



Development Management (Region 1)
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EIA REFERENCE NUMBER: 16/3/3/1/A1/20/3002/22
NEAS REFERENCE NUMBER: WCP/EIA/0001024/2022
ENQUIRIES: Mr. R. Chambeau
DATE OF ISSUE: 22 June 2022

The Municipal Manager City of Cape Town P. O. Box 298 CAPE TOWN 8000

<u>Attention: Mr. E. Claassen</u> Tel.: (021) 400 5934

Email: <a href="mailto:Ernest.Claassen@capetown.gov.za">Ernest.Claassen@capetown.gov.za</a>

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): THE PROPOSED CONSTRUCTION OF A NEW BULK OUTFALL PIPELINE AND THE REHABILITATION OF THE EXISTING BULK OUTFALL PIPELINE IN MONTAGUE GARDENS.

- 1. With reference to the above application, this Department hereby notifies you of its decision to **grant** Environmental Authorisation, together with the reasons for the decision.
- 2. In terms of Regulation 4 of the Environmental Impact Assessment Regulations, 2014 (as amended), you are instructed to ensure, within 14 days of the date of the decision on the application, that all registered interested and affected parties ("I&APs") are provided with access to the decision 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 summarised in the Environmental Authorisation below.

Yours faithfully

MR. ZAAHIR TOEFY

**DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)** 

Copied to: (1) Ms. K. Munamati / Mr. J. Rose (Infinity Environmental (Pty) Ltd)

(2) Mr. M. Theron (City of Cape Town: ERM)

Email: <u>kakale@infinityenv.co.za</u> / <u>jeremy@infinityenv.co.za</u>

Email: Morne.Theron@capetown.gov.za

Development Management (Region 1) Rainer.Chambeau@westerncape.gov.za | Tel: 021 483 2729

**EIA REFERENCE NUMBER:** 16/3/3/1/A1/20/3002/22

#### **ENVIRONMENTAL AUTHORISATION**

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): THE PROPOSED CONSTRUCTION OF A NEW BULK OUTFALL PIPELINE AND THE REHABILITATION OF THE EXISTING BULK OUTFALL PIPELINE IN MONTAGUE GARDENS.

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 the Preferred Alternative, described in the Basic Assessment Report ("BAR") dated March 2022.

The applicant for this Environmental Authorisation is required to comply with the conditions set out in section E below.

#### DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION Α.

The Municipal Manager City of Cape Town P. O. Box 298 **CAPE TOWN** 

8000

Tel: (021) 400 5934

Email: Ernest.Claassen@capetown.gov.za

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

# B. ACTIVITY AUTHORISED

Listed Activity		Activity/Project Description	
Listing amen	Notice 1 of the EIA Regulations, 2014, (as ided):		
	ty Number: 19A ty 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—		The proposed bulk sewer pipeline will require the infilling or depositing of material of more than 5m³ (i.e. 3 000m³) within 100m of the high-water mark of the Diep River Estuary.	
(i) (ii)	the seashore; 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; or the sea; -		
	xcluding where such infilling, depositing, ying, excavation, removal or moving-		
devel	will occur behind a development setback; is for maintenance purposes undertaken in accordance with a maintenance management plan; falls within the ambit of activity 21 in this Notice, in which case that activity applies; occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or e such development is related to the opment of a port or harbour, in which case by 26 in Listing Notice 2 of 2014 applies."		
Listing Notice 3 of the EIA Regulations, 2014, (as amended):			
Activity Number: 12 Activity Description:			
"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. In the Western Cape-		The proposed bulk sewer pipeline installation will result in the clearance of approximately 1 000m <sup>2</sup> of indigenous vegetation within a critically endangered ecosystem listed in terms of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) –	

- 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;
- ii. Within critical biodiversity areas identified in bioregional plans;
- iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;
- iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or
- v. 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."

National List of Ecosystems that are Threatened and in Need of Protection (2011).

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 authorised development:

The authorised development entails the installation of a 1000mm diameter gravity bulk sewer pipeline of approximately 4.8km length in Montague Gardens. The new reinforced concrete gravity bulk outfall sewer will be installed around the eastern and northern boundaries of the Montague Gardens Industrial area and will largely occur along servitudes and reserves of the affected properties. The pipeline will commence slightly west of the Bosmansdam Road and Montague Drive intersection at its southern extent and will then turn northwards between Railway Road and Station Road following Platinum Street, Esso Road and Stella Road before turning northwards again towards Koeberg Road where it will connect to the Koeberg Road Pump Station.

