



**REFERENCE:** 16/3/3/1/A3/54/2060/19  
**NEAS REFERENCE:** WCP/EIA/0000709/2019  
**ENQUIRIES:** MS. K. ADRIAANSE  
**DATE OF ISSUE:** 12 JUNE 2020

## ENVIRONMENTAL AUTHORISATION

**APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): PROPOSED EROSION CONTROL AND REHABILITATION OF WATERCOURSES AND ASSOCIATED INFRASTRUCTURE ON PORTION 2 AND THE REMAINDER OF FARM NO. 744, VERGELEGEN WINE ESTATE, SOMERSET WEST.**

With reference to your application for the abovementioned, find below the outcome with respect to this application.

### DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the listed activities specified in section B below with respect to the Preferred Alternative, described in the Basic Assessment Report ("BAR"), dated February 2020.

The applicant for this Environmental Authorisation is required to comply with the conditions set out in section E below.

### A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

The Director  
c/o Mr. L. Naidoo  
Vergelegen Wines (Pty) Ltd.  
P.O. Box 17  
**SOMERSET WEST**  
7129

Tel: (021) 847 2100  
Fax: (021) 847 1608  
Email: [naidool@vergelegen.co.za](mailto:naidool@vergelegen.co.za)

The abovementioned applicant is the holder of this Environmental Authorisation and is hereinafter referred to as "**the holder**".

**B. LIST OF ACTIVITIES AUTHORISED**

Listed Activity	Activity/Project Description
<p>Listing Notice 1 of the NEMA EIA Regulations, 2014 (as amended):</p> <p>Activity Number: 12 Activity Description:</p> <p><i>The development of –</i></p> <p>(i) <i>dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or</i></p> <p>(ii) <i>Infrastructure or structures with a physical footprint of 100 square metres or more;</i></p> <p><i>where such development occurs –</i></p> <p>(a) <i>within a watercourse;</i></p> <p>(b) <i>in front of a development setback; or</i></p> <p>(c) <i>if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; -</i></p> <p><i>excluding –</i></p> <p>(aa) <i>the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbor;</i></p> <p>(bb) <i>where such development activities are related to the development of a port or harbor, in which case activity 26 of Listing Notice 2 of 2014 applies;</i></p> <p>(cc) <i>activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 of Listing Notice 3 of 2014, in which case that activity applies;</i></p> <p>(dd) <i>where such development occurs within an urban area;</i></p> <p>(ee) <i>where such development occurs within existing roads, road reserves or railway line reserves; or</i></p> <p>(ff) <i>the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.</i></p> <p>Activity Number: 19 Activity Description:</p> <p><i>The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;</i></p> <p><i>but excluding where such infilling, depositing, dredging, excavation, removal or moving –</i></p>	<p>The proposed erosion control and rehabilitation of watercourses entails the development of weirs with a physical footprint of 100m<sup>2</sup> or more within watercourses on Portion 2 and the Remainder of Farm No. 744, Vergelegen Wine Estate, Somerset West and will occur outside an urban area.</p> <p>The proposed erosion control and rehabilitation of watercourses entails the infilling or depositing of any material of more than 10m<sup>3</sup> from watercourses on Portion 2 and the Remainder of Farm No. 744, Vergelegen Wine Estate, Somerset West.</p>

<p>(a) will occur behind a development setback;  (b) is for maintenance purposes undertaken in accordance with a maintenance management plan;  (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;  (d) occurs within existing ports or harbours that will not increase the development footprint of the port of harbor; or  (e) where such development is related to the development of a port or harbor, in which case activity 26 in Listing Notice 2 of 2014 applies.</p> <p>Activity Number: 27  Activity Description:</p> <p><i>The clearance of an area of 1 hectares of more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for –</i></p> <p>(i) <i>the undertaking of a linear activity; or</i>  (ii) <i>maintenance purposes undertaken in accordance with a maintenance management plan.</i></p>	<p>The proposed erosion control and rehabilitation of watercourses will entail the clearance of more than 1ha of indigenous vegetation on Portion 2 and the Remainder of Farm No. 744, Vergelegen Wine Estate, Somerset West.</p>
<p>Listing Notice 3 of the NEMA EIA Regulations, 2014 (as amended):</p> <p>Activity Number: 12  Activity Description:</p> <p><i>The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</i></p> <p><b>i. Western Cape</b></p> <p><i>i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</i></p> <p><i>ii. Within critical biodiversity areas identified in bioregional plans;</i></p> <p><i>iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;</i></p> <p><i>iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or</i></p>	<p>The proposed erosion control and rehabilitation of watercourses will entail the clearance of an area of more than 300m<sup>2</sup> or more of indigenous vegetation within a critically endangered ecosystem on Portion 2 and the Remainder of Farm No. 744, Vergelegen Wine Estate, Somerset West.</p>

<p>v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.</p> <p>Activity Number: 14 Activity Description:</p> <p>The development of –</p> <p>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or</p> <p>(ii) infrastructure or structures with a physical footprint of 10 square metres or more;</p> <p>where such development occurs –</p> <p>(a) within a watercourse;</p> <p>(b) in front of a development setback; or</p> <p>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</p> <p>excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbor.</p> <p><b>i. Western Cape</b></p> <p>i. Outside urban areas:</p> <p>(aa) A protected area identified in terms of NEMPAA, excluding conservancies;</p> <p>(bb) National Protected Area Expansion Strategy Focus areas;</p> <p>(cc) World Heritage Sites;</p> <p>(dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</p> <p>(ee) Sites or areas listed in terms of an international convention;</p> <p>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> <p>(gg) Core areas in biosphere reserves; or</p> <p>(hh) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined.</p>	<p>The proposed erosion control and rehabilitation of watercourses on Portion 2 and the Remainder of Farm No. 744, Vergelegen Wine Estate, Somerset West will entail the development of weirs exceeding 10m<sup>2</sup> within watercourses outside an urban area within a protected area identified in terms of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003).</p>
---	---

The abovementioned list is hereinafter referred to as “**the listed activities**”.

