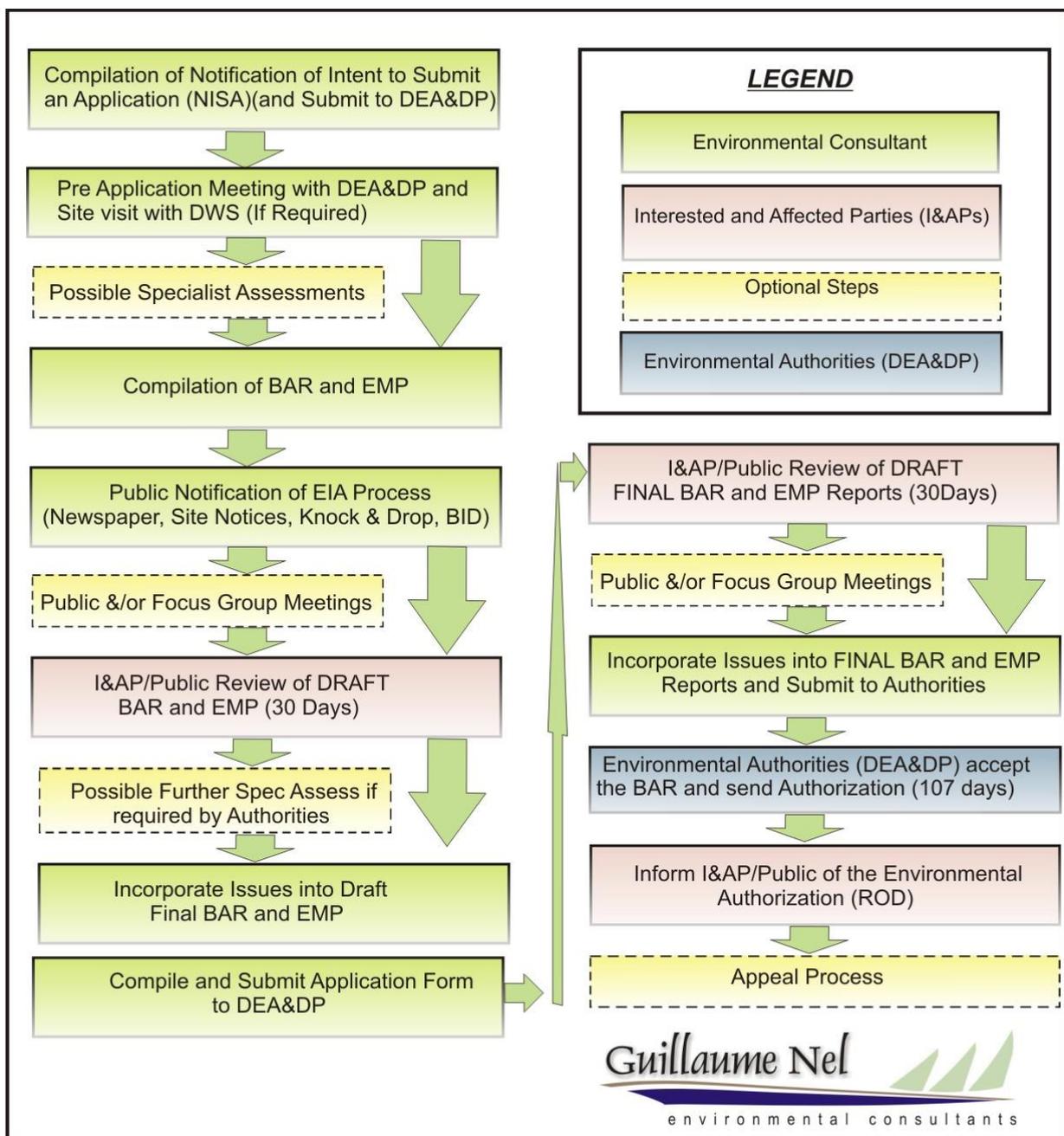


PUBLIC PARTICIPATION

1. PUBLIC PARTICIPATION PROCESS

Public participation is the involvement of all parties who potentially have an interest in a development or project or may be affected by it. The principal objective of public participation in an Environmental Impact Assessment process, in particular this River Maintenance Management Plan, is to inform and enrich decision-making.

