



EIA REFERENCE: 16/3/3/1/E2/15/1073/22
NEAS REFERENCE: WCP/EIA/0001175/2022
DATE OF ISSUE: 16 May 2023

The Director
Department of Infrastructure
Private Bag X9185
CAPE TOWN
8000

Attention: Mr. Johannes Neethling

Tel.: 021 483 2205

E-mail: Johannes.Neethling2@westerncape.gov.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 REGULATIONS, 2014, (AS AMENDED): THE PROPOSED UPGRADE OF A SECTION OF TRUNK ROAD 28, HERMANUS.

1. With reference to the above application, the Department hereby notifies you of its decision to **grant the Environmental Authorisation** ("EA") together with the reasons for the decision.
2. In terms of Regulation 4 of the Environmental Impact Assessment Regulations, 2014, (as amended), 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 National Appeal Regulations, 2014 (as amended), which prescribes the appeal procedure to be followed. This procedure is summarized in the attached Environmental Authorisation.

Yours faithfully

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

Cc: Mr. E. Costandius (SLR Consulting (Pty) Ltd)
Ms. P. Aplon (Overstrand Municipality)

Email: ecostandius@slrconsulting.com

Email: paplon@overstrand.gov.za

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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): THE PROPOSED UPGRADE OF A SECTION OF TRUNK ROAD 28, HERMANUS.

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 alternative as described in the Basic Assessment Report ("BAR"), received on 26 January 2023.

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

Department of Infrastructure
Private Bag X9185
CAPE TOWN
8000

Tel.: 021 483 2205
E-mail: Johannes.Neethling2@westerncape.gov.za

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

B. LISTED ACTIVITIES AUTHORISED

Listed Activities	Project Description
<p>EIA Regulations Listing Notice 1 of 2014: 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 a watercourse;</i></p> <p><i>but excluding where such infilling, depositing, dredging, excavation, removal or moving—</i></p> <ul style="list-style-type: none"> <i>(a) will occur behind a development setback;</i> <i>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan;</i> <i>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</i> <i>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or 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>The proposed road upgrade will require the infilling or depositing and excavation of more than 10m³ of material within a watercourse.</p>
<p>EIA Regulations Listing Notice 3 of 2014: Activity Number: 12</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>i. Western Cape</p> <ul style="list-style-type: none"> <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> <i>ii. Within critical biodiversity areas identified in bioregional plans;</i> <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>The proposed development will result in the clearance of 300m² of critically endangered and endangered vegetation.</p>

<p>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 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>EIA Regulations Listing Notice 3 of 2014: Activity Number: 18</p> <p>The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</p> <p>i. Western Cape</p> <p>i. Areas zoned for use as public open space or equivalent zoning;</p> <p>ii. All areas outside urban areas: (aa) Areas containing indigenous vegetation; (bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or</p> <p>iii. Inside urban areas: (aa) Areas zoned for conservation use; or (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.</p>	<p>The existing road will be widened by more than 4 metres within areas zoned as public open space.</p>

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

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

The proposed development entails the upgrade of Trunk Road (“TR”) 28 and associated infrastructure (between 23km and 29.46km), Hermanus. The proposed road will be upgraded to the north of the existing road. The proposed development will include the following:

- The dualling of the existing single carriageway road (TR28), with each carriageway consisting of two 3.7m lanes, a 3.1m outside shoulder, a 2m sidewalk and a 5m paved median between the two carriageways;
- Provision of dedicated turn lanes at main accesses, as appropriate;
- The widening of the road reserve width by 15m to a minimum width of 45m;
- The development of bus stops at major intersections and junctions;
- The development of stormwater channels and the widening of existing culverts (not located within or within 32m of a watercourse);
- The relocation of pipelines and moving of the existing 10m service servitude outside the new road reserve;
- The development of a new bridge across the Onrus river;
- The relocation and development of new access roads to Amana / Paradise Park, Berghof Estate and Kidbrooke Place;
- A pavement reseat on the road section between km 26.69 and km 29.46; and

- The development of noise berms.