The holder is herein authorised to undertake the following alternative that includes the listed activities as it relates to the proposed development:

The activity entails the implementation of erosion control and rehabilitation measures to address the progressive erosion of five (5) watercourses on Portion 2 and the Remainder of Farm No. 744, Vergelegen Wine Estate, Somerset West. The proposed erosion measures include the removal of sediment, the placement of rocks and other materials into the watercourses and proposed construction of erosion control weirs as part of the rehabilitation of the affected watercourses.

At site 1, the rehabilitation of erosion gullies will entail the development of approximately eleven (11) weirs. The spillways of the proposed weirs have been designed as close to the natural ground level as possible in order to have a maximum effect on the flow of water in the gully upstream. The secondary spillways will be constructed between 0.5m and 1m above the spillway in order for the water to flow through the broader wetland during flood events. In some areas, the gully would have to be widened and protected with a vegetated geocell.

Site 2 is located downstream of site 1 and is located within a wetland area. Approximately eleven (11) weirs will be developed along the length of site 2. The weirs have been designed as low multi-stage weirs through the gully and the adjacent wetland, as if it were confined to the gully. During flood events, the multi-stage weir will slow down the velocity of the water and spread the water throughout the wetland to prevent further gullies forming.

Site 3 is located on a valley bottom wetland that is impounded by the Rooilanddam. Approximately five (5) weirs will be developed along the length of site 3. The weirs will be located in strategic areas to make maximum uses of the rock outcrops as stable foundations. The weirs will be smaller and shorter than those located at sites 1, 2 and 5.

Site 4 is located on the main valley bottom wetland feeding into the Rooilanddam. One (1) 10m long weir will be developed immediately upstream of an existing culvert to prevent the further incision of the upstream channel. The channel downstream of the culvert will be rehabilitated by landscaping the floor channel at least 6m wide. Cut-off walls every 20m will be developed and the channel floor will be covered with vegetated geocells.

Site 5 is located on the upper foothill slopes of the Hottentots Holland Mountains within an area characterised by a wetland within terrestrial fynbos. Approximately seven (7) weirs will be developed upstream of an existing sediment trap and an existing gravel road. The gully and disturbed areas will be landscaped and re-vegetated. Once the re-vegetation has been completed, the flow of water into the rehabilitated area will be controlled in order to allow the vegetation to establish. A blocked boundary channel, located upstream of the gully, will be rehabilitated by removing the sediment. A gabion weir will be developed within the channel to raise the river bed in the area of the former offtake into the boundary channel in order to reduce the potential for downstream erosion events. Downstream of the gully, the water will need to be re-directed in a westerly direction, over the farm gravel road in order to address the downstream erosion effects. A short gabion channel and a culvert underneath the gravel road will be developed. The water will be directed behind a low gabion wall, which will be fitted with small openings to allow the water to dissipate slowly over a wider area and avoid localised concentrations of water. The gully will be landscaped to have the side slopes flat enough to be vegetated and small erosion control structures will be constructed through the gully.

Temporary access roads will be developed to gain access to the five sites. All temporary access roads will be rehabilitated upon completion of the rehabilitation work. The erosion control weirs and associated infrastructure will be maintained in accordance with the Maintenance Management Plan (compiled by Doug Jeffery Environmental Consultants and dated 14 February 2020) included as part of the Environmental Management Programme (dated June 2020) and submitted with the BAR.

### C. SITE DESCRIPTION AND LOCATION

The authorised listed activities will be undertaken on Portion 2 and the Remainder of Farm No. 744, Vergelegen Wine Estate, Somerset West for the proposed rehabilitation of watercourses. The property is located off Vergelegen Avenue, Somerset West and the watercourses have the following start point co-ordinates:

Start Point	Latitude	Longitude
Site 1	34°4'49.66" South	18°56'4.71" East
Site 2	34°4'57.02" South	18°55'30.72" East
Site 3	34°4'59.75" South	18°54'46.59" East
Site 4	34°4'46.70" South	18°55'0.03" East
Site 5	34°3'33.74" South	18°56'56.86" East

The SG 21-digit codes are:

Portion 2 of Farm No. 744	C06700000000074400002
Remainder of Farm No. 744	C06700000000074400000

Refer to Annexure 1: Locality Map and Annexure 2: Site Plan.

The above is hereinafter referred to as "**the site**".

### D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Doug Jeffery Environmental Consultants (Pty) Ltd.

c/o Ms. L. Speirs / Mr. D. Jeffery

P.O. Box 44

**KLAPMUTS**

7625

Tel: (021) 875 5272

Fax: (086) 660 2635

### E. CONDITIONS OF AUTHORISATION

#### Scope of authorisation

1. The holder is authorised to undertake the listed activities specified in Section B above in accordance with and restricted to the Preferred Alternative described in the BAR dated February 2020 on the site as described in Section C above.
2. The holder must commence with the listed activities on site within a period of five **(5) years** from the date of issue of this Environmental Authorisation.
3. The development must be concluded within 5 (five) years from the date of commencement of the listed activities.
4. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
5. Any changes to, or deviations from the scope of the alternative described in section B above must be accepted or approved, in writing, by the Competent Authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.

