environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA · 0001· Environment House · 473 Steve Biko Road, Arcadia · PRETORIA

DEA Reference: 14/12/16/3/3/2/1057
Enquiries: Lunga Dlova
Telephone: (012) 399 8524 **E-mail:** LDlova@environment.gov.za

Mr Thomas Barkmann
Vredenburg Windfarm (Pty) Ltd
Box 1, 18 Cavendish Street
Claremont
CAPE TOWN
7708

Telephone: (021) 483 4790

E-mail: Candice.evans@enercon.de

PER E-MAIL/ MAIL

Dear Mr Barkmann

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 982/983/984 AND 985 AS AMENDED, FOR THE PROPOSED 140MW BOULDERS WIND ENERGY FACILITY IN SALDANHA BAY LOCAL MUNICIPALITY WITHIN THE WEST COAST DISTRICT MUNICIPALITY IN THE WESTERN CAPE PROVINCE

With reference to the above application, please be advised that the Department has decided to grant an Environmental Authorisation (EA) to you. The EA and reasons for the decision are attached herewith.

In terms of Regulation 4(2) of the National Environmental Management Act: the Environmental Impact Assessment Regulations, 2014, as amended (the EIA Regulations), you are instructed to notify all registered interested and affected parties, in writing within 14 (fourteen) days of the date of this EA, of the Department's decision as well as the provisions regarding the submission of appeals that are contained in the Regulations.

In terms of the Promotion of Administrative Justice Act, 2000 (Act No 3 of 2000), you are entitled to the right to fair, lawful and reasonable administrative action; and to written reasons for administrative action that affects you negatively. Further your attention is drawn to the provisions of the Protection of Personal Information Act, 2013 (Act no. 4 of 2013) which stipulate that the Department should conduct itself in a responsible manner when collecting, processing, storing and sharing an individual or another entity's personal information by holding the Department accountable should the Department abuse or compromise your personal information in any way.

Your attention is drawn to Chapter 2 of National Environmental Management Act, 1998 (Act No. 107 of 1998) National Appeal Regulations published under Government Notice R993 in Government Gazette No. 38303 dated 08 December 2014 (National Appeal Regulations, 2014), which prescribe the appeal procedure to be followed. Kindly include a copy of this document (National Appeal Regulations, 2014) with the letter of notification to interested and affected parties in this matter.

Should any person wish to lodge an appeal against this decision, he/she must submit the appeal to the appeal administrator, and a copy of the appeal to the applicant, any registered interested and affected party, and any organ of state with interest in the matter within 20 days from the date that the notification of the decision was sent to the registered interested and affected parties by the applicant; or the date that the notification of the decision was sent to the applicant by the Department, whichever is applicable.

Appeals must be submitted in writing in the prescribed form to:

Director: Appeals and Legal Review of this Department at the below mentioned addresses.

By email: Appeals@environment.gov.za;

By hand: Environment House
473 Steve Biko Street
Arcadia
Pretoria
0083; or

By post: Private Bag X447
Pretoria
0001

Please note that in terms of Section 43(7) of the NEMA, the lodging of an appeal will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged, you may not commence with any activity authorised in the EA until such time that the appeal is finalised.

To obtain the prescribed appeal form and for guidance on the submission of appeals, please visit the Department's website at https://www.environment.gov.za/documents/forms#legal_authorisations or request a copy of the documents at appealsdirectorate@environment.gov.za.

Yours faithfully

Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs
Date: 14/01/2020

cc:	Alan Carter	Coastal and Environmental Services (CES)	Email: a.carter@cesnet.co.za
	Piet van Zyl	Western Cape Department of Environmental Affairs & Development Planning	Email: Pieter.vanZyl@westerncape.gov.za
	Nazeema Duarte	Saldanha Bay Local Municipality	Email: nazeema.duarte@sbm.gov.za

environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of Regulation 25 of the Environmental Impact Assessment Regulations, 2014, as amended.

The proposed 140MW Boulders Wind Energy Facility in Saldanha Bay Local Municipality in the Western Cape Province

West Coast District Municipality

Authorisation register number:	14/12/16/3/3/2/1057
Last amended:	First issue
Holder of authorisation:	Vredenburg Windfarm (Pty) Ltd
Location of activity:	*The southern and eastern portion of the Farm Schuitjes Klip 3/22; Farms Boebezaks Kraal 2/40; Boebezaks Kraal 5/40; Het Schuytje 1/21; and Frans Vlei 2/46 in Ward number – 11Saldanha Bay Local Municipality within the West Coast District Municipality in the Western Cape Province*

This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this Environmental Authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this Environmental Authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, Act No. 107 of 1998, as amended and the EIA Regulations, 2014, as amended.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment Regulations, 2014, as amended, the Department hereby authorises –

VREDENBURG WINDFARM (PTY) LTD

with the following contact details –

Thomas Barkmann
Vredenburg Windfarm (Pty) Ltd
Box 1, 18 Cavendish Street
Claremont
CAPE TOWN
7708