GENERIC PUBLIC PARTICIPATION PROCESS SHOWING STEPS WHERE INTERESTED AND AFFECTED PARTIES CAN BE INVOLVED



2. PROCESS FOLLOWED TO DATE

A Notice of Intent to Develop was submitted to Heritage Western Cape on the 4th of June 2018. Heritage Western Cape reviewed the NID during the period of the 4th of June 2018 to the 26th of June 2018. On the 26th of June 2018, Heritage Western Cape issued a Record of Decision stating that “*there is no reason to believe that the proposed road maintenance and upgrades will impact on heritage resources*”.

The compilation of a Water Licence Application is currently being facilitated in terms of the National Water Act, 1998 (Act No. 36 of 1998). A Freshwater Assessment was completed during the period of October 2018.

The first Draft River Maintenance Management Plan Report was drafted and made available to the relevant commenting authorities and to the general public. The first Draft River Maintenance Management Plan Report was submitted to the Department of Environmental Affairs and Development Planning (DEA&DP) on the 7th of November 2018. Background Information Documents were hand delivered to residents and businesses within a 100 meter radius of the culvert located at Km 8.920 of Waarburgh Road. Notification letters were sent via registered post to neighbouring land owners, potentially affected state departments, NGO's and commenting authorities. The first Draft River Maintenance Management Plan Report was delivered to the relevant authorities and made available at the local public library in Kraaifontein for public review.

The following process was undertaken to facilitate the initial 30-day Public Participation Period, which commenced on the **7th of November 2018 and lapsed on the 10th of December 2018.**

2.1. Site notice

To inform surrounding communities and immediately adjacent landowners of the proposed development, two sets (including one Afrikaans and one English) of site notices were erected on site at visible and accessible locations adjacent to the Km 8.920 culvert of Waarburgh Road on **7 November 2018.**

2.2 Direct notification of identified I&APs

Identified I&APs, including key stakeholders representing the following sectors, were directly informed of the proposed development by post on **7 November 2018.**

- Local Authorities
- Provincial Authorities
- Service providers
- Ward Councillors

- Non-governmental organizations, and
- Directly adjacent landowners.

2.3 Hand-delivered notifications

Letters were hand-delivered to adjacent landowners within 100 meters of the Km 8.920 culvert of Waarburgh Road on **7 November 2018** to notify and inform them of the proposed project.

2.4 Concerns raised by I&APs

I&APs registered by completing registration forms and forwarding comments by email, fax, post and telephonically.

Comments received from I&APs are captured on a stakeholder database, acknowledged by personal letters and forwarded to the relevant environmental specialists for consideration.

3. COMMENT AND RESPONSE REPORT

Comments and issues of concern contributed by I&APs were listed, along with the I&APs name and means of communication in the Comment and Response Report.

«Name»	«Date_of_Comms»	«Means_of_Comms»
Rhett Smart	10 January 2019	E-mail
Comment Received		
<p>Attention: Carina Nel</p> <p>By Email: carina@gnec.co.za</p> <p>River Maintenance Management Plan for the Proposed Maintenance of the km 8.92 Culvert over the Mosselbank River, Waarburgh Road, Joostenbergvlakte (DEA&DP reg. no.: #)</p> <p>CapeNature would like to thank you for the opportunity to comment on the application and would like to make the following comments. Please note that our comments only pertain to the biodiversity related impacts and not the overall desirability of the application.</p> <p>The application is for maintenance of the culvert for the Waarburgh Road over the Mosselbank River. The location of the culvert is classified as Other Ecological Support Area (ESA)/ESA 2 according to the Biodiversity Network for the City of Cape Town/ Western Cape Biodiversity Spatial Plan, however directly downstream is classified as Critical Biodiversity Area (CBA) 1b/ CBA 1.</p> <p>The maintenance proposal for this culvert is to retain the existing culvert structure in place, to remove debris as necessary and for replacement of the concrete apron slabs. The footprint will remain the same. The proposal will result in an improvement of the freshwater ecological value and functioning of the river.</p> <p>A freshwater specialist study was undertaken which also included the section of the road between R304 and R44 which is not included within the current application. Three freshwater feature crossings were identified for the current application, however the other two crossings are of excavated channels, which are not defined as watercourses according to legislation. Although these are excluded for the application, the recommendations must still be implemented, which will result in an improvement of the ecological condition.</p> <p>It is noted that alien clearing has been included within the Maintenance Management Plan which is supported. It must be ensured that alien invasive species are eradicated within the road reserve, particularly at the watercourse crossing. This will also assist in preventing blockages of the culverts.</p> <p>In conclusion, CapeNature supports the implementation of the MMP as proposed.</p>		

