

### **ASHA Consulting (Pty) Ltd**

40 Brassie Street Lakeside 7945

20 August 2020

Aneesah Alwie

# **Arcus Consultancy Services South Africa (Pty) Ltd**

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#### PAULPUTS WIND ENERGY FACILITY SPLIT: HERITAGE CONSIDERATIONS

#### Dear Aneesah

Thank you for providing the details of the proposed split of the Paulputs Wind Energy Facility (WEF) into two separate projects. It is noted that the original project received Environmental Authorisation (EA) on 11 December 2019 (DEA Ref. No. 14/12/16/3/3/2/1120). It is now proposed to (1) split the facility into two, (2) to change the turbine specifications, and to split the grid connection from the WEFs. The three amendments are thus as follows:

A AMENDMENT 1	Project Title	The Proposed Paulputs North Wind Energy Facility and Associated Infrastructure EA Amendment, Northern Cape Province
	Project Information	Paulputs N WEF (up to 150 MW) consisting of 40 turbines (T1 – T40), substation A and associated infrastructure on the north-west side of the N14.
	Project SPV	Paulputs Wind Energy Facility North (Pty) Ltd
B AMENDMENT 2	Project Title	The Proposed Paulputs South Wind Energy Facility EA Amendment, Northern Cape Province
	Project Information	Paulputs SE WEF (up to 150 MW) consisting of 35 turbines (T41 – 75) and associated infrastructure on the south-east side of N14.
	Project SPV	Paulputs Wind Energy Facility South (Pty) Ltd
C AMENDMENT 3	Project Title	The Proposed Paulputs Grid Connection and Electrical Infrastructure associated with the authorised Paulputs Wind Energy Facility, Northern Cape Province
	Project Information	Paulputs WEF grid connection to be split from the current authorisation for ease of transfer of ownership to Eskom
	Project SPV	Paulputs Wind Energy Facility North (Pty) Ltd

This letter concerns the Paulputs WEF North (Amendment 1), and the Paulputs WEF North grid connection and associated electrical infrastructure (Amendment 2). The WEF project details are as follows:

Component	Authorised	Proposed
Holder of Authorisation	Paulputs WEF RF (Pty) Ltd	Paulputs Wind Energy Facility North (Pty) Ltd
Location of the Site	50 km northeast of Pofadder, Northern Cape Province	50 km northeast of Pofadder, Northern Cape Province
Total generation capacity	300 MW	Up to 150 MW
Proposed technology	Wind turbines and associated infrastructure	Unchanged

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Number of turbines	Up to 75 turbines	Up to 40 turbines
Hub height from ground	Up to 140 m	Up to 180 m
Rotor diameter	Up to 180 m	Up to 220 m
Area occupied by inverter transformer stations / substations	Approximately 4 hectares	Unchanged
Capacity of on-site substation	132 kV	Unchanged
Width of internal access roads	6 - 12 m wide	Unchanged
Length of internal access roads	80 km	~ 40 km
Site access	N14 (including for abnormal loads) and MN759 (no abnormal loads)	Unchanged

The grid connection and associated electrical infrastructure details are as follows:

Component	Authorised	Proposed
Holder of Authorisation	Paulputs WEF RF (Pty) Ltd	Paulputs Wind Energy Facility North (Pty) Ltd
Location of the Site	50 km northeast of Pofadder, Northern Cape Province	50 km northeast of Pofadder, Northern Cape Province
Height of pylons	Maximum of 30 m high	Unchanged
Length of transmission line	Maximum 12.5 km	Unchanged
Types of poles used	Both monopoles and lattice structures are being considered	Unchanged
Transmission capacity	132 kV line, evacuating a maximum of 300 MW	Unchanged, Only one route will be used, probably using a double line on one set of pylons
Area occupied by both permanent and construction laydown areas	Laydown areas used are the same as for the WEF, i.e. approximately 4 hectares (To allow for a 0.5 hectare office block, 1 hectare permanent laydown and 1 hectare temporary laydown)	Will include authorisation of a BESS
Area occupied by buildings	The O&M complex will form part of the on-site 200m x 200m substation compound of the WEF.	Unchanged
Width of internal access roads	3 – 6 m wide	Unchanged
Length of internal access roads	26.8 km (worst case scenario)	Unchanged
Site access	N14 (including for abnormal loads) and MN759 (no abnormal loads)	Unchanged
Height of fencing	Maximum 3m only around the on-site substation and buildings	Unchanged
Type of fencing	Wired mesh / chain link fence not electrified	Unchanged

The authorised layout of the turbines has been slightly altered but they still remain in the same general area to the northwest of the N14.

