



**Western Cape
Government**
Environmental Affairs and
Development Planning

Directorate: Development Management
(Region 2)

REFERENCE: 16/3/3/1/E4/5/1007/16
NEAS REFERENCE: WCP/EIA/0000081/2016
ENQUIRIES: D'mitri Matthews
DATE OF ISSUE: 2016-03-04

The Director
Department of Transport and Public Works
P. O. Box 2630
CAPE TOWN
8000

Attention: Mr. L. Truter

Tel: (021) 483 2020
Fax: (021) 483 2205

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: PROPOSED REPAIR AND UPGRADE OF THE EXISTING DEGRADED STORMWATER INFRASTRUCTURE ALONG MAIN ROAD ("MR") 269 AT KM 4.95 AND KM 5.67 AND ALONG DIVISIONAL ROAD ("DR") 1257 AT KM 1.47, HEMEL & AARDE VALLEY, BETWEEN SANDBAAL AND CALEDON

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 Environmental Impact Assessment 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 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

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 2)
DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

CC: (1) Mr. C. Dippenaar (Guillaume Nel Environmental Consultants) Fax: (021) 870 1873
(2) Ms. P. Aplon (Overstrand Municipality) Fax: (028) 316 4953
(3) Mr. J. Viljoen (Theewaterskloof Municipality) Fax: (028) 214 1289
(4) Mr. A. Oosthuizen (DEA&DP: Development Facilitation) Fax: (021) 483 8311

2nd Floor, 1 Dorp Street, Cape Town, 8001
Tel: +27 21 483 8350 Fax: +27 21 483 3633
E-mail: D'mitri.Matthews@westerncape.gov.za

Private Bag X9086, Cape Town, 8000
www.westerncape.gov.za/eadp



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Development Planning

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(Region 2)

REFERENCE: 16/3/3/1/E4/5/1007/16
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ENQUIRIES: D'mitri Matthews
DATE OF ISSUE: 2016-08-04

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: PROPOSED REPAIR AND UPGRADE OF THE EXISTING DEGRADED STORMWATER INFRASTRUCTURE ALONG MAIN ROAD ("MR") 269 AT KM 4.95 AND KM 5.67 AND ALONG DIVISIONAL ROAD ("DR") 1257 AT KM 1.47, HEMEL & AARDE VALLEY, BETWEEN SANDBAAI AND CALEDON

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 activity specified in section B below with respect to Alternative 1, described in the Basic Assessment Report ("BAR"), dated 22 April 2016.

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 Transport and Public Works
c/o Mr. L. Truter
P. O. Box 2630
CAPE TOWN
8000

2nd Floor, 1 Dorp Street, Cape Town, 8001
Tel: +27 21 483 8350 Fax: +27 21 483 3633
E-mail: D'mitri.Matthews@westerncape.gov.za

Private Bag X9086, Cape Town, 8000
www.westerncape.gov.za/eadp

Tel: (021) 483 2020

Fax: (021) 483 2205

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

B. LIST OF ACTIVITIES AUTHORISED

Listed Activity	Activity/Project Description
Government Notice No. R. 983 of 4 December 2014 – Activity Number: 19 Activity Description: The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from— (i) a watercourse; (ii) the seashore; or (iii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater— 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; or (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies.	The proposal entails the repair and upgrading of existing stormwater infrastructure.

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

The holder is herein authorised to undertake the following alternative:

Alternative 1

Upgrade of the stormwater infrastructure along MR 269 and DR 1257 at the following locations:

- MR 269

- The culverts at Km 4.95:

The replacement and upgrading of two existing 900mm diameter pipe culverts with two new 1800mm x 1800mm box culverts, with new inlet and outlet structures along MR 269. Gabions will be constructed at the inlet and outlet structures to protect the culverts and embankments.

➤ The culvert at Km 5.67:

The upgrading of the existing 2400mm wide x 1500mm high box culvert with a 750mm arched *in-situ* box culvert that is situated at a dangerous curve along MR 269. It is proposed that the structure will be extended and that guardrails be placed at the culvert opening. Gabions will be constructed at the inlet and outlet structures to protect the culvert and embankments.

