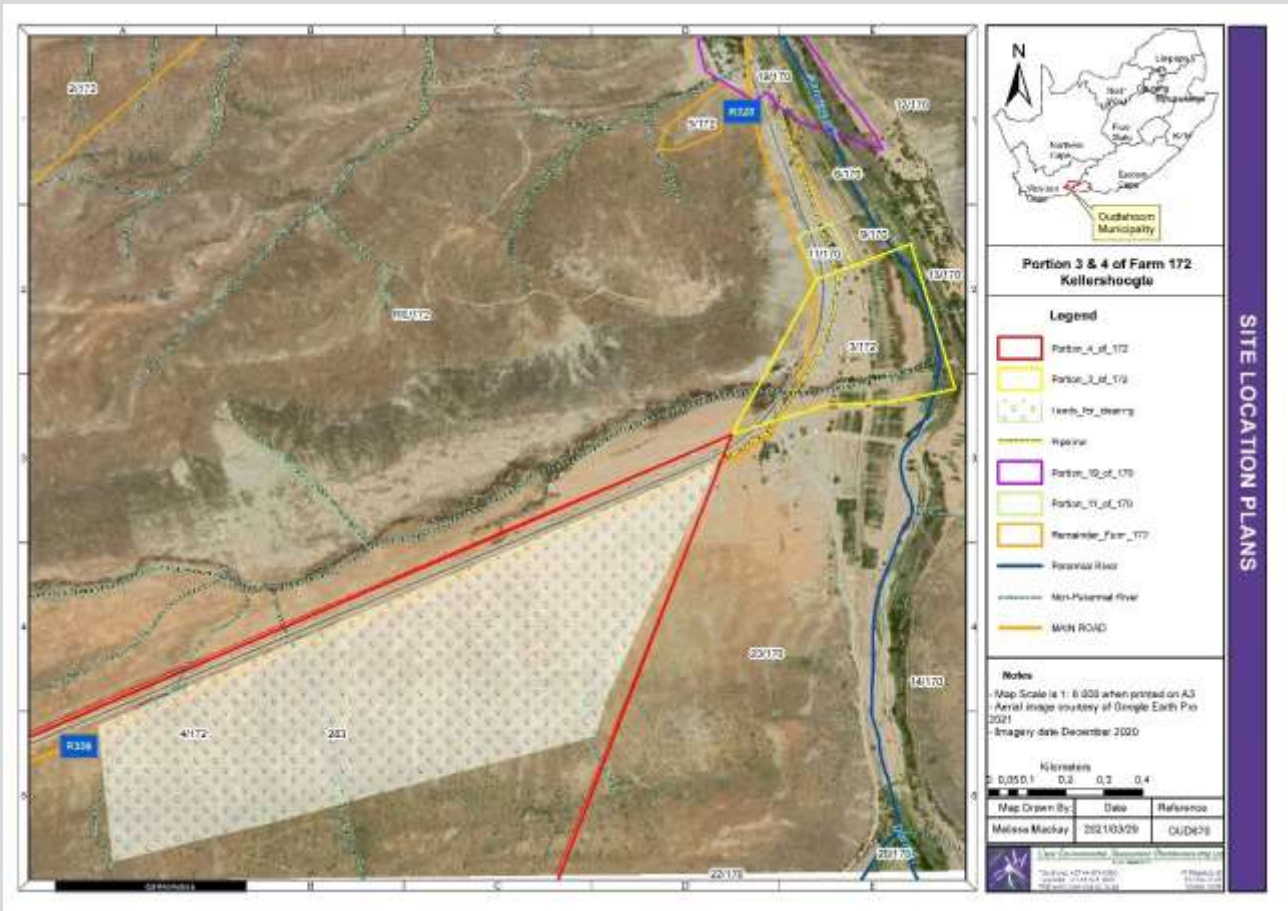


Figure 23: Initial Site Plan showing the 70ha of land for planting.



Alternative 2, the preferred alternative, has been formulated based on specialist input – see below figure and Appendix B2. The preferred alternative is 56 ha in extent of which approximately 13 ha has already been cleared and developed for crop production, and the remainder 43 ha is subject to approval. This includes the already completed water pipeline transferring water from two new boreholes to the development area for (drip) irrigation purposes.

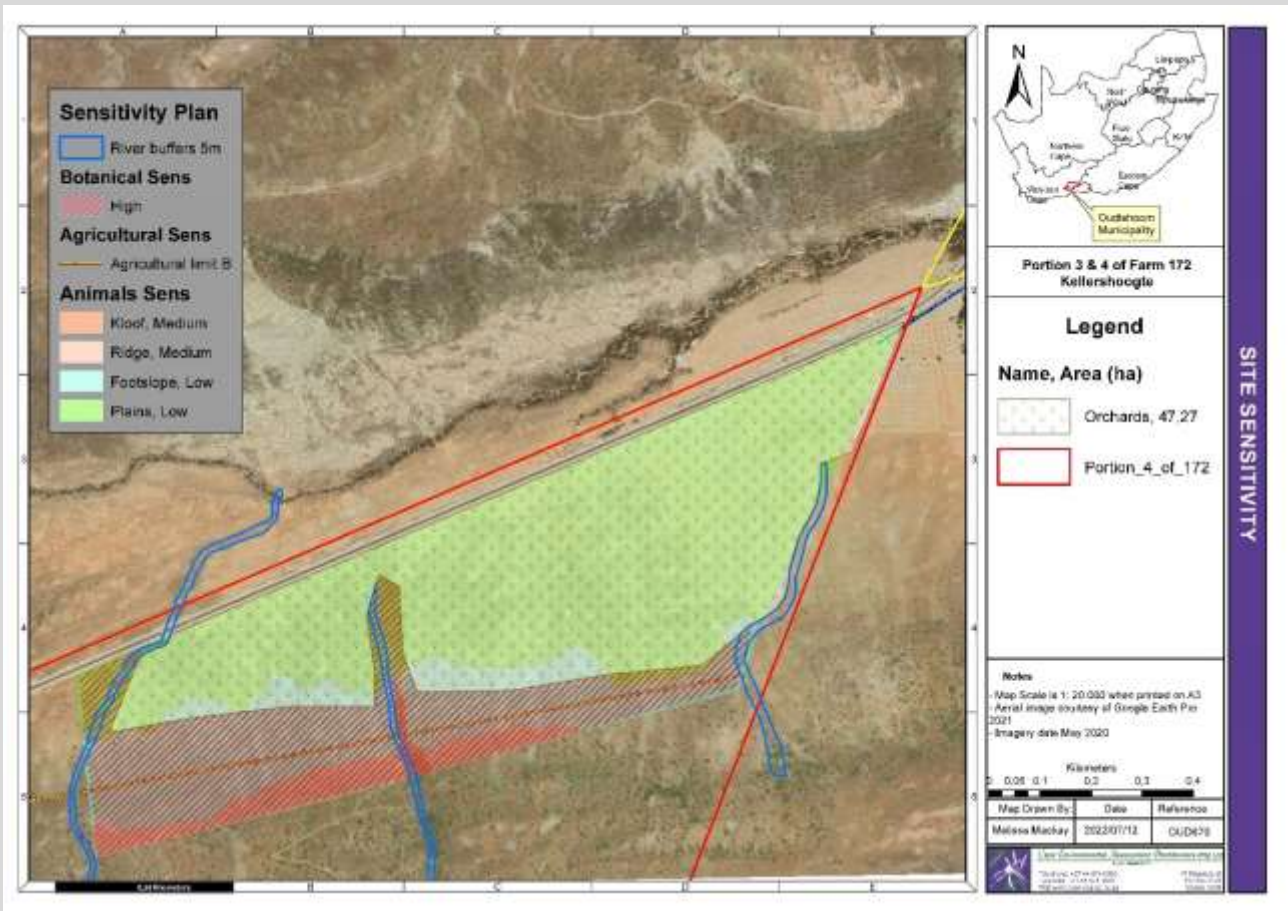


Figure 24: Preferred site plan informed by specialist input.

The preferred alternative considers:

- The watercourses identified on the site by the aquatic specialist and their five metre buffers to reduce the risk of any impact on these watercourses during ploughing or site preparation as some are connected to the broader hydrological network. Ploughing may impact their ecological function. The mapped aquatic constraints are shown in the above figure.





Figure 25: Aquatic constraints mapped (extracted from the Aquatic Assessment Report (Dabrowski, 2022))

- The plant species sensitivities area mapped by the botanist and the sensitive areas excluded from the preferred alternative.
- The terrestrial biodiversity exclusion zones mapped by the specialist in below figure.

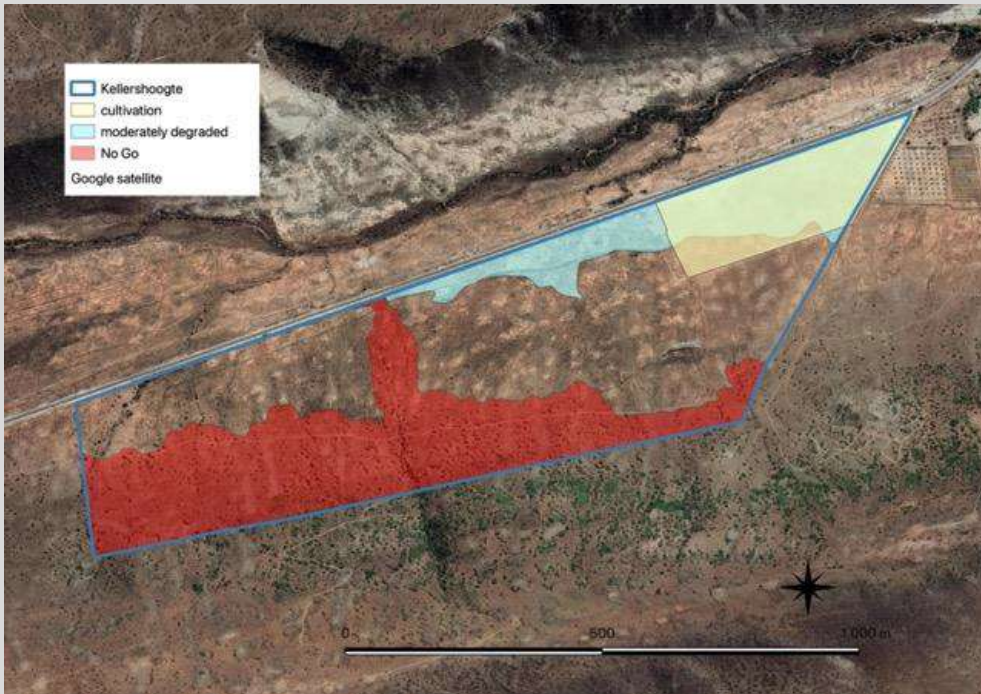


Figure 26: Terrestrial exclusion zones mapped (extracted from the Terrestrial Assessment Report (Hoare, 2022))

- The agriculture specialist does not provide no-go areas in his report. However, when identifying constraints, the specialist noted that the southern slopes and ridge should not be considered for development. This has been considered and shown in Figure 11, the preferred alternative.
- The Terrestrial Animal Species Report identifies the ridge, footslopes and kloof as areas of habitat sensitivity that should be avoided.



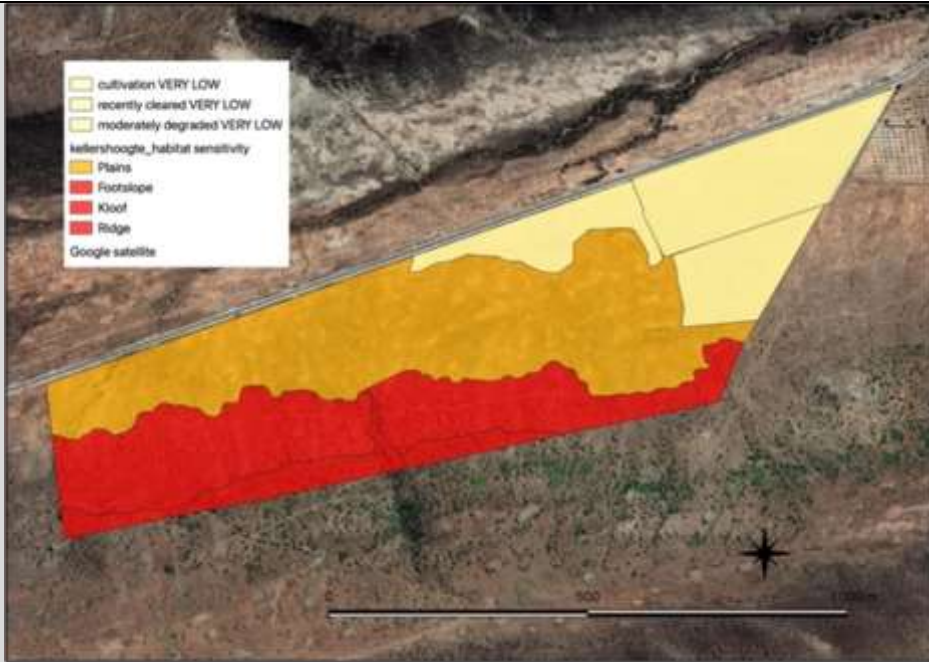


Figure 27: Map of terrestrial areas sensitivities (Extracted from Terrestrial Biodiversity Assessment Report, 2022(Appendix H6))

Alternative 3 is to maintain the existing 13ha and not authorise completion of the project by adding a further 43ha. Considering the bulk infrastructure for the total project, in the form of the main water line and additional boreholes are in place implemented, it will then only serve 23% of the total project. Income from the project will be reduced by a correspondence ¾, with the same applying to the workforce when compared to the total project i.e. socio-economic benefit. Similarly water demand will be reduced by a corresponding ¾ compared to the demand associated with the total project. Transformation will be reduced with the remainder of the property in a natural, albeit somewhat transformed, state.



