

REFERENCE: 16/3/3/1/B4/45/1064/20
NEAS REFERENCE: WCP/EIA/0000834/2020
DATE: 20/05/2021

The Municipal Manager
Stellenbosch Municipality
2nd Floor Ecclesia Building
71 Plein Street
STELLENBOSCH
7600

Attention: Mr J.G. Louw

Tel: (021) 808 8213
Email: Deon.Louw@stellenbosch.co.za

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014 (AS AMENDED): REHABILITATION OF THE DISTILLERY ROAD BRIDGE, STELLENBOSCH

1. With reference to the above application, the Department hereby notifies you of its decision to **grant** Environmental Authorisation, attached herewith, together with the reasons for the decision.
2. In terms of Regulation 4 of the EIA Regulations, 2014, you are instructed to ensure, within 14 days of the date of the Environmental Authorisation, that all registered interested and affected parties ("I&APs") are provided with access to and reasons for the decision, and that all registered I&APs are notified of their right to appeal.
3. Your attention is drawn to Chapter 2 of the Appeal Regulations, 2014, which prescribes the appeal procedure to be followed. This procedure is summarised in the attached Environmental Authorisation.

Yours faithfully

**DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING**

Cc: (1) R Baker (SLK Consulting (Pty) Ltd)
(2) S. van der Merwe (Stellenbosch Municipality)
(3) A Duffell-Canham (CapeNature)
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REFERENCE: 16/3/3/1/B4/45/1064/20
NEAS REFERENCE: WCP/EIA/0000834/2020
ENQUIRIES: Samornay Smidt
DATE OF ISSUE: 20/05/2021

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 (AS AMENDED): PROPOSED REHABILITATION OF THE DISTILLERY ROAD BRIDGE, STELLENBOSCH

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 activity specified in section B below with respect to Activity Alternative 5 and Design Alternative 3, as described in the Basic Assessment Report ("BAR"), dated January 2021.

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

Stellenbosch Municipality
c/o Mr. Deon Louw
2nd Floor Ecclesia Building
71 Plein Street
STELLENBOSCH
7600

Tel: (021) 808 8213
Email: Deon.Louw@stellenbosch.co.za

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

B. LIST OF ACTIVITY AUTHORISED

Listed Activity	Activity/Project Description
<p>EIA Regulations Listing Notice 1 of 2014 -</p> <p>Activity Number: 19</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—</i></p> <p><i>(i) a watercourse;</i></p> <p><i>but excluding where such infilling, depositing, dredging, excavation, removal or moving—</i></p> <p><i>(a) will occur behind a development setback;</i></p> <p><i>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan;</i></p> <p><i>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</i></p> <p><i>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</i></p> <p><i>(e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.</i></p>	<p>The proposed project will result in the depositing and / or excavating and removal of more than 10 m³ of material from a watercourse (Plankenbrug River) related to the demolition of the damaged bridge structure and construction of the new bridge.</p>

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

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

The proposed project entails the following:

- The phased demolition of the deck of the existing bridge structure to allow traffic accommodation during the rehabilitation of the structure;
- Excavation within the riverbed and banks to construct the foundations of new bridge supports, including piling. Each abutment would comprise an abutment wall of approximately 14m² and 13 x 375mm diameter circular piles;
- Construction of a new bridge super and substructure on the same footprint of the demolished bridge, which is wider and longer than the existing bridge (approximately 23.5m long x 7.2m wide); and
- Provision of a wider road surface and sidewalk for the bridge approaches to accommodate two lanes of vehicle and pedestrian / non-motorised traffic in accordance with the planning requirements for this urban area.

