



REFERENCE: 16/3/3/1/F1/11/3055/21
NEAS REFERENCE: WCP/EIA/0001000/2021
DATE: 25 April 2022

The Board of Directors
Sturdee Energy (Pty) Ltd
2nd Floor, Grosvenor Gate
Hyde Park Office Park
HYDE PARK
2196

Attention: Mr. Andrew Johnson

Cell: 083 854 1986

E-mail: andrew@sturdee-energy.com

Dear Sir

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): THE PROPOSED DEVELOPMENT OF A 7MW AC SOLAR PHOTOVOLTAIC FACILITY AND ASSOCIATED INFRASTRUCTURE ON PORTION 10 OF FARM RIETFONTEIN NO. 184, PIKETBERG.

1. With reference to the above application, the Department hereby notifies you of its decision to grant the Environmental Authorisation, attached herewith, together with the reasons for the decision.
2. In terms of Regulation 4 of the EIA Regulations, 2014 (as amended), you are instructed to ensure, within 14 days of the date of the Environmental Authorisation, that all registered Interested and Affected Parties ("I&APs") are provided with access to and reasons for the decision, and that all registered I&APs are notified of their right to appeal.
3. Your attention is drawn to Chapter 2 of the Appeal Regulations, 2014 (as amended), which prescribes the appeal procedure to be followed. This procedure is summarized in the attached Environmental Authorisation.

Yours faithfully

MR. ZAAHIR TOEFY
DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

Copies to:

- (1) Ms. B. Mason/ Dr. A. Avis(CESNET)
- (2) Ms. A. Joubert (Bergriver Municipality)
- (3) Ms. D. Kotze (WCDM)

E-mail: brooke.mason@cesnet.co.za/t.avis@cesnet.co.za

E-mail: jouberta@Bergmun.org.za

E-mail: dkotze@wcdm.co.za



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): THE PROPOSED DEVELOPMENT OF A 7MW AC SOLAR PHOTOVOLTAIC ("PV") FACILITY AND ASSOCIATED INFRASTRUCTURE ON PORTION 10 OF FARM RIETFONTEIN NO. 184, PIKETBERG.

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 December 2021.

The granting of this Environmental Authorisation (hereinafter referred to as the "Environmental Authorisation") is subject to compliance with the conditions set out in Section E below.

A. DETAILS OF THE HOLDER OF THIS ENVIRONMENTAL AUTHORISATION

Sturdee Energy (Pty) Ltd
% Mr. Andrew Johnson
2nd Floor, Grosvenor Gate
Hyde Park Office Park
HYDE PARK
2196

Cell: 083 854 1986
E-mail: andrew@sturdee-energy.com

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

B. AUTHORISED ACTIVITIES

Listed Activities	Activity/Project Description
<p>Listing Notice 1 of the EIA Regulations, 2014 (as amended)–</p> <p>Activity Number: 1</p> <p><i>“The development of facilities or infrastructure for the generation of electricity from a renewable resource where—</i></p> <p><i>(i) the electricity output is more than 10 megawatts but less than 20 megawatts;</i></p> <p><i>or</i></p> <p><i>(ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare;</i></p> <p><i>excluding where such development of facilities or infrastructure is for photovoltaic installations and occurs—</i></p> <p><i>(a) within an urban area; or</i></p> <p><i>(b) on existing infrastructure.”</i></p>	<p>The output of the proposed Solar PV facility will be 7MW, but the entire project area will cover an area of approximately 14.8ha.</p>
<p>Listing Notice 1 of the EIA Regulations, 2014 (as amended)–</p> <p>Activity Number: 12</p> <p><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><i>(ii) infrastructure or structures with a physical footprint of 100 square metres or more</i></p> <p><i>where such development occurs—</i></p> <p><i>(a) within a watercourse;</i></p> <p><i>(b) in front of a development setback; or</i></p> <p><i>(c) 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><i>(aa) the development of infrastructure or structures within existing ports or harbour that will not increase the development footprint of the port or harbour;</i></p>	<p>The proposed Solar PV facility will cover an area of approximately 14.08ha and the development footprint of the overhead poweline will occur within 32 metres of a watercourse.</p>