CapeNature reserves the right to revise initial comments and request further information based on any additional information that may be received.

Yours Sincerely

Phett Smart

Response

Dear Rhett. Thank you for your interest and comment on the proposed project.

It is noted that CapeNature has no objections to the maintenance of the Km 8.920 Culvert located on Waarburgh Road. As mentioned, the two additional culverts proposed to be upgraded / rehabilitated is classified as excavated channels. It is also supported that the recommendations included in the RMMP and freshwater assessment be followed for construction activities to take place within the two excavated channels.

«Name»	«Date_of_Comms»	«Means_of_Comms»
Alvin Cope	27 November 2018	E-mail

Comment Received

Hi Ms CN,

1. Your GNEC code 20480 of 6 November 2018 and accompanying CD.
2. Please note that the contract under which this culvert maintenance is being undertaken is being managed by this Branches Design Directorate, and no further input is required from this Branch.
3. Notwithstanding, this Branch offers no objection in terms of the NEMA to this culvert maintenance action and accordingly please remove this Branch from your IAAP list.

Thanks.

Regards,

Alvin Cope

Response

Dear Mr. Cope

Thank you for interest and comment regarding the proposed development. It has been noted that the Branch has no objections against the maintenance of the Km 8.20 culvert, Waarburgh Road.

The Branch has been removed from any future correspondence with regards to the proposed project.

«Name»	«Date_of_Comms»	«Means_of_Comms»
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Clarissa Fransman

7 December 2018

E-mail

Comment Received

Attention: Carina Nel

Dear Madam

PROPOSED MAINTENANCE OF THE KM 8.920 CULVERT, WAARBURGH ROAD, JOOSTENBERGVLAKTE-RIVER MAINTENANCE MANAGEMENT PLAN REPORT.

1. WATER AND SANITATION: CATCHMENT AND STORMWATER MANAGEMENT

It is acknowledged that a River Maintenance Management Plan is required prior to commencement of the works associated with the upgrades to Waarburgh Road. It must be noted that the City of Cape Town's Catchment, Stormwater and River Management Branch has compiled generic River Maintenance Management Plans to accommodate various maintenance works executed by the City.

Following discussions with Guillaume Nel Environmental Consultants (GNEC) and Catchment and Stormwater Management Branch, it was agreed that the RMMP submitted by GNEC will be fully revised to account for Catchment and Stormwater Management Branch's Generic MMP and the detail contained therein. To this end **point 1.1** below must be noted.

Stormwater management related to the development of this project must be designed and managed in accordance with the following policy documents of the City of Cape Town:

- Management of Urban Stormwater Impacts Policy, Approved by Council: 27 May 2009.
- Floodplain and River Corridor Management Policy, Approved by Council: 27 May 2009.
- City of Cape Town's Stormwater Management By-Law. Approved by Council: 30 August 2005.

