



EIA REFERENCE: 16/3/3/1/A5/87/2005/23
NEAS REFERENCE: WCP/EIA/0001233/2023
DATE OF ISSUE: 24 JULY 2023

The Municipal Manager
City of Cape Town
12 Hertzog Boulevard
CAPE TOWN
8001

For Attention: Ms. Riana Pretorius

Tel.: (021) 444 0604

E-mail: Riana.Pretorius@capetown.gov.za

Dear Madam

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) ("NEMA") AND THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014 (AS AMENDED): THE PROPOSED INFORMAL SETTLEMENT UPGRADE THROUGH THE PROVISION OF A MAXIMUM OF TWENTY (20) FORMALLY SERVICED STANDS FOR EXISTING BACKYARD DWELLERS ON ERF 148, PHILADELPHIA

1. With reference to the above application, the Department hereby notifies you of its decision to **grant** Environmental Authorisation, attached herewith, together with the reasons for the decision.
2. In terms of Regulation 4 of the Environmental Impact Assessment Regulations, 2014 (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 summarized in the Environmental Authorisation below.

Your interest in the future of the environment is greatly appreciated.

Yours faithfully

MR. ZAAHIR TOEFY

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

WESTERN CAPE GOVERNMENT: ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

Copied to:

- (1) Ms. Sonja Warnich-Stemmet (City of Cape Town)
- (2) Ms. Kozette Myburgh (Ecosense CC)
- (3) Mr. Andre Oosthuizen (DEA&DP: DDF)

E-mail: sonja.warnichstemmet@capetown.gov.za

E-mail: kozette@ecosense.co.za

E-mail: andre.oosthuizen@westerncape.gov.za



EIA REFERENCE: 16/3/3/1/A5/87/2005/23
NEAS REFERENCE: WCP/EIA/0001233/2023
DATE OF ISSUE: 24 JULY 2023

ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) ("NEMA") AND THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014 (AS AMENDED): THE PROPOSED INFORMAL SETTLEMENT UPGRADE THROUGH THE PROVISION OF A MAXIMUM OF TWENTY (20) FORMALLY SERVICED STANDS FOR EXISTING BACKYARD DWELLERS ON ERF 148, PHILADELPHIA

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 1, described in the final Basic Assessment Report ("BAR"), dated May 2023.

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

A. DETAILS OF THE HOLDER FOR THIS ENVIRONMENTAL AUTHORISATION

City of Cape Town
C/O Ms. Riana Pretorius
12 Hertzog Boulevard
CAPE TOWN
8001

Tel.: (021) 444 0604
E-mail: Riana.Pretorius@capetown.gov.za

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

B. LISTED ACTIVITY AUTHORISED

Listed Activity	Activity/Project Description
<p>Listing Notice 1 of the EIA Regulations, 2014 (as amended)–</p> <p>Activity Number: 12 Activity Description: <i>“The development of—</i></p> <p>(i) <i>dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or</i></p> <p>(ii) <i>infrastructure or structures with a physical footprint of 100 square metres or more;</i></p> <p><i>where such development occurs—</i></p> <p>(a) <i>within a watercourse;</i></p> <p>(b) <i>in front of a development setback; or</i></p> <p>(c) <i>if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; —</i></p> <p><i>excluding—</i></p> <p>(aa) <i>the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</i></p> <p>(bb) <i>where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;</i></p> <p>(cc) <i>activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;</i></p> <p>(dd) <i>where such development occurs within an urban area;</i></p> <p>(ee) <i>where such development occurs within existing roads, road reserves or railway line reserves; or</i></p> <p>(ff) <i>the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared”.</i></p>	<p>A maximum of twenty (20) formally serviced stands located outside an urban area, with a development footprint exceeding 100 square metres, will be established within 32m of the wetland/watercourse.</p>
<p>Listing Notice 3 of the EIA Regulations, 2014 (as amended)–</p> <p>Activity Number: 4 Activity Description: <i>“The development of a road wider than 4 metres with a reserve less than 13,5 metres.</i></p> <p>i. Western Cape</p> <p>i. Areas zoned for use as public open space or equivalent zoning;</p> <p>ii. Areas outside urban areas;</p> <p>(aa) <i>Areas containing indigenous vegetation;</i></p>	<p>A road wider than 4 metres with a reserve less than 13,5 metres will be constructed on land zoned Open Space, located outside an urban area.</p>

