

Phase 2a Heritage Monitoring (Interim Report 1) –

**IMPOFU NORTH WIND FARM, IMPOFU WEST WIND FARM, AND IMPOFU EAST WIND FARM,  
NEAR OYSTER BAY, KOUGA LOCAL MUNICIPALITY,  
SARAH BAARTMAN DISTRICT MUNICIPALITY, EASTERN CAPE**

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**DATE –  
21 AUGUST 2023**



### SPECIALIST DECLARATION OF INTEREST

I, Karen van Ryneveld, ArchaeoMaps, declare that:

- I act as independent heritage specialist in this application.
- I do not have any financial or personal interest in the application, its proponent, or subsidiaries, aside from fair remuneration for specialist services rendered.
- I am suitably qualified, accredited, and experienced to act as independent specialist in this application.
- Work is conducted in an objective manner; circumstances that may have compromised work is reported on.
- All material information collected for purposes of this application are transparently reported on.
- Work is done in accordance with relevant heritage legislation, regulations, and policy guidelines, and with cognisance to environmental legislation, regulations, and policies, including the principle of Integrated Environmental Management (IEM).



**SIGNATURE – 21 AUGUST 2023**

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	<b>COMPANY:</b> ArchaeoMaps cc <b>REGISTRATION NR:</b> 2005/180719/23
<b>PROFESSIONAL MEMBERSHIP &amp; ACCREDITATION</b>	ASAPA [Association of Southern African Professional Archaeologists] Member Nr. 163 ASAPA CRM [Cultural Resources Management] Accreditation: ❖ Principal Investigator: 2010 – Stone Age CRM ❖ Field Director: 2005 – (Stone Age), Iron Age, and Colonial Period CRM
<b>QUALIFICATION</b>	MSc – Archaeology, WITS University, 2003

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**EXECUTIVE SUMMARY**

**PROJECT NAME AND LOCALITY**

*Impofu North Wind Farm, Impofu West Wind Farm, and Impofu East Wind Farm, near Oyster Bay, Kouga Local Municipality, Sarah Baartman District Municipality, Eastern Cape.*

- General site co-ordinate: S34°04'35.9"; E24°32'52.1" (Impofu North Wind Farm).
- 1:50,000 Map Ref: 3424AB and 3424BA.

**INTERIM REPORT 1**

The Impofu Cluster comprises of three wind farms, namely Impofu North Wind Farm, Impofu West Wind Farm, and Impofu East Wind Farm, located near Oyster Bay in the Kouga Local Municipal area of the Sarah Baartman District Municipality, Eastern Cape. The cluster obtained Environmental Authorisations (EA) in 2019 and 2023, based on the Environmental Impact Assessments (EIA) and Environmental Management Programmes (EMPr) for the respective wind farm developments. As part of the EMPr approval process archaeological–heritage micro-siting was conducted for the cluster, as follow-up to the EIA specialist Heritage Impact Assessment (HIA) components of the cluster and including palaeontological (PIA) and archaeological and cultural heritage (AIA) assessments.

The purpose of this report is to report on heritage compliance pertaining to the construction phase of the Impofu Cluster development to date, including:

- **Heritage training of the project team**

A pre-construction heritage training session was held on 3 August 2023 at 52 Voortrekker Street, Humansdorp.

- **Temporary conservation of the IE8 Stone Age quarry, Impofu East Wind Farm**

The temporary conservation area of the identified IE8 Stone Age quarry was confirmed on-site, 3 August, and recommended measures implemented (3–4 August) for the construction phase of the development.

## CONTENTS

<b>1 – INTERIM REPORT 1 .....</b>	<b>1</b>
<b>1.1 Heritage training of the project team.....</b>	<b>2</b>
<b>1.2 Temporary conservation of the IE8 Stone Age quarry, Impofu East Wind Farm.....</b>	<b>3</b>

### LIST OF MAPS

<b>Map 1:</b> The Impofu North, East, and West Wind Farm Cluster, Kouga Local Municipality, Sarah Baartman District Municipality, Eastern Cape.....	1
<b>Map 2:</b> The Impofu East Wind Farm and the locality of the archaeological Stone Age quarry site IE8.....	2
<b>Map 3:</b> Setting of the Impofu North, East, and West Wind Farm Cluster in relation to its broader heritage sensitive environment (courtesy Red Cap Energy).....	3
<b>Map 4:</b> Location of the IE8 Stone Age quarry site in relation to planned development and the general quartzite outcrops rich surrounds. ....	4