### **Written notice to the Competent Authority**

6. A minimum of 7 (seven) calendar days' notice, in writing, must be given to the Competent Authority before commencement of development activities.
  - 6.1. The notice must make clear reference to the site details and EIA Reference number given above.
  - 6.2. The notice must also include proof of compliance with the following conditions described herein:  
  
Conditions: 6, 7, 12 and 18.

### **Notification and administration of appeal**

7. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision–
  - 7.1. Notify all registered Interested and Affected Parties ("I&APs") of –
    - 7.1.1. the outcome of the application;
    - 7.1.2. the reasons for the decision as included in Annexure 3;
    - 7.1.3. the date of the decision; and
    - 7.1.4. the date when the decision was issued.
  - 7.2. Draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations, 2014 (as amended) detailed in Section G below;
  - 7.3. Draw the attention of all registered I&APs to the manner in which they may access the decision; and
  - 7.4. Provide the registered I&APs with:
    - 7.4.1. the name of the holder (entity) of this Environmental Authorisation,
    - 7.4.2. name of the responsible person for this Environmental Authorisation,
    - 7.4.3. postal address of the holder,
    - 7.4.4. telephonic and fax details of the holder,
    - 7.4.5. e-mail address, if any, of the holder,
    - 7.4.6. the contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the National Appeal Regulations, 2014 (as amended).
8. The listed activities, including site preparation, must not commence within 20 (twenty) calendar days from the date the holder notifies the registered I&APs of this decision. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided i.e. the listed activities, including site preparation, must not commence until the appeal is decided.

### **Management of activity**

9. The draft Environmental Management Programme ("EMPr") (dated June 2020) submitted as part of the application for Environmental Authorisation is hereby approved must be implemented.
10. The Management Maintenance Plan ("MMP") (dated 01 June 2020) included as part of this EMPr must be implemented.
11. The EMPr must be included in all contract documentation for all phases of implementation.

## **Monitoring**

12. The holder must appoint a suitably experienced environmental control officer ("ECO"), or site agent where appropriate, before the commencement of any land clearing activities to ensure compliance with the provisions of the EMPr and the conditions contained in this Environmental Authorisation.
13. A copy of the Environmental Authorisation, EMPr, Environmental Audit Reports and compliance monitoring reports must be kept at the site where the listed activities will be undertaken during the rehabilitation activities, whereafter it must be kept at the office of the applicant and must be made available to any authorised official on request.
14. Access to the site referred to in Section C above must be granted, and the environmental reports mentioned above must be produced, to any authorised official representing the Competent Authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.

## **Auditing**

15. In terms of Regulation 34 of the NEMA EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation and the EMPr and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Reports must be prepared by an independent person and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014 (as amended).
  - 15.1. The holder must undertake an environmental audit within 3 (three) months of the commencement of the land clearing/rehabilitation activities and submit an Environmental Audit Report to the Competent Authority upon the completion of the environmental audit.
  - 15.2. A final Environmental Audit Report must be submitted to the Competent Authority 1 (one) month after the completion of the rehabilitation/development activities.
  - 15.3. An Environmental Audit Report must be submitted to the Competent Authority every 5 (five) years after the completion of the rehabilitation/development activities.
  - 15.4. The holder must, within 7 (seven) calendar days of the submission of an Environmental Audit Report to the Competent Authority, notify all potential and registered I&APs of the submission and make the Environmental Audit Report available to an authorised person on request.

## **Specific Conditions**

16. Should any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape.
  - 16.1. Heritage remains include: meteorites, archaeological and/or palaeontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features with heritage significance; rock art and rock engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.



17. An integrated waste management approach, which is based on waste minimisation and incorporates reduction, recycling, re-use and disposal, where appropriate, must be employed. Any solid waste must be disposed of at a landfill licensed in terms of the applicable legislation.
18. Each site must be clearly demarcated prior to the commencement of the land clearing/erosion control and rehabilitation activities. The development footprint of the proposed rehabilitation work must be limited to the demarcated area.
19. All temporary access roads developed must be rehabilitated upon completion of the rehabilitation activities.

## **F. GENERAL MATTERS**

1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activities.
2. Non-compliance with a condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.
3. If the holder does not commence with the listed activities within the period referred to in Condition 2, this Environmental Authorisation shall lapse for that activities, and a new application for Environmental Authorisation must be submitted to the Competent Authority. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be made to the Competent Authority prior to the expiry date of the Environmental Authorisation.
4. The holder must submit an application for amendment of the Environmental Authorisation to the Competent Authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for Amendment in terms of Part 1 of the NEMA EIA Regulations, 2014 (as amended) must be submitted.

Please note that an amendment is not required if there is a change in the contact details of the holder. In this case, the Competent Authority must only be notified of such changes.

5. The manner and frequency for updating the EMPr is as follows:  
Amendments to the EMPr must be done in accordance with Regulations 35 to 37 of the NEMA EIA Regulations, 2014 (as amended) or any relevant legislation that may be applicable at the time.

## **G. APPEALS**

Appeals must comply with the provisions contained in the National Appeal Regulations, 2014 (as amended).

1. An appellant (if the holder of the decision) must, within 20 (twenty) calendar days from the date the notification of the decision was sent to the holder by the Competent Authority –
  - 1.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and
  - 1.2. Submit a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.