<p>(bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or</p> <p>iii. Inside urban areas:</p> <p>(aa) Areas zoned for conservation use; or</p> <p>(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority".</p>	
<p>Listing Notice 3 of the EIA Regulations, 2014 (as amended)–</p> <p>Activity Number: 15</p> <p>Activity Description:</p> <p>"The transformation of land bigger than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, such land was zoned open space, conservation or had an equivalent zoning, on or after 02 August 2010.</p> <p>f. Western Cape</p> <p>i. Outside urban areas, or</p> <p>ii. Inside urban areas:</p> <p>(aa) Areas zoned for conservation use or equivalent zoning, on or after 02 August 2010;</p> <p>(bb) A protected area identified in terms of NEMPAA, excluding conservancies; or</p> <p>(cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act as adopted by the competent authority".</p>	<p>The land to be transformed measures approximately 4 565 square metres and is located outside an urban area.</p>

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 provision of a maximum of twenty (20) formally serviced sites. Each serviced site will measure approximately 72 squares meter in extent. The associated infrastructure comprises of the following:

- One (1) septic/interceptor tank to connect to the existing sewer line leading to the evaporation ponds;
- One (1) Public Open Space Erven;
- Associated roads, including an approximately 8m wide traffic circle;
- Stormwater infrastructure; and
- Associated landscaping.

Access to site will be gained from the existing Baken Street, Philadelphia, necessitating the existing secondary pedestrian access from Baken Street to be closed off.

The total development footprint amounts to approximately 0.4565ha.

C. SITE DESCRIPTION AND LOCATION

The Listed Activities will be undertaken on Erf 148, Philadelphia, which is located off Baken Street, Philadelphia.

The SG 21-digit code is given below:

Erf 148, Philadelphia	C01600440000014800000
-----------------------	-----------------------

The co-ordinates are given below:

	Latitude (S)	Longitude (E)
Erf 148, Philadelphia	33° 39' 55.24" South	18° 35' 13.43" East

Refer to **Annexure 1**: Locality Map. Refer to **Annexure 2**: Site Layout Plan.

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

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Ecosense CC
C/O Ms. Kozette Myburgh
58 The Glades
Wedderwill
SIR LOWRY'S PASS
7133

Tel.: (021) 161 0258

E-mail: kozette@ecosense.co.za

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 1 described in Section B above.
2. The holder must commence with, and conclude, the Listed Activities within the stipulated validity period which this Environmental Authorisation is granted for, or this Environmental Authorisation shall lapse and a new application for Environmental Authorisation must be submitted to the competent authority.

This Environmental Authorisation is granted for –

- (a) A period of five (**5**) years, from the date of issue, during which period the holder must commence with the authorised Listed Activities.
 - (b) A period of ten (**10**) years, from the date the holder commenced with the authorised Listed Activities, during which period the authorised Listed Activities must be concluded.
3. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his behalf, including an implementing agent, sub-contractor, employee or any person rendering a service to the holder.
 4. Any changes to, or deviations from the scope of the alternative described in section B above must be approved in writing by the Competent Authority before such changes or deviations may be implemented. In assessing whether or not to grant such approval, 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 written notice of seven (7) calendar days must be given to the Competent Authority before construction work can be commenced with.
 - 5.1. The notice must make clear reference to the site details and EIA Reference number given above.
 - 5.2. The notice must include proof of compliance with the following conditions described herein:

Conditions: 6, 7 and 11.

Notification of Environmental Authorisation and Administration of Appeal

6. The holder must in writing, within fourteen (14) calendar days of the date of this decision—
 - 6.1. notify all registered Interested and Affected Parties ("I&APs") of –
 - 6.1.1. the decision reached on 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 the:
 - 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; and
 - 6.4.6. contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the National Appeals Regulations, 2014 (as amended).

Commencement

7. The Listed Activities, including site preparation, must not be commenced with within (20) twenty calendar days from the date the applicant notifies the registered I&APs of this decision.
8. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided.

Management of Activity

9. The draft Environmental Management Programme ("EMPr") (dated May 2023), is hereby approved and must be implemented.
10. The Environmental Authorisation and EMPr must be included in all contract documentation for all phases of implementation.