The manholes will be covered with reinforced concrete slabs. In areas where the sewer will be adjacent to aquatic features and where indigenous vegetation of up to 1 000m<sup>2</sup> will be cleared, micro tunnelling will be utilised to minimise impacts while open trenching will be used in other sections.

A minimum buffer of approximately 15m between the proposed pipeline and the Duikersvlei canal and associated wetland will be applied to avoid any potential impacts on the freshwater features. Following the installation of the proposed bulk sewer, the existing Montague Bulk Sewer will be rehabilitated using the non-intrusive method of cure-in-place pipe.

### C. SITE DESCRIPTION AND LOCATION

The authorised listed activities will be undertaken on Erven 3624-RE, 8/RE, 1754, 1422-RE, 4672, CA245-27-RE, 2434, RE/1428, RE/1432, 40200-RE, 9379/RE, RE/27, RE/7170, Erf 28, RE/38602, Erf 105727, RE/1607 and RE/20988, Montague Gardens.

The 21-digit Surveyor General codes for the proposed site are:

3624-RE	C01600360000362400000
8/RE	C0160036000000800000
1754	C01600360000175400000
1422-RE	C01600360000142200000
4672	C01600360000467200000
CA245-27-RE	C0160000000024500027
2434	C01600360000243400000
RE/1428	C01600360000142800000
RE/1432	C01600360000143200000
40200-RE	C01600190004020000000
9379/RE	C01600340000937900000
RE/27	C01600360000002700000
RE/7170	C01600360000717000000
Erf 28	C01600360000002800000
RE/38602	C01600340003860200000
Erf 105727	C01600070010572700000
RE/1607	C01600360000160700000
RE/20988	C01600340002098800000

The site co-ordinates for the proposed pipeline installation are:

Starting point	33° 03'48.82" South	18° 31'13.55" East
Middle point	33° 51'35.03" South	18° 31'40.72" East
End point	33° 50'53.23" South	18° 31'12.25" East

The co-ordinates for the Duikersvlei Canal and associated wetland (which are located north of Platinum Street and Esso Road) are as follows:

Duikersvlei Canal (middle point)	33° 51'12.66" South	18° 31'42.46" East
Wetland (middle point)	33° 51'9.25" South	18° 31'31.53" East

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

The said section of land is hereinafter referred to as "the site".

# D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Infinity Environmental (Pty) Ltd. c/o Ms. Kakale Munamati / Mr. Jeremy Rose Suite 17 Private Bag X11 MOWBRAY

7705

Cell.: (061) 415 9968

Email: <u>kakale@infinityenv.co.za</u> / <u>jeremy@infinityenv.co.za</u>

### E. CONDITIONS OF AUTHORISATION

### Scope of authorisation

- 1. The holder is authorised to undertake the listed activities specified in Section B above in accordance with and restricted to the Preferred Alternative described in the BAR dated March 2022 on the site described in Section C above.
- 2. The holder must commence with, and conclude, the listed activities within the stipulated validity period, which this Environmental Authorisation is granted for, or this Environmental Authorisation shall lapse and a new application for Environmental Authorisation must be submitted to the competent authority.

This Environmental Authorisation is granted for-

- a. A period of five (5) years, from the date of issue, during which period the holder must commence with the authorised listed activities; and
- b. A period of ten (10) years, from the date the holder commenced with an authorised listed activity during which period the authorised listed activities for the construction phase, must be concluded.
- 3. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
- 4. Any changes to, or deviations from the scope of the alternatives described in section B above must be 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. A minimum of 7 (seven) calendar days' notice, in writing must be given to the Competent Authority before commencement of development activities.
  - 5.1. The notice must make clear reference to the site details and EIA Reference number given above.
  - 5.2. The notice must also include proof of compliance with the following conditions described herein:

Conditions: 6, 7 and 10.