• DR 1257

➤ The culverts at Km 1.4:

The replacement and upgrading of the existing three 600mm diameter pipe culverts with three 1050mm diameter pipe culverts. A temporary bypass road will need to be constructed during the construction phase. The bypass road will be directly north of the existing road and will extend approximately 300m through disturbed agricultural land, where it will then extend approximately 43m south-west through natural indigenous vegetation before tying back into DR 1257. Gabions will be constructed at the inlet and outlet structures to protect the culverts and embankments. Furthermore, at the outlet of the structure, a stepped concrete energy dissipating structure is proposed.

C. SITE DESCRIPTION AND LOCATION

The listed activity will be undertaken along MR 269 and along DR1257 between Sandbaai and Caledon, at the following co-ordinates:

The co-ordinates for the culverts are:

The culverts along MR 269 at Km 4.95:

Latitude (S)	Longitude (E)
34° 23' 00.68" South	19° 14' 11.28" East

The culvert along MR 269 at Km 5.67:

Latitude (S)	Longitude (E)
34° 22' 41.39" South	19° 14' 23.56" East

The culverts along DR 1257 at Km 1.47:

Latitude (S)	Longitude (E)
34° 19' 23.61" South	19° 25' 08.95" East

Refer to Annexure 1: Locality Plans and Annexure 2: Site Plans.

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

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Guillaume Nel Environmental Consultants cc
c/o Mr. Christoff Dippenaar
P. O. Box 2632
PAARL
7620

Tel.: (021) 870 1874

Fax: (021) 870 1873

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, Alternative 1, described in the BAR dated 22 April 2016 at the sites 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 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: 7 and 13

6. Seven calendar day's notice, in writing, must be given to the Competent Authority before commencement of operational activities specified in the EA.

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; and
- 7.4 provide the registered I&APs with:
 - 7.4.1 the name of the holder (entity) of this Environmental Authorisation;
 - 7.4.2 name of the responsible person for this Environmental Authorisation;
 - 7.4.3 postal address of the holder;
 - 7.4.4 telephonic and fax details of the holder;
 - 7.4.5 e-mail address, if any, of the holder; 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 notifies the registered I&APs of this decision. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided i.e. the listed 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 Maintenance Management Plan ("MMP"), included as part of the EMPr, read in conjunction with the additional information dated 10 June 2016, is herewith agreed to in terms of the NEMA EIA Regulations, 2014 relating to Activity 19 of GN No. R. 983. The maintenance work specified in the MMP therefore does not require a separate Environmental Authorisation prior to the undertaking thereof.
- 11. The Rehabilitation Plan submitted as part of the Freshwater Ecosystem Assessment dated November 2015 must be implemented.
- 12. The EMPr, MMP and Rehabilitation Plan must be included in all contract documentation for all phases of implementation.

Monitoring

- 13. 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 EMPr, MMP, Rehabilitation Plan and the conditions contained herein.

14. A copy of the Environmental Authorisation, EMPr, MMP, Rehabilitation Plan, 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 on a publicly accessible website.
15. 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

16. 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, MMP and the Rehabilitation Plan, 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 submit an Environmental Audit Report for the construction phase within 3 months of completion of construction to the Competent Authority and thereafter, every 3 months for a period of 1 year. The final Environmental Audit Report must be submitted to the Competent Authority three months after commencement of operations.

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

17. 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.

18. 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.

19. Construction activities that will occur within or directly adjacent to the river may only take place outside the rainy season or periods of rainfall.

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 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 at least **three months** prior to the expiry date of the Environmental Authorisation.

Note that: (1) in terms of Regulation 28(2) of the NEMA EIA Regulations, 2014, failure to lodge an application for amendment at least three months prior to the expiry of the validity period of the Environmental Authorisation may result in the lapsing of the Environmental Authorisation, due to the Competent Authority being unable to process the application for amendment within this period; (2) it is an offence in terms of Section 49A(1)(a) of NEMA for a person to commence with a listed activity if the competent authority has not granted an Environmental Authorisation for the undertaking of the activity.

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, other than those mentioned above, must be done in accordance with Regulations 35 to 37 of GN No. R.982 of 4 December 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 (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 Jaap de Villiers (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 Jaap.DeVilliers@westerncape.gov.za.

