

Development Management: Region 1 Bernadette.Osborne@westerncape.gov.za | Tel: 021 483 3679

REFERENCE: 16/3/3/1/B4/23/1004/20
NEAS REFERENCE: WCP/EIA/0000775/2020
ENQUIRIES: Bernadette Osborne
DATE OF ISSUE: 09 OCTOBER 2020

ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL **IMPACT ASSESSMENT** REGULATIONS. 2014: THE MIXED-USE DEVELOPMENT ON THE REMAINDER OF PORTION 1 OF FARM GROENFONTEIN NO. 717, KLAPMUTS.

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, 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 Layout Alternative described in the Basic Assessment Report ("BAR"), dated 15 June 2020.

In terms of the NEMA, viz, the EIA Regulations, 2014 (Listing Notices 1 and 3 of 2014 in Government Gazette No. 40772 of 7 April 2017) the Competent Authority hereby **adopts the Maintenance Management Plan** for the mixed-use development on the remainder of Portion 1 of Farm Groenfontein No. 717, Klapmuts.

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

Cadcor (Pty) Ltd c/o Mr Charles Collins PO Box 643

PAARDEKRAAL

1752

Cell: (082) 895 6362

E-mail: charles@collins1969.com

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

B. ACTIVITY AUTHORISED

| Liste | d Activity | Project Description | | | |
|--------|---|---|--|--|--|
| Listin | g Notice 1 - | The stormwater pipelines will have | | | |
| Activ | rity Number: 9 | a diameter of 0.375 metres and will exceed 1000 metres in length. | | | |
| The o | development of infrastructure exceeding 1 000 | | | | |
| metr | es in length for the bulk transportation of water | | | | |
| or sto | orm water— | | | | |
| (i) | with an internal diameter of 0,36 metres or | | | | |
| | more; or | | | | |
| (ii) | with a peak throughput of 120 litres per | | | | |
| | second or more; | | | | |
| | | | | | |
| exclu | uding where- | | | | |
| (a) | such infrastructure is for bulk transportation | | | | |
| | of water or storm water or storm water | | | | |
| | drainage inside a road reserve or railway line | | | | |
| | reserve; or | | | | |
| (b) | where such development will occur within | | | | |
| | an urban area. | | | | |
| | | | | | |
| Listin | g Notice 1 - | Structures and infrastructure with a | | | |
| Activ | vity Number: 12 | physical footprint exceeding 100 | | | |
| | development of— | square metres will be located | | | |
| (i) | dams or weirs, where the dam or weir, | within and within 32 metres from | | | |
| | including infrastructure and water surface | the Klapmuts River. | | | |
| 443 | area, exceeds 100 square metres; or | | | | |
| (ii) | infrastructure or structures with a physical | | | | |
| | footprint of 100 square metres or more; | | | | |
| whe | re such development occurs— | | | | |
| (a) | within a watercourse; | | | | |
| (b) | in front of a development setback; or | | | | |

(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; —

excluding-

- (aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;
- (bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;
- (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;
- (dd) where such development occurs within an urban area:
- (ee) where such development occurs within existing roads, road reserves or railway lines; or
- (ff) 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.

Listing Notice 1 -

Activity Number: 19

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 or more than 10 cubic metres from a watercourse;

but excluding where such infilling, depositing, dredging, excavation, removal or moving-

- (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 or harbour; 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.

The development entails the construction of infrastructure across the Klapmuts River. More than 10 cubic metres of material will be excavated from and / or infilled into the watercourse.

Listing Notice 1 -

Activity Number: 24

The development of a road—

- (i) for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or
- (ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres:

but excluding a road—

- (a) which is identified and included in activity 27 in Listing Notice 2 of 2014;
- (b) where the entire road falls within an urban area; or
- (c) which is 1 kilometre or shorter.

The internal roads will have a road reserve of 16 metres.

Listing Notice 1 -

Activity Number: 28

Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:

- (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or
- (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;

excluding where such land has already been developed for residential, mixed, retail, commercial, industrial, or institutional purposes.

The site is located outside of the urban area of Klapmuts, is bigger than 1 hectare and has historically been used for agricultural purposes.

The abovementioned activities are 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 development for the construction of a mixed-use development, which will consist of the following areas:

➤ The Klapmuts River that flows through the centre of the site will be retained as a green corridor, which will be approximately 0.95ha in extent. The in-stream dam on the site will be retained and restored as a stormwater attenuation pond. No buildings will be

located within the 1:100-year floodline of the Klapmuts River. The only formal structures, which will be located within the floodlines of the Klapmuts River will be bulk service infrastructure crossing the river, a road culvert crossing, and the upgraded impoundment spillway.