The content of this letter is based on the information generated during the original impact assessment process and presented in the project Heritage Impact Assessment (HIA). The relevant report is:

Orton, J. 2019. Heritage Impact Assessment: proposed Paulputs Wind Energy Facility and associated Grid Connection near Pofadder, Kenhardt Magisterial District, Northern Cape. Unpublished report prepared for Arcus Consultancy Services South Africa (Pty) Ltd. Lakeside: ASHA Consulting (Pty) Ltd.

It is noted that the turbine layout is slightly changed from that which was authorised (the latest layout is shown in Figure 1). The potential impacts to archaeology were rated as being of medium intensity because some sites might still be impacted. No sites of very high cultural significance were located during the survey. Despite the permanence of impacts to archaeological sites, the low extent and probability of impacts combined to result in a low significance. With mitigation the intensity would become low and the resulting significance would remain low.

Figure 1 shows the buffers around those archaeological sites that did have cultural significance. Several such sites are present within the bounds of the Paulputs South WEF. These sites have all been considered and avoided in the project design and, because it is still possible that other sites might occur within the road footprint, no change in the impact assessment ratings is needed. The ratings to all other aspects of heritage similarly remain unchanged. It will, however, still be important to conduct the pre-construction archaeological survey of the road layout in order to determine whether any other archaeological sites might be present in open areas not covered during the original survey.

The powerline route for the grid connection was not surveyed during the initial assessment because the alignment could not be accessed at the time. Some areas were noted from aerial photography as being potentially of medium sensitivity during the scoping phase. The line does cross a few of these. In the WEF area many of the potentially medium sensitivity areas turned out to not be sensitive and it is possible that this may also occur during survey of the grid line route. On the basis of the archaeology seen in the WEF study area and of other sites known by the author to occur in the wider area, it is unlikely that the power line construction would result in impacts of anything more than medium intensity. The impact assessment ratings discussed above thus also continue to apply to the grid connection. Once more, the pre-construction survey will be an important part of the project and will ensure that any as yet undocumented sites can be recorded and sampled, if necessary, prior to their destruction.

The recommendations contained in the original HIA require modification in that the original recommendation pertaining to the substations falls away. The recommendations to be carried forward in the amended authorisation for the **Paulputs WEF North** are as follows:

- The final authorised layout for the WEF, all internal roads (including the above rerouted section), internal power lines, substation and any other areas to be disturbed must be surveyed by an archaeologist prior to construction in order to identify any remaining potential impacts that may need mitigation;
- Identified sensitive sites must be treated as no-go areas throughout the lifetime of the project;
- If any turbines are removed as a result of the use of larger turbines at a later stage then priority should be given to removing turbines close to the N14; and
- If any archaeological material or human burials are uncovered during the course of development then work in the immediate area should be halted. The find would need to be reported to the heritage authorities and may require inspection by an archaeologist. Such heritage is the property of the state and may require excavation and curation in an approved institution.

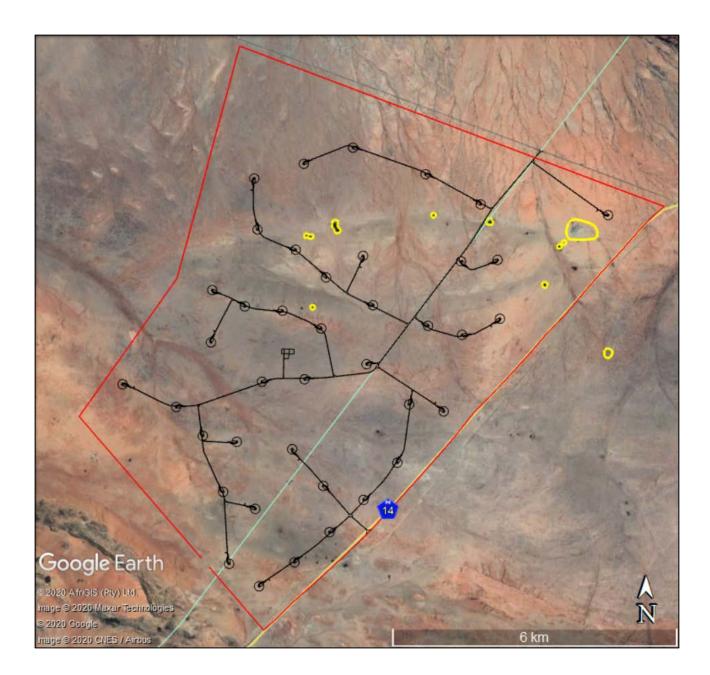
The recommendations to be carried forward in the amended authorisation for the **Paulputs WEF North grid connection** are as follows:

