



**REFERENCE:** 16/3/3/1/A5/20/2029/20  
**DATE OF ISSUE:** 23 March 2021

## ENVIRONMENTAL AUTHORISATION

### APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): PROPOSED UPGRADE OF A SEWERAGE PIPELINE THROUGH THE UITKAMP WETLAND OVER ERVEN 12208 AND 12196, DURBANVILLE.

With reference to your application for the abovementioned, find below the outcome with respect to this application.

#### DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the listed activities specified in section B below with respect to Preferred Activity Alternative, described in the Final Basic Assessment Report ("BAR"), dated 1 December 2020.

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

City of Cape Town: Economic Opportunities and Asset Management  
c/o Dr Bongwiwe Mali-Swelindawo  
Corner of Voortrekker Road and De Villiers Street  
**GOODWOOD**  
7459

Tel.: (021) 444 4698  
Email: [Bongwiwe.mali-swelindawo@capetown.gov.za](mailto:Bongwiwe.mali-swelindawo@capetown.gov.za)

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

## B. LIST OF ACTIVITIES AUTHORISED

Listed Activities	Activity/Project Description
<p>Listing Notice 1 of the EIA Regulations, 2014 (as amended)–</p> <p>Activity Number: 19</p> <p>Activity Description: <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"> <li><i>(a) will occur behind a development setback;</i></li> <li><i>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan;</i></li> <li><i>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</i></li> <li><i>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</i></li> <li><i>(e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies”.</i></li> </ul>	<p>The proposed development will result in the excavation of more than 10 cubic metres material from the wetland area.</p>
<p>Listing Notice 3 of the EIA Regulations, 2014 (as amended)–</p> <p>Activity Number: 12</p> <p>Activity Description: <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> <ul style="list-style-type: none"> <li><i>i. Western Cape</i></li> <li><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></li> <li><i>ii. Within critical biodiversity areas identified in bioregional plans;</i></li> <li><i>iii. Within the littoral active zone or 100 metres inland from high water mark of</i></li> </ul>	<p>The proposed development will result in the clearance of more than 300 square metres of endangered vegetation during excavations required at approximately 15 side connection points along the pipeline route, as well as for the two sections where the sewerage line route is to be re-aligned by laying new pipe sections.</p>

<p><i>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> <p>iv. <i>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</i></p> <p>v. <i>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".</i></p>	
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The abovementioned list is hereinafter referred to as "**the listed activities**".

The holder is herein authorised to undertake the following alternative that includes the listed activities relating to the development.

The proposed upgrade of an existing sewerage pipeline through the Uitkamp Wetland Nature Reserve on Erven 12208 and 12196, Durbanville and will result in the excavation of more than 10 cubic metres material from the wetland area.

The upgrade of the existing sewerage pipeline, as follows:

- replacing the first section of the existing 350mm diameter wide pipeline with a 450mm diameter wide pipe at an approximate depth of 4m;
- replacing the second section of the existing 300mm diameter wide pipeline with a 400 mm diameter wide pipe at an approximate depth of 2m;
- replacing the third section of the existing 250 mm wide pipeline with a 350 mm diameter wide pipeline at an approximate depth of 1.3 – 2 m;
- replacing the fourth section of the existing 200 mm wide pipeline with a 300 mm diameter pipeline at an approximate depth of 1.3 – 2 m; and
- replacing the last section of the existing 150 mm wide pipeline with a 250 mm diameter pipeline at an approximate depth of 1.5 m.

Excavations will be required at approximately 15 side connection points (manholes) along the route. These points will be used to pull and push the new pipe into the old pipes and to connect and seal side pipes to the new pipe.

The existing pipeline will be upgraded by means of a combination of pipe-reaming or pipe-cracking methods, as well as open trench excavation.

The replaced pipeline will comprise High Density Polyethylene ("HDPE").

The total development footprint will measure approximately 7 780 m<sup>2</sup>.

### C. SITE DESCRIPTION AND LOCATION

The listed activities will be undertaken on Erven 12208 and 12196, Durbanville.