Figure 28: Alternative 3 allowing for 13ha of orchard as per the area already transformed (although not yet planted).



SECTION F: IMPACT ASSESSMENT, MANAGEMENT, MITIGATION AND MONITORING MEASURES

Please note: The impacts identified below refer to general impacts commonly associated with development activities. The list below is not exhaustive and may need to be supplemented. Where required, please append the information on any additional impacts to this application.

Please note: The information in this section must be duplicated for all the feasible and reasonable alternatives (where relevant).

1. DEVELOPMENT IMPACTS

PLEASE DESCRIBE THE MANNER IN WHICH THE DEVELOPMENT HAS IMPACTED ON THE FOLLOWING ASPECTS:

(a) Geographical and physical aspects:

The development has resulted in the clearing of 13 ha of vegetation with 43ha more planned for clearing as part of the preferred alternative.

(b) Biological aspects:

Has the development impacted on critical biodiversity areas (CBAs) or ecological support areas (ESAs)?	YES	NO
If yes, please describe:		
<p>The drainage lines on Portion 4 of Farm 172 are mapped as aquatic ESAs and the northern portion of these lines will be lost to the proposed cultivated areas. The pipeline also traverses an aquatic ESA.</p> <p>A small portion of Portion 4 of Farm 172 along the R328 is mapped as a CBA. However, the Botanist notes that the CBA area is most likely an incorrect data layer since there is nothing noteworthy about the plant diversity or ecological condition of the CBA area.</p>		
Has the development impacted on terrestrial vegetation, or aquatic ecosystems (wetlands, estuaries or the coastline)?	YES	NO
If yes, please describe:		
<p>The 13 ha that has been cleared is Eastern Little Karoo (SKv11) vegetation type which is considered Vulnerable in terms of NEMBA.</p> <p>Aquatic ecosystems that have been impacted include the Kandelaarsrivier where the two boreholes have been established, a tributary of the Kandelaarsrivier (KH1) affected by the construction of the pipeline, and the drainage line (KH2) within the cultivated area that has been transformed but since excluded from the 56ha footprint (to be rehabilitated).</p>		
Has the development impacted 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?	YES	NO
If yes, please describe:		
Please describe the manner in which any other biological aspects were impacted:		
<p>The main impact of the activity is the clearance of vegetation and associated loss of habitat within 13ha (already transformed) and the remnant 43ha subject to approval.</p> <p>Also the temporary transformation of a non-perennial drainage line within the development footprint, and temporary impact on an unnamed non-perennial tributary of the Kandelaarsrivier where the water pipeline was installed.</p>		

(c) Socio-Economic aspects:

What was the capital value of the activity on completion?	Confidential Information.
What is the (expected) yearly income or contribution to the economy that is/will be generated by or as a result of the activity?	Confidential Information.

Has/will the activity have contributed to service infrastructure?	YES	NO
How many new employment opportunities were/will be created in the construction phase of the activity?	Dependant on the hectarage associated with final approval.	
What was the value of the employment opportunities during the construction phase?	Dependant on the hectarage associated with final approval.	
What percentage of this accrued to previously disadvantaged individuals?	Dependant on the hectarage associated with final approval.	
How was this ensured and monitored (please explain):		
How many permanent new employment opportunities were/will be created during the operational phase of the activity?	Dependant on the hectarage associated with final approval.	
What is the current/expected value of the employment opportunities during the first 10 years?	Dependant on the hectarage associated with final approval.	
What percentage of this accrued/will accrue to previously disadvantaged individuals?	Dependant on the hectarage associated with final approval.	
How was/will this be ensured and monitored (please explain):		
<p>It is advised that the Applicant be instructed to maximise local employment (local rural community, Oudsthoorn community, Karoo community) to maximise employment benefit and potential income benefits to local beneficiaries.</p> <p>The Applicant must keep record of employees for this project. Similarly the Applicant must ring-fence expenses associated with this project as a way to establish (at the time of auditing) the extent of the socio-economic impact.</p>		
Any other information related to the manner in which the socio-economic aspects was/will be impacted:		
<p>While the above details are not known at this time, the development will contribute to employment opportunities in the sector most notably increasing employment security for existing employees by introducing crops with a different seasonal employment, as well as seasonal employment opportunities during periods of harvest (albeit temporary) which will positively contribute to the local economy.</p> <p>The Applicant has confirmed that they make use of local labourers, mostly from the Volmoed community and also the Oudtshoorn area in general and they will continue to source from these communities as part of this project. The Applicant must keep record of employees associated with this project to ensure that the claimed socio-economic benefits will realise as presented.</p> <p>The capital investment for the already planted trees and associated infrastructure amounts to R1.5 million.</p> <p>The expected yearly income/contribution to the economy that will be generated by the orchards through job creation and income is estimated at R14 000 000 (approximately R12 000 000 would be from foreign currency associated with exports).</p>		

(d) Cultural and historic aspects:

It is not expected that the proposed development will impact on any cultural or historic aspects as confirmed by the heritage practitioner and Heritage Western Cape.

2. WASTE AND EMISSIONS

(a) Waste (including effluent) management

Did the activity produce waste (including rubble) during the construction 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?	Quantities unknown.	
Green waste during the preparation of the orchard, and related waste (plant bags, irrigation pipe off-cuts) will be produced during commencement of the activity. These must be collected and disposed of at a registered landfill site.		

Does the activity 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?	Quantities unknown.	
Waste from crop farming will be generated during the operation phase. Some organic waste will be generated during the operation phase and it is recommended that such material be mulched and reapplied to the orchards as groundcover and composting.		

Where and how was/will the waste be treated / disposed of (describe)?
Organic materials can be composted on site and used as mulch (recommendation by soil/agricultural specialist). Other waste such as plastics, paper, metal should where practically possible be collected and taken to a recycling facility rather than disposed of at a landfill site. Burning of waste should not be permitted on site without the necessary burning permit.

Has the municipality or relevant authority confirmed that sufficient capacity exists for treating / disposing of the waste (to be) generated by this activity(ies)? If yes, provide written confirmation from Municipality or relevant authority	YES	NO
Does/will the activity produce waste that is/will be treated and/or disposed of at another facility other than into a municipal waste stream?	YES	NO
If yes, has this facility confirmed that sufficient capacity exists for treating / disposing of the waste (to be) generated by this activity(ies)? Provide written confirmation from the facility and provide the following particulars of the facility:	YES	NO
Does the facility have an operating license? (If yes, please attach a copy of the license.)	YES	NO
Facility name:		
Contact person:		
Postal address:		
	Postal code:	
Telephone:	Cell:	
E-mail:	Fax:	

Waste generated will need to be taken to a suitable facility or composted on the farm.
Describe the measures that were/will be taken to reduce, reuse or recycle waste:
As outlined in the EMPr compiled, the integrated waste management system must be implemented as part of the operation phase activities.

(b) Emissions into the atmosphere

Does/will the activity produce emissions that will be disposed of into the atmosphere?	YES	NO
If yes, does it require approval in terms of relevant legislation?	YES	NO
Describe the emissions in terms of type and concentration and how it is/will be treated/mitigated:		

3. WATER USE

Please indicate the source(s) of water for the activity by ticking the appropriate boxes)

Municipal	Water board	Groundwater	River, Stream, Dam or Lake	Other	The activity did/does/will not use water
If water was extracted from a groundwater source, river, stream, dam, lake or any other natural feature, please indicate the volume that was extracted per month:					
Existing registered water volumes include 19 500 m ³ per year from two registered boreholes (groundwater), and 127 500 m ³ per year from the Kandelaarsrivier (surface water).					
Please provide proof of assurance of water supply (e.g. Letter of confirmation from municipality / water user associations, yield of borehole)					
A Geohydrological Report (Appendix H4) was compiled by <i>Groundwater Complete</i> to conduct a groundwater study for the two boreholes already established and a third new borehole. Tests were undertaken during the 2021 drought and in 2022 after good rainfall. Considering the severe dry, and the above-normal wet conditions, a pump depth of 120 mbs is recommended. The recommended sustainable yields are shown in table 1 below.					

Table 2: Recommended sustainable borehole yields

Borehole	Sustainable Yield (ℓ/h for 12h/d)	Yield (m³/a)
KBH02	40 000	175 200
KBH03	45 000	197 100
KBH04	11 520	50 450
Total		422 750 m³ / a

The Agricultural Report (**Appendix H5**) confirms that this is sufficient water for the irrigation of the orchard.

Did/does the activity require a water use permit / license from DWA?	YES	NO
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If yes, please submit a certified copy of the water use permit/license or submit the necessary application to Department of Water Affairs and attach proof thereof to this application, whichever is applicable.

Proof of commencement of the EWULAAS submission is provided under **Appendix F1**.

In terms of the National Water Act the following water uses are triggered in terms of the National Water Act (NWA), 1998 (Act 36 of 1998, as amended):

- Section 21 (a): Taking water from a water resource;
- Section 21 (c): Impeding or diverting the flow of water in a watercourse; and
- Section 21 (i): Altering the bed, banks, course or characteristics of a watercourse.

As required, the following documents are made available for comment for the water use authorisation application:

- Freshwater Assessment Report – Appendix H1
- Geohydrology Report - Appendix H4
- Draft Technical Report – Appendix H6

Describe the measures that were/ will be taken to reduce water demand, and measures to reuse or recycle water:

Irrigation infrastructure should be developed so that the right amount of water is supplied at the right time to reduce any risk of water loss. In addition, best agricultural practises are to be implemented. These include:

- Removal of alien invasive species on site and within watercourses
- Restore and protect water resources
- The use of mulch to encourage water infiltration
- Ensuring sufficient ground cover (natural vegetation / mulch) to reduce evaporation
- The use of efficient irrigation systems
- Measure water abstraction / usage for the orchards
- Keep record of water usage for BGCMA to consider with any auditing
- Allow natural groundcover to re-establish amongst the trees in the orchards.

4. POWER SUPPLY

Please indicate the source of power supply e.g. Municipality / Eskom / Renewable energy source

Eskom

If power supply is not available, where will power be sourced from?

5. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

Drip irrigation instead of spray/pivot irrigation systems that require more electricity.



Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

6. DESCRIPTION AND ASSESSMENT OF THE SIGNIFICANCE OF IMPACTS PRIOR TO AND AFTER MITIGATION

Please note:

- While sections are provided for impacts on certain aspects of the environment and certain impacts, the sections should also be copied and completed for all other impacts.
- Mitigation measures that were implemented and mitigation measures that are to be implemented should be clearly distinguished.

(a) Impacts that resulted from the planning, design and construction phases (briefly describe and compare the impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that occurred as a result of the planning, design and construction phases.