C. SITE DESCRIPTION AND LOCATION

The listed activity will be undertaken on Remaining Extent of the Farm 183, Stellenbosch

The SG21 digit code is: C06700000000018300000

Co-ordinates of the properties:

Starting Point:

Latitude	Longitude
33° 56' 28.1" South	18° 50' 42.702" East

Middle Point:

Latitude	Longitude
33° 56' 28.338" South	18° 50' 42.097" East

End Point:

Latitude	Longitude
33° 56' 28.532" South	18° 50' 41.702" East

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

SLR Consulting (Pty) Ltd

c/o Ms R Baker

PO Box 10145

CALEDON SQUARE

7905

Cell: 082 496 7398

Email: rbaker@slrconsulting.com

E. CONDITIONS OF AUTHORISATION

Scope of authorisation

1. The holder is authorised to undertake the listed activity specified in Section B above in accordance with and restricted to Activity Alternative 5 and Design Alternative 3, as described in the BAR dated January 2021 on the site as described in Section C above.
2. The Environmental Authorisation is valid for a period of **five years** from the date of issue, within which commencement must occur.
3. The development must be concluded within **ten years** from the date of commencement of the listed activity.

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 activity.
 - 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: 7, 8, 9 and 11.

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 Appeals 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;
 - 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, and
 - 7.4.6 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 (as amended).

8. The listed activity, including site preparation, must not commence within 20 (twenty) calendar days from the date the applicant notified 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 activity, including site preparation, must not commence until the appeal is decided.

Management of activity

9. The draft Environmental Management Programme ("EMPr") submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented.
10. The EMPr must be included in all contract documentation for all phases of implementation.

Monitoring

11. The holder must appoint a suitably experienced environmental control officer ("ECO") before commencement of any land clearing or construction activity to ensure compliance with the EMPr and the conditions contained herein.
12. A copy of the Environmental Authorisation, EMPr, MMP, audit reports and compliance monitoring reports must be kept at the site of the authorised activity, and must be made available to anyone on request, including a publicly accessible website.
13. Access to the site referred to in Section C 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

14. 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. The Environmental Audit Report must be prepared by an **independent person** (not the ECO appointed in terms of condition 12 above) and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014 (as amended).

The holder must undertake an environmental audit and submit an Environmental Audit Report to the Competent Authority within three months after commencement of the construction phase. The final Environmental Audit Report must be submitted to the Competent Authority within three months after completion of the construction phase of the development.

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

15. 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 paleontological 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.

16. A qualified archaeologist and/or paleontologist 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.
17. The relevant requirements with respect to occupational health and safety must be adhered to at all times.

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 activity.
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 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 (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 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 on which 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 on which 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 Organs 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 Organs 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