The Surveyor General (SG) 21-digit codes for the said properties are:

Erf 12208: C01600130001219600000

Erf 12196: C01600130001220800000

Co-ordinates for the starting point of the sewer pipeline are:

33° 49' 22.63" South

18° 38' 19.67" East

Co-ordinates for the middle point of the sewer pipeline are:

33° 49' 05.71" South

18° 38' 20.45" East

Co-ordinates for the end point of the sewer pipeline are:

33° 48' 43.68" South

18° 38' 29.44" East

Refer to Annexure 1: Locality Map and Pipeline Route

### D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Cornerstone Environmental Consultants (Pty) Ltd  
c/o Mr. P. J. de Villiers  
P. O. Box 12606  
Die Boord  
STELLENBOSCH  
7613

Tel.: (021) 887 9099

Email: [info@cornerstoneenviro.co.za](mailto:info@cornerstoneenviro.co.za)

### E. CONDITIONS OF AUTHORISATION

#### Scope of authorization

1. The holder is authorised to undertake the listed activities specified in Section B above in accordance with and restricted to the preferred activity alternative, described in the Final BAR dated 1 December 2020 on the site as described in Section C above.
2. Authorisation of the activities is subject to compliance with the conditions set out in this Environmental Authorisation. The holder must ensure 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.
3. 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; and

- (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 for the construction phase, must be concluded.
4. The activities that have been authorised may only be carried out at the site described in Section C above in terms of the approved "Environmental Management Programme" ("EMPr").
  5. Any changes to, or deviations from the scope of the description set out in Section B and Condition 2 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 such information 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.

### **Notification of authorisation and right to appeal**

6. The holder of the authorisation must in writing, within 14 (fourteen) calendar days of the date of this decision –
  - 6.1 notify all registered Interested and Affected Parties of –
    - 6.1.1 the outcome of the application;
    - 6.1.2 the reasons for the decision;
    - 6.1.3 the date of the decision; and
    - 6.1.4 the date of issue of the decision;
  - 6.2 draw the attention of all registered Interested and Affected Parties to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations, 2014 (as amended);
  - 6.3 draw the attention of all registered Interested and Affected Parties to the manner in which they may access the decision; and
  - 6.4 provide the registered Interested and Affected Parties 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; and
    - 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 Interested and Affected Parties in the event that an appeal is lodged in terms of the National Appeal Regulations, 2014 (as amended).

### **Commencement**

7. The listed activities, including site preparation, must not commence within 20 (twenty) calendar days from the date the applicant notified the registered Interested and Affected Parties of this decision.
8. In the event that an appeal is lodged with the Appeal Administrator, the effect of this Environmental Authorisation is suspended until such time as the appeal is decided. In the instance where an appeal is lodged the holder may not commence with the activity, including site preparation, until such time as the appeal has been finalised and the holder is authorised to do so.

### **Written notice to the competent authority**

9. A minimum of seven calendar days' notice, in writing, must be given to the competent authority before commencement of construction activities. Commencement for the purpose of this condition includes site preparation.
  - 9.1 The notice must make clear reference to the site details and EIA Reference number given above.
  - 9.2 The notice must also include proof of compliance with the following conditions described herein:  
Conditions: 6, 7, 14 and 19.1.

### **Management of activity**

10. The EMPr and MMP submitted, as dated 1 December 2020 is hereby approved and must be implemented.
11. An application for amendment of the EMPr must be submitted to the competent authority in terms of Chapter 5 of the EIA Regulations, 2014 (as amended), if any amendments are to be made to the outcomes of the EMPr and these may only be implemented once the amended EMPr has been authorised by the competent authority.
12. The EMPr and MMP must be included in all contract documentation for all phases of implementation.
13. A copy of the Environmental Authorisation, EMPr and the MMP must be kept at the site where the listed activities will be undertaken. Access to the site referred to in Section C above must be granted and the Environmental Authorisation, EMPr and MMP must be produced to any authorised official representing the competent authority who requests to see these for the purposes of assessing and/or monitoring compliance with the conditions contained herein. The Environmental Authorisation, EMPr and MMP must also be made available for inspection by any employee or agent of the applicant who works performs work at the site.

### **Monitoring**

14. The holder must appoint a suitably experienced Environment Control Officer ("ECO"), for the duration of the construction and rehabilitation phases of implementation.