Monitoring

11. The holder must appoint a suitably experienced Environmental Control Officer ("ECO") before the Listed Activities can be commenced with, to ensure compliance with the EMPr and the conditions contained herein. The ECO must submit ECO reports on a quarterly basis for the duration of the construction phase.
12. A copy of the Environmental Authorisation, EMPr, ECO reports, audit reports and compliance monitoring reports must be kept at the contractor's site office during the construction phase and thereafter the said documents must be kept at the office of the holder and must be made available to any authorised official of the Competent Authority on request.
13. Access to the site referred to in Section C must be granted, and the environmental reports mentioned above must be produced, to any authorised official representing the Competent Authority who requests to see the reports for the purposes of assessing and/or auditing compliance with the conditions contained herein.

Auditing

14. 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. Environmental audit reports must be compiled and be submitted to the Competent Authority. 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).
15. The audit reports must be compiled and subsequently submitted to the Competent Authority in the following manner:
 - 15.1. An audit report must be submitted to the Competent Authority within **six (6) months** of the commencement of the construction phase; and
 - 15.2. A final audit report must be submitted within **three (3) months** of the proposed development being completed.
 - 15.3. The holder must submit an environmental audit report **every five (5) years** while the Environmental Authorisation remains valid.
16. The audit report must indicate compliance status with the conditions of this Environmental Authorisation, and the EMPr and make recommendations for improved environmental management.
17. The holder must, within **seven (7) calendar days** of the submission of the audit report to the Competent Authority, notify all registered I&APs of the submission and make the audit report available to any registered I&AP on request and, where the holder has such a facility, place on a publicly accessible website.

Specific Conditions

18. Should any heritage remains be exposed during excavations or any other actions on the site, this must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be disturbed further until the necessary approval has been obtained from Heritage Western Cape.

Heritage remains include, *inter alia*, meteorites, archaeological and/or paleontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features with heritage significance; rock art and rock

engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.

19. A qualified archaeologist and/or paleontologist must be contracted where necessary (at the expense of the holder) to remove any heritage remains. Heritage remains can only be disturbed by a suitably qualified heritage specialist working under a directive from the relevant heritage resources authority.
20. An integrated waste management approach must be used that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste that cannot be recycled, re-use shall be disposed of at a licensed waste disposal facility.
21. The following recommendation, adapted from the final BAR (dated May 2023 and compiled by Ms. Kozette Myburgh of Ecosense CC), must be implemented:
 - 21.1. Appropriate structural elevation measures must be implemented to reduce any flood risk.
22. The following recommendations, adapted from the Geotechnical Site Investigation Report (dated August 2022 and compiled by Core Geotechnical Consultants Pty Ltd.), must be implemented:
 - 22.1. Terracing must be implemented in sections of the site to ensure slope stability.
 - 22.2. The necessary guidelines must be followed after a suitably qualified professional has established an on-site assessment of joint orientations and sidewall stability.
 - 22.3. The necessary dewatering and drainage measures must be implemented.
 - 22.4. All drainage and stormwater services must be designed in accordance with sound engineering practice.
 - 22.5. Suitable measures to ensure reinforcement of foundations or a uniform founding horizon to accommodate the expected differential settlement must be implemented.

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 any Condition of this Environmental Authorisation or EMPr may render the holder liable for criminal prosecution.
3. If the holder does not commence with the Listed Activities within the period referred to in Condition 2, this Environmental Authorisation shall lapse. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be lodged with the Competent Authority.
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.
5. Please note that an amendment of the Environmental Authorisation is not required for a change in the contact details of the holder. In such a case, the Competent Authority must only be notified of such changes.

6. The manner and frequency for updating the EMPr must be as follows:
 - 6.1. Amendments to the EMPr must be made in accordance with Regulations 35 to 37 of GN No. R.982 (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 (if the holder of the decision) must, within twenty (20) calendar days from the date the notification of the decision was sent to the holder by the Competent Authority –
 - 1.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (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 twenty (20) 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 twenty (20) calendar days from the date of receipt of the appeal submission.
4. The appeal and the responding statement must be submitted to the address listed below:

By post: Western Cape Ministry of Local Government, Environmental Affairs and Development Planning
Private Bag X9186
CAPE TOWN
8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr Marius Venter (Tel.: 021 483 2659)
Room 809
8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

Note: For purposes of electronic database management, you are also requested to submit electronic copies (Microsoft Word format) of the appeal, responding statement and any supporting documents to the Appeal Authority at the address listed above and/or via e-mail to DEADP.Appeals@westerncape.gov.za.