- The final authorised layout for the power line, substation, battery storage system and any other areas
  to be disturbed must be surveyed by an archaeologist prior to construction in order to identify any
  remaining potential impacts that may need mitigation;
- Identified sensitive sites must be treated as no-go areas throughout the lifetime of the project. These are to be confirmed during the pre-construction survey;
- If any archaeological material or human burials are uncovered during the course of development
  then work in the immediate area should be halted. The find would need to be reported to the
  heritage authorities and may require inspection by an archaeologist. Such heritage is the property of
  the state and may require excavation and curation in an approved institution.

Yours sincerely

Jayson Orton

ASHA Consulting (Pty) Ltd



**Figure 1:** The current layout considered by this opinion letter. The N14 serves as the south-eastern boundary of the project and the red polygon indicate the project site outline. The small yellow polygons denote buffers around archaeological sites.

## Site verification report

A site sensitivity verification was undertaken in order to confirm the current land use and environmental sensitivity of the proposed project area. The details of the site sensitivity verification are noted below:

Date of Site Visit	30 November to 2 December 2018
Specialist Name	Dr Jayson Orton
Professional Registration Number)	ASAPA: 233; APHP: 043
Specialist Affiliation / Company	ASHA Consulting (Pty) Ltd

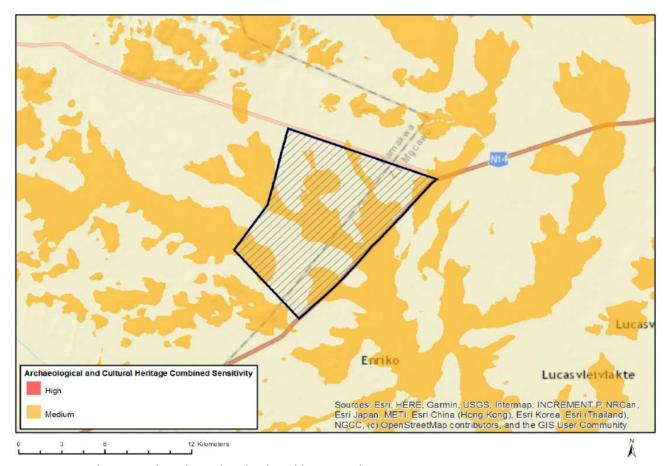
- Provide a description on how the site sensitivity verification was undertaken using the following means:
- (a) desk top analysis, using satellite imagery;
- (b) preliminary on -site inspection; and
- (c) any other available and relevant information.

Initial work was carried out using satellite aerial photography in combination with the author's accumulated knowledge of the local landscape. This was used to provide sensitivity data. Subsequent fieldwork served to ground truth the site, including areas identified as potentially sensitive (but not in the section that was inaccessible). Desktop research was also used to inform on the heritage context of the area.

- Provide a description of the outcome of the site sensitivity verification in order to:
- (a) confirm or dispute the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.; and
- (b) include a motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity.

The map below is extracted from the screening tool report and shows the archaeological and heritage sensitivity to be medium to low. The site visit showed that in fact the majority of the site is of low sensitivity with only small pockets (where archaeological resources were found) considered to be of medium sensitivity. Figure 1 (above) shows the areas considered to be archaeologically sensitive. Since none of the sites were of high cultural significance, these can all be considered as medium sensitivity areas. A photographic record and description of the relevant heritage resources is contained within the impact assessment report.

The screening tool report contains no palaeontological map which indicates 100% low sensitivity. This is in line with the specialist study conducted during the impact assessment phase.



Screening tool map: archaeological and cultural heritage theme.