The ECO must–

- 14.1 be appointed prior to commencement of any land clearing or construction activities commencing;
- 14.2 ensure compliance with the EMPr and the conditions contained herein; and
- 14.3 keep record of all activities on site; problems identified; transgressions noted and a task schedule of tasks undertaken by the ECO.

### **Environmental audit reports**

15. The holder must, for the period during which the Environmental Authorisation and EMPr remain valid –
  - 15.1 ensure that compliance with the conditions of the Environmental Authorisation and the EMPr is audited;
  - 15.2 submit at least two environmental audit reports to the relevant competent authority during the construction phase. The holder must submit one audit report three (3) months after commencement of the construction phase and another audit report six (6) months after completion of the construction period; and

- 15.3 submit an environmental audit report every five (5) years while the Environmental Authorisation remains valid.
16. The environmental audit report must be prepared by an independent person and must address the objectives and contain all the information set out in Appendix 7 of the EIA Regulations, 2014 (as amended).

In addition to the above, the environmental audit report, must –

- 16.1 provide verifiable findings, in a structured and systematic manner, on–
- (a) the level of compliance with the conditions of the Environmental Authorisation and the EMPr and whether this is sufficient or not; and
  - (b) the extent to which the avoidance, management and mitigation measures provided for in the EMPr achieve the objectives and outcomes of the EMPr and highlight whether this is sufficient or not;
- 16.2 identify and assess any new impacts and risks as a result of undertaking the activity;
- 16.3 evaluate the effectiveness of the EMPr;
- 16.4 identify shortcomings in the EMPr;
- 16.5 identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr;
- 16.6 indicate the date on which the construction work was commenced with and completed or in the case where the development is incomplete, the progress of the development and rehabilitation;
- 16.7 include a photographic record of the site applicable to the audit; and
- 16.8 be informed by the ECO reports.
17. The holder must, within 7 days of the submission of the environmental audit report to the competent authority, notify all potential and registered Interested and Affected Parties of the submission and make the report available to anyone on request and, where the holder has such a facility, place on a publicly accessible website.

### Specific conditions

18. The Maintenance Management Plan dated November 2020 submitted together with the Final BAR dated 1 December 2020 is hereby approved and must be implemented. If any amendments are to be made to the Maintenance Management Plan, these may only be implemented once the amended Maintenance Management Plan has been authorised in writing by the competent authority.
19. The following measures recommended in the Freshwater Impact Assessment Report dated November 2020 and compiled by Dr. D Grobler and Ms. T Belcher of Bluescience and Dr. C Boucher, as included in the EMPr must be implemented:
- 19.1 No-go/exclusion areas must be identified and marked where no construction activities or through fare is allowed. All no-go areas must be demarcated prior to the commencement of any construction activities.
- 19.2 No material may be stored or dumped (temporarily or semi-permanent) into the no-go/exclusion areas.
- 19.3 Rehabilitation of cleared areas must take place after construction is completed by revegetating the aquatic features with similar/rescued indigenous plants that have been removed prior to the construction phase or specifically cultivated from seeds collected in the Uitkamp Wetland.
- 19.4 No vehicle access must be allowed outside the areas demarcated as access routes.
- 19.5 The pipe-cracking and reaming process must only take place in the dry season.