2. An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date the holder of the decision sent notification of the decision to the registered I&APs–
  - 2.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and
  - 2.2. Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organ of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.
4. The appeal form/s must be submitted by means of one of the following methods:

By post:           Attention: Marius Venter  
Western Cape Ministry of Local Government, Environmental Affairs and  
Development Planning  
Private Bag X9186  
**CAPE TOWN**  
8000

By facsimile: (021) 483 4174; or

By hand:           Attention: Mr. M. Venter (Tel: 021 483 3721)  
Room 809  
8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001
5. The prescribed appeal form, as well as assistance regarding the appeal processes is obtainable from the office of the appeal authority/ at: Tel. (021) 483 3721, E-mail [DEADP.Appeals@westerncape.gov.za](mailto:DEADP.Appeals@westerncape.gov.za) or URL <http://www.westerncape.gov.za/eadp>.

#### H. DISCLAIMER

The Western Cape Government, the holder, committees or any other public authority or organisation appointed in terms of the conditions of this Environmental Authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Your interest in the future of our environment is appreciated.

Yours faithfully



---

**MR. ZAAHIR TOEFY**  
**DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)**

DATE OF DECISION: 12/06/2020

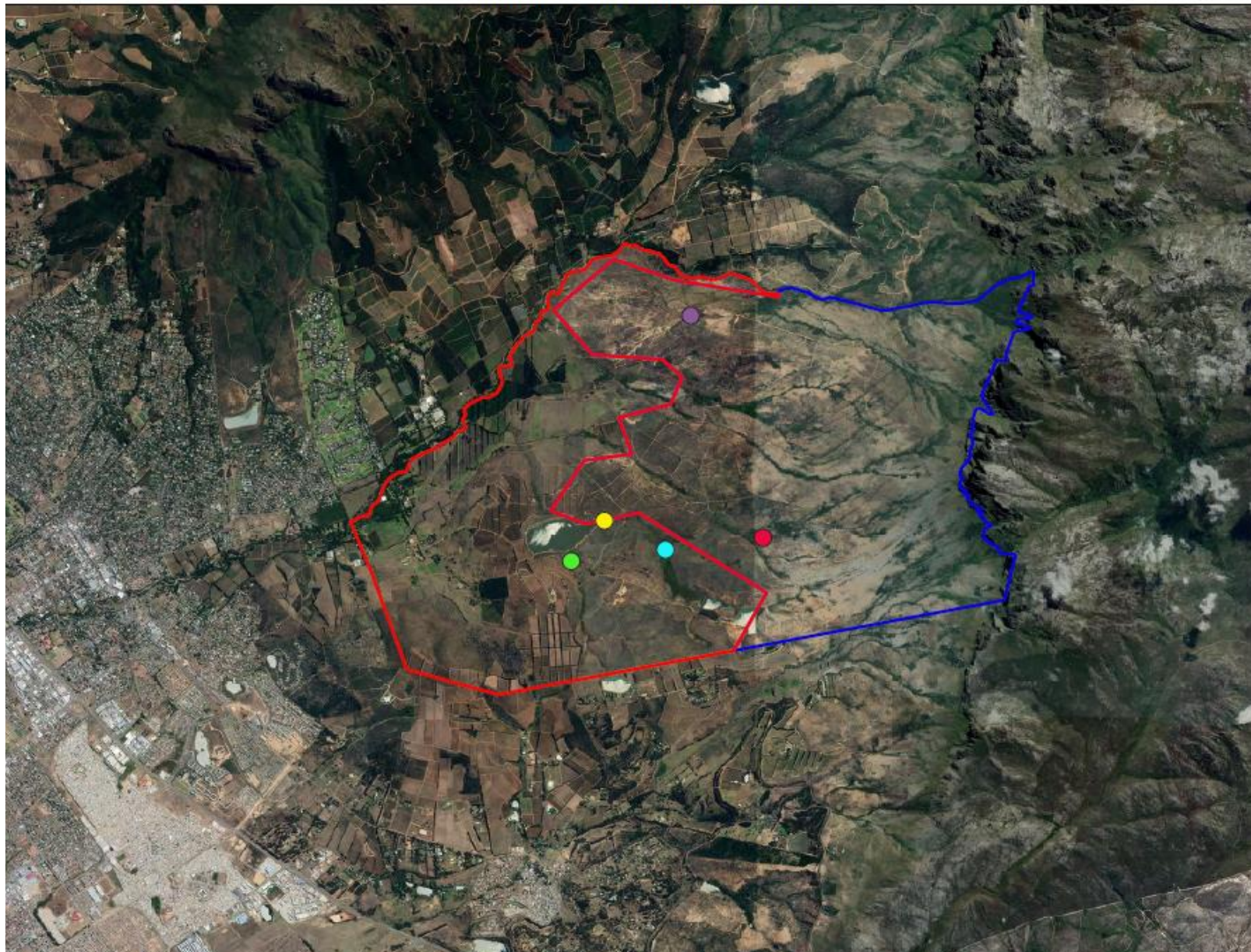
Copies to: (1) Ms. L. Speirs (Doug Jeffery Environmental Consultants)  
(2) Ms. A. van Wyk (City of Cape Town: ERM)  
(3) Mr. D. Daniels (DWS: Berg Water Management Area)

Email: [lindsay@dougjeff.co.za](mailto:lindsay@dougjeff.co.za)  
Email: [azanne.vanwyk@capetown.gov.za](mailto:azanne.vanwyk@capetown.gov.za)  
Email: [DanielsD@dws.gov.za](mailto:DanielsD@dws.gov.za)