### LIST OF PLATES

<b>Plate 1:</b> General view of the IE8 Stone Age quarry site (site visit) [1] .....	6
<b>Plate 2:</b> General view of the IE8 Stone Age quarry site (site visit) [2] .....	6
<b>Plate 3:</b> General view of the IE8 Stone Age quarry site surrounds (site visit) [1] .....	6
<b>Plate 4:</b> General view of the IE8 Stone Age quarry site surrounds (site visit) [2] .....	6
<b>Plate 5:</b> Stone Age quarry site IE8 with temporary conservation fencing and signage in place (courtesy IEMS–EGP) [1].....	7
<b>Plate 6:</b> Stone Age quarry site IE8 with temporary conservation fencing and signage in place (courtesy IEMS–EGP) [2].....	7
<b>Plate 7:</b> Stone Age quarry site IE8 with temporary conservation fencing and signage in place (courtesy IEMS–EGP) [3].....	7

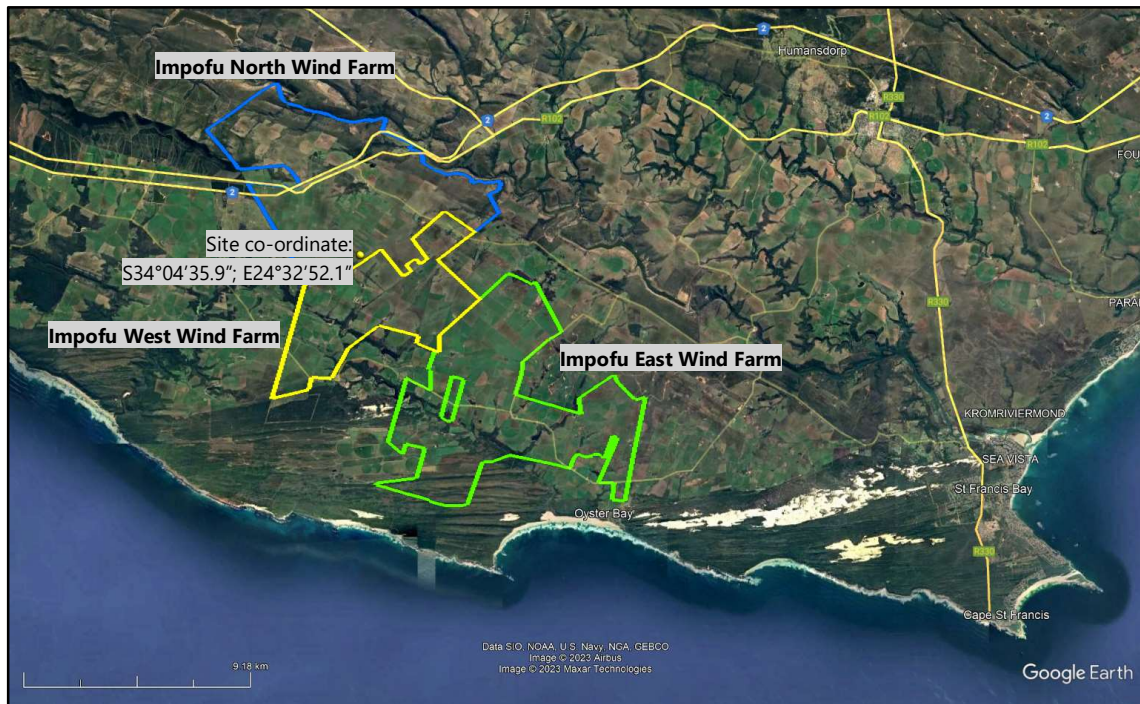
### LIST OF TABLES

<b>Table 1:</b> Extract of Nilssen’s (2019) archaeological and cultural heritage impact assessment report indicating the site sensitivity significance and mitigation recommendations for IE8. ....	4
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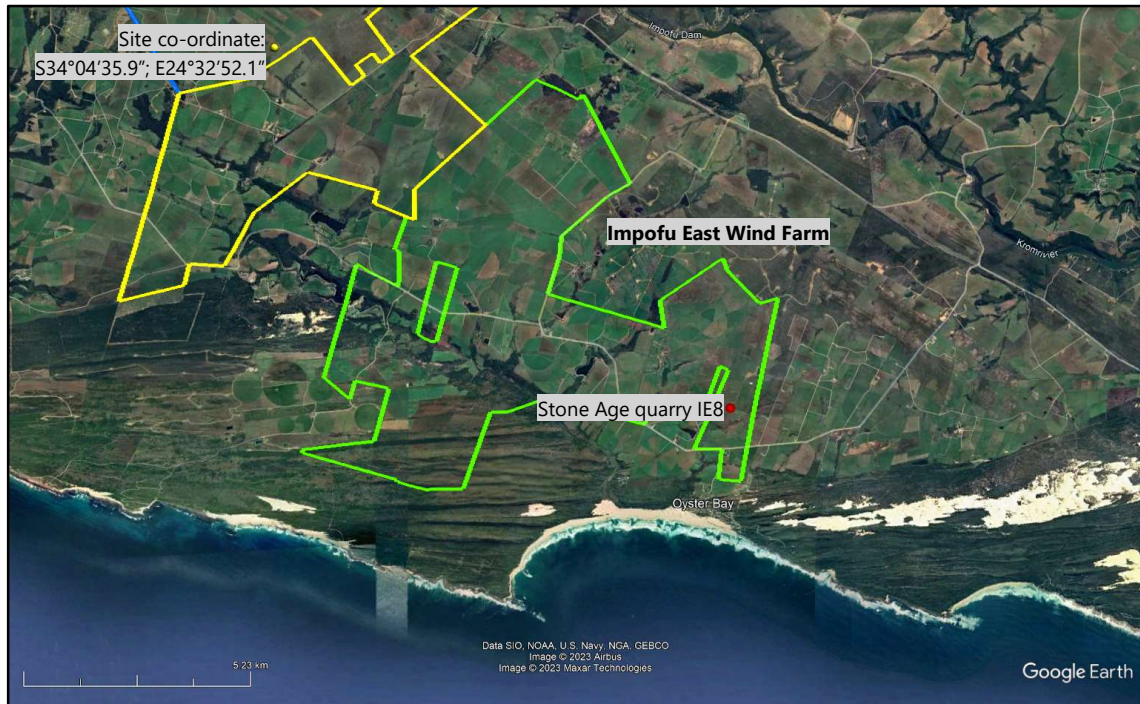
The Impofu Cluster comprises of three wind farms, namely Impofu North Wind Farm, Impofu West Wind Farm, and Impofu East Wind Farm, located near Oyster Bay in the Kouga Local Municipal area of the Sarah Baartman District Municipality, Eastern Cape. The wind farm cluster constitutes a 57-turbine development (and related infrastructure), with 19 turbines situated on each wind farm. Enel Green Power South Africa (Pty) Ltd (EGP) intends to construct and operate the wind farm cluster. As part of the EA, and EIA and EMP conditions, EGP must appoint an independent Environmental Control Officer (ECO) during the construction phase of the project to audit environmental compliance on site—Environmental Impact Management Services (Pty) Ltd (EIMS) has been appointed in this capacity—as well as a Contractor to carry the construction activities on site. To ensure protection and care of heritage—environmental items on site during the construction phase, the following activities must be carried out:

- a) Pre-construction heritage training of all personnel on site about the importance of identified heritage and heritage that may be encountered during the course of construction.