- 19.6 The topsoil must be removed and stored separately to be used to re-fill the excavated and disturbed areas after construction. Topsoil must be returned to the same area from which it was removed.
  - 19.7 All materials on the construction sites must be properly stored and contained outside the no-go/exclusion areas. The storage of material must be kept to a minimum period as to prevent the compaction and destroying vegetation along the access paths and areas around the pipeline.
  - 19.8 Ablution facilities at the construction sites must be located at least 30 m away from the river/stream systems and regularly serviced.
  - 19.9 The northern section of Erf 12196, at the co-ordinates 33° 48' 44.83" South and 18° 38' 25.04" East must be regarded as a no-go area.
  - 19.10 Clearly marked poles must be erected to demarcate access routes and the outer limits of the allowable disturbance areas before any construction activities commences.
  - 19.11 Detailed Method Statements must be compiled to be used by the contractor and appointed ECO and must contain, but not limited to the following:
    - 19.11.1 the identification and marking of plant species in the flowering season in the areas that will be affected;
    - 19.11.2 collection of seeds of species that must be used for re-establishment of plants after construction has ended;
    - 19.11.3 removal and appropriate storage of plants, bulbs and seeds;
    - 19.11.4 prevention of over or under compaction in areas that are excavated to ensure maintenance of soil moisture regime; and
    - 19.11.5 re-establishment of affected plant species and vegetation in the areas to be used for access and construction activities.
    - 19.12.6 The Detailed Method Statements must be prepared in consultation with a botanist who has specific knowledge of the plants of the Uitkamp wetland area.
    - 19.11.7 The Detailed Method Statements for the restoration of the sections of vegetation that has to be removed must be submitted for approval to the City of Cape Town's Environmental and Heritage Management Branch and Biodiversity Management Branch. Approval of the Detailed Methods Statements must be obtained prior to the commencement of any restoration works and copies of the approval(s) must be submitted to this Department.
  - 19.12 The search and rescue operations of plants and seeds must be undertaken during spring and early summer as well as prior to the commencement of any construction work.
  - 19.13 Collars must be installed in the trenches at the two sections where open excavations will take place to prevent these trenches becoming preferential flow paths underground and disrupting the normal groundwater flows.
20. The following measures recommended in the report titled "Botanical management guidelines pertinent to sewer line upgrade through the Uitkamp Wetland, Durbanville" dated 14 March 2019 (updated 24 November 2020) compiled by Dr C. Boucher must be implemented:
- 20.1 All staff entering the site must attend at least one information session to be informed about allowed activities and the ethos they must practice when undertaking any activity on site.



- 20.2 The red listed Species of Conservation Concern plants must be pointed out and the staff must be directed to avoid these plants.
  - 20.3 Movement between structures within the wetland areas must be kept to the minimum and only be done on foot after a path have been identified in the method statement and mark out in the wetland area by a qualified botanist.
  - 20.4 Vehicles moving into the wetlands must avoid causing trenches by means of placing of suitable supports to drive that will carry the weight without causing subsidence.
  - 20.5 Excavated materials vertical layering must be stored and returned in their current vertical sequence.
  - 20.6 Any materials to be disposed of (e.g. subsurface clay layers) must be removed from the wetland area and disposed of in according with the appropriate approved Method Statement.
  - 20.7 All foreign materials, such as sand and stone, which are brought onto the site must be weed free and be removed once construction is complete.
  - 20.8 Geophytes (bulbs) must be marked at each excavation footprint during Spring and removed during the dry season (i.e. late Spring to Summer) for holding until it can be translocated into disturbed areas for the rehabilitation of that area.
  - 20.9 Seed must be collected during the preceding Late Spring to Autumn from plants on the site. The seeds collected must be distributed over the returned topsoil, post-construction, as part of the rehabilitation process.
  - 20.10 Topsoil must be used to fill any unnatural hollows or other disturbances created during construction (e.g. footpaths or disturbed areas resulting from the removal of structures).
  - 20.11 New structures must not be intrusive and must prevent sewer leakages and spillages into the wetland area.
- 21. Surface or ground water must not be polluted due to any actions on the site. The applicable requirements with respect to relevant legislation pertaining to water must be met.
  - 22. An integrated waste management approach, which is based on waste minimisation and incorporates reduction, recycling, re-use and disposal, where appropriate, must be employed. Any solid waste must be disposed of at a waste disposal facility licensed in terms of the applicable legislation.
  - 23. Should any heritage remains be exposed during excavations or any actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape (in accordance with the applicable legislation). 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: archaeological remains (including fossil bones and fossil shells); 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; rock art and rock engravings and graves or unmarked human burials.
  - 23.1 A qualified archaeologist must be contracted where necessary (at the expense of the applicant and in consultation with the relevant authority) to remove any human remains in accordance with the requirements of the relevant authority.

## F. 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 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 Interested and Affected Parties, 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 Interested and Affected Parties -
  - 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 Interested and Affected Party, 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 Interested and Affected Party 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:                   Attention: Marius Venter  
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 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](mailto:DEADP.Appeals@westerncape.gov.za).