Telephone: (021) 483 4790
Fax: (021) 483 4185
E-mail: Candice.evans@enercon.de

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1, Listing Notice 2 and Listing Notice 3, as amended (GN R983, R984 and R985, as amended):

Activity number	Activity description
GN R. 983 Activity 11 (i): *"The development of facilities or infrastructure for the transmission and distribution of electricity –* *(i) Outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kV."*	The project will include the development of an on-site substation and transformers with a capacity of more than 33kV and less than 275kV outside of an urban area. Substation Capacity: 132kV
GN R. 983 Activity 12 (ii) (a) and (c): *"The development of-* *(ii) Infrastructure or structures with a physical footprint of 100 square metres or more;* *where such development occurs-* *a) within a watercourse;* *c) If no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse…"*	Associated infrastructure and structures with a physical footprint of 100m^2 or more, such as grid connection infrastructure (i.e. cabling) and access roads will be constructed within a watercourse or within 32 meters of a watercourse located within the project site.
GN R. 983 Activity 19: *"The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse"*	The upgrade or construction of road access for the Boulders Wind Farm will lead to material of more than 10m^3 being deposited into or removed from watercourses.
GN R. 983 Activity 24 (ii): *"The development of a road–* *(ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;*	The Boulders Wind Farm will require access roads with sections up to a width of 8m, to be constructed as a result of logistical construction vehicle specification and operational requirements.
GN R. 983 Activity 28 (ii): *"Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian*	The development of the Boulders Wind Farm will take place within a project site with an extent of 5 102.13ha which has been historically used and is currently used for agricultural activities. The development footprint of

Activity number	Activity description
purposes or afforestation on or after 01 April 1998 and where such development: *(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;*	the facility (infrastructure and associated areas) will cover an area greater than 1 hectare on land currently used for agriculture outside of an urban area. It is envisaged that the development footprint will be ~44ha in extent.
GN R. 983 Activity 56: *"The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre-* *(ii) where no reserve exists, where the existing road is wider than 8 metres;*	The Boulders Wind Farm will require the widening of portions of existing roads by more than 6m, or the lengthening of existing roads by more than 1km to accommodate the logistical construction requirements to access the site and associated infrastructure.
GN R. 984 Activity 1: *"The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more,*	The Boulders Wind Farm will generate an electricity output of more than 20MW. The wind farm is expected to have a contracted capacity of up to 140MW.
GN R. 984 Activity 15: *"The clearance of an area of 20 hectares or more of indigenous vegetation."*	Vegetation clearance of an area of 20 hectares or more of indigenous vegetation will occur during the construction phase of the facility and associated infrastructure.
GN R. 985 Activity 4: *The development of a road wider than 4 metres with a reserve less than 13,5 metres -* *(i) in the Western Cape;* *(ii) in areas outside urban areas;* *(aa) in areas containing indigenous vegetation*	Access road wider than 4m will be constructed outside of urban areas within areas containing indigenous vegetation, in the Western Cape.
GN R. 985 Activity 10: *The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic meters –*	The construction and operation of the Boulders Wind Farm will require the storage of dangerous goods (i.e. fuels and oils) with a combined capacity of up to 80m^3. The development will take place within the Western Cape outside of urban areas.

Activity number	Activity description
(i) in the Western Cape; *(ii) in all areas outside urban areas.*	
GN R. 985 Activity 12: *The clearance of an area of 300 square metres or more of indigenous vegetation;* *(i) in the Western Cape;* *(ii) 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 and;* *(iii) within critical biodiversity areas identified in bioregional plans.*	An area of more than 300m^2 of indigenous vegetation cover will be cleared for infrastructure and associated activities within the Boulders Wind Farm. The project site is located in the Western Cape, within an area which contains two endangered ecosystems, the Saldanha Granite Strandveld and the Saldanha Flats Strandveld. The project site also contains Critical Biodiversity Area (CBA) 1 and CBA 2 areas as identified in the Western Cape Biodiversity Spatial Plan (WCBSP) of 2017.
GN R. 985 Activity 14: *The development of-* *(ii) infrastructure or structures with a physical footprint of 10 square meters or more; where such development occurs –* *(a) within a watercourse; or* *(c) within 32 meters of a watercourse, measured form the edge of a watercourse;* *(i) within the Western Cape;* *(i) outside urban areas;* *(ff) within critical biodiversity areas of ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.*	Infrastructure in excess of 10m^2 will be developed within a watercourse and within 32m of a watercourse for the development of the Boulders Wind Farm. The project site is located in the Western Cape, outside of urban areas and within CBA 1 and CBA 2 areas as identified in the Western Cape Biodiversity Spatial Plan (WCBSP) of 2017.
GN R. 985 Activity 18: *The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre* (i) in the Western Cape; (ii) within all areas outside urban areas;	The upgrading of access roads for the project will involve the widening and/or lengthening of existing access roads. The Boulders Wind Farm will require access roads to be upgraded, which will include the

Activity number	Activity description
(aa) within areas containing indigenous vegetation.	widening of the roads as well as the lengthening of roads in some areas by more than 4m in width and more than 1km in length. The project site is located within the Western Cape, outside of urban areas and contains areas of indigenous vegetation that will be affected by this activity.