From a stormwater management and sustainability point of view, the following comments are provided at this point, bearing in mind that a revised RMMP must be provided by GNEC to account for the City of Cape Town: Catchment and Stormwater Management Branch's Generic MMP:

- 1.1. It should be noted that the Catchment and Stormwater Management Branch has compiled **a Generic Maintenance Management Plan for Built Stormwater Infrastructure (MMP reference No. G4), MMP Name: Road and Rail Culvert Crossings**, the detail of which must be considered within the proposed works, if not already included in this rehabilitation/Maintenance project. If the details contained in the City's MMP — G4 has not been fully addressed, then the RMMP is to be revised to address those issues.
- 1.2. The applicant must ensure that a Water Use License has been secured prior to the commencement of any works on site for this project.
- 1.3. The nature of the construction activities requires the use of heavy vehicles which may result in the pollution of the environment resulting from oil/hydrocarbon leaks and spills. To reduce the risk of leaks and spills, the contractor's workshop/offices must not be located within any environmental buffer area.

1.3.1. Workshop and oil/fuel areas must be located on impermeable hard standing (i.e. Concrete).

1.3.2. Oil/fuel must be stored in a secure bunded area; the bunded area must be able to contain 110% of any potential spill/leak of stored fuels.

1.3.3. Any spills must be cleaned up immediately and spoiled material disposed of in accordance with the requirements for disposal.

1.4. Concrete for the construction of concrete apron slabs at 8.92 Waarburgh Road must be done with ready mixed concrete and not be mixed on site.

1.4.1. Concrete must be contained and prevented from entering the watercourse and polluting downstream areas.

1.4.2. Tools and equipment must not be washed in the watercourse and all care must be taken to prevent equipment cleaning water from entering the watercourse.

1.4.3 Cement bags and litter must be disposed of appropriately and shall not enter the watercourse.

1.5 A site specific methodology for the construction of the apron slabs and the associated works within the watercourse must be provided to the Catchment and Stormwater Management Branch for review prior to any works commencing on site at the culvert at 8.920KM. The methodology must further indicate how the developer intends to manage/divert the watercourse during the specific construction works.

1.6. Prevention of erosion at the site and downstream of the area during and after construction of the works is to be addressed.

1.7. The following policies must be included in the Legislative requirement on page 2 of the report.

- Management of Urban Stormwater Impacts Policy, Approved by Council: 27 May 2009.
- Floodplain and River Corridor Management Policy, Approved by Council: 27 May 2009.
- City's By-Law relating to Stormwater Management, Approved by Council: 30 August 2005.

1.8. Ensure that, if any of the steps required above still require further authorization from any other organ of state, such authorization(s) must be obtained and be brought to the Catchment and Stormwater Management Branch's attention. (i.e. Water Use License, Environmental Authorisation, General authorisation or renewal/ amendment etc).

2. WATER AND SANITATION: WATER DEMAND MANAGEMENT

Water Reticulation

2.1. A portion of Waarburgh Road falls within the "Langeberg" water distribution zone. There is an existing 100mmØ water main in Anderson Street, between Lucullus Street and Kestrel road and an existing 100mmØ main in Kestrel Road, crossing Waarburgh Road.

Bulk Water

2.2. No bulk water pipelines or infrastructure under the control of the City of Cape Town's Bulk Water Branch is directly affected by the proposed development.

Sewer Reticulation

2.3. No sewer mains are affected by this application as there is no existing infrastructure along the route.

Wastewater

2.4. No wastewater flow is anticipated from the proposed maintenance of the culvert in Waarburgh Road.

Conclusions

2.5. Water mains are affected by this application; caution should be exercised when working close to municipal water and sanitation infrastructure.

2.6. The City of Cape Town: Water & Sanitation Regional Operation Managers are to be contacted for consent before work commences.

General/ Disclaimer

Information provided is based on the best available data. The flows and pressures provided in this comment are theoretical and not measured. The costs provided are estimated and may vary.

3. TRANSPORT DEVELOPMENT AUTHORITY (TDA): Environmental Management Department

3.1. The Environmental Management Department- EMD (inclusive of the Biodiversity Management and the Environmental and Heritage Management Branches) have been mentioned under the roles and responsibilities section (page 5). Be advised that the EMD will not be maintaining the river but will provide input/advice into appropriate plants to use for rehabilitation and correct alien clearing methodology etc.