Impacts on biological aspects	Alternative 1 & Alternative 2 (Preferred)	Do-nothing Option
Nature of impact:	Disturbance of river and riparian habitat as a result of the excavation of the trench to lay the pipeline across KH1.	Status quo remains.
Extent and duration of impact:	Very limited and short term	Not applicable
Probability of occurrence:	Certain	Not applicable
Degree to which the impact can be reversed:	High	Not applicable
Intensity	Very Low	Not applicable
Irreplaceability	Low	Not applicable
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Minor	Not applicable
Proposed mitigation:	The small disturbed riparian area on the northern bank must be revegetated with plant species typical of the surrounding area.	Not applicable
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Negligible	Not applicable

Impacts on biological aspects	Alternative 1: 70 ha cultivation area	Alternative 2: 56 ha cultivation area (preferred)	
	Without mitigation	Without mitigation	With mitigation
Nature of impact:	Loss of aquatic biodiversity due to loss of instream and riparian habitat caused by establishing agricultural fields across KH2.		
Extent and duration of impact:	Very limited and permanent	Very limited and permanent	Very limited and medium term
Probability of occurrence:	Certain	Certain	Certain
Degree to which the impact can be reversed:	High	High	High
Intensity	Low	Low	Very low

Irreplaceability	Low	Low	Low
Significance rating of impact (Low, Medium, Medium-High, High, or Very-High)	Moderate	Moderate	Minor
Proposed mitigation:	<p>Extracted from Aquatic Assessment Report (Appendix H1).</p> <ul style="list-style-type: none"> • Runoff from the undisturbed section of the river reach is discharging into the prepared fields and creating a new channel. This channel should be allowed to re-establish through these fields (which are currently not planted) until water infiltrates into the soil. A 5 m buffer should be established along this channel to allow water to flow freely (and avoid further erosion to fields and damage to crops) • Indigenous vegetation must be allowed to re-establish within the 5 m buffer and control of alien invasive plant species must take place to ensure that these do not establish. • Further expansion of agricultural fields must avoid modifying additional non-perennial watercourses located to the west of KH2. 5 m buffers must be established around these watercourses; • No fields or infrastructure must be located within the 5 m buffer for these watercourses and to ensure such these watercourses must be clearly demarcated. 		

Impacts on biological aspects:	Alternative 1 & Alternative 2 (Preferred)	No-Go Option
Nature of impact:	Loss of succulent karoo plains habitat	Status quo remains.
Extent and duration of impact:	Local and medium term	Local and long term
Probability of occurrence:	Definite	Not applicable
Degree to which the impact can be reversed:	Irreversible	Not applicable
Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss	Not applicable
Intensity	Low	Not applicable
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low	Not applicable
Proposed mitigation:	<p>Extracted from Terrestrial Biodiversity Report (Appendix H2)</p> <ul style="list-style-type: none"> • Retain natural habitat of the Ridge, Footslope and Kloof, as well as a buffer of 30 m. The No-Go area should also include the main drainage line that runs from the Kloof towards the north (R328) • Ensure all possible steps are taken to limit erosion of surfaces, including proper management of storm-water runoff, so that 	Not applicable



	<p>downslope areas are protected from runoff and erosion.</p> <ul style="list-style-type: none"> • Attempt to position any additional cultivation adjacent to the main road, which would include areas already (historically) degraded. • Compile and implement an alien management plan, which highlights control priorities and areas and provides a programme for long-term control. • Undertake regular monitoring to detect alien invasions early so that they can be controlled, as per the Alien Management Plan. 	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low	Not applicable

Impacts on socio-economic aspects:	Alternative 1 & Alternative 2 (Preferred)	No-Go Option
Nature of impact:	During the construction phase, employment opportunities will be created	Status quo remains
Extent and duration of impact:	Local to regional and short term	Local to regional and short term
Probability of occurrence:	Definite	Not applicable
Degree to which the impact can be reversed:	Not applicable	Not applicable
Degree to which the impact may cause irreplaceable loss of resources:	Not applicable	Not applicable
Cumulative impact prior to mitigation:	Skills development	Not applicable
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low (positive)	Not applicable
Degree to which the impact can be mitigated:	Not applicable	Not applicable
Proposed mitigation:	No mitigation required.	Not applicable
Cumulative impact post mitigation:	None	Not applicable
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low (positive)	Not applicable

Dust impacts	Alternative 1 & Alternative 2 (Preferred)	No-Go Option
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Nature of impact:	During the construction phase, site preparation and vehicles may result in dust nuisance to those travelling along the R328 road.	Status quo remains
Extent and duration of impact:	Local and short term	Not applicable
Probability of occurrence:	Probable	Not applicable
Degree to which the impact can be reversed:	High	Not applicable
Degree to which the impact may cause irreplaceable loss of resources:	No loss	Not applicable
Cumulative impact prior to mitigation:	None	Not applicable
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low	Not applicable
Proposed mitigation:	<ul style="list-style-type: none"> Site preparation should not be undertaken on very windy days. Vehicles on site to drive no more than 20km/hr to 	Not applicable
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Very low to negligible	Not applicable

(b) Impacts that result from the operational phase (briefly describe and compare impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the operational phase.

Impacts on biological aspects:	Alternative 1 & Alternative 2 (Preferred)	No-Go Option
Nature of impact:	Drawdown of the alluvial aquifer and associated base flows caused by abstraction of water from the boreholes.	Status quo remains and no abstraction will be undertaken.
Extent and duration of impact:	Local and brief	Not applicable
Probability of occurrence:	Highly unlikely	Not applicable
Degree to which the impact can be reversed:	High	Not applicable
Irreplaceability	Low	Not applicable
Intensity	Negligible	Not applicable
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Negligible	Not applicable – no impact
Proposed mitigation:	No mitigation required.	Not applicable
Significance rating of impact after mitigation	Negligible	Not applicable – no impact

(Low, Medium, Medium-High, High, or Very-High)		
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Impacts on biological aspects:	Alternative 1 & Alternative 2 (Preferred)	No-Go Option
Nature of impact:	Impedance of flow caused by infilling of the trench crossing the unnamed non-perennial tributary (KH1) of the Kandelaars River.	Status quo remains.
Extent and duration of impact:	Limited and brief	Not applicable
Probability of occurrence:	Unlikely	Not applicable
Degree to which the impact can be reversed:	High	Not applicable
Irreplaceability	Low	Not applicable
Intensity	Very low	Not applicable
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Negligible	Not applicable
Proposed mitigation:	<p>Extracted from Aquatic Assessment Report (Appendix H1).</p> <ul style="list-style-type: none"> While the pipeline has been buried deep beneath the river-bed, the crossing must be routinely inspected to ensure that flows following high rainfall events have not scoured potentially loosely compacted soil from the infilled trench causing the formation of a nick-point, which could potentially result in further erosion of the river bed; and The formation of nick-points or localised areas of scour must be immediately filled (using material from the riverbed) or re-profiled and compacted to ensure a continuous slope along the river reach. 	Not applicable
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Negligible	Not applicable

Impacts on biological aspects:	Alternative 1 & Alternative 2 (Preferred)	No-Go Option
Nature of impact:	Impedance of flow caused by establishing agricultural fields across the non-perennial watercourse (KH2).	
Extent and duration of impact:	Very limited and permanent	Very limited and permanent
Probability of occurrence:	Certain	Certain
Degree to which the impact can be reversed:	High	High



Irreplaceability	Low	Low
Intensity	Very Low	Very Low
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Minor	Minor
Proposed mitigation:	<p>Extracted from Aquatic Assessment Report (Appendix H1).</p> <ul style="list-style-type: none"> Runoff from the undisturbed section of the drainage line is discharging into the prepared fields and creating a new channel. This channel should be allowed to re-establish through these fields (which are currently not planted) until water infiltrates into the soil. A 5 m buffer should be established along this channel to allow water to flow freely (and avoid further erosion to fields and damage to crops) Indigenous vegetation should be allowed to re-establish within the 5 m buffer and control of alien invasive plant species must take place to ensure that these do not establish. Further expansion of agricultural fields must avoid modifying additional non-perennial watercourses located to the west of KH2. 5 m buffers must be established around these watercourses; No fields or infrastructure must be located within the 5 m buffer for these watercourses. 	
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Minor	Minor

Impacts on socio-economic aspects:	Alternative 1 & Alternative 2 (Preferred)	No-Go Option
Nature of impact:	During the operation phase, employment opportunities will be created	Status quo remains
Extent and duration of impact:	Local to regional and short term	Local to regional and short term
Probability of occurrence:	Definite	Not applicable
Degree to which the impact can be reversed:	Not applicable	Not applicable
Degree to which the impact may cause irreplaceable loss of resources:	Not applicable	Not applicable
Cumulative impact prior to mitigation:	Skills development	Not applicable
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low (positive)	Not applicable
Degree to which the impact can be mitigated:	Not applicable	Not applicable
Proposed mitigation:	No mitigation required.	Not applicable



Cumulative impact post mitigation:	None	Not applicable
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low (positive)	Not applicable

Other impacts	Alternative 1 & Alternative 2 (Preferred)	No-Go Option
Nature of impact:	Implementation of alien clearing management plan will improve the management of alien species on the property and assist with water security.	
Extent and duration of impact:	Local and long term	Local and long term
Probability of occurrence:	Definite	Definite
Degree to which the impact can be reversed:	Not applicable	Not applicable
Degree to which the impact may cause irreplaceable loss of resources:	Not applicable	Not applicable
Cumulative impact prior to mitigation:	Water security	Water security
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium (positive)	Medium (positive)
Degree to which the impact can be mitigated:	Medium	Medium
Proposed mitigation:	Implementation of the alien management plan.	Implementation of the alien management plan.
Cumulative impact post mitigation:	Water security	Water security
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium to high (positive)	Medium to high (positive)

(c) Impacts that may result from the decommissioning and closure phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase.

The applicant does not wish to decommission the activity. In the event that S24G application is refused by the Competent Authority a separate Rehabilitation Plan will have to be compiled that will deal with decommissioning of the already established orchard.

Considering that the already established, as well as the proposed extension to complete the project, is deemed to be within acceptable environmental standards, decommissioning is not likely.

However, in the unlikely event that such an option must be implemented, it will imply the following:

- Felling and destumping of the trees mechanically to remove the established root systems;
- Excavating the irrigation system through trenching and infilling;
- Excavating the main water pipeline through trenching and infilling;
- Levelling of the affected areas;

- Seeding of the area to establish groundcover.

As mentioned in this report, according to “*Succulent Karoo Ecosystems (M Cadman (ed) Fynbos Forum Ecosystem Guidelines for Environmental Assessment in the Western Cape, Edition 2*” (Helme, 2016) it is deducted that rehabilitation of (the) transformed areas is likely to have little or no biodiversity benefit in the semi-arid region of the study area, since low rainfall and sensitive soil types represent a significant limiting factor on post-disturbance ecological recovery.

Achieving successful rehabilitation of the affected area is therefore unlikely.

Please note: If any of the above information is not available, specialist input may be requested.



7. SPECIALIST INPUTS/STUDIES AND RECOMMENDATIONS

Please note: Specialist inputs/studies that will be undertaken as part of this application. These specialist inputs/studies must take into account the Department's relevant Guidelines on the Involvement of Specialists in EIA Processes available on the Department's website (<http://www.capegateway.gov.za/eadp>). A summary of all the specialist inputs/studies must be provided with the additional information.

Specialist inputs/studies and recommendations:

Aquatic (Appendix H1)

Two new boreholes are located within the existing riparian zone of the Kandelaarsrivier but outside of the outer edge of the agricultural fields adjacent the river. During establishment of the boreholes, it is unlikely that this resulted in the degradation of the aquatic and riparian habitat as construction vehicles did not need to enter the delineated area of the watercourse.

During the excavation of the trench to lay the pipeline across the tributary to the Kandelaarsrivier, the bed and banks would have been impacted although it follows the existing farm road alignment across the watercourse. However, some minor disturbance to the riparian vegetation on the northern bank occurred due to the likely (temporary) stockpiling of soil from the trench and scaped back into the trench. It is unlikely that sedimentation of the river habitat would have occurred due to the unlikelihood of rain occurring during the excavation period given the drought conditions. To mitigate the northern bank, it is recommended that the northern bank be revegetated with plant species typical of the surrounding area.

As a result of the agricultural fields being established, the non-perennial drainage line ending in the fields is lost, with a resultant loss of associated habitat. Loss of the associated habitat did not result in significant alteration to the ecological function of the watercourse since it was already disconnected from the broader hydrological network. Although the loss of aquatic biodiversity is not very significant, the specialist has recommended the following:

- Runoff from the undisturbed section of the river reach is discharging into the prepared fields and creating a new channel. This channel should be allowed to re-establish through these fields (which are currently not planted) until water infiltrates into the soil. A five metre buffer should be established along this channel to allow water to flow freely (and avoid further erosion to fields and damage to crops).
- Indigenous vegetation should be allowed to re-establish within the 5 m buffer and control of alien invasive plant species must take place to ensure that these do not establish.
- Further expansion of agricultural fields must avoid modifying additional non-perennial watercourses located to the west of KH2. 5 m buffers must be established around these watercourses.
- No fields or infrastructure must be located within the 5 m buffer for these watercourses and to ensure no entry these areas must be clearly demarcated at all times.

The aquatic specialist notes that to re-establish or divert the channel from the agricultural fields during the operation phase is not recommended as this would likely result in further unintended consequences such as erosion or gully formations. Provision of small retention structures in the form of packed rocks across this watercourse at intervals will assist with erosion control and rehabilitation.

During the operation phase, abstraction from the aquifer is not expected to impact sub-surface flows in the alluvial aquifer and therefore no additional effect on the base flows in the river is anticipated.