### Notification and administration of appeal

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

- 6.2. Draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations, 2014 (as amended) detailed in Section G below;
- 6.3. Draw the attention of all registered I&APs to the manner in which they may access the decision;
- 6.4. Provide the registered I&APs with:
  - 6.4.1. name of the holder (entity) of this Environmental Authorisation,
  - 6.4.2. name of the responsible person for this Environmental Authorisation,
  - 6.4.3. postal address of the holder,
  - 6.4.4. telephonic and fax details of the holder,
  - 6.4.5. e-mail address, if any, of the holder,
  - 7.4.6. the contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the National Appeal Regulations, 2014 (as amended).
- 7. The listed activities, including site preparation, must not be commenced with within 20 (twenty) calendar days from the date the holder 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 activities, including site preparation, must not be commenced with until the appeal is decided.

### Management of activity

- 8. The Environmental Management Programme ("EMPr") (dated March 2022) and submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented.
- 9. The EMPr must be included in all contract documentation for all phases of implementation.

### Monitoring

- 10. The holder must appoint a suitably experienced Environmental Control Officer ("ECO") before commencing with development activity to ensure compliance with the provisions of the EMPr and the conditions contained in this Environmental Authorisation.
- 11. A copy of the Environmental Authorisation, EMPr, Environmental Audit Reports and compliance monitoring reports must be kept at the office of the EA holder of the authorised listed activities and must be made available to any authorised person on request.
- 12. Access to the site referred to in Section C above must be granted and the environmental reports mentioned above must be produced, to any authorised official representing the Competent Authority who requests to see these for the purpose of assessing and/or monitoring compliance with the conditions contained herein.

### **Auditing**

13. In terms of Regulation 34 of the EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation and the EMPr and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Reports must be prepared by an independent person and must contain all the information required in Appendix 7 of the EIA Regulations, 2014 (as amended).

- 13.1. The holder must undertake an environmental audit within three (3) months of the commencement of the listed activities and submit an Environmental Audit Report to the Competent Authority within one (1) month of completion of the environmental audit.
- 13.2. Thereafter, the holder must undertake an environmental audit every two (2) years during the construction period and submit the Environmental Audit Reports to the Competent Authority one (1) month after the completion of undertaking each of the environmental audits.
- 13.3. A final Environmental Audit Report must be submitted to the Competent Authority within one (1) year after the completion of the development phase.
- 13.4. The holder must, within 7 (seven) days of the submission of the Environmental Audit Report to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request.

### **Specific conditions**

- 14. Should any heritage resources be discovered during the execution of the activities above, all works must be stopped immediately and the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape must be notified without delay. 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 bones and fossil shells); coins; indigenous and/ or colonial ceramics; any articles of value or antiquity; stone artifacts and bone remains; structures and other built features with heritage significance; rock art and rock engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.
- 15. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate avoidance, reduction, recycling, treat, reuse and disposal where appropriate. Uncontaminated building rubble generated on the premises can be used as back-filling material on site. Ensure that no refuse or rubble generated on the premises is placed, dumped or deposited in the recreated wetland area.
- 16. Surface, storm 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.
- 17. The recommendations provided in the Geotechnical Investigation (compiled by SRK Consulting and dated January 2022), as included in the EMPr, must be implemented.
- 18. The recommendations provided in the Aquatic Ecosystem Delineation and Risk Assessment (compiled by BlueScience and dated August 2021), as included in the EMPr, must be implemented.
- 19. A minimum buffer of approximately 15m between the proposed pipeline and the Duikers Canal and associated wetland must be maintained during all phases of the proposed development. The buffer must be adequately demarcated prior to the commencement of the development activities within the Duikers Canal and associated wetland area.
- 20. The recommendations provided in the Botanical Assessment (compiled by KC Phyto Enterprises CC and dated 24 November 2021 and revised 07 December 2021), as included in the EMPr, must be implemented.
- 21. Employment opportunities must be afforded to the local community (as far as possible) during all phases of the proposed development.

### F. GENERAL MATTERS

- 1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activities.
- 2. Non-compliance with a condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.
- 3. If the holder does not commence with the listed activities within the period specified in Condition 2, this Environmental Authorisation shall lapse for those activities, and a new application for Environmental Authorisation must be submitted to the Competent Authority. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be made to the Competent Authority prior to the expiry date of the Environmental Authorisation.
- 4. An application for amendment of the Environmental Authorisation must be submitted to the Competent Authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for Amendment in terms of Part 1 of the EIA Regulations, 2014 (as amended) must be submitted.
  - Please note that an amendment is not required if there is a change in the contact details of the holder. In this case, the Competent Authority must only be notified of such changes.
- 5. The manner and frequency for updating the EMPr is as follows:

Amendments to the EMPr, must be made in accordance with Regulations 35 to 37 of the EIA Regulations, 2014 (as amended) or any relevant legislation that may be applicable at the time.