5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from 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 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 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)
WESTERN CAPE GOVERNMENT: ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

DATE OF DECISION: 24 JULY 2023

Copied to:

- (1) Ms. Sonja Warnich-Stemmet (City of Cape Town)
(2) Ms. Kozette Myburgh (Ecosense CC)
(3) Mr. Andre Oosthuizen (DEA&DP: DDF)

E-mail: sonja.warnichstemmet@capetown.gov.za

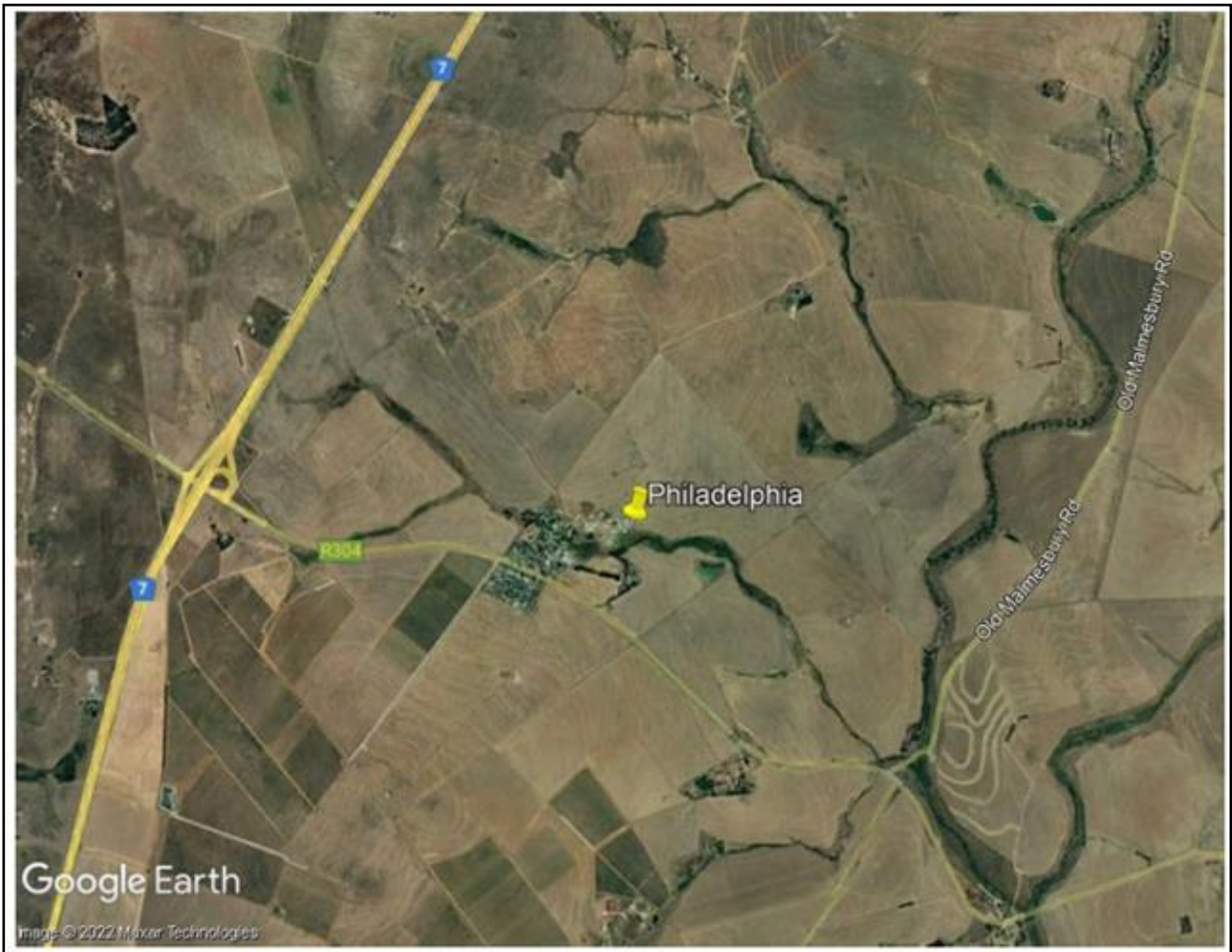
E-mail: kozette@ecosense.co.za

E-mail: andre.oosthuizen@westerncape.gov.za

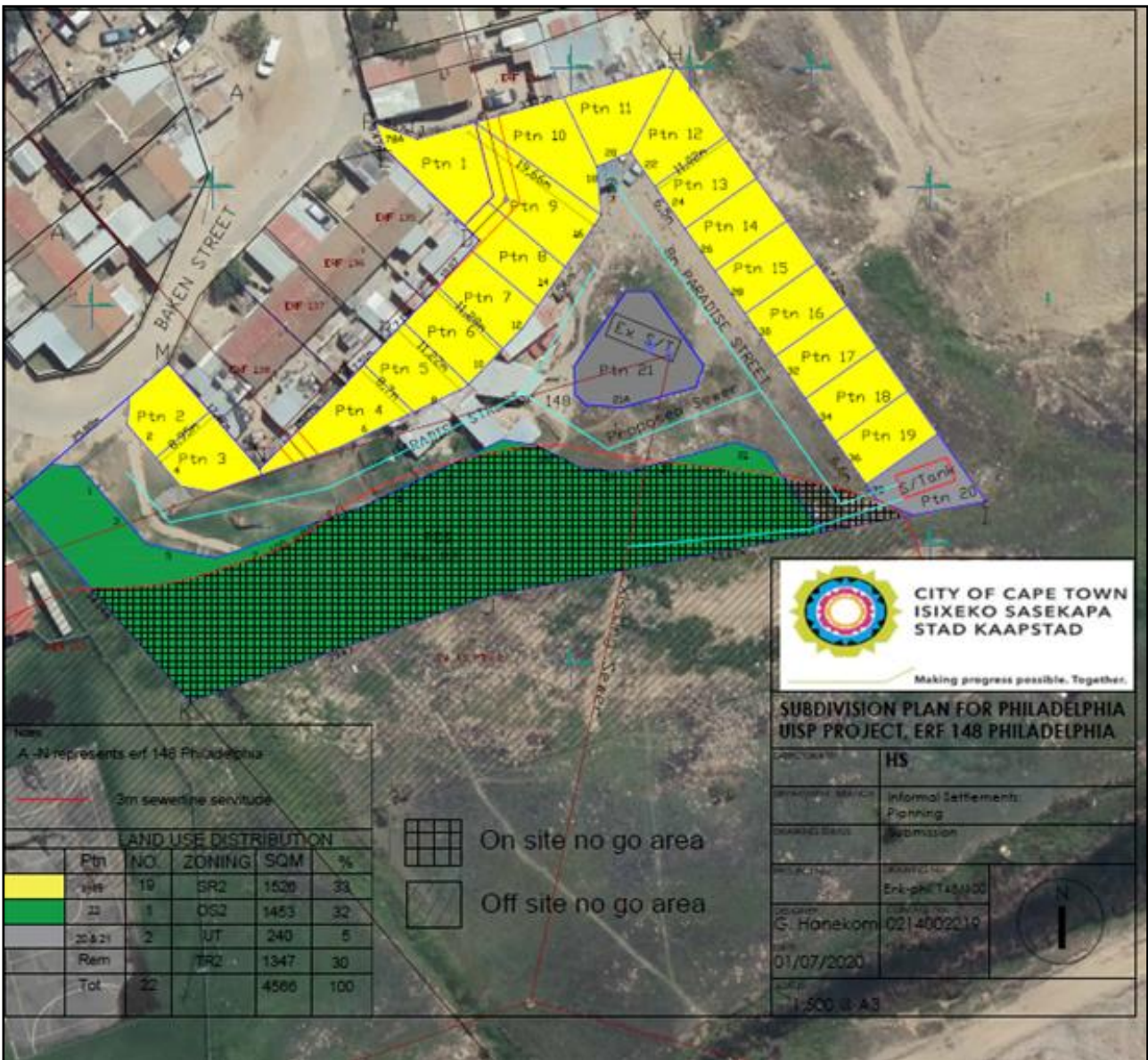
FOR OFFICIAL USE ONLY:

EIA REFERENCE: 16/3/3/1/A5/87/2005/23
NEAS REFERENCE: WCP/EIA/0001233/2023

ANNEXURE 1: LOCALITY MAP



ANNEXURE 2: THE SITE LAYOUT PLAN



ANNEXURE 3: REASONS FOR THE DECISION

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

- a) The information contained in the Application Form (dated 15 February 2023), the final BAR (dated May 2023), the EMPr (dated May 2023), and the additional information received on 3 July 2023 and 4 July 2023, respectively;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation, Need and Desirability and Alternatives (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 the responses thereto, included in the final BAR; and
- e) The balancing of negative and positive impacts and proposed mitigation measures.