Infilling of the trench across the tributary of the Kandelaarsrivier resulted in the impedance of flow of the watercourse. However, the bed and substrates have re-established over the disturbed area. It is noted that there is no visible difference in characteristics of the bed upstream and downstream of the crossing. Long-term impedance of the watercourse is unlikely. Proposed mitigation measures, however, include:

- Routine inspection of the riverbed to ensure that after high rainfall events there is no scouring causing the formation of a nick-point, which could potentially result in further erosion of the riverbed; and

- The formation of nick-points or scour must be immediately filled (using material from the riverbed) or re-profiled and compacted to ensure a continuous slope along the river reach.

Botanical (Appendix H2)

A small section of the planned development area is a terrestrial CBA. However, there is nothing noteworthy of the plant diversity or the ecological condition of the CBA except the areas with a higher density of *Vachellia karoo*. The plant diversity of the area is low in comparison to similar sized areas that are in a near-pristine condition.

It is assumed that the vegetation in the disturbed area is similar to the remainder of the development area. The ecological condition of the affected vegetation varies between moderately and severely disturbed.

None of the Species of Conservation Concern in the Screening Tool Report were found on the site. The only species that might have occurred in the area, however, is *Glottiphyllum linguiforme*, which is very sensitive to trampling by ostriches and was probably previously destroyed. One of the taxa found on the site, *Euphorbia ferox subsp. calitzdorpense*, should be regarded as a threatened species.

While the site is considered to be a transformed ecological state, the site contains very few alien species. Only a few individuals of *Opuntia ficus-indica* and *Salsola kali* were noted.

Mitigation measures recommended include:

- No developing the sensitive area;
- No ostrich grazing within the remaining sensitive area for a period of 20 years.

Terrestrial Animal Species (Appendix H5)

A Terrestrial Animal Species Compliance Statement was compiled (**Appendix H5**) identifying the various habitats on site and determining if the animal species in the Screening Tool Report (**Appendix M**) would be present on the site.

The animal habitats mapped on site includes the ridge, kloof, footslope and plains.

The fauna identified in the Screening Tool Report include:

- *Aquila verreauxii* (common name: Verreauxs' Eagle)
- *Bunolagus monticularis* (common name: Riverine Rabbit)
- *Aneuryphymus montanus* (common name: Yellow-winged Agile Grasshopper)

The specialist notes that of the three species identified, two of the species - *Aquila verreauxii* and *Bunolagus monticularis* –could make use of the site for foraging. It is unlikely, however, that there are any residential animals on site, or that they forage on site. The site is evaluated as being unlikely habitat for both species. The sensitivity for these species is thus low and not the ratings afforded in the Screening Tool Report High and Medium, respectively.



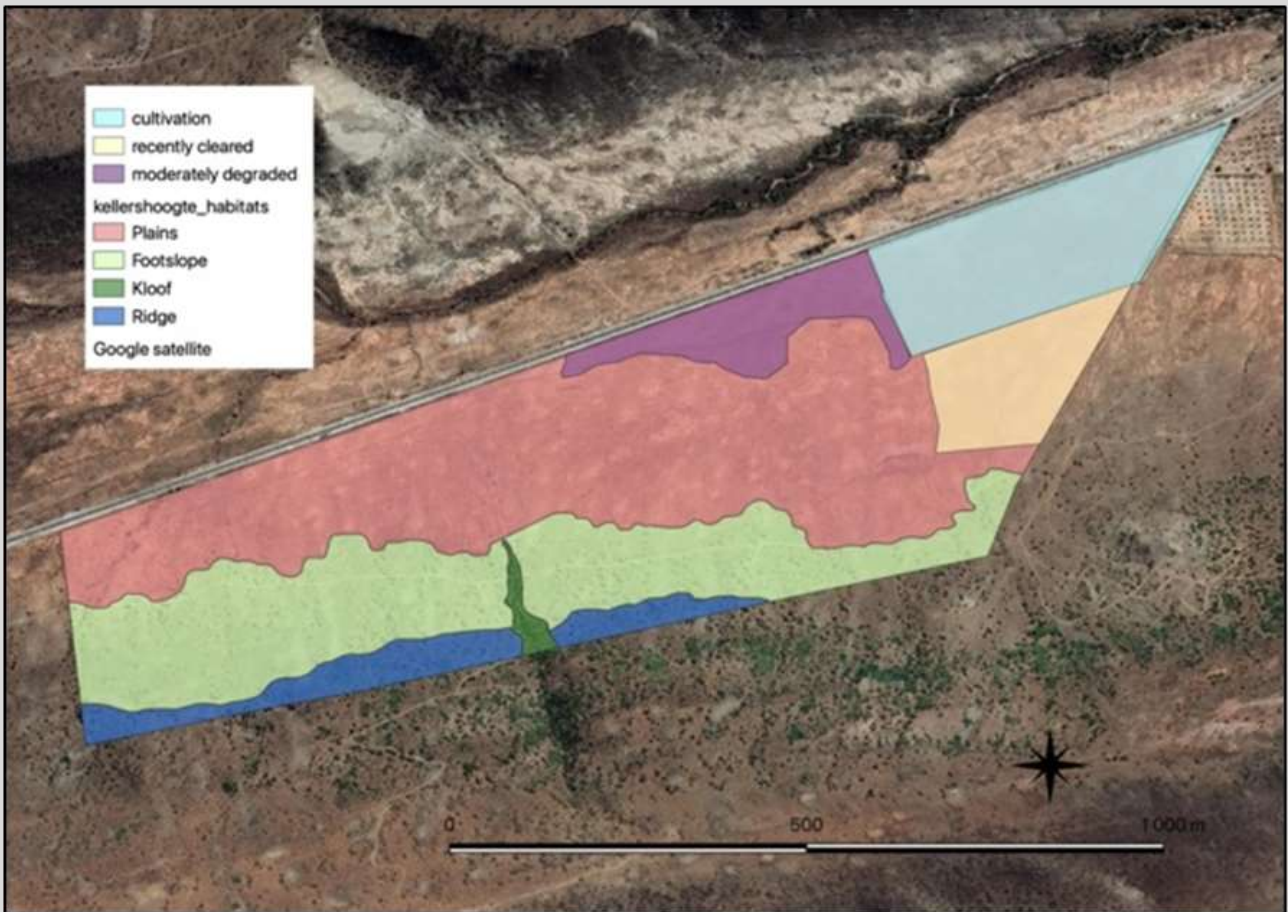


Figure 29: Map of animal habitats on site (Extracted from Terrestrial Animal Compliance Statement, 2022(Appendix H5))

In terms of animal species and the identified habitat areas, the specialist notes that:

- the suitable habitat for the *Aquila verreauxii* is the ridge south of the site although not a very high, inaccessible nesting cliff which the species prefers. No nests were found on the site. The site is possibly suitable for foraging habitat but unlikely to contain nesting birds. Prey would be available on site for the species if the ridge habitat is not disturbed. The development does not affect the south-facing slopes on the site. The site has low sensitivity in respect to this species.
- The *Bunolagus monticularis* is Critically Endangered and found along seasonal rivers in the Nama Karoo. It is endemic to central karoo in the Northern and Western Cape provinces. The species is a habitat specialist that occupies a very limited and specific riverine shrubland niche linked to its feeding preferences. In the southern Cape, the species is not restricted to alluvial floodplains (Collins et al. 2016) and can occur in old lands not associated with riverine vegetation. The species was not found on site and its presence is unlikely. The site has low sensitivity in respect to this species.
- *Aneuryphymus montanus* is almost strictly associated with fynbos vegetation extending towards East London. The species is not often seen but, when observed, occurs in obvious numbers. No grasshoppers were seen on site matching the description of the species, and is unlikely to occur on the site. The site therefore has low sensitivity with respect to this species.

The orchards developed on site are within previously disturbed and/or degraded areas. Therefore, development will not result in loss of habitat, will not reduce foraging resources, and not disrupt ecological corridors and migration routes.

Terrestrial Biodiversity (Appendix H6)

According to the Screening Tool Report (Appendix M), the terrestrial biodiversity theme indicates a Very High sensitivity because of the sensitivity features identified: ESA 2, ESA 1, CBA 1, Freshwater ecosystem priority area quinary catchments, and Vulnerable Ecosystem.

The Site Ecological Importance (SEI) was calculated for each of the habitats identified in figure 10.

- the ridge, footslope and kloof are High
- the plains Medium
- degraded areas and transformed (cultivated) areas are Very Low

See Figure 11 for the SEI illustration. The guideline for interpreting the SEI is provided in table 2 below.

Table 3: Guidelines for interpreting SEI in the context of the proposed development activities.

Site ecological importance	Interpretation in relation to proposed development activities
Very high	Avoidance mitigation – no destructive development activities should be considered. Offset mitigation not acceptable/ not possible (i.e. last remaining populations of species, last remaining good condition patches of ecosystems/ unique species assemblages). Destructive impacts for species/ecosystems where persistence target remains.
High	Avoidance mitigation wherever possible. Minimisation mitigation – changes to project infrastructure design to limit the amount of habitat impacted; limited development activities of low impact acceptable. Offset mitigation may be required for high impact activities.
Medium	Minimisation and restoration mitigation – development activities of medium impact acceptable followed by appropriate restoration activities.
Low	Minimisation and restoration mitigation – development activities of medium to high impact acceptable followed by appropriate restoration activities
Very low	Minimisation mitigation – development activities of medium to high impact acceptable and restoration activities may not be required.

The proposed development will result in the loss of succulent karoo plains habitat assessed as having low significance. The reason for the low significance is because most of the development footprint was already degraded and/or transformed.

It is recommended that:

- Appropriate restoration activities must be undertaken after development activities (medium impact activities are acceptable).
- Natural habitat areas within the High SEI class should be retained, and a 30 m buffer implemented. The no-go area should include the drainage line in the middle of the site (not KH2).
- Erosion of surfaces to be limited through suitable stormwater runoff management.
- Additional cultivation areas to be adjacent the R328 road and within already degraded (historically) areas.
- Compilation and implementation of an alien management plan highlighting control priorities and areas, and long-term control programme.
- Regular monitoring of the site to identify alien invasive species so they can be controlled.

Agriculture

The Screening Tool Report (**Appendix M**) identifies the Agriculture Theme as High sensitivity due to its land capability. The agriculture specialist notes that this sensitivity is not applicable since the intention of the development is to establish an orchard rather than the loss of agricultural land. **See Appendix H7: Agricultural Report.**



The soil investigation undertaken confirms that the soil is suitable for almond orchards. However, the soil and the borehole water partly used for irrigation has salinity limitations. If the borehole water was the only water used for irrigation, the sustainability of the orchards would have been at risk. However, low salinity water from the Kandelaarsrivier is available. The water yield from the borehole is considered sufficient for the orchard.

The specialist recommends:

- Salinity management is required dependent on leaching salts from the soil through applications of non-saline river water usage.
- To facilitate water infiltration, mulch should be used on tree rows.
- Soil preparation: deep cross-ripping is required to facilitate drainage out of the soil that will leach salinity from the root zone.

Heritage

The heritage specialist in the Background Information Document (**Appendix H8**) submitted as part of the Notice of Intent to Heritage Western Cape notes that:

- No evidence of the construction of the pipeline negatively impacted heritage resources; and
- The transformation of the landscape from natural to agriculture is considered appropriate considering surrounding land uses and in the landscape along the R328 road.



8. IMPACT ASSESSMENT SUMMARY

Briefly describe the impacts (as appropriate), significance rating of impacts, mitigation and significance rating of impacts of the activity. This must include an assessment of the significance of all impacts.

Impacts	Significance rating of impacts after mitigation (Low, Medium, Medium-High, High, Very High):
PLANNING, DESIGN AND CONSTRUCTION PHASE	
Disturbance of river and riparian habitat as a result of the excavation of the trench to lay the pipeline across KH1.	Negligible
Loss of aquatic biodiversity due to loss of instream and riparian habitat caused by establishing agricultural fields across KH2.	Minor
Loss of succulent karoo plains habitat	Low
During the construction phase, employment opportunities will be created	Low positive
Dust nuisance	Very low to negligible
OPERATION PHASE	
Drawdown of the alluvial aquifer and associated base flows caused by abstraction of water from the boreholes.	Negligible
Impedance of flow caused by infilling of the trench crossing the unnamed non-perennial tributary (KH1) of the Kandelaars River.	Negligible
Impedance of flow caused by establishing agricultural fields across the non-perennial watercourse (KH2).	Minor
During the operation phase, employment opportunities will be created	Low (positive)
Implementation of alien clearing management plan will improve the management of alien species on the property and assist with water security.	Medium to high (positive)



9. SUMMARY OF THE CONSEQUENCES OF/ IMPACTS OF THE UNLAWFULLY COMMENCED ACTIVITY/IES

Please provide a detailed summary of the consequences/impacts of commencement of the activity/ies on the environment.