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

## G. 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: 23 MARCH 2021**

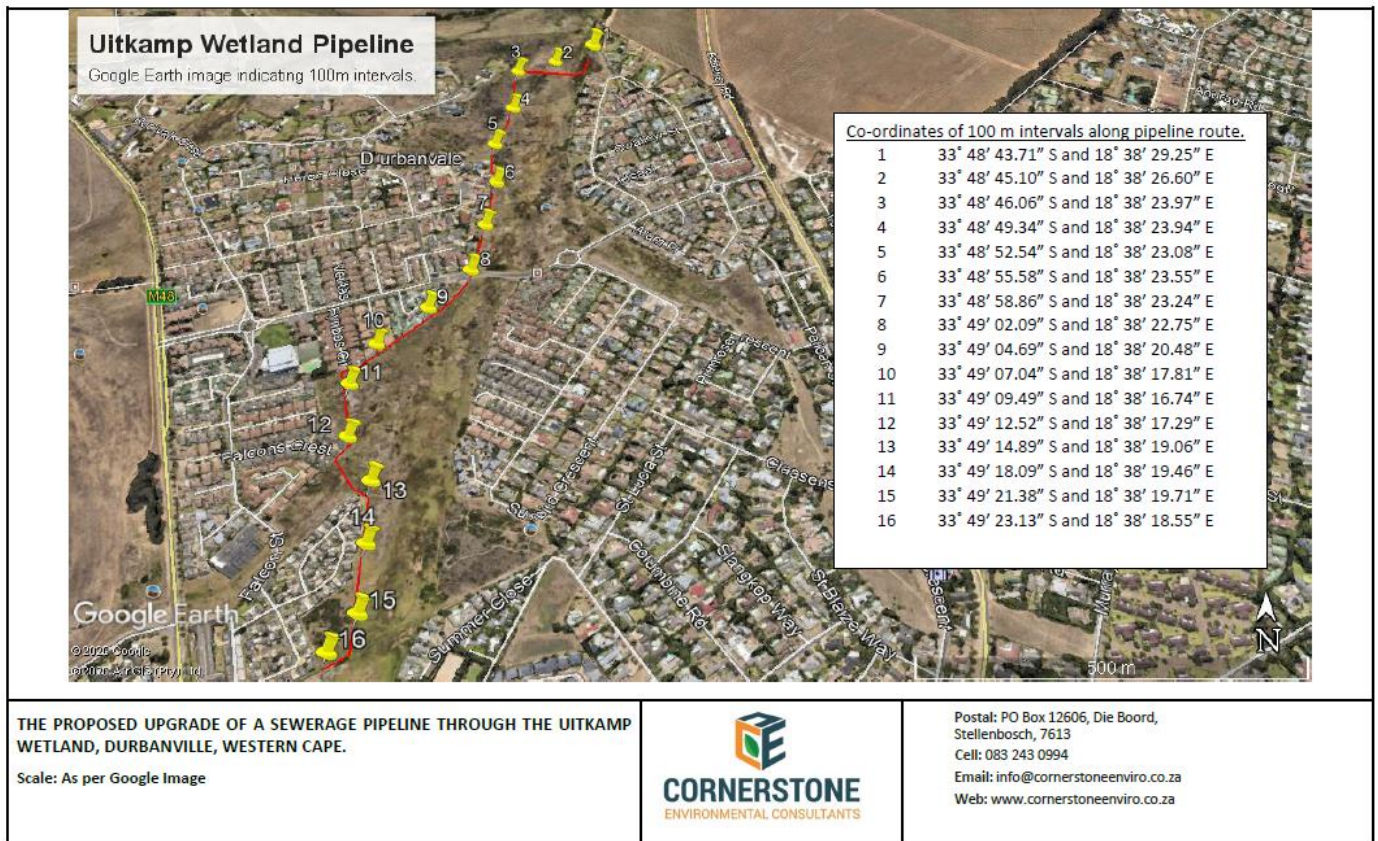
Copied to: (1) Mr. P. de Villiers (Cornerstone Environmental Consultants (Pty) Ltd.)  
(2) Ms. P. Titmuss (City of Cape Town)  
(3) Mr. D. Daniels (DWS)

Email: [pieter@cornerstoneenviro.co.za](mailto:pieter@cornerstoneenviro.co.za)  
Email: [Pat.Titmuss@capetown.gov.za](mailto:Pat.Titmuss@capetown.gov.za)  
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**FOR OFFICIAL USE ONLY:**