<p>(bb) 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;</p> <p>(cc) 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;</p> <p>(dd) where such development occurs within an urban area;</p> <p>(ee) where such development occurs within existing roads, [or] road reserves or railway line reserves; or</p> <p>(ff) 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."</p>	
<p>Listing Notice 1 of the EIA Regulations, 2014 (as amended)–</p> <p>Activity Number: 27</p> <p><i>The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—</i></p> <p>(i) <i>the undertaking of a linear activity;</i></p> <p>(ii) <i>maintenance purposes undertaken in accordance with a maintenance management plan.</i></p>	<p>The proposed development will result in the clearance of more than 1ha of indigenous vegetation.</p>
<p>Listing Notice 1 of the EIA Regulations, 2014 (as amended)–</p> <p>Activity Number: 56</p> <p><i>"The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre—</i></p> <p>(i) <i>where the existing reserve is wider than 13,5 meters; or</i></p> <p>(ii) <i>where no reserve exists, where the existing road is wider than 8 metres;</i></p> <p><i>excluding where widening or lengthening occur inside urban areas."</i></p>	<p>The proposed development includes the widening of the existing access road including the incorporation of a turning circle to accommodate the transport of construction vehicles and delivery vehicles to and from the site.</p>

<p>Listing Notice 3 of the EIA Regulations, 2014 (as amended)–</p> <p>Activity Number: 4</p> <p><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) Areas containing indigenous vegetation.</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>The proposed development will result in the development of an access road which is wider than 4m on a site that contains indigenous vegetation.</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 development:

The proposed development entails the development of a 7MW AC Solar PV facility and associated infrastructure, located adjacent to the PPC De Hoek, on Portion 10 of Farm Rietfontein No. 184, Piketberg.

The proposal is comprised of the following components:

- 11kV single-circuit overhead line, approximately 1.5km in length. The powerline will be developed on Portions, 13, 32 and 35 of Farm Rietfontein, Piketberg;
- A cable running 360m along the existing cable track;
- A cable running 320m buried within the existing cable trench to connect to the existing 11kV substation.

The proposed development is comprised of the following additional infrastructure:

- Internal gravel roads;
- A security guardhouse; and
- An Operations and Maintenance building.

The proposed development includes the construction of a new access road from “de Brug” road located at the entrance to the site, off the N7 that will lead to a proposed gravel parking area with a development footprint of 60m².

The total development footprint will be approximately 140 814m² in extent.

C. SITE DESCRIPTION AND LOCATION

The site is a brownfield site located on transformed portions of vacant land within the De Hoek mining property, adjacent to the open cast mine. The proposed development will be located adjacent to the PPC cement factory and along the road reserve. The entrance to the site will be taken from a new gravel that forms part of the proposed development, off de Brug Road.

The site co-ordinates:

Latitude (S)	32°	57'	20.31''
Longitude (E)	18°	46'	22.64''

The co-ordinates for the overhead line:

Starting point			
Latitude (S)	32°	57'	10.02''
Longitude (E)	18°	46'	15.35''
Middle point			
Latitude (S)	32°	56'	42.78''
Longitude (E)	18°	46'	02.56''
End point			
Latitude (S)	32°	56'	19.60''
Longitude (E)	18°	45'	49.41''

The SG digit codes for the property where the listed activities will occur:

Portion 10 of Farm Rietfontein No. 184, Piketberg	C05800000000018400010
Remainder of Portion 13 of Farm Rietfontein No. 184, Piketberg	C05800000000018400013
Remainder of Portion 35 of Farm Rietfontein No. 184, Piketberg	C05800000000018400035

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

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Coastal and Environmental (Pty) Ltd
c/o Ms. Brooke Mason/ Dr. Anthony Mark Avis
P. O. Box 934
GRAHAMSTOWN
6140

Tel.: 021 045 0900
E-mail: brooke.mason@cesnet.co.za/ t.avis@cesnet.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, described in the BAR dated December 2021 on the site as described in Section C above.