Aquatic

Construction and operation of boreholes and the pipeline had/will have negligible impacts on the watercourses, but these are considered acceptable since they do not compromise the conservation and water management objectives as outlined on page 28 of the Aquatic Assessment Report (**Appendix H1**).

The agricultural field has not resulted in any loss of ecological function of the drainage line (KH2) since it was already disconnected from the broader hydrological network when the activities commenced. The impacts are assessed as low. The similar watercourses west of the drainage line should not be disturbed as none are connected to the broader hydrological network and, if ploughed, will result in ecological function loss. Therefore, a five-metre buffer is proposed around these watercourses.

The specialist has confirmed that the activities that have been undertaken are acceptable and that the application should be approved if considering the constraints in figure 9.

Terrestrial biodiversity

The terrestrial biodiversity confirms the presence of natural habitat on site and the already cultivated area. The SEI determined the ridge, kloof and footslope is of high SEI and the plains a medium SEI. The degraded areas and cultivated area is of very low SEI.

The impact of cultivating the land is the loss of natural habitat within the footprint of the cultivated area and assessed as low significance, future cultivation should avoid the mapped sensitive areas.

Terrestrial animal species

The report confirms that due to the lack of suitable habitat for the animal species identified in the Screening Tool Report (Appendix M), it is unlikely that the animal will be found on the site.

Botanical

Although the site is not botanically rich and in a degraded ecological state, the mapped sensitivity area to be avoided.

Agriculture

The high salinity of the borehole water should be augmented with the water from the Kandelaarsrivier to ensure there is no build of salinity within the area that may impact the orchard.

Water surety of supply

Studies undertaken to determine water demand and sustainable supply for irrigation so as not to impact on the water resource indicate that the water demand associated with the 56ha orchards will be within the sustainable yield volumes. The assumption then is that said water use will not impact negatively on lawful water users that also rely on the same water supply.

As a minimum, it therefore required the Water Use License (WULA) for this project, be obtained (as water balance and water allocation is based on the WULA investigation/assessment) prior to completion of the activity (balance of the 56ha).

The conditions of the WULA, most notably continuous monitoring of irrigation volumes will be mandatory and the data must be recorded to ensure that potential queries about impacting on downstream lawful water users can be processed and considered effectively.



10. OTHER MANAGEMENT, MITIGATION AND MONITORING MEASURES

(a) Over and above the mitigation measures described above, please indicate any additional management, mitigation and monitoring measures.

None.

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

The applicant is an experienced farmer. The mitigations that are being proposed can be implemented and will ensure that the farming activities have least negative impact possible on condition that downstream lawful water users are not negatively impacted.

Please note: A draft **ENVIRONMENTAL MANAGEMENT PROGRAMME** must be attached to this application as **Appendix I**.

SECTION G: ASSESSMENT METHODOLOGIES AND CRITERIA, GAPS IN KNOWLEDGE, UNDERLYING ASSUMPTIONS AND UNCERTAINTIES

(a) Please describe adequacy of the assessment methods used.

The assessment was undertaken using national and international criteria for assessment and its adequacy is of a high standard. The specialists all have extensive knowledge and experience in their respective fields which further supports the adequacy of the assessments.

(b) Please describe the assessment criteria used.

EAP ASSESSMENT

Criteria for Assessment

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

These criteria include:

- **Nature of the impact**

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

- **Extent of the impact**

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

- **Duration of the impact**

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

- **Intensity**

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

- **Probability of occurrence**

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

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

- **Legal requirements**

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

- **Status of the impact**

The specialist / EAP should determine whether the impacts are negative, positive or neutral ("cost – benefit" analysis). The impacts are to be assessed in terms of their effect on the project and the environment. For

example, an impact that is positive for the proposed development may be negative for the environment. It is important that this distinction is made in the analysis.

- **Accumulative impact**

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

- **Degree of confidence in predictions**

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

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

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

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

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

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

AQUATIC ASSESSMENT

The aquatic assessment methodology is not the same as the EAP assessment methodology as outlined above. The assessment methodology used by the aquatic specialist is provided below:

Individual impacts for the construction and operational phase were identified and rated according to criteria which include their intensity, duration and extent. The ratings were then used to calculate the consequence of the impact which can be either negative or positive as follows:

Consequence = type x (intensity + duration + extent)

Where type is either negative (i.e. -1) or positive (i.e. 1). The significance of the impact was then calculated by applying the probability of occurrence to the consequence as follows:

Significance = consequence x probability

The criteria and their associated ratings are shown in Table 3.

Table 4: Categorical descriptions for impacts and their associated ratings.

Rating	Intensity	Duration	Extent	Probability
1	Negligible	Immediate	Very limited	Highly unlikely
2	Very low	Brief	Limited	Rare
3	Low	Short term	Local	Unlikely
4	Moderate	Medium term	Municipal area	Probably
5	High	Long term	Regional	Likely
6	Very high	Ongoing	National	Almost certain
7	Extremely high	Permanent	International	Certain

Categories assigned to the calculated significance ratings are presented in Table 4.

Table 5: Value ranges for significance ratings, where (-) indicates a negative impact and (+) indicates a positive impact



Significance Rating	Range	
Major (-)	-147	-109
Moderate (-)	-108	-73
Minor (-)	-72	-36
Negligible (-)	-35	-1
Neutral	0	0
Negligible (+)	1	35
Minor (+)	36	72
Moderate (+)	73	108
Major (+)	109	147

Each impact was considered from the perspective of whether losses or gains would be irreversible or result in the irreplaceable loss of biodiversity or ecosystem services. The level of confidence was also determined and rated as low, medium or high (Table 5).

Table 6: Definition of reversibility, irreplaceability and confidence ratings.

Rating	Reversibility	Irreplaceability	Confidence
Low	Permanent modification, no recovery possible.	No irreparable damage and the resource isn't scarce.	Judgement based on intuition.
Medium	Recovery possible with significant intervention.	Irreparable damage but is represented elsewhere.	Based on common sense and general knowledge
High	Recovery likely.	Irreparable damage and is not represented elsewhere.	Substantial data supports the assessment

(c) Please describe the gaps in knowledge.

There are no known gaps in knowledge.

(d) Please describe the underlying assumptions.

EAP
 It is assumed that the Applicant will continue to monitor water use and report back to the BOCMA on a regular basis to confirm that sustainable water use is not exceeded.

Aquatic

- With ecology being dynamic and complex, there is the likelihood that some aspects (some of which may be important) may have been overlooked;
- The assessment was based on the findings of a visual assessment of the site combined with available desktop resources. This study was not informed by detailed hydraulic, hydrological, faunal or floral assessments;
- The PES and EIS assessments undertaken are largely qualitative assessment tools and thus the results are open to professional opinion and interpretation. An effort has been made to substantiate all claims where applicable and necessary.
- The assessment of impacts relies on an understanding of the conditions prior to the commencement of the unlawful activities. As the activities have already occurred, this assessment relied on a combination of desktop analysis of historical imagery and observed on-site verifications of current conditions.

Botanical
 There are no assumptions.

Terrestrial Biodiversity
 There are no assumptions.

Agriculture



Ad hoc irrigation of the orchards with freshwater via the *leibeurt* system will sufficient flush the soils to prevent salt build-up.

Animal Species

There are no assumptions.

(e) Please describe the uncertainties.

Compliance on the part of the Applicant to adhere to sustainable yield abstraction and resource conservation to avoid impacting on non-renewable water resources and other registered, lawful water users in the area.

SECTION H: RECOMMENDATIONS OF THE EAP

In my view (EAP), the information contained in the Application and the documentation attached hereto is sufficient to make a decision in respect of the activity applied for.	YES	NO
If "NO", list the aspects that should be further assessed through additional specialist input/assessment:		
If "YES", please indicate below whether in your opinion the applicant should be directed to cease the activity or if it should be authorised:		
Applicant should be directed to cease the activity:	YES	NO
Please provide reasons for your opinion		
<p>The property is zoned for agricultural use. Before laying fallow, the property was actively utilised for extensive agriculture activities. Ceasing the activity will mean that no agricultural activities may continue on the property which is not a reasonable outcome considering that a sustainable yield (water supply volume) has been identified, investigated and assessed alongside the reduced footprint to accommodate biophysical sensitivities.</p> <p>Specialists have identified and assessed continuing the activity which is deemed acceptable.</p> <p>In terms of the various municipal and provincial policies outlined and discussed in Section D of this report, the proposed activity is in keeping with the intention of the Oudtshoorn area to encourage agriculture activities and diversification thereof.</p> <p>Continuation of the activity will benefit the socio-economy of the area as it will promote economic growth and benefit those employed through skills development on condition that water use of lawful water users are not compromised.</p> <p>The impacts identified and associated with the continuing of the activity have been assessed and can be adequately mitigated.</p>		
If you are of the opinion that the activity should be authorised, then please provide any conditions, including mitigation measures that should in your view be considered for inclusion in an authorisation.		
<p>The following conditions should be included:</p> <ul style="list-style-type: none"> • The mitigation measures as provided by the specialist and the Department of Agriculture (CARA permit), as well as any conditions of the WULA (should it be authorised) must be implemented; • Alien invasive clearing must continue on site; • Water use must be metered and monitored to ensure sustainable use within permissible volumes (subject to outcome of the WULA application process that is being run in parallel to the S24G application process); • The tributaries identified within the footprint area must be clearly demarcated as no-go areas; 		

- Restoration of on-site non-perennial tributary transformed within the 13ha already ripped;
- Optimise use of local labour / suppliers to maximise economic beneficiation.
- Allow natural groundcover to re-establish within the orchards.
- Completion of the project (full 56ha) to be implemented in phases (no less than 2 phases i.e. +/- 20ha per phase) to allow continuous monitoring of especially water demand which is deemed critical with this proposal.

SECTION I: REPRESENTATIONS – RESPONSE TO AN INCIDENT OR EMERGENCY SITUATION

This section is only applicable to instances where Section 49A (2) of NEMA applies. Please list all steps that were taken in response to the incident or emergency situation.

Not applicable.

Please note: Section 30 of NEMA deals with the procedures to be followed for the control of emergency incidents and Section 30A deals with procedures to be followed in the case of emergency situations.

SECTION J: PUBLIC PARTICIPATION

1. PUBLIC PARTICIPATION PROCESS TO BE FOLLOWED

1.1 The Public Participation Process in terms of the Section 24G Fine Regulations, 2017

Regulation 8 of the Section 24G Fine Regulations require that all applicants must conduct public participation **prior to submission** of a section 24G application (as outlined in Annexure A of the Section 24G Fine Regulations - Section D: Preliminary Advertisement).

"The applicant must place a preliminary advertisement in-
(1) A local newspaper in circulation in the area in which the activity was, or activities were, commenced; and on the applicant's website, if any.
(2) This advertisement must comply with the requirements set out in Annexure A, Section D of the Section 24G Fine Regulations, 2017.
(3) The applicant must open and maintain of a register of interested and affected parties.
(4) The register must be attached to the application form and included in the report, or form part of the information submitted in terms of section 24G(1) of the Act, which the register must, as a minimum, contain the names, contact details and addresses of-
(a) all persons who, as a consequence of the public participation process conducted in respect of the application, have submitted written comments or attended meetings with the applicant or any environmental assessment practitioner or other specialist appointed by the applicant to assist with the application;
(b) all persons who have requested the applicant, in writing, to place their names on the register; and
(c) all organs of state that have jurisdiction in respect of the activity to which application relates."

Please provide a summary of the steps followed where public participation was undertaken in accordance with Regulation 8 prior to submission of this Application Form. Ensure that proof of compliance with Regulation 8 is submitted with this Application Form, including, *inter alia*, proof of preliminary advertisement in a local newspaper.

Proof of this public participation process will be included prior to submission of the Application Form. Below are examples of the newspaper advert and site notices.

The image shows a newspaper advertisement for 'LASSIFIEDS' from '10 OUDTSHOORN COURANT' dated 'Vrydag 18 November 2022'. The ad features a large magnifying glass graphic and the headline 'LASSIFIEDS reap the benefits'. It lists contact information for 'Duitshoorn Courant' and 'Graaff Reinett Advertiser'. Below the main ad is a public participation notice for 'CAPE ENVIRONMENTAL ASSESSMENT PRACTITIONERS PUBLIC PARTICIPATION PROCESS 24G RECTIFICATION APPLICATION & WATER LICENSE'. The notice details the process for a water license application on Portion 4 of Farm 172, Kellenhoogte, and includes information on how to register, comment, and contact the relevant parties.