DETAILS OF THE SPECIALIST, DECLARATION OF INTEREST AND UNDERTAKING UNDER OATH

	(For official use only)
File Reference Number:	
NEAS Reference Number:	DEA/EIA/
Date Received:	

Application for authorisation in terms of the National Environmental Management Act, Act No. 107 of 1998, as amended and the Environmental Impact Assessment (EIA) Regulations, 2014, as amended (the Regulations)

## PROJECT TITLE

PROPOSED AMENDMENT OF THE AUTHORISED PAULPUTS WIND ENERGY FACILITY, NORTHERN CAPE **PROVINCE** 

## Kindly note the following:

- 1. This form must always be used for applications that must be subjected to Basic Assessment or Scoping & Environmental Impact Reporting where this Department is the Competent Authority.
- 2. This form is current as of 01 September 2018. It is the responsibility of the Applicant / Environmental Assessment Practitioner (EAP) to ascertain whether subsequent versions of the form have been published or produced by the Competent Authority. The latest available Departmental templates available https://www.environment.gov.za/documents/forms.
- 3. A copy of this form containing original signatures must be appended to all Draft and Final Reports submitted to the department for consideration.
- 4. All documentation delivered to the physical address contained in this form must be delivered during the official Departmental Officer Hours which is visible on the Departmental gate.
- 5. All EIA related documents (includes application forms, reports or any EIA related submissions) that are faxed; emailed; delivered to Security or placed in the Departmental Tender Box will not be accepted, only hardcopy submissions are accepted.

#### Departmental Details

#### Postal address:

Department of Environmental Affairs Attention: Chief Director: Integrated Environmental Authorisations Private Bag X447 Pretoria

0001

# Physical address:

Department of Environmental Affairs Attention: Chief Director: Integrated Environmental Authorisations **Environment House** 473 Steve Biko Road Arcadia

Queries must be directed to the Directorate: Coordination, Strategic Planning and Support at: Email: EIAAdmin@environment.gov.za

### SPECIALIST INFORMATION

Specialist Company Name:	ASHA Consulting (Pty) Ltd					
B-BBEE	Contribution level (indicate 1   4		Percentage 0			
	to 8 or non-compliant)		Procureme	ent		
			recognition			
Specialist name:	Dr Jayson Orton					
Specialist Qualifications:	D.Phil (Archaeology, Oxford, UK) MA (Archaeology, UCT)					
Professional	ASAPA CRM member No. 233					
affiliation/registration:	APHP member No. 043					
Physical address:	23 Dover Road, Muizenberg, 7945					
Postal address:	23 Dover Road, Muizenberg					
Postal code:	7945	Cell:	0	83 272 322	25	
Telephone:	021 788 1025	Fax:	n	ı/a		
E-mail:	ail: jayson@asha-consulting.co.za					

# 2. DECLARATION BY THE SPECIALIST

1 JAYSON	ORTON	, declare that -
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- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that
  reasonably has or may have the potential of influencing any decision to be taken with respect to the application by
  the competent authority; and the objectivity of any report, plan or document to be prepared by myself for
  submission to the competent authority;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.

Signature of the Specialist

ASHA CONSULTING (PTY) LTD

Name of Company:

21-07-2021

Date

3.	UNDERTAKING UNDER OATH/ AFFIRMATION	
,	ed for the purposes of this application is true and correct.	the information submitted or to be
Signatu	re of the Specialist	
	ASHA CONSULTING (PTX) LTD	
Name o	of Company	
	21-07-2021	
Date	10 Mill 110	
Signatu	ure of the Commissioner of Oaths	
Date	2021-07-21	
	EK SERTIFISEER DAT HIERDIE DOKUMENT 'N WARE AFDRUK(AFSKELF) SIVAN DIE OORSPRONKLIKE DOKUMENT WAT AAN MY VIR WAARN WING VOORGELÊ IS, EK SERTIFISEER VERDER DAT VOLGENS MY WAARN WINGS DAAR NIE 'N WYSIGING OF VERANDERING OP DIE OORSPRONKLIKE DOKUMENT AANGEBRING IS NIE.  I CERTIFY THAT THIS DOCUMENT IS A TRUE REPRODUCTION(COPY) OF THE ORIGINAL DOCUMENT WHICH WAS HANDED TO ME FOR AUTHENTICAL IN I FURTHER CERTIFY THAT FROM MY OBSERVATIONS AN AMENDTIMENT ON A CHANGE WAS NOT MADE TO THE ORIGINAL DOCUMENT.  MAGSNOMMER MAGSNOMMER RANGER MINNER	SUID-AFRIKAANSE POLISIEDIENS COMMUNITY SERVICE CENTRE MUIZENBERG  2 1 JUL 2021  COMMUNITY SERVICE CENTRE MUIZENSERG SOUTH AFRICAN POLICE SERVICE
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