**EIA REFERENCE NUMBER: 16/3/3/1/A5/20/2029/20**

## ANNEXURE 1: LOCALITY MAP AND PIPELINE ROUTE



## ANNEXURE 2: REASONS FOR THE DECISION

In reaching its decision, the Competent Authority considered, *inter alia*, the following:

- a) The information contained in the Application Form dated 28 July 2020, the Final BAR received on 1 December 2020 and the Maintenance Management Plan and EMPr submitted together with the Final BAR;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation, Alternatives (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including Section 2 of the NEMA; and
- d) The comments received from Interested and Affected Parties and responses to these, included in the Final BAR dated 1 December 2020

All information presented to the Competent Authority was taken into account in the consideration of the application for Environmental Authorisation. A summary of the issues that were considered to be the most significant for the decision is set out below.

### 1. Public Participation

The public participation process included:

- Distribution of seven (7) site notices, providing information on the proposed development. These notices were fixed at various places, amongst others, to the boundary fence, around the Uitkamp Wetland Nature Reserve, etc.;
- Background Information Document ("BID") were either hand delivered or posted to occupiers of land adjacent to the site;
- a newspaper advertisement was published in the 'Tyger Burger' on 12 August 2020;
- distribution of copies of the BARs to relevant organs of state for comment;
- placement of a copy of the BARs on the Cornerstone Environmental Consultants (Pty) Ltd. website, [www.cornerstoneenviro.co.za](http://www.cornerstoneenviro.co.za); and
- availing the BAR and associated information for a 60-day commenting period from 12 August 2020 to 12 October 2020.

This Department is satisfied that the Public Participation Process that was followed met the minimum legal requirements. All the comments and responses made were included in the BAR.

### 2. Alternatives

One site alternative, one activity alternative, one layout alternative, technology alternatives, two operational alternatives as well as the no-go alternative were considered. The alternatives are:

#### Site Alternative 1 (Preferred)

This alternative entails the proposed upgrade of an existing sewerage pipeline to be undertaken on Erven 12208 and 12196, Durbanville. This is the only and preferred site alternative as the applicable erven are the very location where the proposed pipeline upgrades are required. The proposed route between the two properties also avoids the gardens of residents and therefore unnecessary property destruction.

#### Activity Alternative 1 (Preferred and herewith authorised)

The preferred activity alternative entails the upgrade of the existing sewerage pipeline, as follows:

- replacing the first section of the existing 350mm diameter wide pipeline with a 450mm diameter wide pipe at an approximate depth of 4m;
- replacing the second section of the existing 300mm diameter wide pipeline with a 400 mm diameter wide pipe at an approximate depth of 2m;

- replacing the third section of the existing 250 mm wide pipeline with a 350 mm diameter wide pipeline at an approximate depth of 1.3 – 2 m;
- replacing the fourth section of the existing 200 mm wide pipeline with a 300 mm diameter pipeline at an approximate depth of 1.3 – 2 m; and
- replacing the last section of the existing 150 mm wide pipeline with a 250 mm diameter pipeline at an approximate depth of 1.5 m.

Activity Alternative 1 is preferred as the abovementioned upgrades are sufficient to provide the necessary service capacity as required in terms of the increased sewerage demand of the area.

#### Layout alternative (Preferred)

The preferred layout alternative entails replacing the pipeline in the same alignment and on the same footprint as the existing pipeline, as far as possible in order to minimise the impact of having to create a totally new footprint. The preferred layout alternative will however deviate from the existing pipeline route in two sections, in order to avoid impacting on private gardens and private properties. This layout alternative is considered the most viable layout in order to avoid unnecessary damages to properties and is therefore deemed as the preferred alternative.

#### Technology alternatives

The installation of metal, concrete or Polyvinyl chloride ("PVC") pipes were considered, however the option of installing HDPE pipes is preferred based on the following reasons:

- a HDPE pipe has a relatively small carbon footprint when compared to metal or concrete pipes;
- a HDPE pipe is less costly to transport to the construction site than metal or concrete pipes;
- for HDPE pressure pipe systems, the fused joint creates a totally leak free system;
- a HDPE pipe does not rust and is highly resistant to mineral tuberculation; and
- a HDPE pipe and its abrasion resistance are significantly greater than metal, concrete and other plastics.