- b) Demarcation (and temporary conservation) of any sensitive heritage features on site (mainly the identified IE8 Stone Age quarry, Impofu East Wind Farm).
- c) Archaeological heritage—environmental monitoring of 11 turbines in the Impofu Cluster.

ArchaeoMaps has been appointed to manage the heritage—environmental scope of the Impofu Cluster. The purpose of this first interim Phase 2a monitoring report is to detail compliance with items a) and b) above.



**Map 1:** The Impofu North, East, and West Wind Farm Cluster, Kouga Local Municipality, Sarah Baartman District Municipality, Eastern Cape.



**Map 2:** The Impofu East Wind Farm and the locality of the archaeological Stone Age quarry site IE8.

### 1.1 Heritage training of the project team

A pre-construction heritage training session was held on 3 August 2023 at 52 Voortrekker Street, Humansdorp, for the Impofu Cluster team, including EGP, ECO, and Contractor personnel. The training session was presented by ArchaeoMaps and focused on the heritage sensitivity of the Impofu Cluster and its greater surrounds, with specific reference to known and excavated archaeological deposits and sites, such as Melkhoutboom, Wilton Large Rock Shelter (LRS) and cave, the Geelhoutboom dune system deposits, and Klasies River Mouth. The Phase 2 archaeological mitigation report for Brandewynkop—with the site situated immediately west of the Impofu East Wind Farm—was requested from the South African Heritage Resources Agency (SAHRA). Unfortunately, the report was not made available and the Brandewynkop findings were, thus, excluded from the training.

Cemeteries and grave sites (human remains) were addressed in terms of both possible surface and sub-surface contexts, and in accordance with their living heritage association, with specific reference to Stone Age (KhoiSan) history but not excluding later Colonial Period (Western) and Iron Age (Bantu / Ba’Ntu) histories of the region. The possibility of paleoanthropological human remains finds and its importance was explained at the hand of the Klasies River Mouth early *Homo sapien* specimens, dating to 90–120,000 years ago, and the site’s current heritage status quo as part of a serial nomination titled, “*The Emergence of Modern Humans: the Pleistocene Occupation Sites of Southern Africa*” for World Heritage Status (WHS) to the United Nations Educational, Scientific and Cultural Organization (UNESCO).