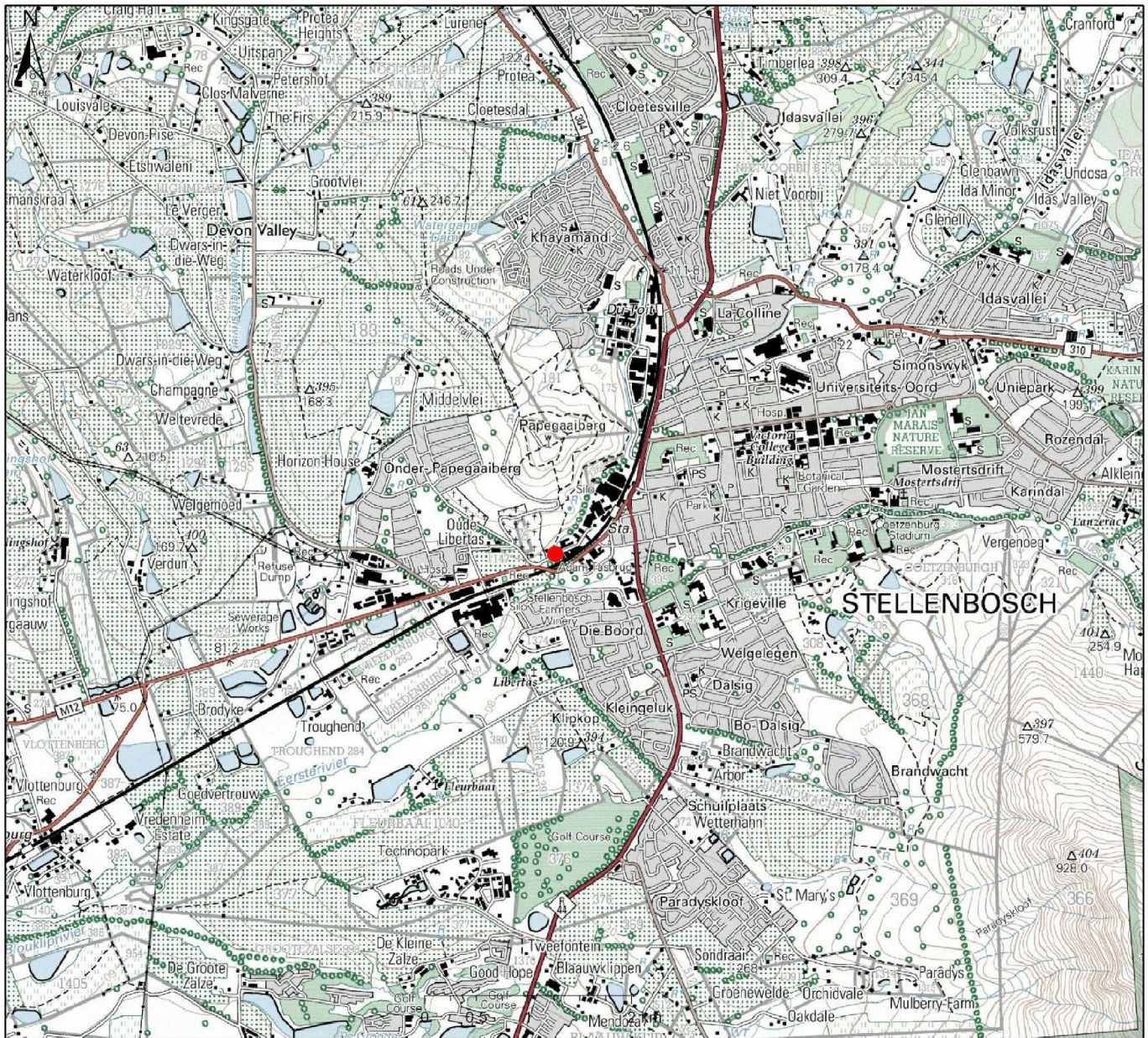
MR. ZAAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DATE OF DECISION: 20/05/2021

Cc: (1) R Baker (SLK Consulting (Pty) Ltd)
(2) S. van der Merwe (Stellenbosch Municipality)
(3) A Duffell-Canham (CapeNature)
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Email: Schalk.VanderMerwe@stellenbosch.gov.za
Email: aduffell-canham@capenature.co.za
Email: mkonton@dws.gov.za

ANNEXURE 1: LOCALITY MAP



ANNEXURE 2: SITE PLAN

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 November 2020, the EMPr submitted together with final BAR dated January 2021;
- 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 BAR dated January 2021; 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;
- fixing notice boards at the site where the listed activity is to be undertaken on 13 November 2020;
- giving written notice to the owners and occupiers of land adjacent to the site where the listed activity is to be undertaken, the municipality and ward councillor, and the various Organs of State having jurisdiction in respect of any aspect of the listed activity on 13 November 2020;
- the placing of a newspaper advertisement in the “*Die Burger and The Cape Times*” on 13 November 2020; and
- circulating the in-process draft BAR to I&APs from 13 November 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

Following an assessment of the extent of the damage to the Distillery Road Bridge, the project engineer recommended several activity alternatives to address the issue. These options included **(1)** Do nothing; **(2)** Downgrade the functionality of the structure; **(3)** Reduce further deterioration to the bridge; **(4)** Strengthen or repair and protect the bridge; **(5)** Reconstruct the bridge; or **(6)** Demolish the bridge. Due to the advanced state of corrosion-related damage to the Distillery Road Bridge, the first three alternatives were not viable options for implementation.