– as described in the Environmental Impact Assessment Report (EIAr) dated September 2019 at:

Farm names and numbers:

- The southern and eastern portion of Schuitjes Klip 3/22
- Boebezaks Kraal 2/40;
- Boebezaks Kraal 5/40
- Het Schuytje 1/21
- Frans Vlei 2/46

21 Digit SG code:

C	0	4	6	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	2
C	0	4	6	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	5
C	0	4	6	0	0	0	0	0	0	0	0	0	0	4	6	0	0	0	0	2
C	0	4	6	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	3
C	0	4	6	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	1

Boulders Wind Energy Facility coordinates:

Site	Point	Latitude	Longitude
Boulders Wind Energy Facility (full infrastructure coordinate list is attached in Annexure 2)	WTG01	32°50'48.99"S	17°58'12.22"E
	WTG03	32°50'40.79"S	17°57'35.40"E
	WTG05	32°49'44.07"S	17°58'03.74"E
	WTG021	32°48'25.54"S	17°58'25.16"E
	WTG012	32°48'54.49"S	18° 01'07.11"E
	WTG030	32°47'54.45"S	17°59'57.44"E
	WTG041	32°47'08.59"S	17°58'17.72"E
	WTG044	32°47'00.03"S	17°58'51.42"E

- for proposed Boulders Wind Energy Facility in Saldanha Bay Local Municipality within the West Coast District Municipality in the Western Cape Province, hereafter referred to as "the property".

M.S

The location indicated in the locality plan and Development Area Geographic Coordinates (Annexure 2), attached in this environmental authorisation.

Technical details for the proposed 140MW Boulders Wind Energy facility (Layout Alternative 2):

Infrastructure and Turbine Design Specifications	Footprint and dimensions
Access roads	Access to the Boulders Wind Farm project site is provided by an existing secondary gravel road traversing the length of project site. Along with the existing secondary gravel road, existing public and private farm roads are also present. The secondary gravel road located within the project site is the Stompneus Bay Secondary Road which traverses the project site in a north-south direction and a north-western direction (there are two legs of the secondary gravel road which meet in the centre of the project site) and provides access from Vredenburg to the project site and to St. Helena Bay, as well as access from Paternoster to the project site. The Regional road (R399) is the main road providing access to the general area within which the project site is located and is also the road from which the Stompneus Bay Secondary Gravel Road stems.
Number of turbines	45 (maximum)
Power output per turbine	3.15MW (maximum)
Facility output	140MW (maximum)
Turbine hub height	120m (maximum)
Foundation dimensions	570m^2 per turbine
Laydown area dimensions	2 624m^2 per turbine
Blade length	45m

Infrastructure and Turbine Design Specifications	Footprint and dimensions
Rotor diameter	103m (maximum)

Conditions of this Environmental Authorisation

Scope of authorisation

1. The proposed 140MW Boulders Wind Energy Facility in Saldanha Bay Local Municipality within the West Coast District Municipality in the Western Cape Province is hereby approved as per the geographic coordinates indicated above on page 6.
2. Authorisation of the activity is subject to the conditions contained in this environmental authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
4. The activities authorised must only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this environmental authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further environmental authorisation in terms of the regulations.
6. The holder of an environmental authorisation must apply for an amendment of the environmental authorisation with the competent authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.
7. This activity must commence within a period of five **(05)** years from the date of issue of this environmental authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
8. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.

Notification of authorisation and right to appeal

9. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
10. The notification referred to must –
    10.1. specify the date on which the authorisation was issued;
    10.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
    10.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
    10.4. Give the reasons of the competent authority for the decision.

Commencement of the activity

11. The authorised activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014, and no appeal has been lodged against the decision. In terms of Section 43(7), an appeal under Section 43 of the National Environmental Management Act, Act No. 107 of 1998, as amended will suspend the Environmental Authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.

Management of the activity

12. The Site Development Plan/ Layout Plan (Alternative Layout 2) appended as part of the EMPr, and submitted with the final EIAr dated September 2019 is **not approved.** A copy of the final Site Development Plan/ Layout Plan must be made available for comments by registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final development layout map (Size A3) must be submitted to the Department for written approval prior to commencement of the activity. All available biodiversity information must be used in the finalisation of the layout map. Existing infrastructure must be used as far as possible e.g. roads. The layout map must indicate the following:
    12.1. Cable routes (where they are not along internal roads);
    12.2. Position of wind turbines and associated infrastructure;

12.3. Internal roads indicating width;

12.4. Wetlands, drainage lines, rivers, stream and water crossing of roads and cables;

12.5. All sensitive features e.g. Important Bird Areas, Critical Biodiversity Areas, Ecological Support Areas, floral sensitive area, heritage sites, wetlands, pans and drainage channels that will be affected by the facility and associated infrastructure;