C. SITE DESCRIPTION AND LOCATION

The listed activities will be undertaken along TR28 (between 23km and 29.46km), Hermanus, at the following co-ordinates:

Co-ordinates of the road upgrade section:

Starting point

Latitude (S)	34°	24'	22.7"
Longitude (E)	19°	08'	59.4"

Middle point

Latitude (S)	34°	24'	27.1"
Longitude (E)	19°	10'	26.7"

End point

Latitude (S)	34°	25'	07.6"
Longitude (E)	19°	13'	38.4"

Amana new access road

Starting point

Latitude (S)	34°	24'	26.4"
Longitude (E)	19°	09'	48.8"

Middle point

Latitude (S)	34°	24'	28.2"
Longitude (E)	19°	09'	38.7"

End point

Latitude (S)	34°	24'	28.1"
Longitude (E)	19°	09'	29.8"

Berghof Estate new access road

Starting point

Latitude (S)	34°	24'	19.2"
Longitude (E)	19°	10'	21.2"

Middle point (T-junction)

Latitude (S)	34°	24'	18.7"
Longitude (E)	19°	10'	28.7"

End point 1 (westwards)

Latitude (S)	34°	24'	27.0"
Longitude (E)	19°	10'	27.7"

End point 2 (eastwards)

Latitude (S)	34°	24'	16.9"
Longitude (E)	19°	10'	36.9"

Paradise Park: new access point

Latitude (S)	34°	24'	41.0"
Longitude (E)	19°	09'	13.3"

Kidbrooke place: new access point

Latitude (S)	34°	24'	30.5"
Longitude (E)	19°	11'	16.1"

The SG digit codes are: Properties Erf 1506 - C01300230000150600000

Remaining Extent of Farm 581- C0130000000058100000

Erf 4716 - C01300160000471600000

Erf 4715 - C01300160000471500000

Erf 4779 - C01300160000477900000

Erf 4286 - C01300160000428600000

Erf 4312 - C01300160000431200000

Erf 5152 - C01300160000515200000

Portion 4 of Farm 581 - C01300000000058100004

Portion 340 of Farm 581- C01300160000058100340

Remaining Extent of Farm 5057 C01300160000505700000

Remaining Extent of Farm 5569 - C01300160000556900000

Remaining Extent of Farm 1291 - C01300200000129100000

Erf 1134 - C01300230000113400000

Erf 2390 - C01300230000239000000

Erf 4362 - C01300160000436200000

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

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

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Ms. E. Costandius

SLR Consulting (Pty) Ltd.

P. O. Box 978

RONDEBOSCH

7701

Tel.: 021 461 1118

Email: ecostandius@slrconsulting.com

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 received on 26 January 2023 on the site as described in Section C above.
2. The holder must commence with, and conclude, the listed activities within the stipulated validity period which this Environmental Authorisation is granted for, or this Environmental Authorisation shall lapse and a new application for Environmental Authorisation must be submitted to the competent authority.

This Environmental Authorisation is granted for-

- (a) A period of five (5) years, from the date of issue, during which period the holder must commence with the authorised listed activities.
 - (b) A period of ten (10) years, from the date the holder commenced with the authorised listed activities, during which period the authorised listed activities, must be concluded.
3. 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.
 4. 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

5. Seven calendar days' notice, in writing, must be given to the Competent Authority before commencement of construction activities.
 - 5.1. The notice must make clear reference to the site details and EIA Reference number given above.
 - 5.2. The notice must also include proof of compliance with the following conditions described herein:
Conditions: 6, 7, 10 and 16.

Notification and administration of appeal

6. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision–
 - 6.1. notify all registered Interested and Affected Parties ("I&APs") of –
 - 6.1.1. the outcome of the application;
 - 6.1.2. the reasons for the decision as included in Annexure 3;
 - 6.1.3. the date of the decision; and
 - 6.1.4. the date when the decision was issued.

- 6.2. 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;
 - 6.3. draw the attention of all registered I&APs to the manner in which they may access the decision;
 - 6.4. provide the registered I&APs with:
 - 6.4.1. the name of the holder (entity) of this Environmental Authorisation,
 - 6.4.2. name of the responsible person for this Environmental Authorisation,
 - 6.4.3. postal address of the holder,
 - 6.4.4. telephonic and fax details of the holder,
 - 6.4.5. e-mail address, if any, of the holder,
 - 6.4.6. 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.
7. 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

8. The draft Environmental Management Programme ("EMPr") submitted as part of the application for Environmental Authorisation must be amended to include method statements for the maintenance activities associated with the road and bridge upgrade. The method statements must include aspects relating to:
- Frequency of maintenance activities.
 - Access requirements.
 - Methodology and equipment to be utilised.
 - Whether specialist oversight is required.
 - Record-keeping requirements (including photographic evidence if needed).