3.2. The applicant is to familiarize themselves with the City of Cape Town: Standard Operating Procedure (SOP) entitled: "Minimizing negative impacts on breeding birds during reed bed clearing activities", dated January 2016 compiled by the City of Cape Town: Environmental Management Department. The content of the SOP must be included in the MMP (where applicable). A copy of this SOP can be requested from the City of Cape Town: Environmental Management Department.

3.3. The methodology for the removal of invasive vegetation is to be included in the report i.e. manually or mechanically.

3.4. The EAP is to refrain from using phrases such as "*where feasible*" and "*where possible*" (used throughout the report) which are not definitive. For example:

3.4.1 *Where feasible (where physical space and budgets are available and ecological gains are warranted (page 8, Erosion Control Measures: River Channel Profile Enhancement)*

3.4.2. *Where feasible, litter traps should be fenced off to make them inaccessible to the public, especially in the case of larger traps (page 10, Litter and Debris Removal)*

3.4.3. *Rock-pile weirs should be selected where possible over gabion (Page 9, Section: Erosion control structures).*

3.5. The following statements are to be clarified:

3.5.1. *"Removal of mole burrows and bird / insect nests that may compromise integrity of banks and retaining walls"* (Page 13, Section: Maintenance of Attenuation infrastructure).

3.5.2. *"The activity of burrowing animals in the levee will have to be monitored"* (page 14, Section: Flood Prevention Embankments/ Berms)

3.6. The term '*Bioengineering approach*' is used on page 18 (Table 3), however no further detail is provided. The plant species proposed to be used for this approach is to be provided.

3.7. The following amendments/additions are to be made:

3.7.1. Under section 9 on Page 24 - "The DEA&DP and City of Cape Town: Environmental Management Department (CCT: EMD) must be informed of the appointment of the ECO...".

3.7.2. All ECO audit reports, and method statements must be circulated to the CCT: EMD for record purposes.

3.7.3. Under Management objectives and Measurable targets on Page 32 (Watercourse Maintenance Planning), the ECO is to liaise with the CCT: Asset and Maintenance Management (Vincent Harris 0214444931 vincent.ramonharris@capetown.gov.za) prior to commencement.

3.7.4. Under Management objectives and Measurable targets on Page 33 (No-Go areas/Hydrology/Erosion/Topsoil), the ECO is to liaise with the CCT: Stormwater and Catchment Management (Johann Terblanche 0214003205 ohann.terblanche@capetown.gov.za) prior to commencement.

3.7.5. Under Management objectives and Measurable targets on Page 35 (Alien Vegetation), the ECO is to liaise with the CCT: Environmental Management (Pat Titmuss 0214440597 pat.titmuss@capetown.gov.za) prior to commencement.

CONCLUSION

The comments raised in this letter must be reflected in the final report sent to the Competent Authority for approval. The final report must kindly be submitted to this office in the form of 1 x hard copy and 1 x electronic CD/flash disk version.

Yours faithfully

MORNE THERON

Acting Regional Manager: Environmental & Heritage Management — Northern Region.

Response

Good day

Thank you for your comments.

The response below will be done by using the same numbering as in the comments above.

- 1.3. Please refer to the 2nd Draft RMMP. All areas outside of the maintenance footprint are No-Go areas for any machinery or workforce. Mitigation measures will be implemented to ensure that no oil/fuel will impact on the surrounding environment.
- 1.4. No concrete will be mixed on site, as well as other mitigation measures to be implemented to ensure that no contamination of any freshwater resources will occur.
- 1.5. The requirements have been noted. A method statement will be submitted to the Catchment and Stormwater Management Branch for review prior to any works commencing on site at the culvert at 8.920KM.
- 1.6. Mitigation measures will be set in place to ensure the prevention and monitoring of any erosion during and after construction activities.
- 1.7. Noted, thank you. The mentioned legislation has been included in the RMMP.

2. **WATER AND SANITATION: WATER DEMAND MANAGEMENT**

All comments in this section have been noted.