# ANNEXURE 1: LOCALITY MAP

## Erosion Sites on Vergelegen Estate

### AERIAL MAP



### Legend

- ▭ RE of Farm 744
- ▭ PTN 2 of Farm 744
- Site 1
- Site 2
- Site 3
- Site 4
- Site 5

### Site Coordinates:

**SITE 1:**  
34° 04'52.27"S  
18° 56'16.00"E

**SITE 2:**  
34° 04'57.02"S  
18° 55'30.72"E

**SITE 3:**  
34° 05'1.57"S  
18° 54'46.99"E

**SITE 4:**  
34° 04'47.35"S  
18° 54'58.36"E

**SITE 5:**  
34° 03'24.19"S  
18° 55'42.47"E

Datum: WGS84  
Projection: Geographic  
GOOGLE EARTH 2019

Scale: 1:50 000 (on A3)



Date: NOVEMBER 2019

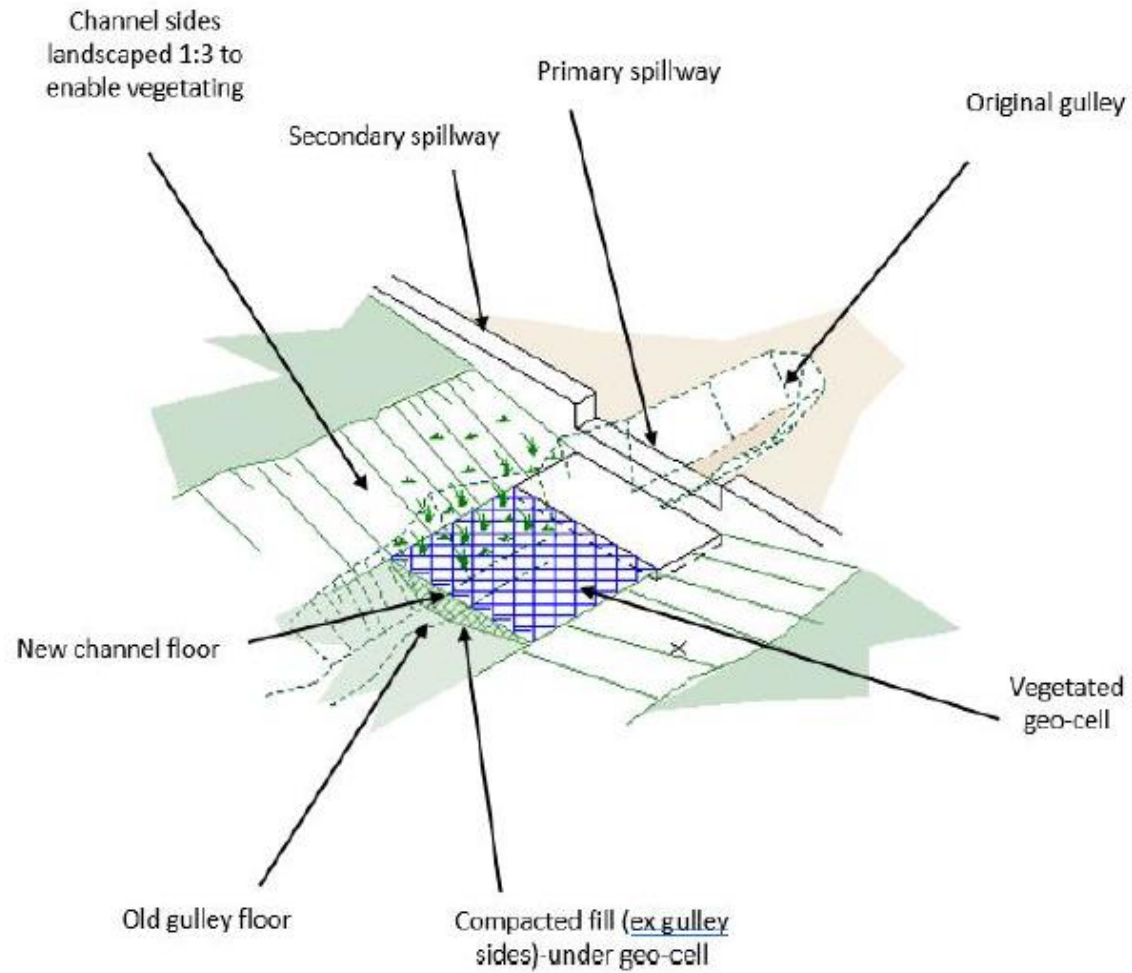
DJEC Ref. 2018/28

Prepared by:



DOUG JEFFREY  
ENVIRONMENTAL CONSULTANTS

## ANNEXURE 2: SITE PLAN



A view of a weir in a gully showing the original gully, landscaping, the geo-cell, and the compacted fill lifting the floor of the old gully

## **ANNEXURE 3: REASONS FOR THE DECISION**

In reaching its decision, the Competent Authority considered, *inter alia*, the following:

- a) The information contained in the Application Form dated 19 November 2019, the BAR received by the Competent Authority on 26 February 2020, the EMPr received by the Competent Authority on 08 June 2020 and the additional information received by the Competent Authority on 04 March 2020 and 08 June 2020;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation, Alternatives and Need and Desirability (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- d) The comments received from I&APs and responses to these, included in the BAR dated February 2020;
- e) The balancing of negative and positive impacts and proposed mitigation measures; and
- f) No site visits were conducted. The competent authority had sufficient information before it to make an informed decision without conducting a site visit.