No site visit was conducted. The Competent Authority had sufficient information before it to make an informed decision without conducting a site visit.

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

1. Public Participation

The Public Participation Process ("PPP") included:

- Notification letters were sent to all relevant I&APs and stakeholders on 12 September 2022, 9 September 2022 and 5 March 2023, respectively;
- An advert was placed in the 'Tygerburger' newspaper on 14 September 2022;
- Approximately 50 pamphlets were distributed to local residents, including occupants on the site as well as backyard dwellers on 6 September 2022;
- Notices were placed on-site on 6 September 2022;
- A notice was placed at a tuckshop located on Baken Street in Philadelphia on 6 September 2022 and 8 March 2023;
- A notice was placed at the local Philadelphia Police Station on 6 September 2022 and 8 March 2023, respectively;
- A copy of the pre-application BAR was placed at the Kloof Street library on 13 June 2022 for the duration of the commenting period;
- The pre-application BAR was made available for a commenting period of thirty (30) days from 12 September 2022 to 14 November 2022; and
- The draft BAR was made available for a commenting period of thirty (30) days from 5 March 2023 to 5 April 2023.

The Department is satisfied that the PPP that was followed met the minimum legal requirements. 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 any significant concerns raised.

2. Alternatives

Site Alternative

The Preferred Site Alternative entails a maximum of twenty (20) formally serviced sites to be established off Baken Street on Erf 148, Philadelphia (Cape Town). This is the preferred site alternative, as the need for housing for the existing backyard dwellers have been requested by local residents. The formally serviced sites therefore aim to respond and address the need for housing, as raised by the local residents. The site was also previously reserved by the City of Cape Town (Property Management) for residential purposes.

Alternative 1 (Preferred and Herewith Authorised)

The Preferred Design Alternative entails the provision of a maximum of twenty (20) formally serviced sites. Each serviced site will measure approximately 72 squares meter in extent. The associated infrastructure comprises of the following:

- One (1) septic/interceptor tank to connect to the existing sewer line leading to the evaporation ponds;
- One (1) Public Open Space Erven;
- Associated roads, including an approximately 8m wide traffic circle;
- Stormwater infrastructure; and
- Associated landscaping.

Access to site will be gained from the existing Baken Street, Philadelphia, necessitating the existing secondary pedestrian access from Baken Street to be closed off.

The total development footprint amounts to approximately 0.4565ha.

Alternative 2

Alternative 2 entails the provision of a maximum twenty (20) formally serviced sites. Each serviced site will measure approximately 72 square meters. The associated infrastructure includes:

- One (1) conservancy tank to service erven that cannot gravity feed to existing interceptor tank;
- One (1) Public Open Space; and
- An approximately 8m wide traffic circle.

The Alternative 1 is preferred and Alternative 2 is rejected, as Alternative 1 provides the specific development components required to alleviate the plight of local backyard dwellers for serviced sites in the local area.

Alternative Road Layout (a) (Rejected)

This alternative entails a road layout, which largely avoids the floodplain. This alternative was rejected, as it does not include the appropriate dimensions to provide access for service vehicles.

Alternative Road Layout (a) (Rejected)

This alternative entails a road layout, which avoids a specific portion of the site that is seasonally wet (due to groundwater/perched water table). This alternative was rejected, as it would reduce the number of serviced sites as well as the level of infrastructure that can be constructed and installed on the site.

Design Alternative (Rejected)

This alternative entails raising the serviced sites to specifically enable the sewage to gravitate to the existing septic/interceptor tank. This alternative was rejected, as the small sizes of the serviced sites will make the raising for the abovementioned purpose impractical to implement.

Technology Alternatives

Various options regarding sewage management were investigated, including:

- The use of a septic/interceptor tank that overflows via a sewer into evaporation ponds offsite;
- The use of an interceptor tank to connect to the sewer conveying sewage to offsite evaporation ponds; or

- The construction of a pump station to pump sewage to an existing interceptor tank.