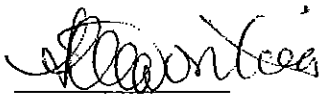
5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from Appeal Authority at: Tel. (021) 483 3721, E-mail Jaap.DeVilliers@westerncape.gov.za or URL <http://www.westerncape.gov.za/eadp>.

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. HENRI FORTUIN

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 2)

DATE OF DECISION: 4-8-16

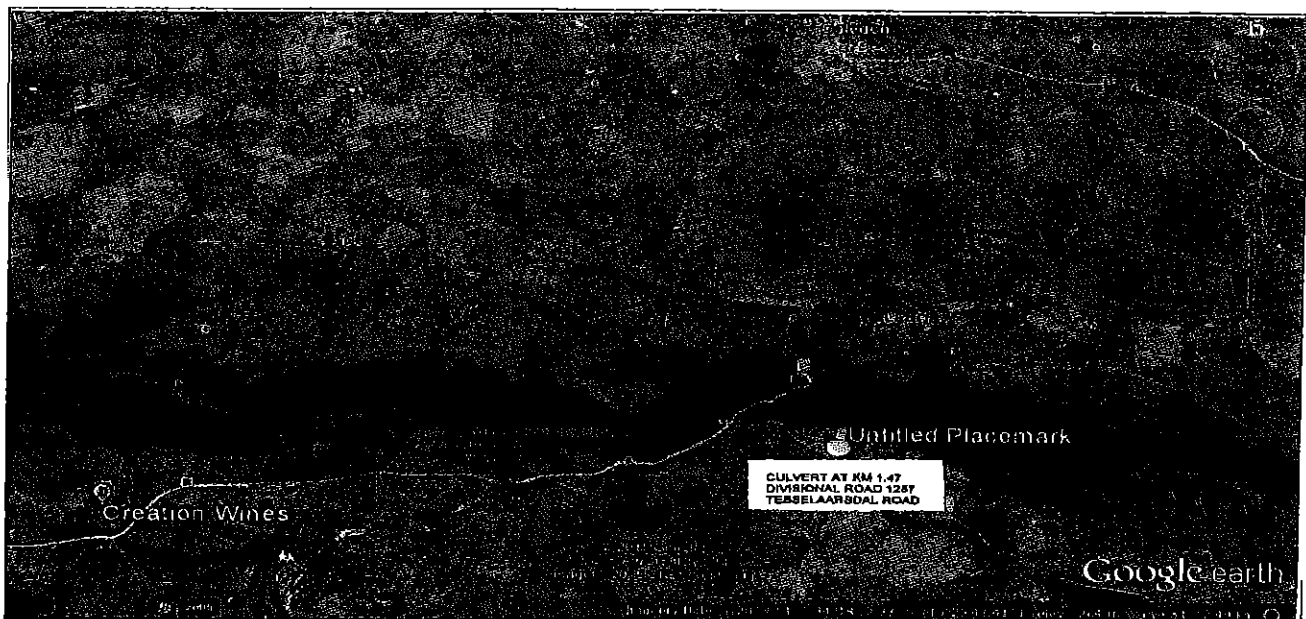
CC: (1) Mr. C. Dippenaar (Guillaume Nel Environmental Consultants)
(2) Ms. P. Aplon (Overstrand Municipality)
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ANNEXURE 1: LOCALITY MAP**Figure 1: MR 269 AT KM 4.95 AND KM 5.67****Figure 2: DR 1257 AT KM 1.47**