All information presented to the Competent Authority was taken into account in the consideration of the application for Environmental Authorisation. A summary of the issues that were considered to be the most significant for the decision is set out below.

### **1. Public Participation**

The public participation process included:

- identification of and engagement with I&APs;
- fixing a notice board on the site where the listed activities are to be undertaken on 08 January 2020;
- giving written notice to the occupiers of land adjacent to the site where the listed activities are to be undertaken, the municipality and ward councillor, and the various organs of state having jurisdiction in respect of any aspect of the listed activities on 11 December 2019;
- the placing of a newspaper advertisement in the '*District Mail* on 09 January 2020; and
- making the BAR available to I&APs for public review from 09 January 2020 to 10 February 2020.

All the concerns raised by I&APs were responded to and adequately addressed during the public participation process. The Department is satisfied that the PPP that was followed met the minimum legal requirements and all the comments and responses report thereto were included in the comments and responses report. Specific management and mitigation measures have been considered in this Environmental Authorisation and in the EMPr to adequately address the concerns raised.

### **2. Alternatives**

Activity alternatives with respect to re-directing the flow of water and landscaping of the gullies, Design Alternatives with respect to the weirs and the "No-Go" Alternative were identified and assessed.

The option of re-directing the flow of water to a stable channel through the development of an earth bank training wall along the side of the gullies that have formed at Sites 1 – 4 on Portion 2 and the Remainder of Farm No. 744 (Vergelegen Estate), Somerset West was identified. The training wall would create an artificial channel adjacent to the gullies to redirect water into the natural low-lying areas where water collects naturally.

However, this option was screened out due to the fact the earth bank training wall would not be suitable for the gully formed at Site 5, which follows the route of a road.

The option of reshaping and landscaping the entire gullies with concrete, rock-filled gabion mattresses and concrete grass blocks were identified and screened out. These Alternatives were screened due to the fact that the landscaping options were not financially feasible and the reshaping of the entire gullies may have led to further environmental degradation since all the water flowing through the gullies would have been directed to a natural wetland.

Design Alternative 1 with respect to the design of the weirs entailed the widening of the gullies in order to construct a weir within a large space, to discharge the maximum expected flood, was identified and screened out. Design Alternative 1 was not deemed the preferred since the development footprint of the weir would be significantly larger when compared to Design Alternative 2 and is not financially feasible for the applicant.

The Preferred Alternative (herewith authorised) is therefore as follows:

The Preferred Alternative entails the implementation of erosion control and rehabilitation measures to address the progressive erosion of five (5) watercourses on Portion 2 and the Remainder of Farm No. 744, Vergelegen Wine Estate, Somerset West. The proposed erosion measures include the removal of sediment, the placement of rocks and other materials into the watercourses and proposed construction of erosion control weirs as part of the rehabilitation of the affected watercourses.

At site 1, the rehabilitation of erosion gullies will entail the development of approximately eleven (11) weirs. The spillways of the proposed weirs have been designed as close to the natural ground level as possible in order to have a maximum effect on the flow of water in the gully upstream. The secondary spillways will be constructed between 0.5m and 1m above the spillway in order for the water to flow through the broader wetland during flood events. In some areas, the gully would have to be widened and protected with a vegetated geocell.

Site 2 is located downstream of site 1 and is located within a wetland area. Approximately eleven (11) weirs will be developed along the length of site 2. The weirs have been designed as low multi-stage weirs through the gully and the adjacent wetland, as if it were confined to the gully. During flood events, the multi-stage weir will slow down the velocity of the water and spread the water throughout the wetland to prevent further gullies forming.

Site 3 is located on a valley bottom wetland that is impounded by the Rooilanddam. Approximately five (5) weirs will be developed along the length of site 3. The weirs will be located in strategic areas to make maximum uses of the rock outcrops as stable foundations. The weirs will be smaller and shorter than those located at sites 1, 2 and 5.

Site 4 is located on the main valley bottom wetland feeding into the Rooilanddam. One (1) 10m long weir will be developed immediately upstream of an existing culvert to prevent the further incision of the upstream channel. The channel downstream of the culvert will be rehabilitated by landscaping the floor channel at least 6m wide. Cut-off walls every 20m will be developed and the channel floor will be covered with vegetated geocells.

Site 5 is located on the upper foothill slopes of the Hottentots Holland Mountains within an area characterised by a wetland within terrestrial fynbos. Approximately seven (7) weirs will be developed upstream of an existing sediment trap and an existing gravel road. The gully and disturbed areas will be landscaped and re-vegetated. Once the re-vegetation has been completed, the flow of water into the rehabilitated area will be controlled in order to allow the vegetation to establish. A blocked boundary channel, located upstream of the gully, will be rehabilitated by removing the sediment. A gabion weir will be developed within the channel to raise the river bed in the area of the former offtake into the boundary channel in order to reduce the potential for downstream erosion events.

Downstream of the gully, the water will need to be re-directed in a westerly direction, over the farm gravel road in order to address the downstream erosion effects. A short gabion channel and a culvert underneath the gravel road will be developed. The water will be directed behind a low gabion wall, which will be fitted with small openings to allow the water to dissipate slowly over a wider area and avoid localised concentrations of water. The gully will be landscaped to have the side slopes flat enough to be vegetated and small erosion control structures will be constructed through the gully.