Please indicate whether the applicant has a website (please tick relevant box):	YES	NO
If yes, please note that the application information as specified above must have been advertised on such website and proof thereof must accompany this application.		
The application is available on the Cape EAPrac website at http://www.cape-eaprac.co.za/ . Interested and Affected Parties and Organs of State have been provided with the link to the application on the aforementioned website. Proof thereof will be submitted with the application.		
The WULA process was advertised in parallel to the S24G application and a 60-day commenting period has been allocated.		
A further 30-day commenting period will be allowed on the draft S24G Application & Assessment Report.		

Please note: Annexure A: Section D attached to this Application form must be strictly adhered to.

1.2 The Public Participation Process in terms of NEMA EIA Regulations, 2014

As the applicant, you may be directed to conduct the public participation process that fulfils the requirements outlined in Chapter 6 of the EIA Regulations, 2014. In doing so, you must take into account any applicable guidelines published in terms of Section 24J of NEMA, the Department's Circular EADP 0028/2014 on the "One Environmental Management System" and the EIA Regulations, 2014 as well as any other guidance provided by the Department. Note that the public participation requirements are applicable to all proposed sites.

Please highlight the appropriate box below to indicate the public participation process that has been or will be undertaken to give notice of the application to all potential interested and affected parties, including deviations that may be agreed to by the competent authority:

1. In terms of regulation 41 of the EIA Regulations, 2014 -			
(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	DEVIATION	
(ii) any alternative site	YES	DEVIATION	
(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	DEVIATION	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	DEVIATION	
(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	DEVIATION	
(iv) the municipality (Local and District Municipality) which has jurisdiction in the area;	YES	DEVIATION	
(v) any organ of state having jurisdiction in respect of any aspect of the activity; and	YES	DEVIATION	
(vi) any other party as required by the Department;	YES	DEVIATION	N/A
(c) placing an advertisement in -			
(i) one local newspaper; or	YES	DEVIATION	
(ii) any official <i>Gazette</i> that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;	YES	DEVIATION	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	DEVIATION	N/A



<p>(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.</p> <p>I&APs will be invited to contact the EAP should there be difficulty in accessing a copy of the report, or in terms of Regulation 41(2) (e), be provided with the information via an alternative method due to illiteracy, disability, or any other disadvantage.</p>	YES	DEVIATION	N/A
If you have indicated that "DEVIATION" applies to any of the above, then Section 2. below must be completed.			
NOTE: 2. The NEM: WA requires that a notice must be placed in at least two newspapers.			
If applicable, have/will an advertisement be placed in at least two newspapers?	YES	NO	
If "NO", then an application for exemption from the requirement must be applied for.			

Please provide a description of the public participation that will be undertaken
<p>The following public participation has been undertaken as part of the S24G application:</p> <ul style="list-style-type: none"> • Site notices placed at the entrance/boundary to the property; • An advertisement placed in the local newspaper (<i>Oudtshoorn Courant</i>) calling for registration and making the Pre-Application S24G and specialist reports available for comment for a period of 60 days (to accommodate the Water Use License Application); • Neighbours immediately adjacent to the property notified in writing of the availability of the Pre-Application S24G; • Key stakeholders have been identified and notified in writing of the availability of the Pre-Application S24G; • A stakeholder register opened and maintained and all registered Interested & Affected Parties (I&APs) provided with opportunities to comment on documents relevant to the S24G process; • All comments received in response to the pre-application S24G have been considered and included and reflected in a Comments & Responses report which is included with this Draft S24G report. <ul style="list-style-type: none"> ◦ Please take note that the original submissions (made by I&APs) are not included with the Draft BAR for privacy purposes into the POPIA. The Competent Authority will be provided with all submissions as part of the final S24G submission. • Upon receipt of the Draft S24G Report the Competent Authority will instruct for a further 30-day commenting period to be completed before decision-making. • Registered I&APs will be notified of the 30-day commenting period on the draft S24G impact assessment; • All comments received in response to the draft S24G have been considered and responded to before the final S24G submission to the Competent Authority for consideration and decision-making; • Once the Administrative Fine is issued to the Applicant, registered stakeholders will be notified; • Once the S24G decision is issued, all registered stakeholders will be notified.

1. Provide a list of all the state departments that has been / will be consulted:		
List of State Depts.	Comment obtained (YES/NO)	If not, provide reasons
Department of Agriculture	Yes	No objection to the preferred alternative on condition that their recommendations be implemented.



Breede Gouritz Catchment Management Agency (BGCMA)	Yes	BOCMA to consider WULA application and to monitor compliance with water measurements.
CapeNature	Yes	CapeNature does not object to the preferred alternative on condition that monitoring be undertaken (also that an ECO be involved to support monitoring functions).
Oudtshoorn Municipality	No	No comment received.
DEA&DP Development Management (Region 3)	No	No comment received.
Heritage Western Cape	Yes	No objection stipulating that no further studies are required.
Provincial Roads (District Oudtshoorn office)	No	No comment received.
Garden Route District Municipality	No	No comment received.
SACAA	No	No comment received.

2. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues raised were incorporated, or the reasons for not being incorporated or addressed. (The details of the outcomes of this process, including supporting information must be included in the Comments and Report to be attached to this application as Appendix G.)

Please refer to the attached Issues & Response Report. To be updated after the closing date of comment on the Draft S24G after the 30-day commenting period.

3. 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.

Please refer to the attached Issues & Response Report. To be updated after the closing date of comment on the Draft S24G after the 30-day commenting period.

Please note:

- A list of all the potential interested and affected parties, including the organs of State must be opened, maintained and made available to any person requesting access, in writing, to the register.
- All comments of interested and affected parties on the Application Form and Additional Information must be recorded, responded to and included in the Comments and Responses Report attached as Appendix G to the Application. The Comments and Responses Report must also include a description of the Public Participation Process followed.
- The minutes of any meetings held by the EAP with interested and affected parties and other role players which record the views of the participants must also be submitted as part of the public participation information to be attached to the additional information/Environmental Impact Report as Appendix G.
- Proof of all the notices given as indicated, as well as of notice to the interested and affected parties of the availability of the Application Form/Additional Information must be submitted as part of the public participation information to be attached to the application as Appendix G.



1.3 Representations regarding deviation from public participation requirements in terms of the EIA Regulations, 2014

Please provide detailed reasons (representations) as to why it would be appropriate not direct you to comply with all of the requirements and to deviate from the requirements of regulation 41 as indicated above.

Not applicable.

1.4 List of State Departments

Section 24(O)(2) obliges the relevant authority to consult with every State department that administers a law relating to a matter affecting the environment when such authority considers an application for an environmental authorisation.

Provide a list of all the State departments that will be/have been consulted, including the name and contact details of the relevant official.

State Department	Name of person	Contact details	
Department of Agriculture	Cor van der Walt	Tel	021 808 5093/9
		E-mail	Cor.VanderWalt@westerncape.gov.za
	Brandon Layman	E-mail	Brandon.Layman@westerncape.gov.za / landuse.elsenburg@elsenburg.com
Breede Olifants Catchment Management Agency (BOCMA)	Carlo Abrahams	Tel	023 346 8000
		E-mail	cabrahams@bgcma.co.za
CapeNature	Megan Simons	Tel	087 087 3058
		E-mail	msimons@capenature.co.za
Oudtshoorn Municipality	Thomas Mathee	Tel	044 203 3922
		E-mail	nickey@oudtmun.co.za
DEA&DP Development Management (Region 3)	Gavin Benjamin	E-mail	DEADPEIAadmin@westerncape.gov.za
Heritage Western Cape	Robin George	Tel	021 483 5959
		E-mail	Robin.George@westerncape.gov.za
Provincial Roads (District Oudtshoorn office)	Mr Cornelius Malgas	E-mail	Cornelius.Malgas2@westerncape.gov.za
Garden Route District Municipality	Nina Viljoen	E-mail	nina@gardenroute.gov.za
SACAA	Lizell Stroh	E-mail	strohl@caa.co.za

Please note: A State department consulted in terms of Section 24O(2) of NEMA and Regulations 3(4) and 43(2) must within 30 days from the date of the Department/EAP's request for comment, submit such comment in writing to the Department. The applicant/EAP is therefore required to inform this Department in writing when the application/relevant information is submitted to the relevant State Departments. Upon receipt of this confirmation, this Department will in accordance with Section 24O (2) & (3) of the NEMA inform the relevant State Departments of the commencement date of the 30-day commenting period.

PART 2 – ANNEXURE A TO THE SECTION 24G APPLICATION FORM

SECTION A: DIRECTIVES

Section 24G(1) of NEMA provides that on application by a person who has commenced with a listed or specified activity without an environmental authorisation in contravention of section 24F(1); or a person who has commenced, undertaken or conducted a waste management activity without a waste management licence in terms of section 20(b) of the National Environment Management: Waste Act, 2008 (Act 59 of 2008) ("NEM:WA") the Minister, the Minister responsible for mineral resources or the MEC concerned (or the official to which this power has been delegated), as the case may be, may direct the applicant to-

i	<i>immediately cease the activity pending a decision on the application submitted in terms of this subsection</i>	
ii	<i>investigate, evaluate and assess the impact of the activity on the environment</i>	
iii	<i>remedy any adverse effects of the activity on the environment</i>	
iv	<i>cease, modify or control any act, activity, process or omission causing pollution or environmental degradation</i>	
v	<i>contain or prevent the movement of pollution or degradation of the environment</i>	
vi	<i>eliminate any source of pollution or degradation</i>	
vii	<i>compile a report containing-</i>	
	aa	<i>a description of the need and desirability of the activity</i>
	bb	<i>an assessment of the nature, extent, duration and significance of the consequences for or impacts on the environment of the activity, including the cumulative effects and the manner in which the geographical, physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity</i>
	cc	<i>a description of mitigation measures undertaken or to be undertaken in respect of the consequences for or impacts on the environment of the activity</i>
	dd	<i>a description of the public participation process followed during the course of compiling the report, including all comments received from interested and affected parties and an indication of how the issues raised have been addressed</i>
	ee	<i>an environmental management programme</i>
viii	<i>provide such other information or undertake such further studies as the Minister, Minister responsible for mineral resources or MEC, as the case may be, may deem necessary.</i>	

You are hereby provided with an opportunity to make representations on any or all of the abovementioned instructions including where you are of the opinion that any of these instructions are not relevant for the purposes of your application setting out the reasons for your assertion. Kindly note further that after taking your representation into account a final directive may be issued.

Please Note:

- **Notwithstanding the above, subsequent to submission of the application form to the Department, you may be issued with a specific directive in terms of section 24G(1)(i) to (viii), and you will therefore be provided with an opportunity to make further representations as to the specific directive.**
- **The appointed Environmental Assessment Practitioner, on behalf of the applicant, may be directed to compile and submit a report that meets the requirements of section 24G(vii)(aa)-(ee) as specified above.**

Requirements of S24G(vii)		How this Application has included these requirements:
aa	<i>a description of the need and desirability of the activity</i>	Please see Section D of this application.
bb	<i>an assessment of the nature, extent, duration and significance of the consequences for or impacts on the environment of the activity, including the cumulative effects and the manner in which the geographical, physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity</i>	Please see Section F (6) of this application.
cc	<i>a description of mitigation measures undertaken or to be undertaken in respect of the consequences for or impacts on the environment of the activity</i>	Please see Section F (6) and (7) of this application, and Appendix I: EMPr.
dd	<i>a description of the public participation process followed during the course of compiling the report, including all comments received from interested and affected parties and an indication of how the issues raised have been addressed</i>	This will be included in the application after the public participation process has been undertaken.
ee	<i>an environmental management programme</i>	Please see Appendix I.

SECTION B: DEFERRAL OF THE APPLICATION

Section 24G(7) of the NEMA provides that if at any stage after the submission of an application it comes to the attention of the Minister, the Minister responsible for mineral resources or the MEC, that the applicant is under criminal investigation for the contravention of, or failure to comply with, section 24F(1) of the NEMA or section 20(b) of the NEM:WA, the Minister, Minister responsible for mineral resources or MEC may defer a decision to issue an environmental authorisation until such time as the investigation is concluded and-

- (a) the National Prosecuting Authority has decided not to institute prosecution in respect of such contravention or failure;
- (b) the applicant concerned is acquitted or found not guilty after prosecution in respect of which such contravention or failure has been instituted; or
- (c) the applicant concerned has been convicted by a court of law of an offence in respect of such contravention or failure and the applicant has in respect of the conviction exhausted all the recognised legal proceedings pertaining to appeal or review.