ANNEXURE 2: SITE PLAN

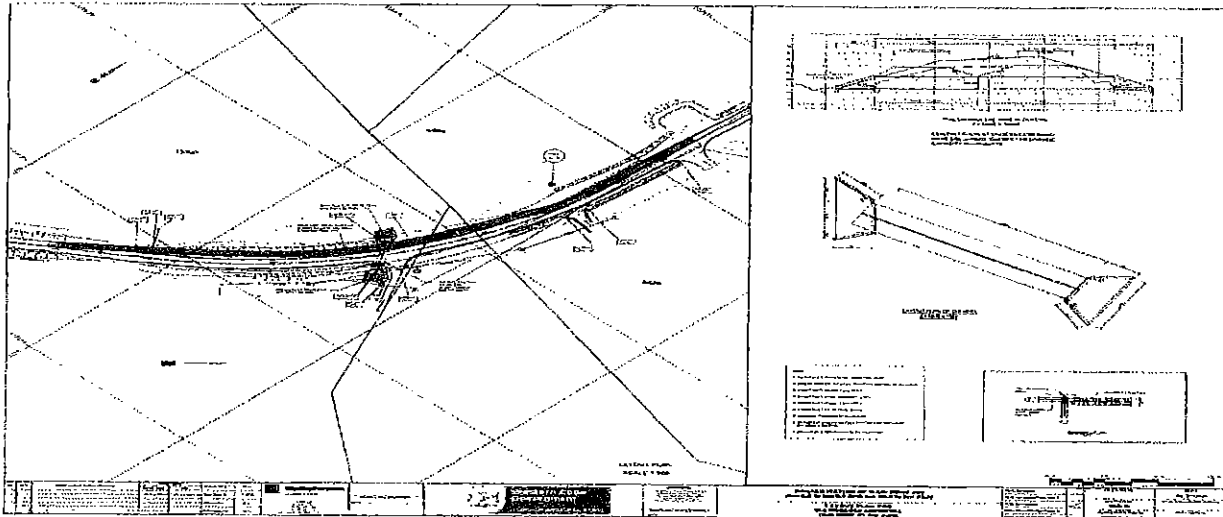


Figure 3: MR 269 AT KM 4.95

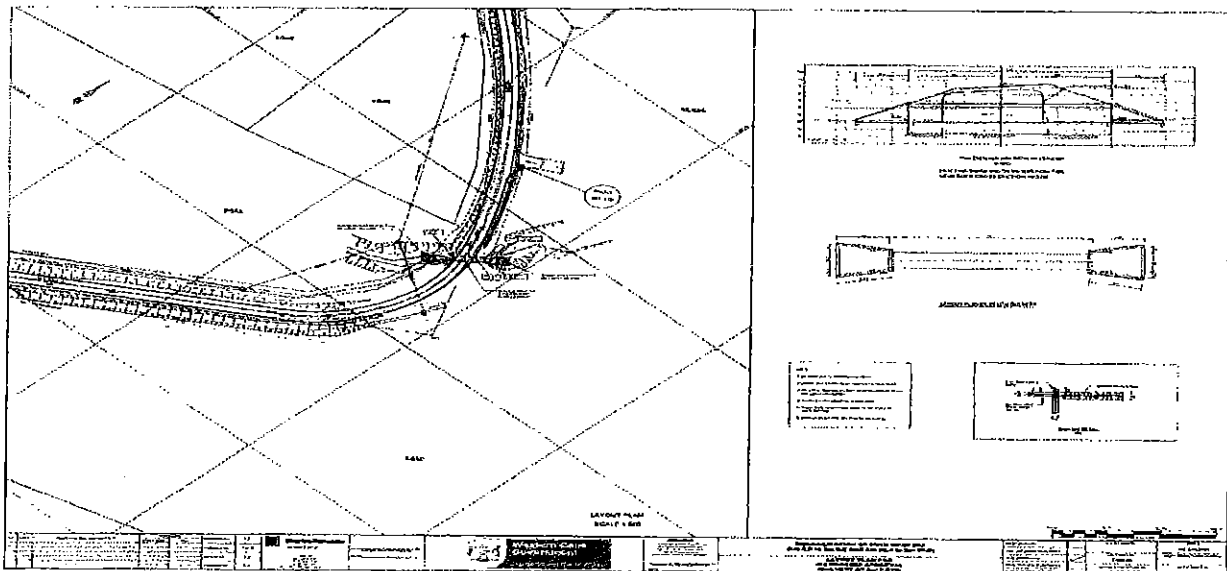


Figure 4: MR 269 AT KM 5.67

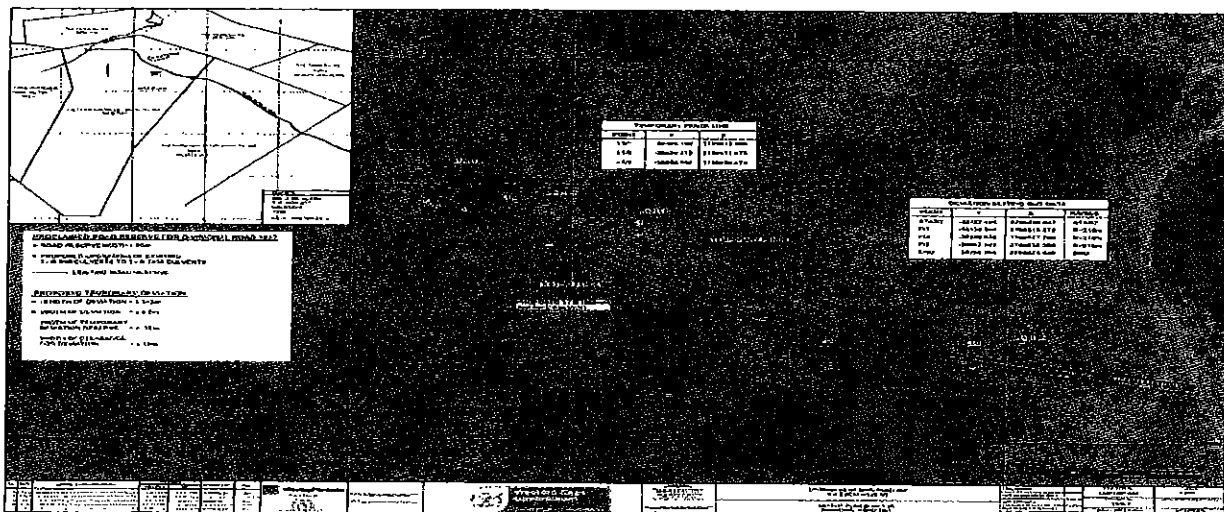


Figure 5: DR 1257 AT KM 1.47

ANNEXURE 3: REASONS FOR THE DECISION

In reaching its decision, the Competent Authority considered, amongst others, the following:

- a) The information contained in the Application Form dated 12 February 2016, the BAR dated 22 April 2016, the EMPr and MMP submitted together with the BAR and the additional information dated 10 June 2016;
- 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 22 April 2016;
- 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 during 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;
- 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 10 December 2015;
- the placing of a newspaper advertisement in the 'Hermanus Times' on 10 December 2015;
- fixing notice boards at the sites where the listed activity is to be undertaken on 10 December 2015;
- making the BAR available to I&APs for public review from 10 December 2015 and again from 4 March 2016.

All the concerns raised by I&APs were responded to, and adequately addressed during the public participation process. Specific management and mitigation measures have been considered in this Environmental Authorisation and in the EMPr, in order to adequately address the concerns raised.

The Competent Authority concurs with the Environmental Assessment Practitioner's responses to the issues raised during the public participation process, and has included appropriate conditions in this Environmental Authorisation and in the EMPr.