The first viable technical solution is Activity Alternative 4 that involves the re-use (through maintenance, rehabilitation or strengthening) of the existing Distillery Road Bridge. A significant amount of highly specialised works would be required to enable the restoration of both the function and condition of the structure. These works would also be required on both sides of the bridge deck, necessitating two construction phases, which would result in additional costs and a longer construction programme. Further ongoing maintenance costs may materialise for the existing bridge elements that could contain hidden defects or defects that arise from ongoing corrosion. Engineering investigations have also revealed that the bearing capacity of the existing pier would be exceeded and would require additional structural modifications, including an additional row of piles at the central pier. Activity Alternative 4 is therefore not preferred.

Activity Alternative 6 is also not a viable solution as it entails the demolition of the bridge. The bridge is the only access point into this area and should this alternative be implemented, an alternative access would need to be provided. The associated costs were deemed not economically feasible.

Activity Alternative 5: Reconstruct the bridge (Herewith Authorised)

The preferred activity alternative entails the partial demolition of the existing bridge and replacing it with a new bridge, as follows:

- The phased demolition of the deck of the existing bridge structure to allow traffic accommodation during the rehabilitation of the structure;
- Excavation within the riverbed and banks to construct the foundations of new bridge supports, including piling. Each abutment would comprise an abutment wall of approximately 14m² and 13 x 375mm diameter circular piles;
- Construction of a new bridge super and substructure on the same footprint of the demolished bridge, which is wider and longer than the existing bridge (approximately 23.5m long x 7.2m wide); and
- Provision of a wider road surface and sidewalk for the bridge approaches to accommodate two lanes of vehicle and pedestrian / non-motorised traffic in accordance with the planning requirements for this urban area.

This is the preferred alternative since it is most cost effective and the best option from an engineering aspect.

Since the bridge is older than 60 years, the following design alternatives were also considered in light of the historical/heritage significance of the bridge:

(1) Total demolition and rebuild as new; **(2)** Total demolition with memorialisation; **(3)** Removal of the concrete upper structure and retention of the central non-functional pier; **(4)** Retention of the stone substructure and incorporating it into the structural design ; **(5)** Restoration and replacement; and **(6)** Repair and renovate.

Design Alternative 3: Removal of the concrete upper structure and retention of the central non-functional pier (Herewith Authorised)

This alternative entails the removal of the existing deck. It would be replaced with a single 23.5 m deck span with the retention of the existing non-functional pier, with piled abutments which would span the existing substructure. The proposed design has been duly informed by the heritage significance of the structure and from input received from a heritage practitioner and architect with previous experience in the restoration of bridges with historical value. The preferred design alternative would limit the construction works in the watercourse and would result in significant cost and time savings. This alternative is also considered to be the best option from a joint structural engineering and heritage perspective.

The remaining alternatives were not deemed viable, for the following reasons:

Design Alternative 1

Alternative 1 is not recommended as it would negate any authentic heritage significance of the site.

Design Alternative 2

This alternative is not recommended as, beyond any possible intrinsic significance vested in the fabric of the bridge itself, once removed from its functional role and context, it would retain little value.

Design Alternative 4

Although this alternative would retain the more significant fabric of the bridge with the incorporation of these elements into the functional design of the bridge, engineering investigations have revealed that the bearing capacity of the existing pier would be exceeded. Additional structural modifications, including an additional row of piles at the central pier would be required and therefore this alternative is not preferred.

Design Alternative 5

This alternative is not recommended as it would result in significant costs to both restore and replace the bridge.

Design Alternative 6

This alternative is ideal from a heritage perspective but comes at the cost of future structural failure. This would also incur substantial costs in future. The final structure would remain approximately the same and would not meet the purpose of the project.

"No-Go" Alternative

The no-go alternative was considered. However, it was not preferred since not proceeding with the proposed project would result in the continued deterioration of the bridge which in turn would continue to compromise the safety of road users.

3. Impact Assessment and Mitigation measures

3.1 Activity need and desirability

The Stellenbosch Municipality's IDP (2017-2022) indicates that as the population of Stellenbosch continues to grow, there is an increased pressure on bulk infrastructure and that aging infrastructure in particular presents a challenge that the Municipality will group into short, medium and long term goals to maintain, update and replace.