Temporary access roads will be developed to gain access to the five sites. All temporary access roads will be rehabilitated upon completion of the rehabilitation work. The erosion control weirs and associated infrastructure will be maintained in accordance with the Maintenance Management Plan (compiled by Doug Jeffery Environmental Consultants and dated 01 June 2020) included as part of the Environmental Management Programme (dated June 2020) and submitted with the BAR.

The Preferred Alternative incorporates the preferred option of reshaping and landscaping the gullies with vegetated geocells and incorporates the preferred design alternative for the weirs. The Preferred Alternative takes cognisance of the recommendations of the Aquatic Specialist and the Engineering Specialist in order to minimise the potential impacts on the watercourse and indigenous vegetation on each site.

#### "No-Go" Alternative

The "No-Go" Alternative would result in maintaining the "*status quo*". Should the proposed erosion control and rehabilitation work not be implemented (i.e. the "No-Go" Alternative), the watercourses will continue eroding and degrading at a rapid pace and will negatively impact on the surrounding Critical Biodiversity Areas and Ecological Support Areas. With the implementation of the proposed erosion control and rehabilitation work, the erosion will be controlled and reduced, which will result in the protection and conservation of the remaining Critical Biodiversity Areas and Ecological Support Areas. The Preferred Alternative will not result in unacceptable environmental impacts, therefore the "No-Go" Alternative was not warranted.

### **3. Impact Assessment and Mitigation measures**

#### 3.1. Activity Need and Desirability

Before 2000, an alien clearing vegetation programme was implemented on the property (i.e. Vergelegen Estate). In 2013, heavy rains and severe flooding was experienced in the region, which led to the washing out of gullies in many of the watercourses on the property. Over the last few years, the gullies have deepened and caused severe erosion across the property. Five (5) sites across the property have been identified for urgent rehabilitation work. The site is zoned Agriculture and the proposed rehabilitation work is permitted within the existing land use rights. The need to address the erosion on the property is required in order to protect the botanically sensitive areas (i.e. Critical Biodiversity Areas and Ecological Support Areas) on the property and to protect the ecological services of the property. The cumulative impact of not proceeding with the erosion interventions would have a medium negative significance since downstream sedimentation would continue and increase as the gullies continue to erode which will impact significantly on the Lourens River. In addition, natural indigenous vegetation will continue to be lost through the collapse of the gullies and increasing size of the gullies.

#### 3.2. Freshwater impacts

An Aquatic Ecosystems Impact Assessment (compiled by Dr. L. Day of Liz Day Consulting (Pty) Ltd. and dated November 2019) was undertaken to determine the potential impacts on the watercourses associated with the proposed rehabilitation work. The specialist indicated that the watercourses within the property area falls within the Berg/Olifants Water Management Area and runoff from the property passes into the Lourens River, which is a Protected Natural Environment.

According to the South African National Biodiversity Institute's BGIS mapping tool Western Cape Biodiversity Spatial Plan, 2017 layer, the site is mapped as a Critical Biodiversity Area and an Ecological Support Area. Sites 1, 2 and 4 lie on one main watercourse, which flows in a westerly direction into the Rooilanddam located on the property. Site 3 lies on a watercourse, which flows in a southerly direction into the Rooilanddam. Site 5 lies on a watercourse towards the north of the property and passes into an extensive valley bottom wetland, which enters the Lourens River. The site is located in a portion of the property, which is a proclaimed Nature Reserve in terms of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003).

Site 1 is located within a hillslope seep that begins approximately 1.4km up the south western facing mountain slopes. Downslope of the site, the seep opens into a wider valley bottom wetland, which is joined by sites 2 and 3 and leads into the Rooilanddam. A deep active headcut was identified within the seep. Sections of the seep that are unaffected by the headcut erosion has a Present Ecological Status ("PES") Category B (i.e. natural) whereas sections of the seep affected by the headcut has a PES Category E (i.e. seriously modified). The low PES is due to the fact that the headcut erosion has impacted on the hydraulics, geomorphology and topographical change of the seep.

Site 2 is located downstream of site 1. The site 2 wetlands extend down into a valley bottom wetland in which site 4 is located. Significant channel incision has occurred over the wetland and has resulted in the creation of a wide and deep vertical sided channel. The incision channel narrows with distance upstream and downstream. Downstream, the channel appears to be widening actively, with collapsed mounds of wetland vegetation on the base of the channel as a result of the bank undercutting. Site 2 has a PES Category E/F (i.e. seriously to critically modified), which is due to the individual criteria of hydraulics, geomorphology and topographical change highly altered by the headcut erosion.

Site 3 is located on a small valley bottom wetland that is impounded by the Rooilanddam. Site 3 is located between the gravel road crossing closest to the dam and the dam margins. A number of small active headcuts have been identified by the specialist. Site 3 has a PES Category D (i.e. modified).

Site 4 is located on the main valley bottom wetland feeding into the Rooilanddam. The area assessed by the specialist extends from the dam margins upstream by approximately 670m, with a gravel road extending across the length of site 4. The wetland area located upstream of the road crossing is wide and become narrower downstream. Water flows have been concentrated into a channel downstream of the culvert, which may have contributed to the shrinking of the wetlands located downstream. The integrity of the culvert is therefore uncertain as erosion continues. Site 4 has a PES Category D.