2. Authorisation for the activity 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 ten (**10**) 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.
4. The authorised activity must 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 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;
 - 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 activities, 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 7 (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, 10, 11 and 15.

Management of activities

10. The draft EMPr (dated December 2021) submitted as part of the application for Environmental Authorisation must be amended to include the following:
 - 10.1. An Alien Invasive Species Management Plan that addresses the ongoing management requirements for the affected watercourses on site must be compiled by a suitably qualified person and must be included in the EMPr.
11. The updated EMPr must be submitted to the competent authority for approval before the commencement of land clearing activities.
12. An application for amendment to 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.
13. The EMPr must be included in all contract documentation for all phases of implementation.
14. A copy of the Environmental Authorisation and the EMPr 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 and EMPr must be produced to any authorised official representing the competent authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein. The Environmental Authorisation and EMPr must be made available for inspection by any employee or agent of the applicant who works or undertakes work at the site.

Monitoring

15. 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 –

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

Environmental audit reports

- 16. The holder must, for the period during which the Environmental Authorisation and EMPr remain valid ensure that the compliance with the conditions of the Environmental Authorisation and the EMPr is audited;
 - 16.1. submit at least two environmental audit reports to the competent authority during the construction phase. The holder must submit the first audit report within three (3) months after commencement of the construction phase and another audit report within six (6) months after completion of the construction period; and
 - 16.2. submit an environmental audit report every five (5) years while the Environmental Authorisation remains valid.
- 17. The environmental audit report must be prepared by an independent person with expertise 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 –

- 17.1. 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;
- 17.2. identify and assess any new impacts and risks as a result of undertaking the activity;
- 17.3. evaluate the effectiveness of the EMPr;
- 17.4. identify shortcomings in the EMPr;
- 17.5. identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr;
- 17.6. 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;
- 17.7. include a photographic record of the site applicable to the audit; and
- 17.8. be informed by the ECO reports.
- 18. The holder must, within 7 (seven) calendar 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, be placed on a publicly accessible website.

Specific conditions

- 19. Surface and 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.
- 20. 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.
- 21. 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 ("HWC"). 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.

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. RECOMMENDATION

This Directorate recommends the following:

1. The holder of the EA should, as far as possible, implement measures that will provide employment opportunities to the local community.

G. 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. If the holder does not commence with the listed activities within the period referred to in Condition 3 this Environmental Authorisation shall lapse for the activity, and a new application for Environmental Authorisation must be submitted to the competent authority. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be made to the competent authority prior to the expiry date of the Environmental Authorisation.
3. The holder must submit an application for amendment of the Environmental Authorisation to the competent authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for amendment in terms of Part 1 of the EIA Regulations, 2014 (as amended) must be submitted.
 - 3.1. 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.
4. The manner and frequency for updating the EMPr is as follows:
 - 4.1. 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.
5. Non-compliance with any condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.

H. 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.

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>.

I. 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: 25 APRIL 2022

Copies to:

- (1) Ms. B. Mason/ Dr. A. Avis(CESNET)
- (2) Ms. A. Joubert (Bergriver Municipality)
- (3) Ms. D. Kotze (WCDM)