The preferred technology alternative is for the use of a septic/interceptor tank to connect to the sewer conveying sewage to offsite evaporation ponds, as it will lead to the lowest cost, the least maintenance as well as the lowest risk to the environment.

'No-go' Alternative

The 'No-Go' Alternative entails maintaining the *status quo*, i.e., no provision of the serviced sites and associated infrastructure. The 'N-Go' Alternative was considered and rejected, as it will mean that much needed housing opportunities in the form of formally serviced stands will not be provided to existing local backyard dwellers.

3. Impact Assessment and Mitigation measures

3.1 Need and Desirability

The proposed development aims to resolve the need to create and prioritise a human settlements project on Erf 148, Philadelphia. This, more specifically, means that housing in the form of a maximum of twenty (20) formally serviced stands will be provided to existing local backyard dwellers.

3.2 Regional and Local Planning

Erf 148, Philadelphia is zoned Open Space. A rezoning application and all other relevant planning related application(s) are required in terms of the relevant planning legislation in order to permit the proposed development.

According to the correspondence from the City of Cape Town (dated 28 March 2023), the proposed development is considered to be compliant with both the 2023 Municipal Spatial Development Framework ("MSDF") and 2023 Northern District Plan. The site is furthermore located in the Incremental Growth and Consolidation Areas in terms of the approved 2023 MSDF as well as inside the Urban Development Edge.

Although the serviced stands will result in transforming land zoned Open Space for residential uses, the land to be developed was not entirely utilised, as a functional open space area. The proposal at the same time seeks to improve the overall usage of the site by not only providing formalised serviced stands, but also incorporating an Open Space, which includes play equipment, into the overall development concept. The implementation of landscaping measures, as per the EMPr, will further enhance the quality and experience of the site as well as the local Sense of Place.

3.3 Aquatic Impacts

According to the Freshwater Ecological Assessment Report (dated 9 September 2022 and compiled by Mr. Nick Steytler of EnviroSwift Western Cape), no wetlands or drainage lines are present on the site. A channelled valley-bottom wetland is located within 500m of the site and another wetland is located immediately adjacent to the site. An additional severely degraded non-perennial drainage line is located immediately east of the site.

The site is partially located below the 1:100 year floodline. However, most of the serviced sites will be located above the 1:100 year floodline and structural elevation measures will be implemented to reduce flood risk, where so required. Certain activities, such as a small section of the road alignment (which is unavoidable), landscaping and sewer infrastructure, will take place below the 1:100 year floodline. However, the approved EMPr contains a provision that these works are only permitted following the approval of a Method Statement by the appointed ECO.

It is expected that due to the small scale of the proposed development and the low catchment roughness within the site (*i.e.*, the limited vegetation groundcover, which enables flood attenuation functions) the impact significance of altering the flow regime and flood attenuation functions will be low with the appropriate mitigation such as revegetating areas disturbed during the construction phase. The necessary mitigation measures form part of the approved EMP. In the same manner, the EMP includes the necessary provisions to ensure that the impact of erosion, increased sedimentation and water quality impairment during the construction phase will be of very low negative significance. This includes, *inter alia*, the implementation of erosion and sedimentation control measures as well as adequate management of construction materials to be used on the site.

During the operational phase similar related impacts include altering the flow regime and water quality impairment. The impact of altering the flow regime may potentially be attributed to increased hard and impermeable surfaces and increased flow and flood peaks within the receiving local drainage line that discharges into the local downstream channelled valley-bottom wetland. The impact of water quality impairment relates to the likelihood of watercourses and associated drainage lines in the local area receiving elevated nutrient levels as well as pollution caused by the damaged service infrastructure. These impacts can be reduced to low negative significance rating if appropriate mitigation measures are implemented. As per the EMP, one of the main mitigation measures is the implementation of appropriate stormwater design management and opportunities, including Sustainable Drainage Systems and the scheduled inspection and repair of any damaged infrastructure.

According to the electronic correspondence (dated 8 March 2023), the Water Use Application has been submitted to the National Department of Water and Sanitation.