12.6. Substation(s) inverters and/or transformer(s) sites including their entire footprint;

12.7. Connection routes to the distribution/transmission network;

12.8. All existing infrastructure on the site, such as roads;

12.9. Soil heaps (temporary for topsoil and subsoil and permanently for excess material);

12.10. Buildings, including accommodation; and,

12.11. All "no-go" and buffer areas.

13. Furthermore, a shapefile of the approved development layout/footprint must be submitted to this Department within two months from the date of the decision. The shapefile must be created using the Hartebeesthoek 94 Datum and the data should be in Decimal Degree Format using the WGS 84 Spheroid. The shapefile must include at a minimum the following extensions i.e. .shp; .shx; .dbf; .prj; and, .xml (Metadata file). If specific symbology was assigned to the file, then the .avl and/or the .lyr file must also be included. Data must be mapped at a scale of 1:10 000 (please specify if an alternative scale was used). The metadata must include a description of the base data used for digitizing. The shapefile must be submitted in a zip file using the EIA application reference number as the title.

The shape file must be submitted to:

Postal Address:	Department of Environmental Affairs Private Bag X447 Pretoria 0001
Physical address:	Department of Environmental Affairs Environment House 473 Steve Biko Arcadia Pretoria
For Attention:	Mr Muhammad Essop Integrated Environmental Authorisations Strategic Infrastructure Developments
Telephone Number:	(012) 399 9406
E-mail Address:	MEssop@environment.gov.za

14. The Environmental Management Programme (EMPr) submitted as part of the final EIAr is not approved. The EMPr must be amended to include measures as dictated by the final site lay-out map and micro-siting; and the provisions of this environmental authorisation. The EMPr must be made available for comments by registered Interested and Affected Parties and the holder of this environmental authorisation must consider such comments. Once amended, the final EMPr must be submitted to the Department for written approval prior to commencement of the activity.

15. The EMPr amendment must include but not limited to the following:

15.1. The requirements and conditions of this authorisation.

15.2. All recommendations and mitigation measures recorded in the EIAr.

15.3. All mitigation measures as listed in the specialist reports must be included in the EMPr and implemented.

15.4. The final site layout map (A3 size).

15.5. An alien invasive management plan to be implemented during construction and operation of the facility. The plan must include mitigation measures to reduce the invasion of alien species and ensure that the continuous monitoring and removal of alien species is undertaken.

15.6. A plant rescue and protection plan which allows for the maximum transplant of conservation important species from areas to be transformed. This plan must be compiled by a vegetation specialist familiar with the site in consultation with the ECO and be implemented prior to commencement of the construction phase.

15.7. A re-vegetation and habitat rehabilitation plan to be implemented during the construction and operation of the facility. Restoration must be undertaken as soon as possible after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.

15.8. A traffic and transport management plans for the site access roads to ensure that no hazards would results from the increased truck traffic and that traffic flow would not be adversely impacted. These plans must include measures to minimize impacts on local commuters e.g. limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time and avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.

15.9. The post construction avifaunal monitoring plan that is in line with Birdlife's most recent guideline.

15.10. A storm water management plan to be implemented during the construction and operation of the facility. The plan must ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion. The plan must include the construction of

appropriate design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.

15.11. An erosion management plan for monitoring and rehabilitating erosion events associated with the facility. Appropriate erosion mitigation must form part of this plan to prevent and reduce the risk of any potential erosion.

15.12. An effective monitoring system to detect any leakage or spillage of all hazardous substances during their transportation, handling, use and storage. This must include precautionary measures to limit the possibility of oil and other toxic liquids from entering the soil or storm water systems.

15.13. A fire management plan to be implemented during the construction and operational phases.

15.14. Measures to protect hydrological features such as streams, rivers, pans, wetlands, dams and their catchments, and other environmental sensitive areas from construction impacts including the direct or indirect spillage of pollutants.

15.15. A Waste management plan to be implemented during construction and operation of the facility. The plan must include mitigation measures to reduce waste during construction and operation of the facility.

15.16. A Heritage Conservation Management Plan (HCMP) inclusive of management procedures to protect and manage the identified rocks art sites and burial grounds.

15.17. An environmental sensitivity map indicating environmental sensitive areas and features identified during the EIA process.

15.18. A map combining the final layout map superimposed (overlain) on the environmental sensitivity map. This map must reflect the proposed location of the facility as stated in the EIAr and this authorisation.

16. The final amended EMPr (once approved) must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.

17. Changes to the EMPr must be submitted to this Department for approval before such changes could be effected.

18. The Department reserves the right to amend the EMPr (once approved) should any impacts that were not anticipated or covered in the EIAr be discovered.

Frequency and process of updating the EMPr

19. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 25 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.
20. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
21. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of GN R. 982. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
22. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of GN R.982. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
23. The holder of the authorisation must request comments on the proposed amendments to the impact management outcomes of the EMPr or amendments to the closure objectives of the closure plan from potentially interested and affected parties, including the competent authority, by using any of the methods provided for in the Act for a period of at least 30 days.