### G. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations, 2014 (as amended).

- 1. An appellant must
  - 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 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 Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
- 3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organ of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.

4. The appeal form/s must be submitted by means of one of the following methods:

By post: Attention: Mr. M. Venter

Western Cape Ministry of Local Government, Environmental Affairs and

Development Planning Private Bag X9186 CAPE TOWN

0008

By facsimile: (021) 483 4174; or

By hand: Attention: Mr. M. Venter (Tel: 021 483 3721)

Room 809

8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

5. The prescribed appeal form, as well as assistance regarding the appeal processes is obtainable from the office of the appeal authority/ at: Tel. (021) 483 3721, E-mail DEADP.Appeals@westerncape.gov.za or URL http://www.westerncape.gov.za/eadp.

### H. DISCLAIMER

The Western Cape Government, the holder, 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 greatly appreciated.

Yours faithfully

MR. ZAAHIR TOEFY

**DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)** 

**DATE OF DECISION: 22 JUNE 2022** 

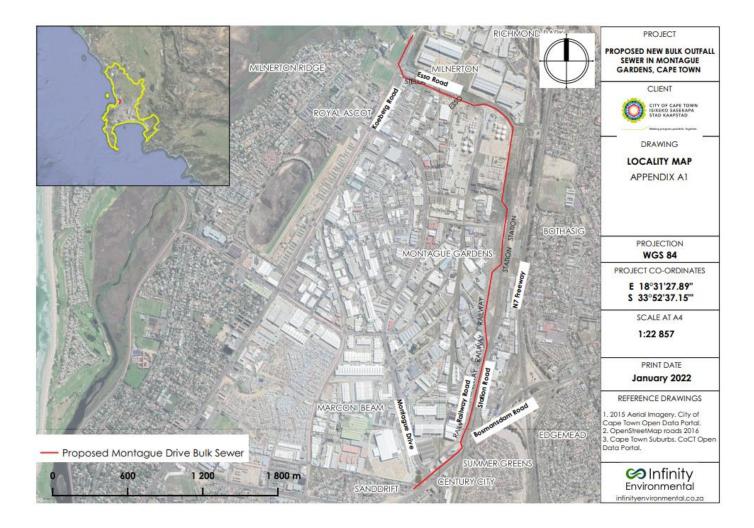
Copied to: (1) Ms. K. Munamati / Mr. J. Rose (Infinity Environmental (Pty) Ltd)

(2) Mr. M. Theron (City of Cape Town)

Email: <u>kakale@infinityenv.co.za</u> / <u>jeremy@infinityenv.co.za</u> Email: <u>Morne.Theron@capetown.gov.za</u>

# **ANNEXURE 1: LOCALITY MAP**

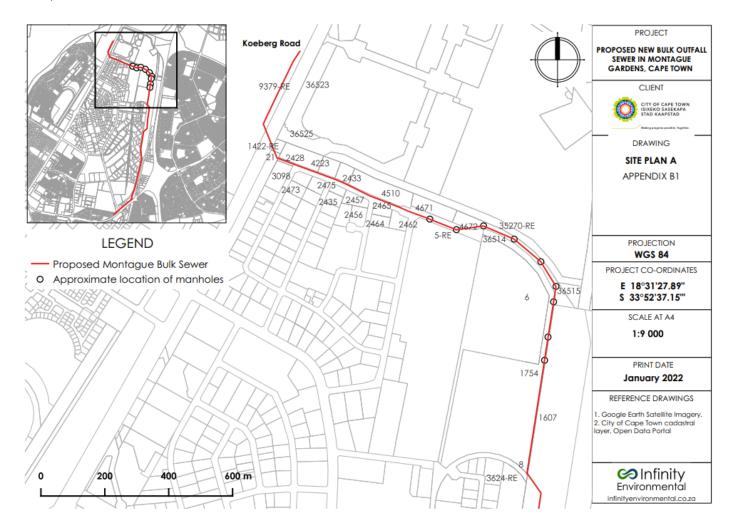
Locality map of the proposed development is demarcated in red below.