- The western corner of the site will be retained for middle-income housing and will be approximately 0.75ha in extent. A maximum of 30 group housing or dwelling units will be constructed on this section of the site.
- The remainder of the property, which is the areas located to the east and west of the Klapmuts River, will be utilised for industrial and warehousing purposes.
- A 25m wide road reserve will be developed from Groenfontein Road located west of the site. The access road will traverse Erf No. 2183 and the road reserve area will be approximately 152m long.
- > The access road will be aligned along the southern boundary of the site and the road reserve for the area utilised for industrial and warehousing purposes will be 10 metres wide.
- The following construction activities will take place within the watercourse:
 - The existing dam will function as an attenuation pond and hence will be retained.
 General maintenance will be performed during construction, which includes the removal of silt from the dam.
 - Minor earthworks to reshape the dam, creating smaller areas of ponding. This will
 assist with the establishment of mirco-habitats for aquatic floral and faunal species.
 - The removal of the existing inlet pipe culverts (located at the southern boundary of the site).
 - The construction of a new 1200mm diameter inlet pipe culvert at the southern boundary of the site. This will also serve as a road crossing.
 - The construction of two additional 375mm diameter stormwater pipes to the attenuation pond with associated inlet and outlet structures.
 - The construction of a 1200mm diameter stormwater outlet pipe culvert with associated inlet and outlet structures that will discharge water north of the site into the Klapmuts River.
 - Both sewer and potable water bulk infrastructure will cross the Klapmuts River. The
 proposed sewer pipeline will be constructed along the western embankment of
 the dam with the water pipeline being constructed on the southern boundary.
 Stormwater management infrastructure will be located on the northern and
 southern boundary of the dam. The sewer pipeline will be concrete encased to
 ensure no potential future leakage of raw effluent into the downstream reaches of
 the river.
 - Stepped gabions will be constructed on the side embankment to stabilise the portion of the river downstream of the dam wall.
 - Hard engineering structures will be used to stabilise the spillway, using a stepped gabion spillway. This entails different levels of gabions to allow water to fall from one gabion to the next to eventually drain into the downstream river.
 - The top of the spillway will be packed with either Armorflex (or similar product) or stone pitched to ensure that the chute does not erode during high flow periods. If Armorflex (or similar product) is used, it should be vegetated with indigenous graminoid species to increase its surface roughness further.

- A reno mattress will be placed at the bottom of the spillway within the riverbed to prevent erosion and scouring of the river when there is overflow from the dam.
- Energy dissipating structures will be installed at the pipe outlets to prevent erosion and scouring of the base of the dam where the stormwater will be discharged.
- At the outlet pipe, which will convey low flow into the river, rocks will be placed, and vegetation established to bind the soil of the riverbed, and to prevent erosion.
 This will also diffuse flow and lower the velocity of water into the lower reach of the river.
- Upon completion of the construction activities, all footprint areas will be revegetated with indigenous vegetation.

C. SITE DESCRIPTION AND LOCATION

The listed activities will be undertaken on the Remainder of Portion 1 of the Farm Groenfontein No. 717, Klapmuts, and has the following co-ordinates:

| | Latitude (S) | | Longitude (E) | | | |
|---------------|--------------|-----|---------------|-----|-----|-------------|
| Co-ordinates: | 33° | 48′ | 48.44" South | 18° | 52′ | 22.67" East |

The SG digit code is: C05500000000071700001

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

Guillaume Nel Environmental Consultants c/o Ms Heloise Groenewald PO Box 1058

WELLINGTON

7654

Cell: 079 111 7378

Email: hdp@gnec.co.za

E. CONDITIONS OF AUTHORISATION

Scope of authorisation

 The holder is authorised to undertake the listed activities specified in Section B above in accordance with and restricted to preferred Layout Alternative described in the BAR dated 15 June 2020 on the site as described in Section C above. The holder must commence with the listed activities on the site within a period of five years from the date issue of this Environmental Authorisation.

3. The development must be concluded within ten 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. Seven calendar days' notice, in writing, must be given to the Competent Authority

before commencement of construction activities.

The notice must make clear reference to the site details and EIA Reference 6.1

number given above.