The Distillery Road Bridge over the Plankenbrug River in southwestern Stellenbosch is part of the only access route to a mixed-use business and residential area otherwise isolated by the river and railway. It

is in a poor state of repair and the structural condition of the Distillery Road Bridge poses a safety concern for road users. As a result, it has been reduced to a single lane, in order to minimise the traffic load on the cantilevers of the bridge deck. This is however causing traffic interruptions. It also makes no allowance for non-motorised transport, nor is the width in line with national standards for this class of road. The bridge also presents a narrow opening for river flow that may flood during 1:10-year flood events. The bridge sub- and superstructure therefore require urgent replacement due to safety concerns.

The proposed project will address the structural safety concerns of the structure while at the same time improving the facility to comply with the urban planning requirements, make provision for non-motorised transport, alleviate traffic congestion during peak hours, and improve road safety and accessibility to a mixed-use development district within the Stellenbosch area.

3.2 Biophysical Impacts

Based on the findings of the Freshwater Assessment dated August 2020, compiled by SLR Consulting the project area has been disturbed through historical activities and recent construction activities associated with the replacement of a pipeline. The site is mapped to contain Critically Endangered Swartland Granite Renosterveld vegetation, but no indigenous vegetation was observed within the project area, apart from *Cynodon dactylon* grass. The specialist findings confirmed that no impacts on terrestrial vegetation is expected as a result of the proposed development.

Based on available mapping resources, four potential Critical Biodiversity Area Class 1 ("CBA 1") wetlands are located within 500m from the bridge and the Plankenbrug River. One of the four wetlands is located within the Eerste River, approximately 130m upstream of the confluence with the Plankenbrug River. It will therefore not be impacted by the proposed development and was excluded from further assessment. The specialist assessment of the area revealed that two of the remaining CBA 1 wetlands did not exhibit wetland soils or hydrophytic vegetation, while the third wetland was found to be a grassy knoll without a wetland vegetation community. The alluvial soils along the banks of the Plankenbrug River lack mottling and other wetland soil indicators confirm that the river is not a channeled valley bottom wetland, but a true river. The Present Ecological State ("PES") and Ecological Importance and Sensitivity of the section of the river within the project areas were determined to fall within a Category D (Largely Modified) and a Moderate Category, respectively. The impacts associated with the proposed development were assessed to be of very low significance, subject to the implementation of the recommended mitigation measures. It was also found that the improvement of flow through the reduced impedance of the river flow will result in an overall positive impact. With the implementation of the mitigation measures, it is further expected that the river will naturally rehabilitate to the preconstruction state. The recommended mitigation measures have been included within the relevant sections of the EMPr that is approved as part 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.

3.3 Heritage Impacts

The proposal entails the partial demolition and replacement of a bridge that is older than 60 years and is considered to have cultural/heritage significance. In order to ensure that the historic fabric of the transport corridor is sufficiently documented and preserved, Heritage Western Cape has requested the completion of Section 34 and 35 permit processes in terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999). These processes are being undertaken in parallel to the

basic assessment process and have been taken into consideration in the preferred activity and design alternatives. The proposed bridge design has specifically been informed by the heritage significance of the structure and incorporates the input received from a heritage practitioner and architect with experience in the restoration of bridges with historical value.

In summary, the proposed development will result in both negative and positive impacts.

Negative Impacts:

- The proposed development will result in the loss of wetland habitat and the degradation of the the Plankenbrug River, which is the only watercourse identified that may be impacted by the proposed project.
- The construction phase impacts will be of temporary duration and mitigation measures have been incorporated into the EMPr pertaining to works within the watercourse for implementation during the construction phase.

Positive impacts:

- The proposed development will provide an opportunity for a permanent positive impact on the watercourse due to the reduced flow impedance associated with the design of the proposed new bridge.
- The proposed project would also improve traffic flow and the overall safety of the bridge and makes provision for non-motorised transport and includes a pedestrian walkway.

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 activity (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 activity 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 activity can be mitigated to acceptable levels.

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