The amended EMPr must be submitted to the Competent Authority for approval prior to commencement of construction activities on the site.

9. The EMPr must be included in all contract documentation for all phases of implementation.

Monitoring

10. The holder must appoint a suitably experienced environmental control officer ("ECO"), or site agent where appropriate, before commencement of the proposed development to ensure compliance with the provisions of the EMPr and the conditions contained herein. The ECO must conduct site visits and submit ECO Reports on a monthly basis to the competent authority.
11. A copy of the Environmental Authorisation, EMPr, 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.

12. 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

13. 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 and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Report must be prepared by an independent person, that is not the ECO referred to in Condition 10 above and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014.

The Audit Reports must be compiled and subsequently submitted to the Department in the following manner:

- 13.1. The holder must undertake an environmental audit and submit an Environmental Audit Report to the Competent Authority within 3 (three) months of commencement of construction. A second Environmental Audit Report must be submitted within 1 (one) year of commencement of construction.
- 13.2. A final Environmental Audit Report must be submitted within 3 (three) months of completion of the proposed 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.

Specific Conditions

14. 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.

15. 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 directive from the relevant heritage resources authority.

16. The development footprint must be clearly demarcated prior to the commencement of construction activities. All areas outside the demarcated areas must be regarded as “no-go” areas.

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 those 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 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.

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 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 3721)
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: 16 MAY 2023

Cc: Mr. E. Costandius (SLR Consulting (Pty) Ltd)
Ms. P. Aplon (Overstrand Municipality)