3. **TRANSPORT DEVELOPMENT AUTHORITY (DA): Environmental Management Department**

- 3.1. Noted, Thank you.
- 3.2. Noted, thank you.
- 3.3. All invasive species will be removed by hand to ensure less impacts on the watercourse, as well as containment of the maintenance footprint.
- 3.4. Noted, thank you.
- 3.5.
 - 3.5.1 It is recommended that the maintenance activities include the removal of all mole burrows and insect nests in order to ensure that the road infrastructure is not compromised by the presence thereof.
 - 3.5.2 This will form part of the maintenance activities. There are a large number of moles present in the area. The existing road has been severely damaged by the moles. It is therefore recommended that the presence of moles be monitored during the maintenance phase of the proposed development.
- 3.6. The maintenance activities proposed for culvert 8.920 (for which the RMMP is required) entails the removal of debris and construction of new aprons slabs. The maintenance activities will be restricted to the current footprint. However, due to the culvert being dominated by invasive vegetation species, it is proposed that up to 10 meters from the culverts be rehabilitated by ingenious vegetation following all maintenance activities. Please refer to Addendum F for the proposed Culvert Rehabilitation Plan. Page 21 of this report lists all plants species that will be used in the rehabilitation process. This rehabilitation plan can be seen as a bioengineering approach.

3.7.

3.7.1. Noted, DEA&DP and City of Cape Town: Environmental Management Department (CCT: EMD) will be informed once an ECO has been appointed to the proposed maintenance project.

3.7.2. Noted, the appointed ECO will communicate with City of Cape Town: Environmental Management Department (CCT: EMD).

3.7.3. Noted, the appointed ECO will communicate with to City of Cape Town: Asset and Maintenance Management prior to commencement.

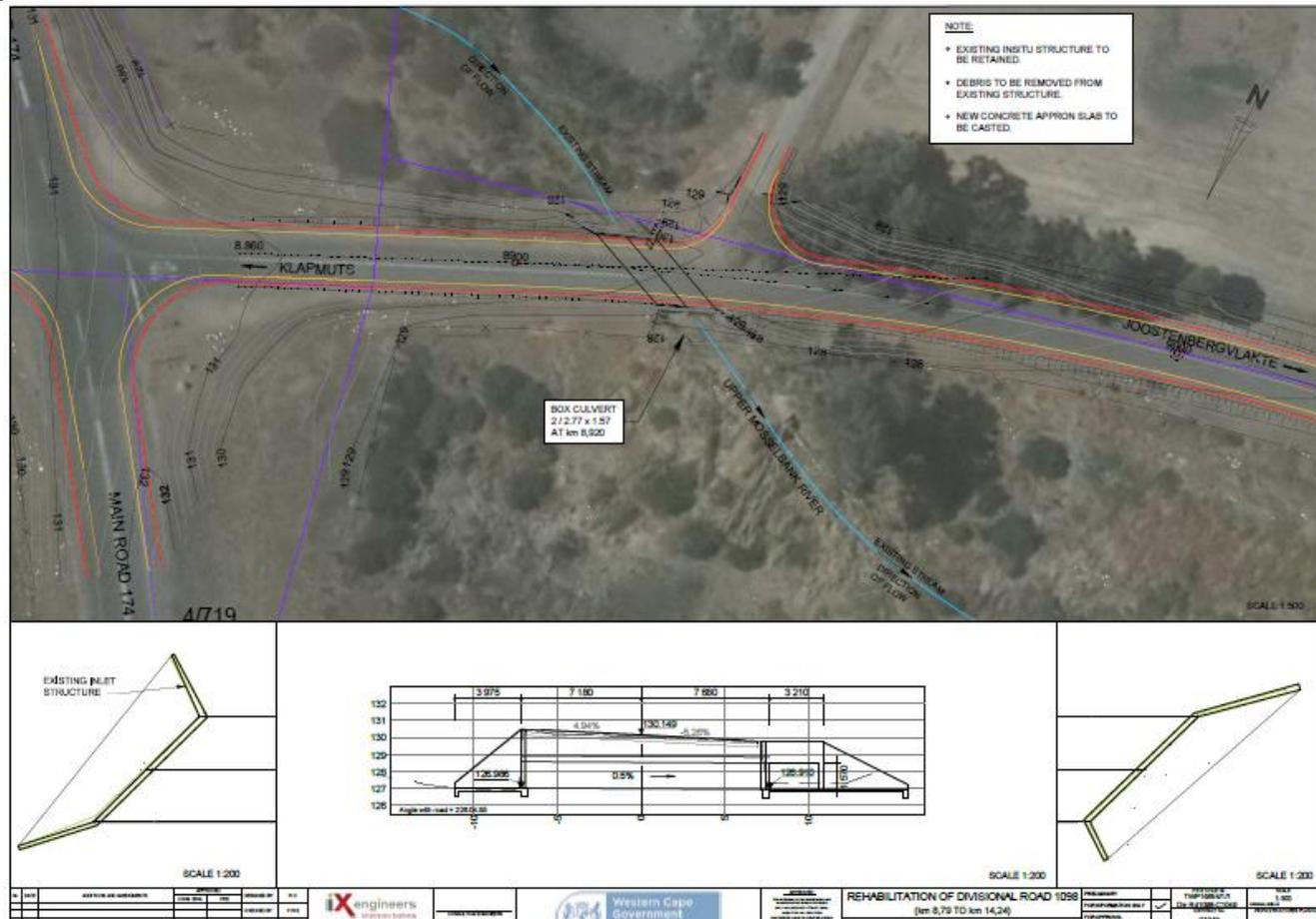
3.7.4. Noted, the appointed ECO will communicate with City of Cape Town: Stormwater and Catchment Management prior to commencement.