E-mail: brooke.mason@cesnet.co.za/t.avis@cesnet.co.za

E-mail: jouberta@Bergmun.org.za

E-mail: dkotze@wcdm.co.za

ANNEXURE 1: LOCALITY MAP

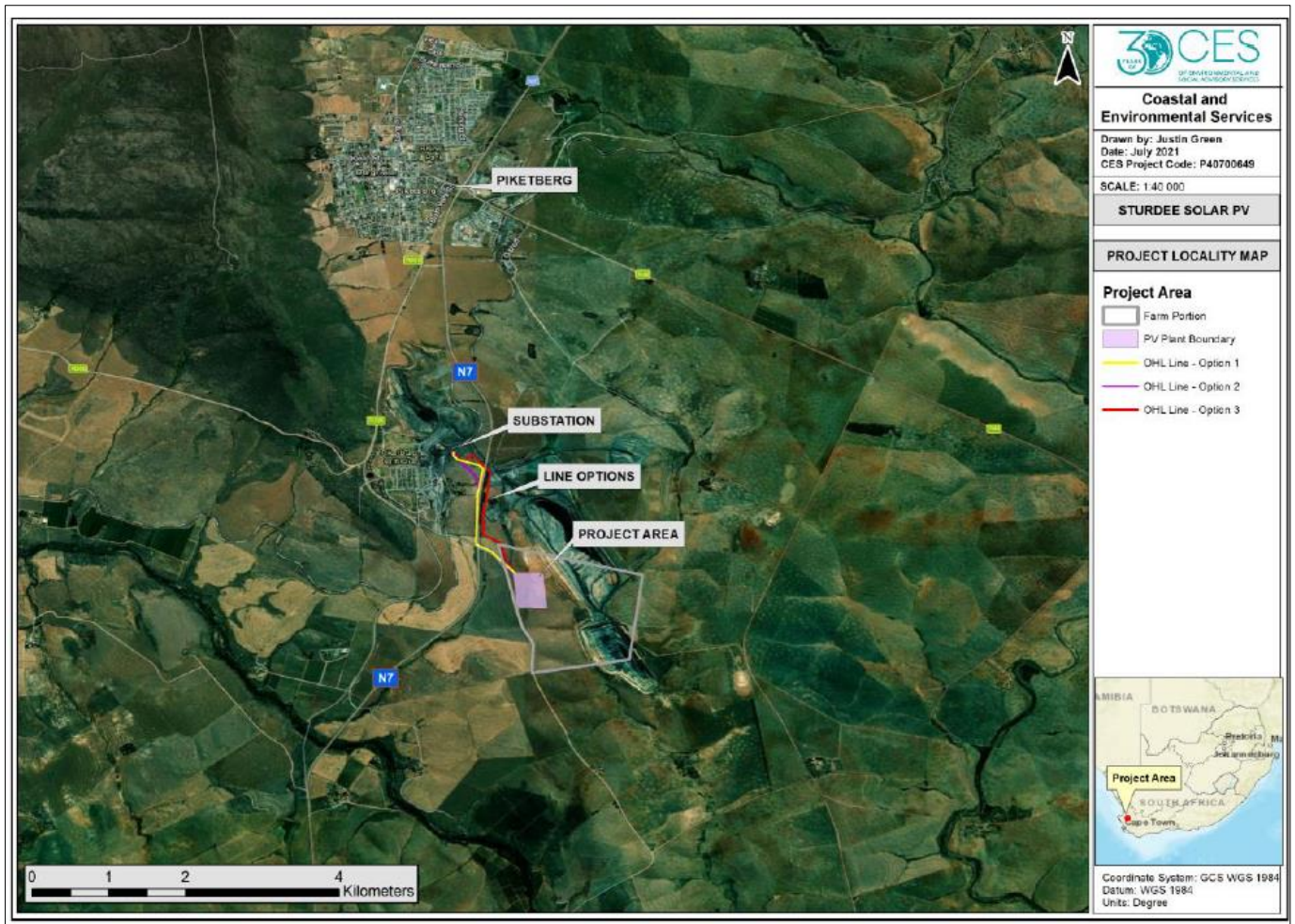
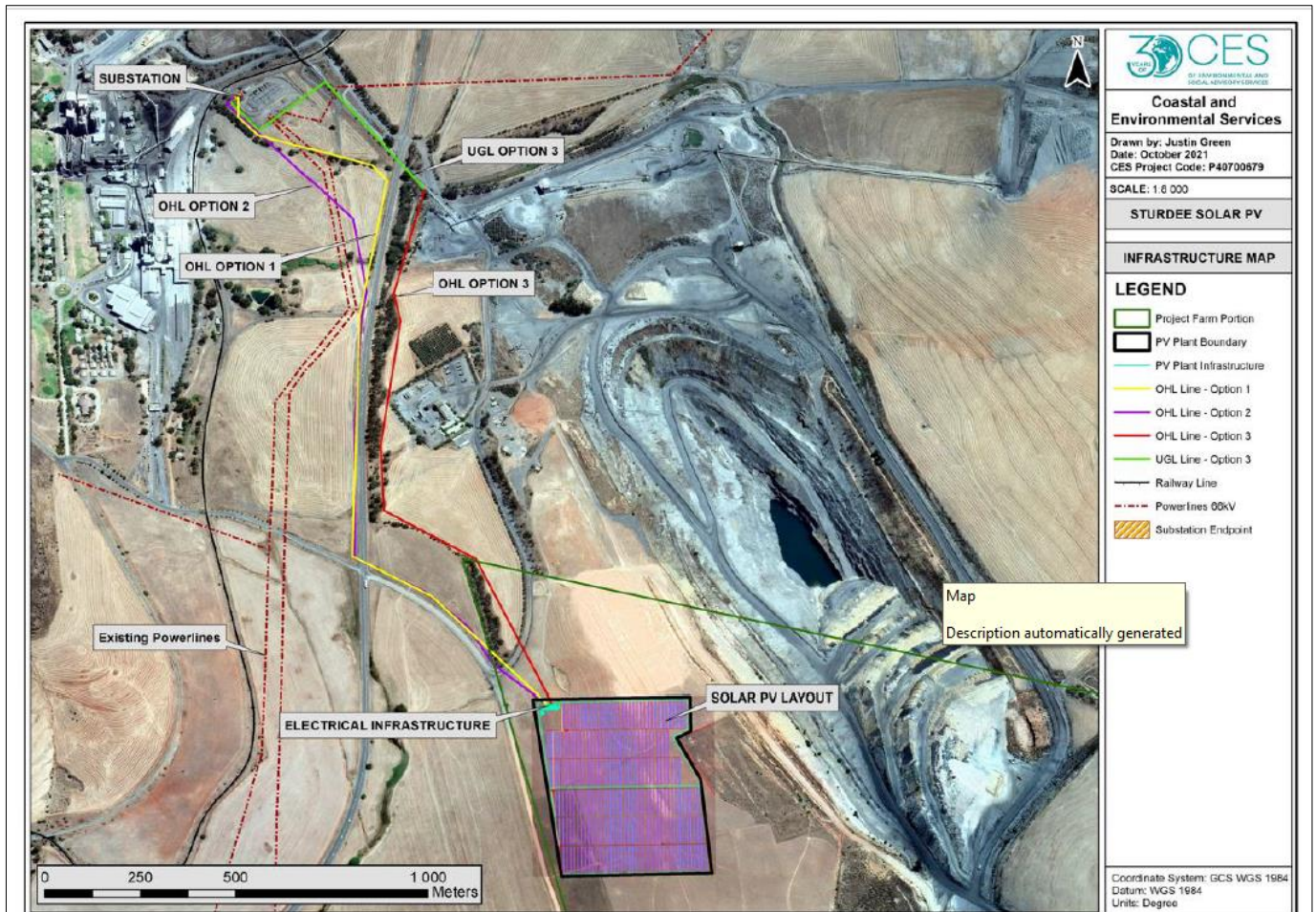