Email: ecostandius@slrconsulting.com

Email: paplon@overstrand.gov.za

ANNEXURE 1: LOCALITY MAP

Locality Map

Legend

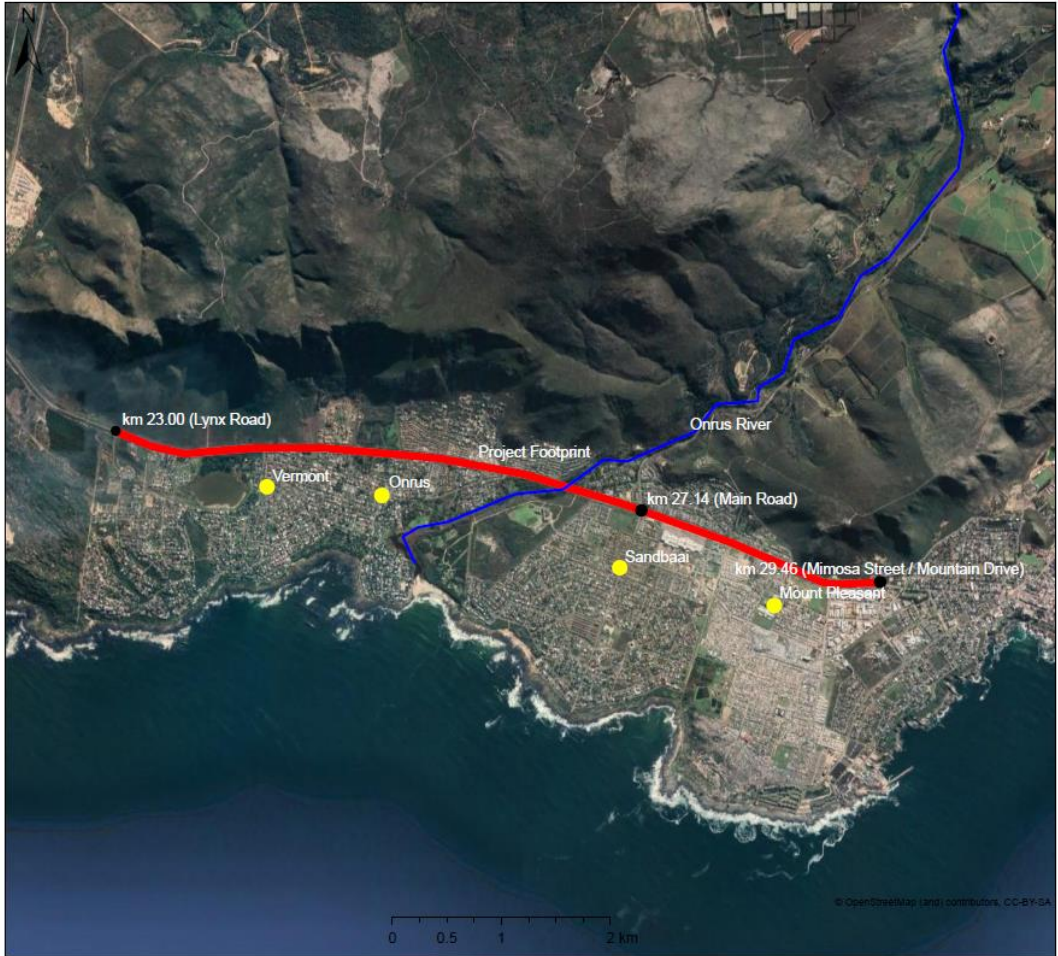


Figure 1: Proposed location.