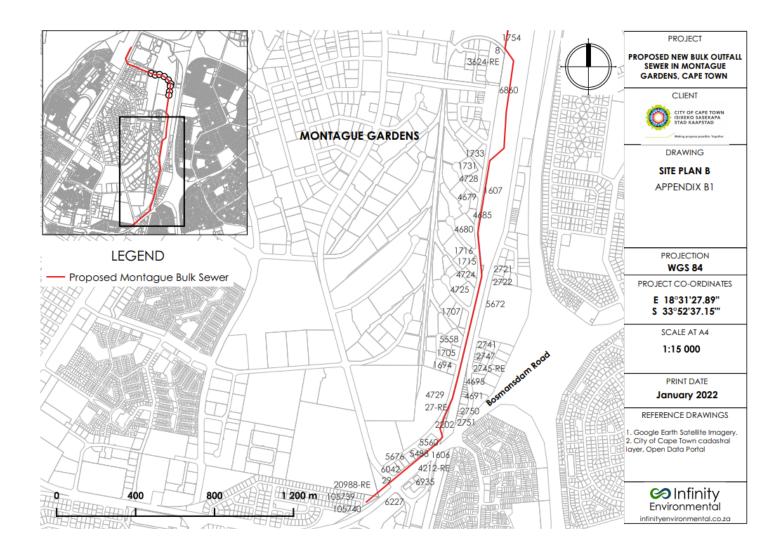


### **ANNEXURE 2: SITE PLANS**

Site plan for the proposed installation.

### Site plan A





### **ANNEXURE 3: REASONS FOR THE DECISION**

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

- a) The information contained in the application form dated and received by the competent authority on 11 January 2022, the BAR and the amended application form dated March 2022 and received by the competent authority on 11 March 2022 and the EMPr (dated March 2022) submitted together with the BAR:
- b) Relevant information contained in the Departmental information base, including, the Guidelines on Public Participation, Alternatives and Exemptions (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the NEMA;
- d) The comments received from I&APs and responses to these, included in the BAR dated March 2022;
- e) The balancing of negative and positive impacts and proposed mitigation measures; and
- f) No site visits were conducted. The competent authority had sufficient information before it to make an informed decision without conducting a site visit.

All information presented to the competent authority was taken into account in the consideration of the application for environmental authorisation. A summary of the issues which, according to the competent authority, were the most significant reasons for the decision, is set out below.

### 1. Public Participation

The Public Participation Process ("PPP") was undertaken in accordance with an approved Public Participation Plan (approved on 16 November 2021) and entailed the following:

- Identification of and engagement with I&APs;
- Fixing two notice boards at the site where the listed activities are to be undertaken on 19 January 2022;
- Giving written notice to the owners and occupiers of land adjacent to the site where the listed
  activities are to be undertaken, the municipality and ward councillor, and the various organs of
  state having jurisdiction in respect of any aspect of the listed activities on 19 January 2022 and
  26 January 2022;
- The placing of a newspaper advertisement in the "Tygerburger" on 19 January 2022;
- Placing the draft BAR on the EAP's website from 19 January 2022 to 25 February 2022;
- Placing the draft BAR at the Milnerton Library from 26 January 2022 to 25 February 2022; and
- Making the draft BAR available to I&APs for comment from 19 January 2022 to 18 February 2022, which was extended to 25 February 2022 due to amendments made to the draft BAR.

All of the concerns raised by I&APs were responded to and adequately addressed during the public participation process. This Department is satisfied that the PPP that was followed met the minimum legal requirements and all the comments raised and responses thereto were included in the comments and responses report. Specific management and mitigation measures have been considered in this Environmental Authorisation and in the EMPr to adequately address the concerns raised.

#### 2. Alternatives

Site and Activity Alternatives were investigated as follows:

The criteria for the preferred site alternative took cognisance of the alignment of the existing bulk sewer pipeline, existing servitudes and road reserves and the fact that the proposed development must connect to the Koeberg Road Pump Station and the pump station west of the Montague Drive and Bosmansdam Road intersection without significantly impacting on existing built structures and ecological features.

In terms of activity alternatives, the options of repairing the existing sewer pipeline, constructing a new sewer pipeline and microtunnelling only and constructing a new sewer pipeline with a combination of microtunneling and open trenching were investigated. Based on the need to have uninterrupted sewage services and reduce the risk of structural failure of the existing sewer pipeline whilst repairing the existing sewer pipeline, the construction of a new sewer pipeline with a combination of microtunneling and open trenching was deemed preferred.