6.2 The notice must also include proof of compliance with the following conditions

described herein:

Conditions: 7, 8 and 12

Notification and administration of appeal

The holder must in writing, within 14 (fourteen) calendar days of the date of this

decision-

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 Appeals Regulations, 2014

detailed in Section F below;

- 7.3 draw the attention of all registered I&APs to the manner in which they may access the decision;
- 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 2014 National Appeals Regulations.
- 8. The listed activities, including site preparation, may not commence within 20 (twenty) calendar days from the date of issue of this Environmental Authorisation. 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.

Management of activity

- 9. The draft or Environmental Management Programme ("EMPr") submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented.
- 10. The Maintenance Management Plan ("MMP") adopted as part of this Environmental Authorisation 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 commencement of any land clearing or construction activities to ensure compliance with the provisions of the EMPr and the conditions contained herein.
- 13. A copy of the Environmental Authorisation, EMPr, MMP, audit reports and compliance monitoring reports must be kept at the site of the authorised activities, and must be made available to anyone on request, including a publicly accessible website.
- 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, the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation, the EMPr, the MMP and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Report must be prepared by an independent person and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014.

The holder must undertake an environmental audit and submit the Environmental Audit Report to the Competent Authority every year during the construction phase. The final Environmental Audit Report must be submitted to the Competent Authority within three months after the mixed-use development is completed.

The holder must, within 7 days of the submission of each of the above-mentioned reports to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request and on a publicly accessible website (if applicable).

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.

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. A qualified archaeologist and/or palaeontologist must be contracted where necessary (at the expense of the holder) to remove any heritage remains. Heritage remains can only be disturbed by a suitably qualified heritage specialist working under a directive from the relevant heritage resources authority.

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 a listed activity within the period referred to in Condition 2, this Environmental Authorisation shall lapse for that activity, 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 EIA Regulations, 2014 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 EIA Regulations 2014 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.

- 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 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 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 and the responding statement must be submitted to the address listed below:

By post: 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 Marius Venter (Tel: 021 483 2659)

Room 809

8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

Note: For purposes of electronic database management, you are also requested to submit electronic copies (Microsoft Word format) of the appeal, responding statement and any supporting documents to the Appeal Authority to the address listed above and/ or via e-mail to DEADP.Appeals@westerncape.gov.za...

5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from Appeal Authority at: Tel. (021) 483 3721, E-mail DEADP.Appeals@westerncape.gov.za or URL http://www.westerncape.gov.za/eadp.

H. DISCLAIMER

The Western Cape Government, the Local Authority, 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)

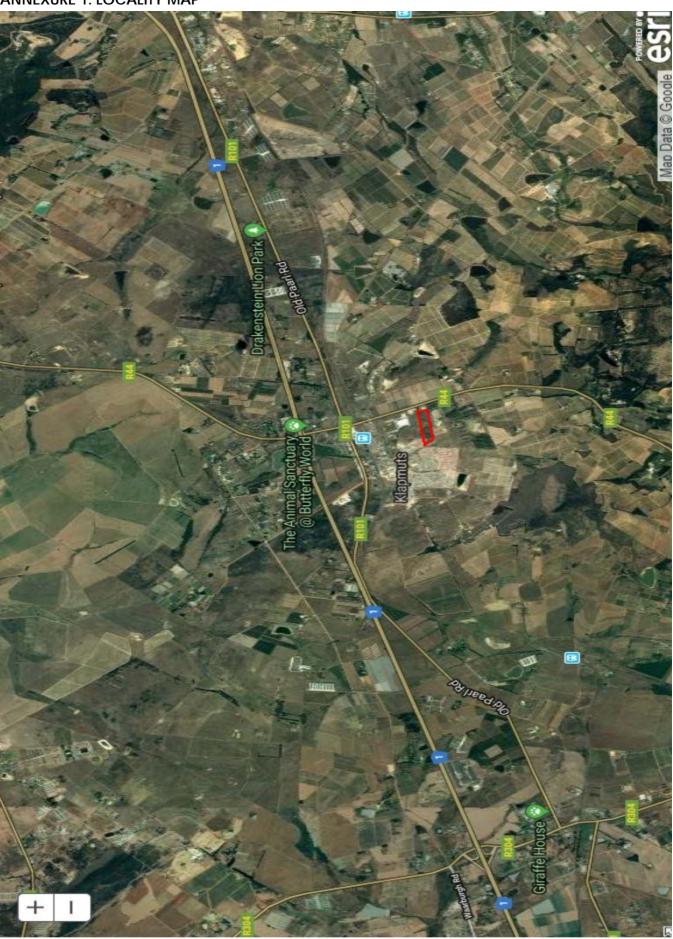
DATE OF DECISION: 09 OCTOBER 2020

Cc: (1) Heloise Groenewald (Guillaume Nel Environmental Consultants)