2. Alternatives

Alternative 1 (Herewith authorised)

Upgrade of the stormwater infrastructure along MR 269 and DR 1257 at the following locations:

- MR 269

- The culverts at Km 4.95:

The replacement and upgrading of two existing 900mm diameter pipe culverts with two new 1800mm x 1800mm box culverts, with new inlet and outlet structures along MR 269. Gabions will be constructed at the inlet and outlet structures to protect the culverts and embankments.

- The culvert at Km 5.67:

The upgrading of the existing 2400mm wide x 1500mm high box culvert with a 750mm arched *in-situ* box culvert that is situated at a dangerous curve along MR 269. It is proposed that the structure will be extended and that guardrails be placed at the culvert opening. Gabions will be constructed at the inlet and outlet structures to protect the culvert and embankments.

- DR 1257

- The culverts at Km 1.4:

The replacement and upgrading of the existing three 600mm diameter pipe culverts with three 1050mm diameter pipe culverts. A temporary bypass road will need to be constructed during the construction phase. The bypass road will be directly north of the existing road and will extend approximately 300m through disturbed agricultural land, where it will then extend approximately 43m south-west through natural indigenous vegetation before tying back into DR 1257. Gabions will be constructed at the inlet and outlet structures to protect the culverts and embankments. Furthermore, at the outlet of the structure, a stepped concrete energy dissipating structure is proposed.