## The preferred alternative (herewith authorised) is therefore as follows:

The preferred alternative entails the installation of a 1000mm diameter gravity bulk sewer pipeline of approximately 4.8km length in Montague Gardens. The new reinforced concrete gravity bulk outfall sewer will be installed around the eastern and northern boundaries of the Montague Gardens Industrial area and will largely occur along servitudes and reserves of the affected properties. The pipeline will commence slightly west of the Bosmansdam Road and Montague Drive intersection at its southern extent and will then turn northwards between Railway Road and Station Road following Platinum Street, Esso Road and Stella Road before turning northwards again towards Koeberg Road where it will connect to the Koeberg Road Pump Station.

The manholes will be covered with reinforced concrete slabs. In areas where the sewer will be adjacent to aquatic features and where indigenous vegetation of up to 1 000m<sup>2</sup> will be cleared, micro tunnelling will be utilised to minimise impacts while open trenching will be used in other sections.

A minimum buffer of approximately 15m between the proposed pipeline and the Duikersvlei canal and associated wetland will be applied to avoid any potential impacts on the freshwater features. Following the installation of the proposed bulk sewer, the existing Montague Bulk Sewer will be rehabilitated using the non-intrusive method of cure-in-place pipe.

The preferred alternative incorporates the criteria used to determine the best practical environmental option. The preferred alternative further incorporates the recommendations of the freshwater and botanical specialists into the design of the route of the proposed pipeline.

### "No-Go" Alternative

The "No-Go" alternative would result in maintaining the "status quo". However, since the preferred alternative will not result in unacceptable environmental impacts, the "No-Go" alternative was not warranted.

## 3. Impact Assessment and Mitigation measures

### 3.1. Activity Need and Desirability

The existing Montague Drive bulk sewer conveys sewage from the intersection of Railway Road and Montague Drive to the Koeberg Sewer Pump Station located along Koeberg Road. The existing bulk sewer has, due to corrosion and ageing infrastructure, become a bulk sewer with a high estimated risk for structural failure. Due to its route (i.e. routed underneath roads and within close proximity to the Theo Marais stormwater canal), a significant negative impact to road users and the Diep River Estuary could occur in the event of structural failure. In addition, the existing bulk sewer will not be able to accommodate future design flows for the larger catchment area.

The proposed new bulk sewer will alleviate the use and pressure on the existing network, which will also provide an opportunity for the existing bulk sewer to be rehabilitated once the proposed bulk sewer is operational.

The Blaauwberg District Environmental Management Framework identifies the Montague Drive sewer as a priority bulk infrastructure project. The Western Cape Provincial Spatial Development Framework (2014), identifies the development of bulk infrastructure which includes sewer as a necessary step to Policy E1, using regional infrastructure investment to leverage economic growth. While the sewer does not service a regional market, in the local context, the prioritisation of the development of the sewer will contribute to leveraging of economic growth. The proposed development is therefore in line with the planning policies applicable to the area.

### 3.2. Botanical Impacts

A Botanical Assessment Report (compiled by KC Phyto Enterprises CC and dated 24 November 2021 and revised 07 December 2021) was undertaken to determine the potential botanical impacts associated with the proposed development. The specialist indicated that the proposed site is not mapped as a Critical Biodiversity Area, Ecological Support Area or Other Natural Area and does not form part of the City of Cape Town's Biodiversity Network.

An area of approximately 6.3ha in extent along the route of the proposed development was screened for botanical sensitivity. Area of approximately 5700m², located between the railway track and the fence along Platinum Street was further assessed by the specialist as Cape Flats Sand Fynbos vegetation was noted in this area. The remainder of the proposed site was not deemed botanically sensitive due to past and ongoing physical and biological disturbances.

No species of conservation concern were noted by the specialist. Although some indigenous vegetation will be lost as a result of the proposed development, the specialist indicated that given the position of the proposed pipeline along the western perimeter of the site, its construction should have little or no direct impact on the indigenous vegetation. The potential botanical impacts have been deemed to be of low negative significance post mitigation and recommended mitigation measures have been provided by the specialist. The specialists' recommendations have been included as a condition in this Environmental Authorisation and has been included in the EMPr.