#### Operational alternative 1 (Preferred)

This alternative entails the installation of the pipeline via methods of pipe-reaming and pipe-cracking. Pipe-reaming includes a trenchless pipe replacement method that removes the host pipe, or old existing pipe, while at the same time installing a new replacement pipe. Pipe-cracking includes replacing the brittle pipes by pulling through the host pipe and pushing the fragments outwards into the surrounding ground. A new pipe attached to the back of the bursting head is installed in the same alignment as the original pipe.

Operational alternative 1 is preferred as methods of pipe-reaming and pipe-cracking reduces the terrestrial disturbance and removal of vegetation associated while construction work can be completed within a shorter period.

#### Operational alternative 2 (Rejected)

This alternative entailed the excavation of the entire pipeline by means of an open trench. This means that the existing pipe will be exposed so that it can be repaired or replaced, after which the trench will be backfilled/closed-up again.

Operational alternative 2 is not deemed as preferred and is rejected as trench excavation is a slow, destructive and labour intensive process and will result in construction noise and vibration impact caused by the machinery.

#### "No-Go" Alternative

The "no-go" alternative entails maintaining the "status quo", i.e. no upgrading of the proposed sewerage pipeline. This alternative is not deemed as preferred as an upgrade to the existing sewerage infrastructure is essential in order to supply sufficient sewerage capacity in new and existing developments in the area.

### 3. Impact Assessment and Mitigation measures

#### 3.1 Activity need and desirability

The upgrade of the existing main sewerage line is required to supply sufficient sewerage capacity for the existing and new developments in the area. The provision of sufficient municipal services and infrastructure to local communities is in line with the applicable forward planning policies. The proposal is in line with the Uitkamp Wetland Nature Reserve Integrated Reserve Management Plan (June 2011). The Management Plan states that Uitkamp Wetland Nature Reserve has a lot of infrastructure and that many of these structures are managed by the City of Cape Town and Eskom. The infrastructure includes stormwater outlets, a pump station, pipelines and power lines, which should be regularly maintained. It is clear, from the Management Plan, that infrastructure maintenance is a priority, and therefore this proposal is in line with the Management Plan, as long as the primary purpose of the reserve is kept in mind. Since the preferred alternative proposes the use of pipe-reaming and pipecracking, the terrestrial disturbance will be minimised.

#### 3.2 Biophysical Impacts

A Freshwater Impact Assessment Report dated November 2020 was compiled by Dr D Grobler and Ms. T Belcher of BlueScience and Dr C Boucher, in order to assess the potential ecological impacts (i.e. impact on the wetland and terrestrial vegetation within the Uitkamp Wetland) associated with the proposed upgrade of the sewerage pipeline located on Erven 12208 and 12196 in the Uitkamp Wetland Nature Reserve.

The Uitkamp Wetland Nature Reserve is situated along a tributary of the Mosselbank River and is a formal protection area managed by the City of Cape Town. The wetland is not mapped as a National Freshwater Ecosystem Protection Area ("NFEPA"), however the City of Cape Town Biodiversity Network Mapping, 2017 maps the Uitkamp Wetland as a natural/semi-natural valley bottom wetland with channel outflows and is a Protected area (formally declared Nature Reserve). In terms of the Critical Biodiversity Areas, the area in which the upgrade of the main sewerage pipeline will take place, is considered as Irreplaceable. According to the Freshwater Impact Assessment Report, the Uitkamp Wetland is in a moderately modified state, with the main impacts being urban development within the wetland area and both agricultural and urban development the catchment of the wetland area. However, the entire Uitkamp Wetland area is important and sensitive from a botanical perspective.

In order to try and prevent and to minimise the extent of the impacts on the wetland areas, pipe cracking methods will be used to install the new sewerage pipeline. This method prevents the need to excavate with the associated impacts of excavations. Excavations will be required at approximately 15 side connection points along the route. These points will be used to pull and push the new pipe into the old pipes and to connect and seal side pipes to the new pipeline.