Monitoring

24. The holder of the authorisation must appoint an experienced independent Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this environmental authorisation are implemented and to ensure compliance with the provisions of the approved EMPr.
    24.1. The ECO must be appointed before commencement of any authorised activities.
    24.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
    24.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
    24.4. The ECO must remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

Recording and reporting to the Department

25. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department at Directorcompliance@environment.gov.za.
26. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department at Directorcompliance@environment.gov.za.
27. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the approved EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of GN R. 982 of 04 December 2014, as amended.
28. The holder of the authorisation must, in addition, submit an environmental audit reports to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.
29. The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014, as amended, and must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the Environmental Authorisation conditions as well as the requirements of the approved EMPr.
30. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and Competent Authority in respect of this development.

Notification to authorities

31. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.

Operation of the activity

32. A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity's operational phase.

Site closure and decommissioning

33. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

Specific conditions

34. No activities will be allowed to encroach into a water resource without a water use authorisation being in place from the Department of Water and Sanitation.
35. An avifauna specialist must be appointed to conduct a final walkthrough to search for breeding/roosting sites within the development footprint, prior to construction commencement.
36. Preconstruction walk-through report detailing the location and distribution of all listed and protected species. This must include a walk-through of all infrastructure including all new access roads, turbine footprints, underground cables, power line routes, buildings and substations.
37. Periodical inspection of turbines to remove and discourage avifaunal nesting must be undertaken. Any nest sites must be removed by a qualified avifaunal specialist.
38. A full bird and bat monitoring programme (including bias trials) must be implemented during the operational phase, to confirm and determine the extent of impacts predicted, as well as to validate the success of any mitigation strategies proposed. The monitoring reports must be submitted to the *Director: Compliance Monitoring* of the Department.
39. All ecological sensitive areas such as rocky outcrops and riparian areas must be demarcated as no go areas.
40. Post construction monitoring of plants translocated during search and rescue to evaluate the success of the intervention. Monitoring for a year post-transplant should be sufficient to gauge success. The monitoring reports must be submitted to the *Director: Compliance Monitoring* of the Department.
41. Any fauna directly threatened by the construction activities must be relocated to a safe location by a qualified person.
42. All Species of Conservation Concern (SCC) must not be disturbed or removed prior to obtaining permit from relevant authorities.
43. Vegetation clearing prior and during construction must be limited to the development footprint of the proposed development in order to minimize loss of species of conservation concern and erosion.
44. The vegetation cover (i.e. natural or cultivated) must be maintained in all areas outside of the actual development footprint. This will minimise the visual impact as a result of cleared areas, power line servitudes and areas denuded of vegetation.

45. All disturbed and cleared areas must be re-vegetated with indigenous perennial shrubs and grasses from the local area.
46. Concurrent rehabilitation and alien vegetation control program within all sensitive areas must be implemented.
47. All wind turbines must avoid all areas (i.e. around farm buildings and graveyards, archaeological sites or complexes) designated as "no-go" areas as well as their buffers. The Lombard and Pienaar cemetery (2011/329) must be treated as a "no-go" area.
48. Accidentally discovered archaeological material must be reported to the Provincial Heritage Authority in terms of section 35 of the National Heritage Resources Act. The finds must also be reported to the appointed archaeologist for assessment and possible action.
49. Accidentally discovered human remains must immediately be reported to the Provincial Heritage Authority in terms of section 36 of the National Heritage Resources Act. The finds must also be reported to the appointed archaeologist for assessment and possible action.
50. The Heritage Western Cape Chance Fossil Finds Procedure must be included in the Environmental Management Programme (EMPr) and implemented in the case of fossil remains being encountered.
51. All buildings and structures which are already on the site and happens to be located within 1km of turbines, as well as any new structures built within the development footprint, must be bat–proofed to prevent the provision of new roosts within the development area.
52. Existing roads must be utilised wherever possible. New roads must be planned taking due cognisance of the topography to limit cut and fill requirements, must be undertaken properly with adequate drainage structures to avoid erosion impacts.
53. In terms of on-site ancillary buildings and structures, must be planned so that clearing of vegetation is minimised.
54. The holder of the authorisation must reduce lighting impacts through:

    - Investigate aircraft warning lights with proximity sensors;
    - Limiting aircraft warning lights to the perimeter turbines;
    - Limit mounting heights of lighting fixtures, use footlights or bollard level lights;
    - Use down-lighters or shielded fixtures;
    - Use motion sensors on security lighting;
    - Once the facility has exhausted its life span, the facility and all associated infrastructure not required for post rehabilitation of the site must be removed and all disturbed areas appropriately rehabilited.

55. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate.

56. Any solid waste, which will not be recycled, must be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No. 59 of 2008). No waste material may be left on site after construction.

57. The recommendations of the EAP in the final EIAr dated September 2019 and the specialist studies attached must be adhered to. In the event of any conflicting mitigation measures and conditions of the Environmental Authorisation, the specific condition of this Environmental Authorisation will take preference.