Kindly answer the following questions:

Are you, the applicant, being investigated for a contravention of section 24F(1) of the NEMA in respect of a matter that <u>is not subject to this application</u> and in any province in the Republic?	YES	NO	UNCERTAIN
If yes provide details of the offence being investigated and authority conducting the investigation. If uncertain provide details of the activity or activities in relation to which you suspect you may be under investigation.			
Are you, the applicant, being investigated for the contravention of section 20(b) of the NEMWA in respect of a matter that is <u>not subject to this application</u> and in any province in the Republic?	YES	NO	UNCERTAIN
If yes provide details of the offence being investigated and authority conducting the investigation. If uncertain provide details of the activity or activities in relation to which you suspect you may be under investigation.			
Not to the knowledge of the EAP.			
Are you, the applicant, being investigated for an offence in terms of section 24F(1) of the NEMA or section 20(b) of the NEMWA <u>in terms of which this application directly relates?</u>	YES	NO	UNCERTAIN
If yes provide details of the offence being investigated and authority conducting the investigation. If uncertain provide details of the activity or activities in relation to which you suspect you may be under investigation.			

If you have answered yes or uncertain to any of the above questions, you are hereby provided with an opportunity to make representations as to why the Minister, Minister responsible for mineral resources or MEC, as the case may be, should not defer the application as he or she is entitled to do under section 24G(7).



SECTION C: QUANTUM OF THE SECTION 24G FINE

In terms of section 24G(4) of the NEMA, it is mandatory for an applicant to pay an administrative fine as determined by the competent authority before the Minister, Minister responsible for mineral resource or MEC may take a decision on whether or not to grant an *ex post facto* environmental authorisation or a waste management licence as the case may be. The quantum of this fine may not exceed R10 million.

Having regard to the factors listed below, you are hereby afforded with an opportunity to make representations in respect of the quantum of the fine and as to why the competent authority should not issue a maximum fine of R5 million.

Please note that Part 1 of this section must be completed by an independent environmental assessment practitioner after conducting the necessary specialist studies, copies of which must be submitted with this completed application form.

Please also include in your representations whether or not the activities applied for in this application (if more than 1) are in your view interrelated and provide reasons therefor.

PART 1: THE IMPACTS OR POTENTIAL IMPACTS OF THE ACTIVITY/ACTIVITIES

Index Socio Economic Impact	Place an "X" in the appropriate box
Description of variable	
The activity is not giving, has not given and will not give rise to any negative socio-economic impacts	X
The activity is giving, has given, or could give rise to negative socio-economic impacts, but highly localised	
The activity is giving, has given, or could give rise to significant negative socio-economic and regionalized impacts	
The activity is resulting, has resulted or could result in wide-scale negative socio-economic impacts.	
Motivation:	
Through the activity existing employment opportunities are secured and additional employment opportunities (albeit seasonal) is anticipated in the short and long term which will contribute to improved standard of living through an income being obtained, and skills development. Care must be taken to avoid any unwanted indirect negative socio-economic impacts should lawful water users be impacted.	

Index Biodiversity Impact	Place an "x" in the appropriate box
Description of variable	
The activity is not giving, has not given and will not give rise to any impacts on biodiversity	
The activity is giving, has given or could give rise to localised biodiversity impacts	X
The activity is giving, has given or could give rise to significant biodiversity impacts	
The activity is, has or is likely to permanently / irreversibly transform/ destroy a recognised biodiversity 'hot-spot' or threaten the existence of a species or sub-species.	
Motivation:	
<p>Botanical/Biodiversity: A very small portion of the site is mapped as a CBA. However, the botanist explains that this is possibly an incorrect data layer since the plant diversity is very low and not characteristic of a CBA. Continuation of the proposed cultivation will result in some loss of habitat and Eastern Little Karoo vegetation type. This, however, is of low significance and mitigation measures have been provided.</p> <p>Aquatic: The aquatic specialist noted that the loss of aquatic biodiversity is not very high.</p> <p>Construction of the pipeline disturbed the northern bank of the watercourse but follows the existing farm road alignment across the watercourse.</p>	

As a result of the agricultural fields established a portion of the drainage line ending in the field has resulted in some loss of habitat. However, this has not resulted in significant alteration to the ecological function of the watercourse. Re-establishment of, or diverting the channel is not recommended as this will likely result in further unintended consequences such as erosion or gully formation.

It is unlikely that the boreholes located outside of the riparian zone of the Kandelaarsrivier has degraded any aquatic and riparian habitat. Abstraction from the boreholes is not expected to impact sub-surface flows in the alluvial aquifer and therefore no additional effect is expected.

Index	Sense of Place Impact and / or Heritage Impact	Place an "x" in the appropriate box
	Description of variable	
	The activity is in keeping with the surrounding environment and / or does not negatively impact on the affected area's sense of place and /or heritage	X
	The activity is not in keeping with the surrounding environment and will have a localised impact on the affected area's sense of place and/or heritage	
	The activity is not in keeping with the surrounding environment and will have a significant impact on the affected area's sense of place and/ or heritage	
	The activity is completely out of keeping with the surrounding environment and will have a significant impact on the affected area's sense of place and/ or heritage	
Motivation:		
The heritage specialist in the Background Information Document submitted as part of the Notice of Intent to Heritage Western Cape (Appendix H8) notes that:		
<ul style="list-style-type: none"> • No evidence of the construction of the pipeline negatively impacted heritage resources; and • The transformation of the landscape from natural to agriculture is considered appropriate considering surrounding land uses and in the landscape along the R328 road. • Heritage Western Cape confirmed that no impacts are anticipated. 		

Index	Pollution Impact	Place an "x" in the appropriate box
	Description of variable	
	The activity is not giving, has not given and will not give rise to any pollution	X
	The activity is giving, has given or could give rise to pollution with low impacts.	
	The activity is giving, has given or could give rise to pollution with moderate impacts.	
	The activity is giving, has given or could give rise to pollution with high impacts.	
	The activity is giving, has given or could give rise to pollution with major impacts.	
Motivation:		
Farming activities have the chance of pollution occurring from herbicide or pesticide application, for example. However, the activity is not expected to give rise to significant pollution as an EMPr has been compiled and will be implemented. The mitigation measures will ensure that pollution that may result from cultivation is negligible or of very low significance.		



PART 2: COMPLIANCE HISTORY AND KNOWLEDGE OF THE APPLICANT

Index	Previous administrative action (i.e. administrative enforcement notices) issued to the applicant in respect of a contravention of section 24F(1) of the National Environmental Management Act and/or section 20(b) of the National Environmental Management Waste Act	Place an "x" in the appropriate box
	Description of variable	
	Administrative action was previously taken against the applicant in respect of the abovementioned provisions.	
	No previous administrative action was taken against the applicant but previous administrative action was taken against a firm(s) on whose board one or more of the applicant's directors sit or sat at the relevant time when the administrative action was taken.	
	Administrative action was not previously taken against the applicant in respect of the abovementioned provisions.	X
	Explanation of all previous administrative action taken in respect of the above:	

Index	Previous Convictions in terms of section 24F(1) of the National Environmental Management Act and/or section 20(b) of the National Environmental Management Waste Act	Place an "x" in the appropriate box
	Description of variable	
	The applicant was previously convicted in terms of either or both of the abovementioned provisions.	
	No previous convictions have been secured against the applicant but a conviction has been secured against a firm(s) on whose board one or more of the applicant's directors sit or sat at the relevant time; or a conviction was secured against a director of the applicant in his or her personal capacity.	
	The applicant has not previously been convicted in terms of either or both of the abovementioned provisions.	X
	Explanation of all previous convictions in respect of the above:	

Index	Number of section 24G applications previously submitted by the applicant	Place an "x" in the appropriate box
	Description of variable	
	Previous applications in terms of section 24G of NEMA were submitted by the applicant.	
	No previous applications have been submitted by the applicant but a previous application(s) have been submitted by a firm(s) on whose board one or more of the applicant's directors sit or sat at the relevant time.	
	No previous applications have been submitted by the applicant, but the applicant sat on the board of a firm that previously submitted an application.	X
	Explanation in respect of all previous applications submitted in terms of section 24G:	

To ensure transparency and in response to a query received from a registered stakeholder:

In 2010-2011 **PJ Keller & Seuns (Pty) Ltd**, was responsible for the establishment of ostrich (grower) camps on a portion of **Portion 4/172** (same property as what the current S24G application is for).

The area in question is quite far removed from the area under current investigation and was utilised as an ostrich camp and before that it appears to have been a quarry or crusher for road construction activities.

When bird flu broke out in 2010 PJ Keller & Seuns (Pty) Ltd had already obtained ostrich eggs (for growing) and their hatching coincided with the bird flu outbreak, resulting in their normal grower camps to be relocated to their existing ostrich camps, to comply biosecurity protocols and for maintaining sufficient distances between ostrich holding areas to prevent the spread of bird flu.

As far as the EAP could determine, the activities thought to have been triggered in the process of establishing the grower camps, where removal of vegetation and concentration of animals. Because of the area being used as ostrich camps before converting it into grower camps, and before that, the crusher activities that impacted on the site conditions, there were no remnant natural vegetation (removed). Furthermore, the establishment of the grower camps did not require the physical removal of any vegetation i.e. no earthworks. Hence the process of a Section 24G assessment was done for concentration of animals.

Information obtained from Mr Viljee Keller, representing **MooiPlaas Trust** (Applicant for the current S24G), indicate that the two processes/activities are unrelated, albeit on the same cadastral farm unit, but were undertaken by two different Applicants.

PART 3: APPLICANT'S PERSONAL CIRCUMSTANCES

Index	Applicant's legal persona	Place an "x" in the appropriate box
	Description of variable	
	The applicant is a natural person.	
	The applicant is a firm.	
	Describe the firm:	
	The Applicant is a Trust	

Index	Any other relevant information that the applicant would like to be considered.
	Motivate and explain fully:
	The Applicant did not deem the transformation of land previously utilised for extensive agriculture i.e. ostrich farming, wheat farming under his father/grandfather (the cut-off drain and small off-stream dam located within the transformed 13ha is evidence of historical farming practices) as needing prior Environmental Authorisation.
	The Applicant ceased with further clearing/transformation upon receipt of the Pre-Compliance/Compliance Notices and proceeded to appoint an EAP and WULA consultant to conduct the necessary investigations.

NOTE: An explanation as to why the applicant did not obtain an environmental authorisation and/or waste management licence must be attached to this application.



SECTION D: PRELIMINARY ADVERTISEMENT

When submitting this application form, the applicant must attach proof that the application has been advertised in at least one local newspaper in circulation in the area in which the activity was commenced, and on the applicant's website, if any.

The advertisement must state that the applicant commenced a listed or specified activity or activities or waste management activity or activities without the necessary environmental authorisation and/or waste management licence and is now applying for *ex post facto* approval. It must include the following:


- the date;
- the location;
- the applicable legislative provision contravened; and
- the activity or activities commenced with without the required authorisation.

Interested and affected parties must be provided with the details of where they can register as an interested and affected party and / or submit their comment. At least 20 days must be provided in which to do so.

This advertisement shall be considered as a preliminary notification and the competent authority may direct the applicant to undertake further public participation and advertising after receipt of this application form.


NOTE: Unless protected by law, all information contained in and attached to this application form may become public information on receipt by the competent authority. This application must be attached to any documentation or information submitted by an applicant further to section 24G(1).

10 OUDTSHOORN COURANT
Vrydag 18 November 2022




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Fax: 049 891 0108

LOCAL RATES & DEADLINE

Rate increase effective 1-3-2022.

DEADLINE
for : Bookings
Payments
Alterations


TUESDAY : 12:00
To avoid disappointment of your advertisement not appearing on the date you wish, please book early.

RATES
Classifieds advertising is strictly CASH.

CONDITIONS
Group Editors (Pty) Ltd reserves the right to withhold or cancel an advertisement order that has been accepted.

ERRORS
Please report errors immediately. Group Editors (Pty) Ltd accepts no responsibility for more than one incorrect insertion of any advertisement or any costs beyond the costs of the space occupied by the error. No re-publication will be given because of small typographical errors which do not lessen the value of the advertisement.

0100 NOTICES	0600 MOTORING
0113 WANTED	0603 VEHICLES UNDER R30,000
WANTED Lounge chairs in Graaff-Reinet WhatsApp only please Richard 060 843 0106	CX AUTO CARRIERS Transporter of motor vehicles at reasonable rates. Full load insurance included. Contact Joe on 076 865 0407 <small>0202001</small>
0300 SERVICES	0610 MISCELLANEOUS
0306 FINANCIAL AND LOANS	CARS/BAKKIES/ SCOOTERS Wanted in any condition. Reliable honest service. 082-722-6183
0500 PROPERTY	0700 VACANCIES
0511 BUSINESS PREMISES TO LET	0703 DOMESTIC WORK WANTED
WERKSWINKELS TE HUUR Oudtshoorn, <small>Ph: 044 272 8918</small>	CHARMAINE Opsoek na Private Carer werk 083 455 5482 <small>0202001</small>



**CAPE ENVIRONMENTAL ASSESSMENT PRACTITIONERS
PUBLIC PARTICIPATION PROCESS
24G RECTIFICATION APPLICATION & WATER LICENSE**

Public Participation Process for the clearance of vegetation on Portions 4 of Farm 172 Kallenshoogte, and pipeline crossing a watercourse on Portions 3 & 11 of Farm 172 Kallenshoogte, Oudtshoorn

Notice is hereby given of a Public Participation Process in terms of the National Environmental Management Act (Act No. 107 of 1998), as amended (NEMA) and the National Water Act (Act 36 of 1998) (NWA).