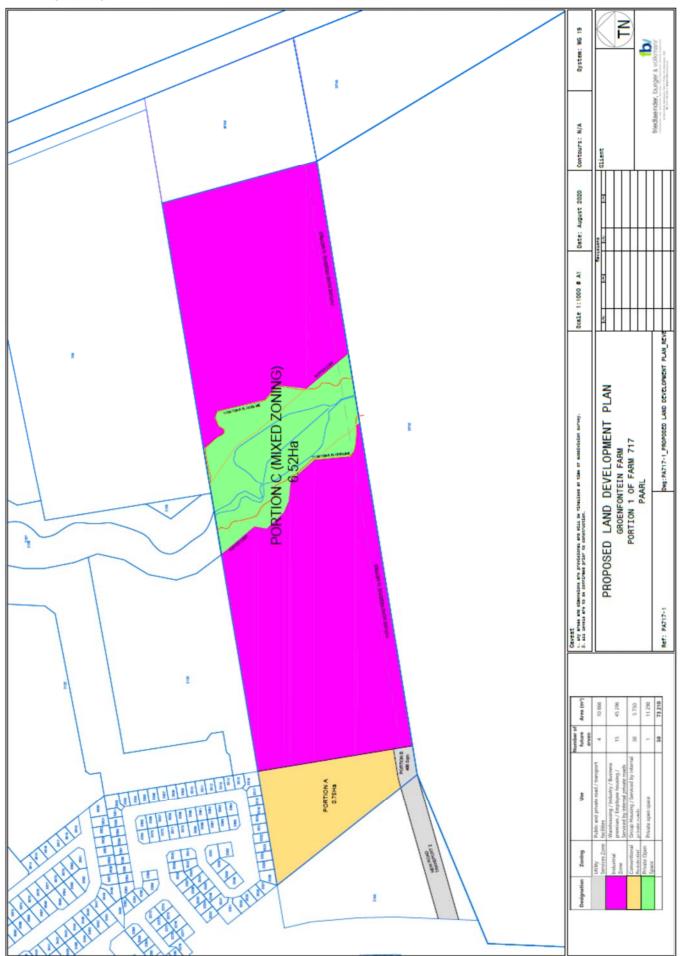
E-mail: hdp@gnec.co.za

(2) Schalk van der Merwe (Stellenbosch Municipality) E-mail: Schalk.vandermerwe@stellenbosch.gov.za