General

58. A copy of this Environmental Authorisation, the audit and compliance monitoring reports, and the approved EMPr, must be made available for inspection and copying-
    58.1. at the site of the authorised activity;
    58.2. to anyone on request; and
    58.3. where the holder of the Environmental Authorisation has a website, on such publicly accessible website.

59. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of environmental authorisation: 14/01/2020

Mr Sabelo Malaza
Chief Director: Integrated Environmental Authorisations
Department of Environmental Affairs

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, *inter alia,* the following into consideration -

a) The listed activities as applied for in the application form received on 28 February 2018.

b) The information contained in the draft EIAr received on 20 June 2019.

c) The information contained in the final EIAr received on 16 September 2019.

d) The comments received from the Department of Water and Sanitation; Heritage Western Cape;; Birdlife South Africa; Cape Nature; West Coast District Municipality; Saldanha Bay Local Municipality; Department of Rural Development & Land Reform; West Coast Bird Club; Department of Environmental Affairs and Development Planning; as included in the final EIAr dated September 2019.

e) Mitigation measures as proposed in the EMPr and the final EIAr dated September 2019.

f) The information contained in the specialist studies within the appendices of the final EIAr dated September 2019 and as appears below:

- Agricultural Impact Assessment of November 2018 and prepared by Freddie Ellis and Johann Laubscher;
- Avifaunal Impact Assessment of July 2018 and prepared by Bio insight;
- Bat Impact Assessment of November 2018 and prepared by Gaia Environmental Services (Pty) Ltd;
- Fauna & Flora Impact Assessment of August 2019 and prepared by 3 Foxes Biodiversity Solutions;
- Freshwater Impact Assessment of November 2018 and prepared by Scientific Aquatic Services;
- Heritage Impact Assessment of 17 August 2019 and prepared by Katie Smuts;
- Noise Impact Assessment of May 2018 and prepared by Enviro-Acoustic Research cc;
- Social Impact Assessment of November 2018 and prepared by Tony Barbour Environmental Consulting and Research;
- Visual Impact Assessment of July 2019 and prepared by LOGIS;
- Visual Impact Assessment of December 2018 and prepared by Coastal and Environmental Services (included as an Appendix);

- Tourism/Economic Impact Assessment of August 2019 and prepared by Urban-Econ Development Economists; and
- Transport Impact Assessment of November 2018 and prepared by Innovative Transport Solutions.

g) The objectives and requirements of relevant legislations, policies and guidelines, including Section 2 of the National Environmental Management Act, Act No.107 of 1998, as amended.

2. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

a) Compliance with the requirements of GN R 982 and Regulation 21(2) of the EIA Regulations 2014, as amended.

a) The findings of all the specialist studies conducted and their recommended mitigation measures.

b) The motivation for the need and desirability of the development which aims to:
   - Strengthen the existing electricity grid for the area;
   - Contribute towards meeting the national energy target as set by the Department of Energy and assist the government in achieving its proposed renewable energy target.
   - Furthermore, during the two-year construction phase, leading to the creation of over 900 jobs, and up to 60 jobs in the operational phase.

c) The final EIAr dated September 2019 identified all legislations and guidelines that have been considered in the preparation of the final EIAr.

d) The methodology used in assessing the potential impacts identified in the final EIAr dated September 2019 and the specialist studies have been adequately indicated.

e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014, as amended, for public involvement.

3. Findings

After consideration of the information and factors listed above, the Department made the following findings -

a) This application fully complies with the requirements of GN R 982 and Regulation 21(2) of the EIA Regulations 2014, as amended.

b) The identification and assessment of impacts are detailed in the final EIAr dated September 2019 and sufficient assessment of the key identified issues and impacts have been completed.