ANNEXURE 2: SITE PLAN

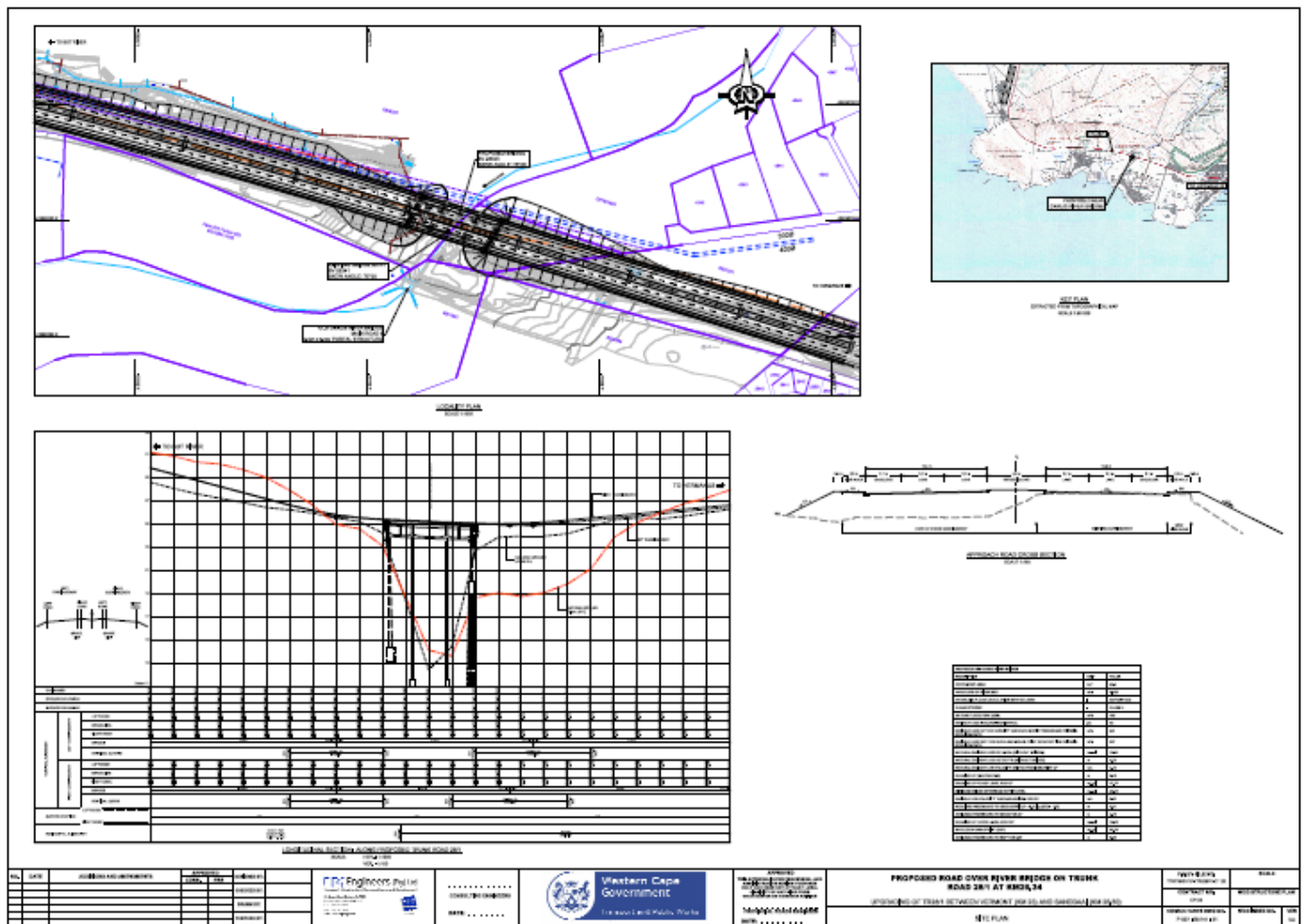


Figure 2: Proposed site plan

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 received by the Department on 10 October 2022 and the EMPr submitted together with the Basic Assessment Report on 26 January 2023;
- 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 26 January 2023;
- 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 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 at the site where the listed activities are to be undertaken;
- the placing of a newspaper advertisement in the "Cape Times" (in English), "Hermanus Times" (in English) and "Die Burger" (in Afrikaans) on 17 March 2021;
- 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 councilor, and the various Organs of State having jurisdiction in respect of any aspect of the listed activities on 17 March 2021 and 10 October 2022;
- making the pre-application draft BAR available to I&APs for comment from 17 March 2021 to 20 April 2021; and
- making the post application draft BAR available to I&AP's for comment from 10 October 2022 to 9 November 2022.

The Department is satisfied that the Public Participation Process that was followed met the minimum legal requirements and that 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

Design / layout alternatives

Option 1:

This design / layout entails the dualling of the existing road with the right-hand side toe line of the existing road as close as allowable to the road reserve boundary (southern side). This would entail widening of the existing road towards both sides of the existing carriageway.

This option was not preferred due to the following:

- Culverts would need to be extended on both sides of the road.
- Potential limited space to accommodate stormwater.
- This option would result in smaller section of the road and sidewalk being added to the existing road which will increase traffic congestion.

Option 2:

This design / layout entails keeping the existing right-hand side shoulder breakpoint at its current position. This entails the widening of the existing carriageway only towards the northern side of the existing road, but closer to the adjacent residential developments compared to the preferred alternative.

This option was not preferred due to the following:

- Material use of the existing carriageway would not be optimised.
- A construction joint would potentially be aligned in the vehicle wheel path, which could lead to long-term maintenance challenges.
- The new carriageway would be located closer to residential properties on the northern side of the existing road.

Technology alternatives

Technology alternatives associated with the construction / rehabilitation of the pavement structures were considered.

Alternative 1:

This alternative entails the removal of the existing asphalt surfacing and the addition of a bituminous treated base and the subsequent resurfacing with asphalt.

This option was not preferred due to the fact that it is considered to be an interim solution, which entails a service life in the short to medium term only. This would result in increased traffic congestion (as per the Traffic Assessment undertaken by EFG Engineers). It is further considered to be costly given that the closest asphalt supplier is located nearly 90 km from the project area.

Alternative 2

This alternative entails the rehabilitation of the existing pavement with the use of bituminous stabilised materials. This method entails the recycling of the existing base and sub-base, together with the application of either emulsion or foamed bitumen.

This option was not preferred, due to the fact that it would require future maintenance and it would require limited rehabilitation of the existing pavement.

Alternative 3:

This option entails the exclusion of pavement rehabilitation. This extended service life comes at the cost of increased maintenance, decrease in riding quality, potential increases in accidents and the higher cost of future rehabilitation.

This option was not preferred as it would only be effective within the short to medium term.

The preferred pavement structure herewith authorised will entail a 250 mm G7 selected layer, 300 mm C4 cement stabilised sub-base, 150 mm G2 crushed stone base and 40 mm asphalt surfacing for the new road.

Preferred alternative (herewith authorised)

The proposed development entails the upgrade of Trunk Road ("TR") 28 and associated infrastructure (between 23km and 29.46km), Hermanus. The proposed road will be upgraded to the north of the existing road. The proposed development will include the following:

- The dualling of the existing single carriageway road (TR28), with each carriageway consisting of two 3.7m lanes, a 3.1m outside shoulder, a 2m sidewalk and a 5m paved median between the two carriageways;
- Provision of dedicated turn lanes at main accesses, as appropriate;
- The widening of the road reserve width by 15m to a minimum width of 45m;
- The development of bus stops at major intersections and junctions;
- The development of stormwater channels and the widening of existing culverts (not located within or within 32m of a watercourse);
- The relocation of pipelines and moving of the existing 10m service servitude outside the new road reserve;
- The development of a new bridge across the Onrus river;
- The relocation and development of new access roads to Amana / Paradise Park, Berghof Estate and Kidbrooke Place;
- A pavement reseal on the road section between km 26.69 and km 29.46; and
- The development of noise berms.