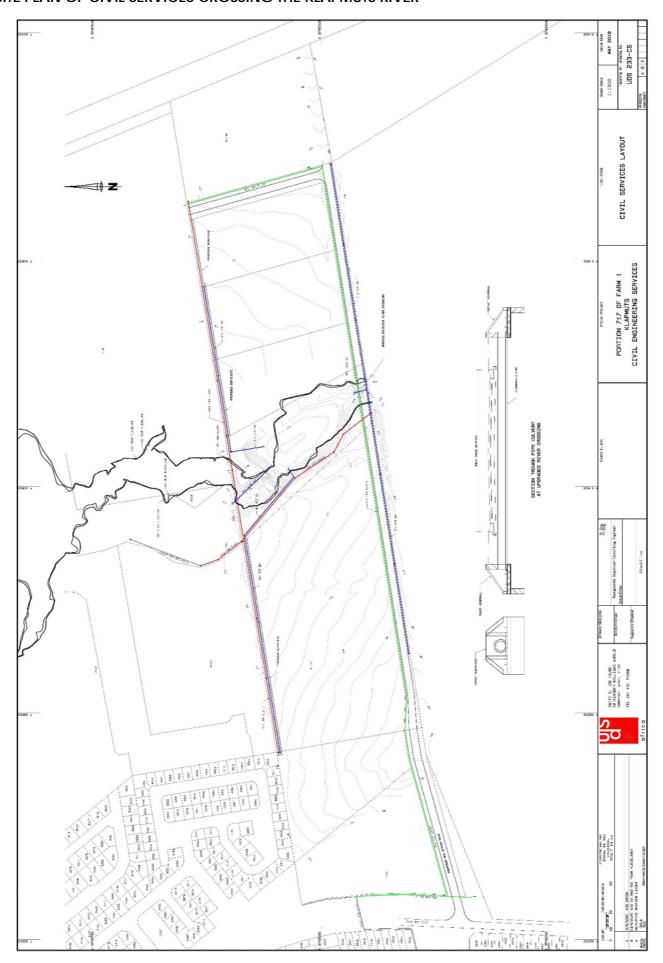
ANNEXURE 1: LOCALITY MAP



ANNEXURE 2: SITE PLAN



SITE PLAN OF CIVIL SERVICES CROSSING THE KLAPMUTS RIVER



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 and letter dated 28 January 2020, the draft Basic Assessment Report received by the Department on 12 February 2020, the EMPr submitted together with the final Basic Assessment Report on 15 June 2020 and the additional information received on 20 August 2020;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation and Alternatives (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 Basic Assessment Report received on 15 June 2020 and the additional information received on 20 August 2020; and
- e) The balancing of negative and positive impacts and proposed mitigation measures.

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;
- Site notices were placed on 24 July 2019;
- giving written notice to the owners and 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 25 July 2019;
- the placing of a newspaper advertisement in the 'Paarl Post' on 25 July 2019; and
- making the pre-application draft Basic Assessment Report ("BAR") available to I&APs for public review from 25 July 2019 and the in-process draft BAR from 12 February 2020.

The Department is satisfied that the Public Participation Process that was followed met the minimum legal requirements and the comments raised and responses thereto were included in the comments and response report.

Specific alternatives, management and mitigation measures have been considered in this Environmental Authorisation and EMPr to adequately address the concerns raised.

2. Alternatives

Layout Alternatives

Preferred Alternative 1 (Preferred and herewith authorised)

This alternative entails the construction of a mixed-use development, which will consist of the following areas:

- ➤ The Klapmuts River that flows through the centre of the site will be retained as a green corridor, which will be approximately 0.95ha in extent. The in-stream dam on the site will be retained and restored as a stormwater attenuation pond. No buildings will be located within the 1:100-year floodline of the Klapmuts River. The only formal structures, which will be located within the floodlines of the Klapmuts River will be bulk service infrastructure crossing the river, a road culvert crossing, and the upgraded impoundment spillway.
- ➤ The western corner of the site will be retained for middle-income housing and will be approximately 0.75ha in extent. A maximum of 30 group housing or dwelling units will be constructed on this section of the site.
- The remainder of the property, which is the areas located to the east and west of the Klapmuts River, will be utilised for industrial and warehousing purposes.
- ➤ A 25m wide road reserve will be developed from Groenfontein Road located west of the site. The access road will traverse Erf No. 2183 and the road reserve area will be approximately 152m long.
- The access road will be aligned along the southern boundary of the site and the road reserve for the area utilised for industrial and warehousing purposes will be 10 metres wide.
- The following construction activities will take place within the watercourse:
 - The existing dam will function as an attenuation pond and hence will be retained. General maintenance will be performed during construction, which includes the removal of silt from the dam.
 - Minor earthworks to reshape the dam, creating smaller areas of ponding. This will assist with the establishment of mirco-habitats for aquatic floral and faunal species.
 - The removal of the existing inlet pipe culverts (located at the southern boundary of the site).
 - The construction of a new 1200mm diameter inlet pipe culvert at the southern boundary of the site. This will also serve as a road crossing.
 - The construction of two additional 375mm diameter stormwater pipes to the attenuation pond with associated inlet and outlet structures.
 - The construction of a 1200mm diameter stormwater outlet pipe culvert with associated inlet and outlet structures that will discharge water north of the site into the Klapmuts River.
 - Both sewer and potable water bulk infrastructure will cross the Klapmuts River. The
 proposed sewer pipeline will be constructed along the western embankment of
 the dam with the water pipeline being constructed on the southern boundary.

Stormwater management infrastructure will be located on the northern and southern boundary of the dam. The sewer pipeline will be concrete encased to ensure no potential future leakage of raw effluent into the downstream reaches of the river.