Figure 1: Locality map depicting where the proposed development will be constructed indicated in purple including the proposed route alternatives for the single circuit 11kV overhead powerline lines indicated in purple, red and yellow.

ANNEXURE 2: SITE DEVELOPMENT 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 and Draft BAR dated July 2021 received by this Department on 29 October 2021, the final BAR dated December 2021 and the EMPr submitted together with the final BAR on 14 December 2021 revised application form received on 20 April 2022;
- 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 BAR dated December 2021.

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:

- identification of and engagement with Interested and Affected Parties ("I&APs");
- fixing notices at conspicuous locations along the site boundary as well as other strategic locations where the listed activities will be undertaken;
- the placing of a newspaper advertisement in the "Weslander" newspaper on 26 August 2021;
- the pre-application draft BAR was made available for public review from 30 August 2021 until 30 September 2021;
- the distribution of information sheets to adjacent property owners, e-mail notifications were utilised to notify all potential and registered I&APs including the municipality, and the various organs of state having jurisdiction in respect of any aspect of the listed activities, about the availability of the report with reminders sent to submit comments;
- the draft BAR was made available to I&APs for public review and comment from 29 October 2021 until 30 November 2021.

2. Alternatives

The alternatives investigated were Technology, Layout Alternatives (i.e., route and alignment alternatives) and the "No-go" Alternative.

Site alternatives

The proposed development will take place on Portion 10 of Farm Rietfontein No. 184, which is approximately 4km southwest of Piketberg. The property is 176.83 ha in extent and includes a portion of the current cement mining quarry. To the west of the quarry is a portion of farmland which is currently leased to a farmer for the cultivation of wheat crops. This area is relatively flat and near the existing mining and cement processing facility. Other site alternatives located on the property were investigated and considered for the proposed development, but were not preferred based on the following reasons:

- Total land coverage;
- Requirement of geotechnical and civil testing to confirm ground conditions;
- High costs associated with restoring the land to usable conditions;
- Land ownership;
- Clearance of indigenous vegetation; and
- Topographical features not conducive to the installation of solar panels.

Powerline (Route) alternatives: Proposed single circuit 11kV overhead powerline

The proposed development includes the construction of a single circuit 11kV overhead powerline. Based on the topographical features on site, particularly, the location of drainage lines and rivers.

Powerline alternatives 1 and 2

The routing of these alternatives falls largely within the road reserve on the property which crosses the N7 highway. However, it was not considered based on the following reasons:

- Impacts on an identified aquatic Critical Biodiversity Area;
- Crosses over the N7 highway;
- Traverses five properties which requires landowner consent;
- Increased visual impact to road users; and
- Removal of critically endangered Shale Renosterveld vegetation.

Powerline alternative 3 (preferred and herewith authorised)

The proposed development includes the construction of a single circuit 11kV overhead powerline which falls within 32 metres of a watercourse. This alternative is preferred based on the following reasons:

- The routing will remain within the property boundary on transformed land already used by the onsite quarry;
- Utilises existing infrastructure viz. rack rail beneath the N7 highway and the existing cable trench;
- Avoids the drainage line and incorporates the 20m buffer as suggested by the freshwater specialist;
- Reduced visual impact to road users;
- Covers a shorter distance; and
- Incorporates the clearance and management of alien invasive vegetation on the property.

Technology alternatives

The proposal investigated the use of Solar Photovoltaic (PV) Panels and Concentrated Solar Power.

Concentrated Solar Power

Concentrated Solar Power. This alternative will result in a better electrical output than Solar Photovoltaic Panels and can store energy in batteries that can be programmed for energy on demand which assists the system to consistently meet local power demands, especially during peak usage times. However, this alternative was not preferred as it has a higher visual impact and requires more water as part of maintenance activities during the operational phase of the development.

Solar Photovoltaic Panels (preferred and herewith authorised)

Even though this alternative requires additional batteries for storage and only generates power in daylight hours, this alternative is preferred for the following reasons:

- More cost effective than Concentrated Solar Power which will result in a lower tariff cost; and
- The maintenance of the solar panels require less water during the operational phase of the development.

"No-Go" Alternative (Rejected)

The "no-go" alternative implies that the "status quo" would remain. This alternative is not preferred as the proposed development of the solar PV facility, is a positive utilisation of undeveloped land and contributes to the effective operational management of the PPC De Hoek Cement factory. The objective of undertaking the project is to ensure that the facility has an uninterrupted power supply through renewable energy to eventually change from a reliance on non-renewable sources, such generators or Eskom for power.

3. Impact Assessment and Mitigation measures

3.1 Need and Desirability

The property is owned by PPC Cement and the electricity generated from the proposed facility will be utilised on site to supplement power for the industrial processes of the mining operations and cement factory on the adjacent properties. The proposed development is aligned with the objectives of Western Cape Provincial Spatial Development Framework dated 2014, as it contributes to the diversification of energy towards incorporating renewable energy and as a

response to a resource consumptive economy. The facility will be developed on transformed land and will not impact on any sensitive ecosystems. The watercourses located on the site and remaining patch of Renosterveld vegetation will be avoided as recommended by the specialists and CapeNature.