### 3.3. Aquatic impacts

An Aquatic Ecosystem Delineation and Risk Assessment (compiled by BlueScience and dated August 2021) to evaluate the potential impacts the proposed development may have on freshwater features located within close proximity to the proposed development.

The aquatic features located along the route of the proposed development consist of the Duikersvlei Canal and associated wetland area, an isolated wetland adjacent to the railway line and the Rietvlei, which is located approximately 300m away from the proposed development. According to the specialist, the Duikersvlei Canal and wetland areas are largely artificial or highly modified features. The wetland areas are, due to its modified and fragmented condition, considered to be largely to seriously modified in terms of habitat integrity. The wetland areas are considered of moderate to low ecological importance and sensitivity that provides limited ecological goods and services. The potential for disturbance or modification of aquatic habitat is expected to be very low to negligible during the construction and operational phases of the proposed development. A minimum setback/buffer area of approximately 15m between the wetland areas and the proposed development has been recommended by the specialist. This recommendation has been included in the placement and design of the proposed pipeline. Additional mitigation measures have been provided by the specialist. The recommendations of the specialist have been as a condition in this Environmental Authorisation and in the EMPr.

The Department of Forestry, Fisheries and the Environment: Oceans and Coasts Branch indicated (in their correspondence dated 25 February 2022) that they were in support of the proposed development and provided further mitigation measures. These mitigation measures have been included in the EMPr. In addition, this Department's Directorate: Pollution and Chemicals Management indicated in their correspondence dated 21 February 2022, that they support the application subject to mitigation measures being implemented as included in the EMPr.

3.4. Section 63 of the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008)

Section 63 of the National Environmental Management: Integrated Coastal Management Act 2008 (Act No. 24 of 2008) ("NEM:ICMA") sets out relevant factors that must be taken into account by the competent authority in considering whether to grant an environmental authorisation for coastal activities – i.e. activities in terms of NEMA which take place within the coastal zone, including coastal public property and estuaries. The northern section of the sewer route, where it lies adjacent to Koeberg Road, occurs in the Estuarine Functional Zone of the Diep River Estuary, defined as including all areas less than 5 m above mean sea level.

The proposed development lies behind the coastal management line, which has been established in terms of Section 25(1) of the NEM:ICMA to promote risk averse and sustainable coastal development. Although the proposed development may not directly impact on the coast, the proposed development is located within the Estuarine Functional Zone of the Diep River Estuary.

### 3.5. Geotechnical impacts

A Geotechnical investigation (compiled by SRK Consulting and dated January 2022) was undertaken to determine the geotechnical aspects of the proposed site. The investigation involved machine excavation of test pits, soil profiling, DPL penetrometer tests, DPSH testing, and borehole drilling to confirm the soil profile and consistency, and laboratory tests for soil classification and to determine the compaction properties.

The site is underlain by very loose to loose consistency fill sand to a depth of about 1.0m and Aeolian sand to about 1.50m below surface. The upper 1.50m of the soil profile is generally non-cohesive and compressible material, unstable trench sidewalls may be expected.

The underlying materials classify as "Soft" excavation to a depth of at least 3m to 4.0m below surface. The pipeline founding level of about 4m to 5m below surface should therefore, be a suitable horizon for the pipe to be installed using trenchless technology (horizontal directional drilling).

Groundwater seepage was encountered at a depth of between 1.7m and 2.8m below surface (Summer condition). While the water table can be expected to rise during wet periods (i.e. winter), groundwater is expected to effect sidewall stability. The water table should not negatively affect the trenchless pipe installation methods (directional drilling) as it can be done from surface and is performed by using slurry type machines. The recommended mitigation measures of the specialist have been included in the EMPr.

### 3.6. Heritage Impacts

A Notice of Intent to Develop was submitted to Heritage Western Cape. Heritage Western Cape confirmed (in their correspondence dated 20 November 2019) that since there is no reason to believe that the proposed new sewer pipeline will impact on heritage resources, no further action under Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) is required.

The development will result in both negative and positive impacts.

Negative Impacts include:

- The loss of indigenous vegetation;
- The potential modification to the aquatic habitat;
- Potential traffic impacts; and
- Construction-related noise, dust and vibration.

### Positive impacts include:

- Functional sewer with increased sewerage network capacity;
- Provision of essential municipal infrastructure:
- The creation of some employment opportunities;
- Reduced risk in structural failure of the existing bulk sewer; and
- Improved service delivery.

# 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.

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."