Site 5 is located on the upper foothill slopes of the Hottentots Holland Mountains. An erosion gulley has formed upslope and south of the sediment trap, which used to convey water into a collection area. The gulley is highly erodible and deepens and widens with each major rainfall event. The Site 5 watercourse crosses under an existing road (i.e. described as Road 2 in the BAR (dated February 2020)) by way of a pipe, which discharges downstream of the road. Due to recent rains in 2019, the site 5 watercourse was engulfed by the gulley and only the gulley is visible as a watercourse through the site. Upstream of the site 5 gulley, a boundary channel was blocked with sediment during the 2013 rainfall period. The blocking of this channel has caused the direction of the natural water flow to change and divert into the site 5 channel. Downstream of the site 5 gulley, significant changes in flow pattern has occurred. Excess water flows across the road as uncontrolled sediment-laden discharge. The excessive accumulation of sediment in the area is assumed to be associated with the upstream erosion at site 5 and off Road 2. Since the 2019 rainfall events, site 5 has eroded significantly.



This has resulted in channel incision through the area downstream of site 5 and the mass deposition of sediment into an area containing Lourensford Alluvial Fynbos wetland vegetation, which is Critically Endangered in terms of the National Environmental Management: Biodiversity Act, 2002 (Act No. 10 of 2002) – National List of Ecosystems that are Threatened and in Need of Protection, 2011. Site 5 has a PES Category F.

The specialist identified and assessed the potential impacts of the Preferred Alternative for each site. The proposed rehabilitation work for site 1 will result in the permanent alteration of the hillslope seep. The excavation and widening of the existing gully and associated rehabilitation work would permanently alter the seep to a channeled system. The proposed rehabilitation work for site 2 will also result in the permanent alteration of the hillslope seep. The loss of upstream aquatic connectivity along the channel is anticipated as a result of the development of the weirs within the wetland. It is anticipated that the wetland would be altered from permanent saturation to seasonal saturation in some sections of the remnant wetland. The proposed rehabilitation work at site 3 will incorporate the existing rock outcrops/boulders as far as practically possible. Although the rehabilitation work and the development of the weirs will have a negative impact on increasing fragmentation in the channel, the weirs would have an overall positive impact in addressing the erosion currently occurring. The proposed rehabilitation work at site 4 will result in the protection of the hillslope seep habitat in site 4. The rehabilitation work for site 5 will result in the complete loss of wetland seep vegetation. Although the loss of wetland seep vegetation is anticipated, the rehabilitation work and the development of the weirs will result in the reduction of sedimentation into areas downstream of site 5, thereby resulting in a positive outcome. The proposed rehabilitation work upstream of site 5 will result in the re-instatement of the natural water flow into the boundary stream to restore the flow of water and reduce water flow into the site 5 channel. The rehabilitation work to be undertaken above the site site 5 gully will be undertaken in winter in accordance with the recommendations of the specialist, as included in the EMPr (dated June 2020).

CapeNature has indicated (in their comment dated 25 February 2020) that the property is a stewardship site. CapeNature further indicated that the proposed rehabilitation work is supported as it will result in a net gain for biodiversity conservation.

The overall impact of the proposed rehabilitation work is considered positive on condition that the rehabilitation commences as soon as possible at sites 1, 2, 4 and 5 and that the recommendations are implemented. The recommendations of the specialist have been included in the EMPr (dated June 2020).

A MMP (dated 01 June 2020) has been compiled to address future maintenance activities to take place within the five affected watercourses (i.e. the 5 sites). It must be noted that the accepted maintenance activities only relate to the activities described in the MMP. Should any new activities and associated infrastructure, not included in the MMP, require maintenance and if any of the applicable listed activities are triggered, an Environmental Authorisation must be obtained prior to the undertaking of such activities. It remains the responsibility of the proponent to determine if any other listed activities are triggered and to ensure that the necessary Environmental Authorisation is obtained.

### 3.3. Heritage Impacts

Although the property (i.e. Farm No. 744) is a proclaimed Provincial Heritage Site, the provincial heritage notice (Ref. No. P.N. 002/2019) excludes the portions of the property that is demarcated as a nature reserve area as described in the Surveyor General Diagram No's. 575/2016 and 576/2016. Since the proposed development entails the rehabilitation of 5 watercourses, Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1998) is not triggered.

### 3.4. Dust and Noise

Potential dust and noise impacts associated with the proposed development will be mitigated by the implementation of the mitigation measures included in the EMPr.

### 3.5. Visual Impacts

Potential visual impacts associated with the proposed rehabilitation measures are anticipated. The Preferred Design Alternative reduces the potential visual impacts associated with the proposed erosion control weirs. The potential visual impacts will be mitigated by the implementation of the mitigation measures included in the EMPr.

The development will result in both negative and positive impacts.

Negative Impacts include:

- Potential impacts on the affected watercourses during the development phase;
- Loss of some indigenous vegetation; and
- Loss of some wetland vegetation.

Positive impacts include:

- Improved erosion control measures;
- Alleviation of the risk of further erosion on the property during major storm events; and
- The improved protection of ecological and heritage resources.

## 4. National Environmental Management Act Principles

The National Environmental Management Principles (set out in section 2 of the NEMA, which apply to the actions of all organs of state, serve as guidelines by reference to which any organ of state must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), *inter alia*, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between organs of state through conflict resolution procedures; and
- the selection of the best practicable environmental option.

## 5. Conclusion

In view of the above, the NEMA principles, compliance with the conditions stipulated in this Environmental Authorisation, and compliance with the EMPr, the Competent Authority is satisfied that the proposed listed activities will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities can be mitigated to acceptable levels.

You are reminded of your general duty of care towards the environment in terms of Section 28(1) of the NEMA which states: "*Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.*"

-----END-----