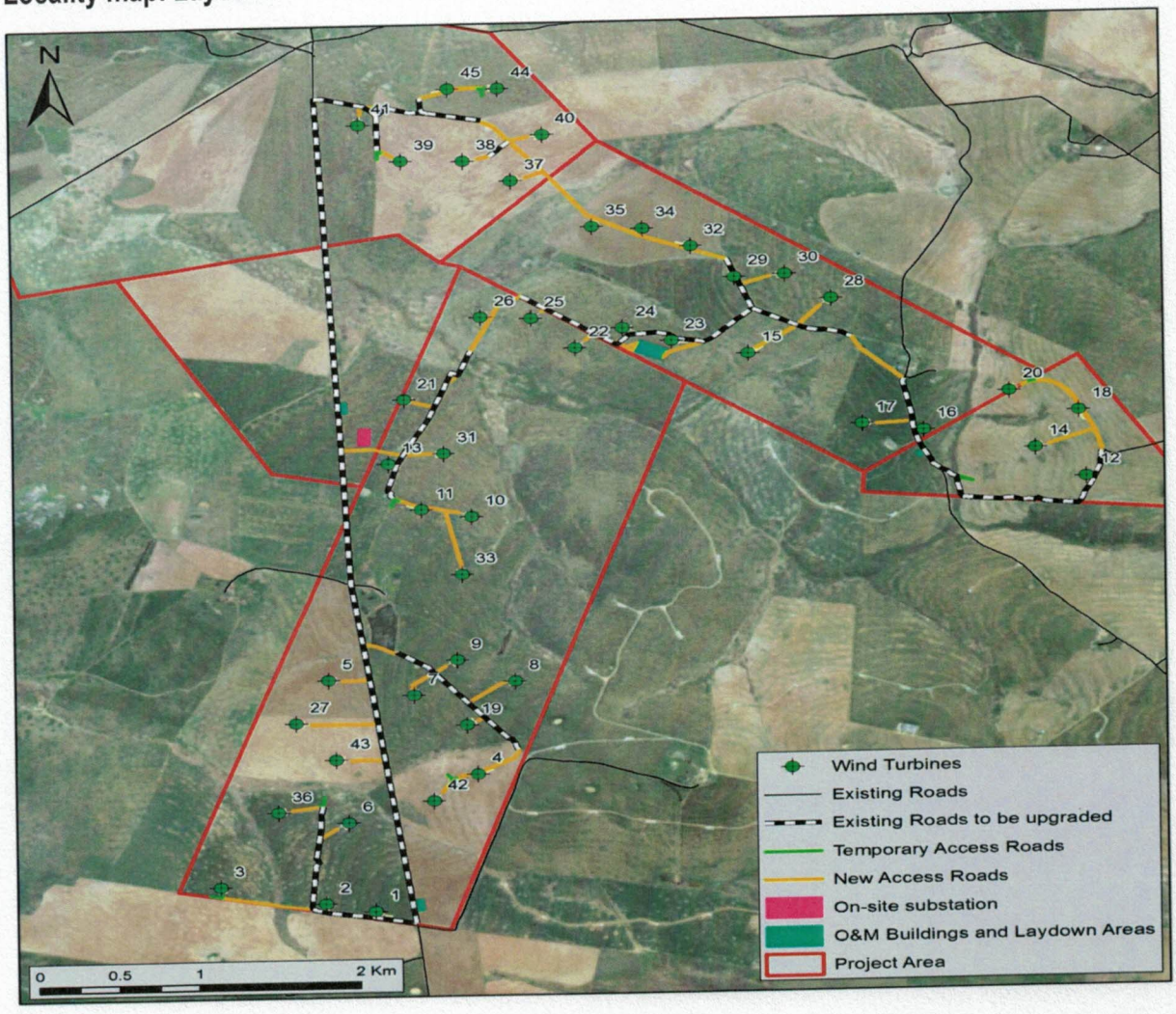
c) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.

d) EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the final EIAr dated September 2019 and will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the Environmental Authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, Act No. 107 of 1998, as amended, and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The Environmental Authorisation is accordingly granted.

Annexure 2

Locality map: Layout 2



Development Area Geographic Coordinates: Wind turbine coordinates for the proposed Boulders Wind Farm project.

WIND TURBINE LABEL NUMBER	Latitude (S)	Longitude (E)
WTG01	32°50'48.99"S	17°58'12.22"E
WTG02	32°50'46.36"S	17°58'00.44"E
WTG03	32°50'40.79"S	17°57'35.40"E
WTG04	32°50'11.66"S	17°58'38.27"E
WTG05	32°49'44.07"S	17°58'03.74"E
WTG06	32°50'24.09"S	17°58'06.82"E

M.S

WTG07	32°49'49.00"S	17°58'24.01"E
WTG08	32°49'46.14"S	17°58'48.28"E
WTG09	32°49'39.64"S	17°58'34.79"E
WTG010	32°48'59.16"S	17°58'39.91"E
WTG011	32°48'56.68"S	17°58'28.06"E
WTG012	32°48'54.49"S	18° 01'07.11"E
WTG013	32°48'43.52"S	17°58'20.64"E
WTG014	32°48'45.99"S	18° 00'55.33"E
WTG015	32°48'16.09"S	17°59'47.77"E
WTG016	32°48'39.63"S	18° 00'28.77"E
WTG017	32°48'37.24"S	18° 00'14.18"E
WTG018	32°48'35.89"S	18° 01'06.04"E
WTG019	32°49'57.88"S	17°58'36.33"E
WTG020	32°48'29.65"S	18° 00'49.80"E
WTG021	32°48'25.54"S	17°58'25.16"E
WTG022	32°48'12.70"S	17°59'06.63"E
WTG023	32°48'11.64"S	17°59'29.61"E
WTG024	32°48'7.62"S	17°59'18.07"E
WTG025	32°48'4.06"S	17°58'56.39"E
WTG026	32°48'3.23"S	17°58'44.43"E
WTG027	32°49'55.79"S	17°57'55.49"E
WTG028	32°48'01.65"S	18° 00'08.18"E
WTG029	32°47'54.73"S	17°59'45.43"E
WTG030	32°47'54.45"S	17°59'57.44"E
WTG031	32°48'41.16"S	17°58'33.96"E
WTG032	32°47'45.63"S	17°59'35.34"E
WTG033	32°49'15.29"S	17°58'37.01"E
WTG034	32°47'40.26"S	17°59'24.06"E
WTG035	32°47'39.25"S	17°59'12.16"E
WTG036	32°50'20.53"S	17°57'50.18"E
WTG037	32°47'25.72"S	17°58'53.40"E
WTG038	32°47'19.77"S	17°58'42.23"E