Certain sections of the sewerage line will be replaced by means of open trench excavation, which together with vehicle access to the construction area will potentially impact on indigenous vegetation. More specifically, the northern section of Erf 12196 (identified as Area C in the Freshwater Impact Assessment Report), at the co-ordinates 33° 48' 44.83" South and 18° 38' 25.04" East contains important plant species and the wetland area is in good condition with free-standing water. This area will therefore be demarcated as a no-go area, which must be left unaffected by the proposed development. In order to further limit any negative impacts on the wetland as well as vegetation, planned access routes and areas to which the construction related activities must be confined, will be implemented, as recommended by the specialists.

Two areas containing silcrete outcrops were identified and will be also be avoided, while red listed Species of Conservation Concern located in the immediate surroundings of the work areas must be marked to prevent intentional or accidental damage. These provisions are included in the EMPr.

Erosion and sedimentation from the construction activities, together with invasive alien plant growth and the possible modification of surface water runoff and water quality may lead to additional impacts on the freshwater habitats. These impacts are likely to be of a moderate to low significance if suitably mitigated by means of the provisions of the EMPr and measures

contained in the Freshwater Impact Assessment dated November 2020. As further mitigation, the site will be suitably rehabilitated once construction works have been completed. The rehabilitation measures will include *inter alia*, re-vegetation of the on-site aquatic features, removal of invasive alien vegetation and stabilisation of areas where erosion due to construction activities have taken place.

In addition to the Freshwater Impact Assessment Report, a Report titled, "Botanical Management Guidelines pertinent to the sewer line upgrade through the Uitkamp Wetland, Durbanville" and dated 14 March 2019 (updated 24 November 2020), was compiled by Dr C Boucher. This report compliments the Uitkamp Wetland Reserve Integrated Reserve Management Plan (City of Cape Town, 2011) and the report assessing botanical issues relevant to the proposed sewer infrastructure upgrade through the Uitkamp Wetland (Boucher, 2013) by proposing long-term management guidelines for the sewer servitude through the wetland. The Report provides several recommendations for the proposed activities (i.e. prior to construction activities, during construction activities and post-construction rehabilitation). These recommendations have been incorporated in this Environmental Authorisation and the EMPr.

The MMP approved as part of this authorisation contains the measures and guidance as to how the maintenance activities will be undertaken along the pipeline and within the wetland area. All the measures contained in the MMP aims to avoid and/or mitigate any negative impacts on the wetland system during the maintenance activities. The MMP furthermore contains measures to improve the overall condition of the wetland area, e.g. the removal of alien vegetation.

### 3.3 Visual / sense of place

During the construction phase, visual impacts are anticipated due to the establishment of a construction area and associated land clearing activities. However, this is temporary and will be managed in accordance with the provisions of the EMPr.

On completion of the construction phase, no further visual impacts are expected, as the sewerage pipeline will be placed underground and not be visible once in operation.

### 3.4 Heritage

No areas containing sensitive heritage resources are present on site.

Heritage Western Cape ("HWC") indicated in its correspondence dated 23 February 2016 that the proposed development will not impact on heritage resources. Further comment was also obtained from HWC on 20 October 2020, who confirmed that their original comment of 23 February 2016 as still being applicable.

### 3.5 Socio-economic

The proposed development will provide temporary employment opportunities during the construction phase.

The development will result in both negative and positive impacts.

#### **Negative Impacts:**

- The development will result in the moving of material in and from the existing wetland area.
- Disturbance and removal of riparian vegetation.
- Disturbance to the bed and banks of the drainage features.

#### **Positive impacts:**

- Some employment opportunities will be created during the construction phase of the development with potential skills development.
- The project addresses the need of the surrounding community by providing sewerage infrastructure in order to accommodate the growing demand.
- The largest part of the preferred layout route will follow an existing sewerage pipeline; and
- No private gardens need be damaged during construction.



#### 4. National Environmental Management Act Principles

The National Environmental Management Principles (set out in section 2 of the NEMA, which apply to the actions of all organs of state, serve as guidelines by reference to which any organ of state must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), *inter alia*, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between organs of state through conflict resolution procedures; and
- the selection of the best practicable environmental option

#### 5. Conclusion

In view of the above, the NEMA principles, compliance with the conditions stipulated in this Environmental Authorisation, and compliance with the EMPr, the Competent Authority is satisfied that the proposed listed activities will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities can be mitigated to acceptable levels.

You are reminded of your general duty of care towards the environment in terms of Section 28(1) of the NEMA which states: *“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.”*

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