- Stepped gabions will be constructed on the side embankment to stabilise the portion of the river downstream of the dam wall.
- Hard engineering structures will be used to stabilise the spillway, using a stepped gabion spillway. This entails different levels of gabions to allow water to fall from one gabion to the next to eventually drain into the downstream river.
- The top of the spillway will be packed with either Armorflex (or similar product) or stone pitched to ensure that the chute does not erode during high flow periods. If Armorflex (or similar product) is used, it should be vegetated with indigenous graminoid species to increase its surface roughness further.
- A reno mattress will be placed at the bottom of the spillway within the riverbed to prevent erosion and scouring of the river when there is overflow from the dam.
- Energy dissipating structures will be installed at the pipe outlets to prevent erosion and scouring of the base of the dam where the stormwater will be discharged.
- At the outlet pipe, which will convey low flow into the river, rocks will be placed, and vegetation established to bind the soil of the riverbed, and to prevent erosion.
 This will also diffuse flow and lower the velocity of water into the lower reach of the river.
- Upon completion of the construction activities, all footprint areas will be revegetated with indigenous vegetation.

This is the preferred alternative since access will be gained from the adjacent residential area. As a result, the development will face towards the existing neighbourhoods and increase the opportunity for direct integration and pedestrian access. Residents from the area will be able to walk to the development, promoting non-motorised transport.

Layout Alternative 2

This alternative entails the same development layout as described in the preferred alternative. The difference is the access road to the site. Access in this alternative will be gained from the R44 road, which is located east of the site. This access road will traverse the Remainder of Portion 6 of Farm No. 748 located to the immediate east of the site. This alternative was not preferred for the following reasons:

- The owners of the Remainder of Portion 6 of Farm No. 748 did not give permission to allow access across their property.
- The Stellenbosch Municipality has indicated that the R44 road access and the Groenfontein Road access are not master plan items, i.e. any such road would therefore have to be developed by the applicant.
- The Remainder of Portion 2 of Farm Bronkhorst No. 748 adjacent to the 10m access on Farm No. 748/6, is used for intensive agriculture. The owner was not prepared to negotiate any access to the proposed development across this land, and thereby relinquishing it for the purpose of access to the proposed development.

No-go Option

This alternative entails the site remaining in its current state and was not preferred since it will not aid in the provision of housing opportunities or result in any economic benefits for the surrounding community. As the property is currently also not being used for agricultural practices, the current state of the site does not hold any benefit for the landowner or surrounding community.

3. Impact Assessment and Mitigation measures

3.1Activity need and desirability

The development in line with the Provincial Spatial Development Framework of the Western Cape and the Stellenbosch Municipality's Integrated Development Plan. The development will also be in line with its surroundings as the site is located within a mixed-use development area. The development will create housing opportunities within Klapmuts and create both long- and short-term employment opportunities for the surrounding community.

3.2 Biophysical Impacts

The site has been completely transformed due to agricultural activities with no indigenous vegetation remaining on the site. The Klapmuts River flows through the centre of the site in a northerly direction. An in-stream dam is located on the site within the Klapmuts River and will be retained and restored as a stormwater attenuation pond. The Freshwater Impact Assessment dated July 2019, compiled by Scientific Aquatic Services, concluded that the bulk service infrastructure crossing the river, the road culvert crossing and the upgrading of the impoundment spillway will have a low risk impact with adherence to the mitigation measures provided in the assessment. These mitigation measures were included in the EMPr accepted in Condition 9 of this Environmental Authorisation. A Water Use Licence Application ("WULA") in terms of the National Water Act, 1998 (Act 38 of 1998) has been submitted to the Department of Water and Sanitation, which will further investigate the watercourse related impacts.

Furthermore, a MMP has also been compiled to address routine maintenance activities taking place in the affected stretch of the watercourse. The maintenance of the structures authorised in this Environmental Authorisation forms part of this MMP. 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.

The fact that the MMP is adopted by the Competent Authority does not absolve the applicant from its general "duty of care" set out in Section 28(1) of the NEMA, which states that "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." (Note: When interpreting their "duty of care" responsibility, cognisance must be taken of the principles of sustainability contained in Section 2 of NEMA).

Negative Impacts:

The development will have a negative biophysical impact on the section of the Klapmuts River flowing through the site. This impact will however be mitigated to a satisfactory level with the implementation of the recommended mitigation measures and adherence to the EMPr.

Positive impacts:

- The development will create additional housing opportunities in Klapmuts, which is a growth point in the Stellenbosch Municipality.
- The in-stream dam located within the Klapmuts River on the site will be restored and rehabilitated.
- The development will create both long- and short-term employment opportunities for the surrounding community.

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.

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