The "No-Go" Alternative

The no-go alternative is not preferred since the road will remain in its current degraded state and would not be able to adequately accommodate the anticipated future traffic volumes and would compromise the safety of road users, should it not be upgraded.

3. Impact Assessment and Mitigation measures

3.1. Activity need and desirability

Traffic volumes indicate that the existing road is operating over its practical capacity for prolonged periods, with long queues forming, especially during peak commute times and over extended periods during the high tourist seasons. The proposed upgrades are necessary to improve the local infrastructure and provide a safer road that can accommodate the traffic load currently being experienced. Furthermore, improvements to the existing road are required to make provision for non-motorised transport facilities, public transport facilities, street lighting and to eliminate traffic congestion.

3.2. Biophysical impacts

According to the Botanical Impact Assessment (dated 3 September 2021, compiled by Bergwind Botanical Surveys & Tours CC.), the vegetation that occurs along the TR28 is Hangklip Sand Fynbos, which is classified as an endangered ecosystem and Overberg Sandstone Fynbos, which is classified as a critically endangered ecosystem in terms of the National Environmental Management: Biodiversity Act, (Act 10 of 2004) ("NEM:BA") revised list of Threatened Ecosystems in Need of Protection dated 18 November 2022. However, the vegetation has been transformed and is not representative of the original vegetation type. Although two species of conservation concern were recorded along the route, the proposed route is not located within a Critical Biodiversity Area. Due to the transformed nature of the

vegetation, the specialist regards the loss of indigenous vegetation along the TR28 as a result of the proposed development to be of low negative significance.

The proposed Amana Road route runs through a patch of fynbos, which is not representative of Hangklip Sand Fynbos, due to past disturbance. The specialist regards the impact associated with the construction of the new road in this area as having medium to low negative significance. The construction of the link road between Berghof and Chanteclair Avenue, Kidbrooke Place, would not affect any vegetation of importance. The road would mostly run through an area that is highly transformed and infested with alien invasive trees. The impact associated with the construction of the road in this area is regarded to be of low negative significance.

According to the Freshwater Impact Assessment (dated November 2020, updated October 2022, compiled by BlueScience), the Onrus River will be impacted by the proposed development of the bridge. The riparian habitat integrity of the Onrus River is considered to be seriously modified as a result of the invasion of the riparian zone by invasive alien plant species. The instream habitat is considered to be largely modified, primarily as a result of the alteration of the flow regime by the large upstream De Bos Dam. Furthermore, the river is considered to be of a moderate to high ecological importance and sensitivity as it provides an important corridor for the movement of biota from the coast to the mountains. However, the specialist report indicates that the proposed works in the Onrus River will result in a limited disturbance of the aquatic habitat of the watercourse. The potential freshwater impacts are therefore regarded to be of low negative significance after mitigation. All the mitigation measures have been included in the EMPr for implementation.

3.3. Impact on Heritage Resources

Heritage Western Cape confirmed in their comment dated 14 July 2020 that no further action under Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) is required. Additionally, the applicant will comply with Conditions 14 and 15 of this Environmental Authorisation. This will ensure the protection of any heritage resources that may be encountered on the site.

3.4. Noise Impact

According to the Noise study (dated January 2023, compiled by EFG Engineers), the day and night noise levels for the residential areas that will be impacted by the proposed development will be below the recommended noise levels for a major road in an urban district. Berms will be constructed to minimise noise impacts.

3.5. Traffic Impact

According to the Traffic Impact Assessment (dated January 2023, compiled by EFG Engineers), there is a current demand to upgrade TR28 to a dual-carriageway road, as the existing traffic volumes exceed the road's practical capacity based on its existing geometry. Long queues and delays are experienced during peak hours, as well as the whale and holiday seasons. The proposed development is anticipated to resolve the existing operational capacity challenges along this route up to the year 2040 and beyond.

The development will result in both negative and positive impacts.

Negative Impacts:

- Loss of indigenous vegetation; and
- Impacts on watercourses.

Positive impacts:

- The proposed improvement of the road will provide safer roads and better access from side roads;
- It will eliminate long queues and traffic congestion; and
- It will create employment opportunities during the construction phase.

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 EMP, 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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