3.4 Geotechnical Aspects

The site is located above the fractured Atlantis aquifer. According to the Geotechnical Site Investigation Report (dated August 2022 and compiled by Core Geotechnical Consultants Pty Ltd.), groundwater was encountered at only one test pit in the south-eastern corner of the site, which is due to a perched water table. It was further established that no real risk of slope instability or soil creep is anticipated, unless deep cuts, or extensive bulk earthworks to reshape the site, are envisaged. The site is regarded as suitable for the proposed development from a geotechnical perspective. However, certain design and technical precautions may be required based on the site's conditions revealed during excavation and associated activities.

3.5 Biophysical Impacts

Erf 148, Philadelphia is a brownfield site and comprises of, *inter alia*, open space areas used as children's play grounds. Hence, the site is largely transformed and has no trace of the mapped Swartland Shale Renosterveld nor natural habitat that would support any Species of Conservation Concern. Little to no negative biophysical impacts on any terrestrial biodiversity/elements were therefore identified.

3.6 Agriculture Aspects

Prior to the site's existing Open Space zoning, the site was zoned Agriculture. According to the Agricultural Compliance Statement (dated 12 August 2022 and compiled by Mr. Johann Lanz), the site has no real crop production potential and is therefore not considered preservation-worthy, as agricultural production land. The proposed development of the site is therefore deemed acceptable in this regard.

3.7 Health and Safety Risks

The proposed development is located within the 5km – 16km zone of Koeberg Power Station (Urgent Protective Action Zone (“UPZ”)) and must be capable of evacuation within 16 hours. According to the correspondence from the City of Cape Town (dated 1 March 2023 and 28 March 2023, respectively), it was confirmed by the Traffic Evacuation Model (“TEM”) Committee that there is sufficient road infrastructure capacity in order to evacuate the general public within the required 16-hour timeframe within the context of the proposed development.

3.8 Heritage Impacts

The greater Philadelphia area comprises various historical structures. The site itself does not, however, have any of such structures present. No sensitive heritage resources will be directly affected by the proposed development. According to the correspondence from Heritage Western Cape (“HWC”) (dated 7 September 2022), there is no reason to believe that the proposed development will impact on heritage resources. On 14 September 2022, HWC confirmed that their previous comment of 7 September 2022 still stands.

The implementation of Conditions 18 and 19 of this Environmental Authorisation will help to ensure the protection of any heritage resources that may be encountered on the site.

3.9 Visual Impacts

Since the development aims to provide serviced sites for backyard dwellers, no negative visual impacts were identified. As per the Site Sensitivity Verification Report (dated May 2023 and compiled by Ms. Kozette Myburgh of Ecosense CC), given the scale and nature of the proposed development, it is not expected to be out of context with the immediate surrounds, which comprises forms of informal and formal (residential) urban development.

3.10 Nuisance

Nuisance related impacts during the construction phase such as noise, traffic (construction vehicles) and dust will be short-term and managed in accordance with the standard best practice provisions of the EMPr.

3.11 Service Requirements

According to the correspondences from the City of Cape Town (dated 11 November 2022 and 26 April 2023, respectively), service capacity for water resource, treatment, bulk storage and conveyance as well as Wastewater Treatment were confirmed. According to the to the correspondence from Eskom (dated 30 January 2023), capacity exist to supply electricity to the proposed development.

3.12 Socio-economic Impacts

Employment opportunities are expected to be generated during the construction phase. Further positive socio-economic impacts expected after the construction period has concluded, which largely relates to the provision of serviced sites to help alleviate the number of existing backyard dwellers present in the local area. As per the approved EMPr, the existing play equipment will be rearranged in order to serve a more functional use in the context of the site and development.

The development proposal will result in both negative and positive impacts.

Negative Impacts include:

- Potential temporary nuisance related impacts during the construction phase.
- Partial loss of Open Space to accommodate the serviced sites.

- Potential pollution from the construction activities taking place within close proximity to identified aquatic elements.

Positive Impacts include:

- Community upliftment through the provision of formally serviced sites.
- Improved health and sanitation through the provision of basic services.
- Temporary employment opportunities during the construction phase.

4. National Environmental Management Act, 1998 (Act No. 107 of 1998) 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 activity (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 authorised Listed Activities will not conflict with the general objectives of Integrated Environmental Management stipulated in Chapter 5 of the NEMA and that any potentially detrimental environmental impacts resulting from the undertaking of the Listed Activities can be mitigated to acceptable levels.

-----END-----