3.2 Planning Context and Agricultural Impacts

The proposed development aligns with the strategic goals of the Bergrivier Municipality Integrated Development Plan (2017-2022) as it aims to create an enabling environment and contributes towards economic growth and sustainable service delivery. The proposed development was found to have a potential impact on the conservation of agricultural resources. Based on this, an Agricultural Potential and Impact Assessment dated May 2021 compiled by Index (Pty) Ltd was undertaken. The findings of the assessment noted that the proposed development will not result in the loss of high potential agricultural land. The proposed development makes use of agricultural land with marginal yields, in a more sustainable manner.

3.3 Aquatic impacts

An Aquatic Specialist Assessment dated July 2021 was undertaken by BlueScience. Based on the findings of the assessment, it is noted that the proposed development falls within a wider area considered of Low Aquatic Biodiversity Sensitivity since there are no watercourses on site that have been mapped as Aquatic Critical Biodiversity Areas or Freshwater Ecosystem Priority Areas. The main water feature within the larger study area is the Zoutkloof River, a tributary of the lower Berg River. The associated watercourses within the study area are two feeder streams of the Zoutkloof Tributary of the Berg River that drains the southern slopes of the Piketberg. Based on the findings of the assessment, it is noted that watercourses on the proposed site are in a largely to seriously modified ecological condition and of low ecological importance and sensitivity. The preferred alternative (herewith authorised) incorporates the 20m buffer around the watercourses, which will be demarcated as a "no-go" area prior to the commencement of construction activities. Impact management actions based on the freshwater specialist's recommendations regarding the potential impact of runoff emanating from the facility have been included in the EMPr. The proposed development falls within the ambit of the General Authorisation ("GA") for Section 21 (c) and (i) water use of the National Water Act, 1998. The process of obtaining a GA for the storage of water as well as for the potential impacts on water courses, has been initiated through the submission of a pre-application Water Use License enquiry.

3.4 Biodiversity Impacts

Due to the transformed nature of the site, the Ecological Compliance Statement compiled by CESNET (Pty) Ltd confirms that the impact of the proposed development on biodiversity will have a low to negligible impact significance rating. The preferred alternative avoids the clearance of Swartland Shale Renosterveld, an ecosystem categorised as critically endangered in terms of the National Environmental Management: Biodiversity Act, 2004, National List of Ecosystems that are in Need of Protection, 2011. In an electronic mail correspondence dated 1 December 2021, CapeNature confirmed that they are satisfied that the preferred alternative does will not result in the removal of Swartland Shale Renosterveld on the proposed site.

In addition to this, the findings of the Avifaunal Impact Assessment dated June 2021 compiled by Wild Skies Ecological Services confirms that due to transformed nature of the site, the impact of the proposed development has a low negative significance rating.

3.5 Visual Impacts

The proposed development is located adjacent to a transport route, adjacent to the PPC De Hoek Cement factory on an undeveloped and vegetated parcel of land. A Visual Impact Assessment dated August 2021 was undertaken by LOGIS. Based on the findings of the assessment, the surrounding environment is not considered to have a "high visual quality" due to its proximity to the existing PPC cement factory and De Hoek mining operations. The PV facility is expected to have a moderate visual impact on observers traveling along the N7 National Road and the R399 arterial road within a 1km radius of the operational PV structures, after mitigation. The operational PV facility could have a moderate visual impact on observers located between a 1 – 3km radius

of the PV facility structures, both before and after the implementation of mitigation measures. However, with the implementation of the mitigation measures proposed by the specialist, the visual impact significance rating can be reduced to a low negative. The specialist recommended mitigation measures have been included in the EMPr.

3.6 Construction phase impacts

Construction activities (mainly construction vehicles transporting materials to the site) will generate dust and an increase in heavy vehicles utilising the roads. The EMPr includes dust, traffic and noise control measures that will be implemented on site.

The development will result in negative and positive impacts

Negative impact:

- Loss of agricultural land; and
- Visual impacts for receptors surrounding the site.

Positive impacts:

- Generation of electricity from renewable energy resources;
- Optimal use of available land;
- Management of alien invasive species; and
- The development will provide employment opportunities.

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.”

-----END-----