M.S

WTG039	32°47'19.15"S	17°58'27.38"E
WTG040	32°47'13.20"S	17°59'01.43"E
WTG041	32°47'08.59"S	17°58'17.72"E
WTG042	32°50'18.78"S	17°58'27.48"E
WTG043	32°50'06.40"S	17°58'04.70"E
WTG044	32°47'00.03"S	17°58'51.42"E
WTG045	32°46'59.63"S	17°58'39.52"E

Road coordinates for the proposed Boulders Wind Farm project.

Segment Number	Road Type (New (N)/Upgraded (U))	Latitude (S)	Longitude (E)
A1	U	32° 50' 19,134"" S	17° 58' 0,963"" E
A2	U	32° 50' 47,562"" S	17° 57' 56,842"" E
A3	N	32° 50' 25,050"" S	17° 58' 5,337"" E
A4	N	32° 50' 20,346"" S	17° 57' 52,041"" E
A5	N	32° 50' 42,503"" S	17° 57' 35,599"" E
A6	N	32° 50' 6,808"" S	17° 58' 6,611"" E
A7	N	32° 49' 56,262"" S	17° 57' 57,320"" E
A8	N	32° 49' 44,455"" S	17° 58' 5,641"" E
B1	N	32° 49' 37,552"" S	17° 58' 20,791"" E
B2	U	32° 50' 4,988"" S	17° 58' 48,076"" E
B3	N	32° 49' 40,346"" S	17° 58' 32,958"" E
B4	N	32° 49' 47,358"" S	17° 58' 23,648"" E
B5	N	32° 49' 46,384"" S	17° 58' 46,439"" E
B6	N	32° 50' 17,572"" S	17° 58' 28,927"" E
C1	N	32° 48' 41,289"" S	17° 58' 24,046"" E
C2	N	32° 48' 42,372"" S	17° 58' 19,205"" E
C3	N	32° 48' 41,094"" S	17° 58' 32,123"" E
C4	U	32° 48' 11,000"" S	17° 58' 42,520"" E
C5	N	32° 47' 57,681"" S	17° 58' 54,116"" E
C6	U	32° 48' 11,909"" S	17° 59' 16,193"" E
C7	N	32° 48' 12,453"" S	17° 59' 37,465"" E
C8	U	32° 48' 3,813"" S	17° 59' 49,323"" E

MS

C9	U	32° 47' 49,626"" S	17° 59' 43,767"" E
C10	N	32° 48' 58,282"" S	17° 58' 38,267"" E
C11	N	32° 49' 13,695"" S	17° 58' 36,783"" E
C12	N	32° 48' 26,265"" S	17° 58' 26,861"" E
C13	N	32° 48' 3,163"" S	17° 58' 58,042"" E
C14	N	32° 48' 11,616"" S	17° 59' 8,056"" E
C15	N	32° 48' 8,200"" S	17° 59' 19,854"" E
C16	N	32° 47' 54,542"" S	17° 59' 55,207"" E
D1	U	32° 48' 12,679"" S	18° 0' 12,583"" E
D2	N	32° 48' 2,603"" S	18° 0' 6,542"" E
D3	N	32° 48' 14,972"" S	17° 59' 49,101"" E
D4	N	32° 48' 25,269"" S	18° 0' 24,650"" E
D5	U	32° 48' 58,836"" S	18° 0' 37,207"" E
D6	N	32° 48' 37,494"" S	18° 0' 16,092"" E
D7	U	32° 49' 1,937"" S	18° 1' 5,123"" E
D8	U	32° 48' 51,388"" S	18° 1' 10,550"" E
D9	N	32° 48' 29,094"" S	18° 0' 51,617"" E
D10	N	32° 48' 45,748"" S	18° 0' 57,247"" E
E1	N	32° 47' 46,529"" S	17° 59' 35,110"" E
E2	N	32° 47' 14,524"" S	17° 58' 53,154"" E
E3	U	32° 47' 1,059"" S	17° 58' 7,657"" E
E4	N	32° 47' 45,349"" S	17° 59' 33,267"" E
E5	N	32° 47' 25,250"" S	17° 58' 55,135"" E
E6	N	32° 47' 19,529"" S	17° 58' 44,032"" E
E7	N	32° 47' 13,371"" S	17° 58' 59,187"" E
E8	U	32° 47' 1,930"" S	17° 58' 32,947"" E
E9	N	32° 46' 59,495"" S	17° 58' 49,051"" E
E10	U	32° 47' 15,461"" S	17° 58' 22,076"" E
E11	N	32° 47' 18,017"" S	17° 58' 25,794"" E
E12	N	32° 47' 3,296"" S	17° 58' 18,301"" E
E13	N	32° 47' 6,927"" S	17° 58' 18,139"" E