3.7.5. Noted, the appointed ECO will communicate with City Of Cape Town: Environmental Management prior to commencement.

«Name»	«Date_of_Comms»	«Means_of_Comms»
Barim Richardson	10 December 2018	Email
Comment Received		
Please can you provide a Graphic Map of where the work will take place as we have a water feed from Theewaterskloof in and around the construction.		
Response		
Good Day Mr. Richardson. Please refer to the Engineer Drawing below for the location of Km 8.920 culvert on Waaburgh Road. The project Engineers confirmed that the water pipeline will not be impacted upon by the maintenance activities.		



Location of Km 8.920 Culvert, Waarburgh Road, Paarl	 Tel: (021) 870 1874 Fax: 086 6933 802 Cell: 072 1571 321	
Source: Google Earth		



«Name»	«Date_of_Comms»	«Means_of_Comms»
Nicole Abrahams	13 January 2019	Email
Comment Received		
<p>Dear Ms Carina Nel</p> <p>The above listed project bears reference.</p>		

I would hereby wish to register as an I&AP for this particular project. I would like to request further information on the RMMP for comments.

The South African National Roads Agency SOC Limited (SANRAL) has received background information for this project and based on the proximity, it appears that SANRAL could be impacted by this development.

If services need to be constructed over or under the national road, (in this case the N1) or within 60m measured from the road reserve fence, the service owner must apply for a written permission from SANRAL, before any work may be carried out. Attached please find an application form for the proposed encroachment.

Do not hesitate to contact the sender should you have any further queries.

I trust that you will find the above in order.

Regards

Response

Good day Nicole

With refence to the culvert at km 8.920.

This culvert is an existing 2/2.7 x 1.57m in-situ culvert.

This culvert is approximately 70m away from the intersection.

This culvert capacity was checked for a Class 4 road, according to the Drainage requirements, thus for Q10 return period.

It was found that the culvert capacity is adequate for this peak flow related to the Class of road.

The only remedial work will be cleaning the existing culverts barrel and construction of a concrete apron slab at the inlet and outlet structure for maintenance.

In addition, erosion outlet protection will also be provided. The proposed maintenance activities will be restricted to the existing development footprint.

The pdf files provided by yourself relates to new work, not maintenance of existing infrastructure. It is therefore unclear whether it is necessary to submit the application to SANRAL. It will be greatly appreciated if further clarity regarding the matter can be provided.

It is noted that should an application be submitted to SANRAL, that this application process is a separate application and does not form part of the NEMA, 1998 (Act No. 107 of 1998) application process.