DE&OP 24G Consultation Reference: 142/41.075/0009/21 Water Use License Reference Number: WU220233
Applicant: Moolplaas Trust Environmental Consultant: Cape EAPrac
Location: Kallenshoogte Farm on the R328 southwest of Oudtshoorn.

24G Rectification Process: An application for a 24G rectification process is being undertaken. The applicant unlawfully commenced with Activity 27 (Listing Notice 1) and Activity 15 (Listing Notice 2) in terms of the Environmental Impact Assessment Regulations. The applicant cleared approximately 13 hectares of natural vegetation for crop production/orchards in furtherance of approximately 56ha without prior Environmental Authorisation.

Water Use License Application (WULA): A WULA has been submitted to Breede-Gouritz Catchment Management Agency in terms of the Water Act for various water use related activities. The applicant plans to abstract 422 000 m³ of water per annum from three boreholes (located on Portions 9 and 19 of Farm 170 Garmitsberg) for the irrigation of orchards to be established on Portion 4 of Farm 172 Kallenshoogte. Water will be transferred via a new 200mm pipeline across Portions 3/11 of Farm 172, Kallenshoogte.

- Section 21 (a): Taking water from a water resource (withdrawal);
- Section 21 (c): Impeding or diverting the flow of water in a watercourse; and
- Section 21 (f): Altering the bed, banks, course or characteristics of a watercourse.

Documents available: A draft 24G Application on Report with specialist studies is available on the Cape EAPrac website, www.cape-eaprac.co.za, and available on request to registered Interested and Affected Parties (I&APs). The WULA Technical Report will also be available for viewing on the Cape EAPrac website, www.cape-eaprac.co.za (search under Active Projects in alphabetical order).

I&APs are hereby invited to register and/or comment on the above-mentioned documents. In order to register or submit comment, I&APs must provide their names and contact details as well as preferred method of communication (e.g. email, registered post, normal post, etc.) and must give an indication of any direct business, financial, personal or other interest which they have in the application to the contact details below. Please note that correspondence throughout the remainder of the 24G process will be to registered I&APs.

Any persons with special needs who wish to comment or wish to register as an interested and affected party who cannot use the provided methods can contact Cape EAPrac Environmental Consultants for assistance.

THE 60-DAY COMMENTING PERIOD COMMENCES ON 21 NOVEMBER 2022 – 9 FEBRUARY 2023.
COMMENTS MUST BE SUBMITTED TO THE RESPECTIVE PARTIES BELOW.

<p>To register as an I&AP or to submit comments on the draft 24G Application:</p> <p>Cape EAPrac (Attention: Kim Williams) Postal Address: P O Box 2070, George, 6530 Telephone: 044 874 0365 Facsimile: 044 874 0432 E-mail: kim@cape-eaprac.co.za</p>	<p>Any comments on the WULA Technical Report must please be submitted to:</p> <p>Confluent Environmental, Aquatic Consulting and Research (Attention: Sonia Jordaan) Telephone: 062 743 24 15 E-mail: sonia@confluent.co.za</p>
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Note: When registering as an I&AP a person consents to the lawful processing of personal information for the intended purposes as described by the Protection of Personal Information Act, 2013 (Act No. 4 of 2013). By registering a person agrees that by submitting a comment to inform this process, your contact details will, where required by a public body, be reflected in regulated reports, that must be compiled and submitted to the general public, registered stakeholders, organs of state as well as the competent authority for consideration and decision-making.

www.westerncape.gov.za

Department of Environmental Affairs and Development Planning

PART 3**1. APPENDICES**

The following appendices must, where applicable, be attached to this form:

Appendix A:	Locality map	✓
Appendix B1:	Preferred plan	✓
Appendix B2:	Initial site plan	✓
Appendix C:	Building plans (if applicable)	Not applicable
Appendix D:	Colour photographs	✓
Appendix E:	Biodiversity overlay map	✓
Appendix F1:	F1: EWULAAS commencement proof	✓
Appendix F2:	F2: HWC response to NID	✓
Appendix G:	Public participation information: including a copy of the register of interested and affected parties, the comments and responses report, proof of notices, advertisements, Land owner consent and any other public participation information as required in Section J above.	The register is not available to the public in terms of the POPI Act. All other PPP Proof will be provided in the next public participation iteration.
Appendix H1:	Aquatic Assessment Report	✓
Appendix H2:	Terrestrial Biodiversity Report	✓
Appendix H3:	Botanical Compliance Statement	✓
Appendix H4:	Geohydrological Report	✓
Appendix H5:	Agriculture Report	✓
Appendix H6:	Draft Technical WULA Report	✓
Appendix H7:	Terrestrial Animal Species Compliance Statement	✓
Appendix H8:	HWC NID Background Information Document	✓
Appendix I:	Environmental Management Programme	✓
Appendix J1:	Pre-Compliance Notice	✓
Appendix J2:	Compliance Notice	✓
Appendix J3:	BGCMA Pre-Directive Notice of Intent	✓
Appendix K:	Certified copy of Identity Document of Applicant	This is not available to the public in terms of the POPI Act.
Appendix L:	Certified copy of the title deed (or title deeds in the case of linear activities)	This is not available to the public in terms of the POPI Act.
Appendix M:	Screening Tool Report	✓
Appendix N :	EAP CV	✓

Where an application has been made in terms of the waste management activities, please complete and annex Annexure 1 as in the following:

Annexures for waste listed activity/ies supporting information		Tick the box if Annexure is attached
Annexure 1	Waste listed activities supporting information (as in prescribed attached form)	
Other	(Please list accordingly)	

2. DECLARATIONS

2.1 The Applicant

Note: Duplicate this section where there is more than one applicant

- I, _____, ~~in my personal capacity~~ or duly authorised as **Trustee** (state capacity) by **Mooiplaas Trust** thereto hereby declare/affirm that all the information contained in this application to be true and correct, and that I:
 - am fully aware of my responsibilities in terms of the National Environmental Management Act of 1998 (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment Regulations, 2014 ("EIA Regulations") in terms of NEMA, the National Environmental Management: Waste Act, 2008 (Act 59 of 2008) ("NEM:WA") and all relevant specific environmental management Act(s), and that failure to comply with these requirements may constitute an offence in terms of the environmental legislation;
 - appointed the environmental assessment practitioner as indicated above, which meet all the requirements in terms of Regulation 13 of the EIA Regulations to act as the independent Environmental Assessment Practitioner for this application;
 - have provided the environmental assessment practitioner and the competent authority with access to all information at my disposal that is relevant to the application;
 - am aware that I may be issued with a directive and that I must comply with such a directive;
 - am fully aware of the administrative fine to be paid before a decision, with respect to the continuation of the listed activity(ies), will be made;
 - will be responsible for the costs incurred in complying with the environmental legislation including but not limited to –
 - costs incurred in connection with the appointment of the environmental assessment practitioner or any specialist appointed in terms of Regulation 13 of the EIA Regulations);
 - costs incurred in respect of the undertaking of any process required in terms of this application;
 - costs in respect of any prescribed fee payable in respect of this application;
 - costs in respect of specialist reviews, if the competent authority decides to recover costs;
 - the provision of security to ensure compliance with the applicable management and mitigation measures; and fine costs
 - am responsible for complying with the conditions that might be attached to any decision(s) issued by the competent authority;
 - have the ability to implement the applicable management, mitigation and monitoring measures; and
 - hereby indemnify, the government of the Republic of South Africa, the competent authority and all its officers, agents and employees, from any liability arising out of, inter alia, the content of any report, any procedure or any action for which the applicant or environmental assessment practitioner is responsible.
 - am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations, 2014

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

Signature of the applicant:

Name of representative:

Name of Trust (if applicable):

Date:

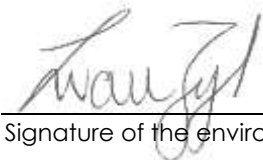


2.2 The Independent Environmental Assessment Practitioner ("EAP")

I **Ms Louise van Zyl**, as the appointed independent environmental practitioner ("EAP") **EAPASA Reg: 2019/1444**, hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that I:

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

Note: The terms of reference must be attached.



Signature of the environmental assessment practitioner:

Cape Environmental Assessment Practitioners (Cape EAPrac)

Name of company:

14 February 2024

Date:

PART 4

~~ANNEXURE B – SUPPORTING INFORMATION WHERE THE ACTIVITY BEING APPLIED FOR IS A LISTED WASTE MANAGEMENT ACTIVITY/IES (IF RELEVANT)~~

~~This section is not applicable~~

1. ~~WASTE QUANTITIES~~

Indicate or specify types of waste and list the estimated quantities (expected to be) managed daily (should you need more columns; you are advised to add more)

Note: In this case of hazardous waste, the National Department of Environmental Affairs is the relevant competent authority to consider the 24G application.

Non-hazardous waste	Total waste handled (tonnes per day)

Source of information supplied in the table above Mark with an "X"

Determined from volumes

Determined with weighbridge/scale

Estimated

1.1. ~~Recovery, Reuse, Recycling, treatment and disposal quantities:~~

Indicate the applicable waste types and quantities expected to be disposed of and salvaged annually:

TYPES OF WASTE	MAIN SOURCE (NAME OF COMPANY)	QUANTITIES		ON-SITE RECOVERY REUSE RECYCLING TREATMENT OR DISPOSAL	OFFSITE RECOVERY REUSE RECYCLING TREATMENT OR DISPOSAL	OFFSITE DISPOSAL
		Tons/ Month	M ³ / Month			

2. ~~GENERAL~~

Prevailing wind direction (e.g. NWW)

November – April

May – October

The size of population to be

served by the facility:

	Mark with "X"	Comment
0-499		
500-9,999		
10,000-199,999		
200,000 upwards		

LANDFILL PARAMETERS (If applicable)



The method of disposal of waste:

Land-building Land-filling Both

The dimensions of the disposal site in metres

	At commencement	After rehabilitation

The total volume for the disposal of waste on the site:

Volume Available	Mark with "X"	Source of information (Determined by surveyor/ Estimated)
Up to 99		
100-34 999		
35 000- 3,5 million		
>3,5 million		

The total volume already used for waste disposal on the site:

(a) Will the waste body be covered daily	Yes	No
(b) Is sufficient cover material available	Yes	No
(c) Will waste be compacted daily	No	No

If the answers (a) and/or (b) are No, what measures will be employed to prevent the problems of burning or smouldering of waste and the generation of nuisance?

The Salvage method (Mark with an "X" the method to be used)

At source	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Recycling installation	
Formal salvaging	
Contractor	
No salvaging planned	

Fatal flaws for the site:

Indicate which of the following apply to the facility for a waste management activity:

Within a 3000m radius of the end of an airport landing strip	Yes	No
Within the 1 in 50-year flood line of any watercourse	Yes	No
Within an unstable area (fault zone, seismic zone, dolomitic area, sinkholes)	Yes	No
Within the drainage area or within 5 km of water source	Yes	No
Within the drainage area or within 5 km of water source	Yes	No
Within an area adjacent to or above an aquifer	Yes	No
Within an area with shallow bedrock and limited available cover material	Yes	No
Within 100 m of the source of surface water	Yes	No
Within 1km from the wetland	Yes	No

Indicate the distance to the boundary of the nearest residential area

metres
metres

Indicate the distance to the boundary of the industrial area

Wettest six months of the year

November-April

May-October

For the wettest six-month period indicated above, indicate the following for the preceding 30 years



	Total rainfall for 6 months	Total rainfall for 6 months	Total rainfall for 6 months
For the 1st wettest year			
For the 2nd wettest year			
For the 3rd wettest year			
For the 4th wettest year			
For the 5th wettest year			
For the 6th wettest year			
For the 7th wettest year			
For the 8th wettest year			
For the 9th wettest year			
For the 10th wettest year			

Location and depth of ground water monitoring boreholes:

Codes of the boreholes	Borehole locality	Depth (m)	Latitude	Longitude
			° ' "	° ' "
			° ' "	° ' "
			° ' "	° ' "
			° ' "	° ' "
			° ' "	° ' "

Location and depth of landfill gas monitoring test pit:

Codes of the boreholes	Borehole locality	Latitude	Longitude
		° ' "	° ' "
		° ' "	° ' "
		° ' "	° ' "
		° ' "	° ' "
		° ' "	° ' "