This alternative is preferred since gabion structures are permeable, do not increase stream flow and has less of a visual impact compared to concrete retaining walls.

Alternative 2

It is proposed to upgrade the stormwater infrastructure along Main Road ("MR") 269 and Divisional Road ("RD") 1257 at the following locations:

- MR 269

- The culverts at Km 4.95:

The two existing 900mm diameter pipe culverts will be retained and an additional 900mm pipe culvert will be added, with the final width of the structure to be approximately 15m. A concrete retaining wall will be constructed at the inlet and outlet structures to protect the culverts and embankments.

- The culvert at 5.67:

The upgrading of the existing 2400mm wide x 1500mm high box culvert with a 750mm arched *in-situ* box culvert that is situated at a dangerous curve along MR 269. It is proposed that the structure is extended and that guardrails be placed at the culvert opening. A concrete retaining wall will be constructed at the inlet and outlet structures to protect the culverts and embankments.

- DR 1257

➤ The culverts at Km 1.4:

The replacement and upgrading of the existing three 600mm diameter pipe culverts with three 1050mm diameter pipe culverts. A temporary bypass road will need to be constructed during the construction phase. The bypass road will be directly north of the existing road and will extend approximately 200m through disturbed agricultural land, where it will then extend approximately 10m south-west through natural indigenous vegetation before tying back into DR 1257. A concrete retaining wall will be constructed at the inlet and outlet structures to protect the culverts and embankments.

This alternative is not preferred since a solid concrete structure is not permeable, stream flow will be increased which may lead to erosion and has a higher visual impact compared to gabion structures.

"No-Go" Alternative

The "no-go" option was also investigated and was not considered feasible since erosion and degradation of the banks will continue, loss of endemic vegetation will be ongoing due to erosion, the capacity of the structure will not be able to accommodate stormwater adequately and road will remain in an unsafe condition at these sites.

3. Impact Assessment and Mitigation measures

3.1 Activity need and desirability

The existing culverts located along MR 269 at Km 4,95 and Km 5,67 and the culvert located along DR 1257 at Km 1,47 are currently degraded and needs urgent repairs and upgrading. The current capacity of these culverts during peak stormwater flow is inadequate and severe erosion at the culverts and the embankments are ongoing. The proposed upgrades to these culverts will reduce the ongoing erosion at the culverts and embankments and will increase the flow capacity for the peak stormwater through these structures. Furthermore, the upgrading of these structures will contribute to a safer utilisation of the roads than is currently being experienced.

3.2 Biodiversity and Biophysical Impacts

According to the Freshwater Ecosystem Assessment dated November 2015, compiled by Ms. M. Riehl, the three sites that have been assessed fall within non-perennial streams with concentrated surface flow. The culvert along MR 269 at Km 4,95 has an associated riparian wetland and the culverts along MR 269 at Km 5,67 and DR 1257 at 1,47 are associated with seasonal wetlands. The Ecological Importance and Sensitivity at the sites are rated as high and the Present Ecological Status of the sites is classified as moderately modified (Category C). Most of the endemic species that occur at the two sites along MR 269 fall outside of the construction footprint. The site located along DR 1257 has more endemic vegetation. A search and rescue exercise (within the construction footprint) will be conducted prior to construction activities. Rescued endemic vegetation will be taken to the on-site nursery and will be used to rehabilitate the disturbed areas after construction activities have been completed. Impacts to the freshwater ecosystems will be rated as being of low significance, through the implementation of the recommendations of the Rehabilitation Plan (Condition 11), the EMPr (accepted in Section E, Condition 9) and MMP (agreed to in Condition 10).

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 agreed to 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).

The development will result in both negative and positive impacts.

Negative Impacts:

- The proposed development will result in elevated noise and dust levels during the construction period.
- Indigenous vegetation will be removed during site preparation and construction.
- Construction related impacts will occur during the construction phase of the proposal.

Positive impacts:

- Road user safety will be increased.
- The freshwater ecosystem will be rehabilitated.
- The stormwater structures will be able to accommodate high peak flow during high rainfall events.
- Temporary 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 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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