The paleontologically sensitive southern dune field, partially overlapped by the south-western extremity of the Impofu East Wind Farm study site was addressed not only with reference to possible palaeontological finds but also its importance in paleoenvironmental reconstruction—and with the link, if a link indeed, between the various paleoenvironments, the southern palaeontological and Geelhoutboom dune fields, Brandewynkop, and Klasies River Mouth terrain yet to be established. Four wind turbines initially proposed in the paleontologically sensitive dune field have been excluded from the final development layout—the four turbines will not be constructed.





**Map 3:** Setting of the Impofu North, East, and West Wind Farm Cluster in relation to its broader heritage sensitive environment (courtesy Red Cap Energy).

In addition, heritage was addressed with direct reference to the study site from an on-site *chance finds procedure* perspective. A *chance finds procedure* was developed and must be implemented on site, should the need arise. The chance find protocol document not only meets the requirements of the NHRA 1999 but also provide a step-by-step action and reporting guide for on-site use, addressing in specific chance paleontological, archaeological, and cemeteries / graves (human remains) categories. Preliminary time frames for EC PHRA permits relating to possible significant finds that would require Phase 2 mitigation (rescue excavation) were communicated as:

- Palaeontological and archaeological finds / sites: 2–4 weeks (4 weeks in the event of a palaeontological site and including the appointment of an accredited palaeontologist).
- Graves and human remains finds / sites: 2–3 months (and including the public consultation process).

## 1.2 Temporary conservation of the IE8 Stone Age quarry, Impofu East Wind Farm

The IE8 Stone Age quarry is situated at S34°08'59.8"; E24°39'36.8" toward the south-eastern extremity of the Impofu East Wind Farm and comprises an approximate 0.45ha area. Nilssen (2019: 27) described the IE8 quarry as a "quartzite outcrop south of the internal road leading to proposed turbine 31 which has numerous flake scars from Stone Age quarrying of raw material for the manufacture of stone tools [...]. Although flake scars are abundant on the exposed quartzite outcrops, dense vegetation in the immediate surroundings makes it impossible to search ground surfaces for flaking debris that may have resulted from quarrying or tool production activities." The site was, resultantly, assigned a low to medium heritage site significance, and temporary conservation, including a temporary fence with signage indicating the site as a "No-go Area" during the construction phase of development was recommended to ensure its conservation in posterity (Nilssen 2019).

Relevant Heritage Impact Assessment (HIA) documentation for the Impofu East Wind Farm is summarised as:

- Almond, J. 2018. (Natura Viva). Palaeontological heritage. Combined desktop and field-based scoping assessment. Proposed Impofu East Wind Farm near Humansdorp, Sarah Baartman District Municipality.

- Nilssen, P. 2019. (CARM). Phase 1a archaeological impact assessment. Draft environmental impact report. Proposed Impofu East Wind Farm, Kouga Local Municipality, Sarah Baartman District Municipality, Eastern Cape.
- Nilssen, P. 2023. (CARM). Micro-siting report. Heritage resources – Phase 1a archaeological impact assessment. Proposed Impofu North, West & East Wind Farms, Kouga Local Municipality, Eastern Cape.



**Map 4:** Location of the IE8 Stone Age quarry site in relation to planned development and the general quartzite outcrops rich surrounds.

Point Name	Age & Material	Location - WGS 84 Lat/Lon dec.degrees	Sensitivity / Significance	Mitigation or Management
IE1-180	LSA/MSA - isolated flake in mammal burrow	S34.14781° E24.59995°	Low	None
IE2 - 188	MSA-LSA stone artefact scatter - disturbed by road	S34.14039° E24.65364°	Low	monitor surrounds during construction
IE3 - 192	MSA/ESA - isolated specimens	S34.14551° E24.65076°	Low	monitor surrounds during construction
IE4 - 193	possible flaked in situ rock	S34.14616° E24.65211°	Low	monitor surrounds during construction
IE5 - 194	MSA/ESA - isolated core	S34.14498° E24.64864°	Low	monitor surrounds during construction
IE6 - 195	ESA - isolated hand axe and "chopper"/core	S34.14044° E24.65432°	Low	monitor surrounds during construction
IE7 - 196	historic period - base for water tanks	S34.14448° E24.66348°	Low	None
IE8 - 197	Stone Age quarrying of quartzite outcrop	S34.14997° E24.66023°	Low-Med	avoided in latest layout - temp fence during construction
IE9 - 198	ESA - isolated core in road - disturbed	S34.14375° E24.63850°	Low	None
IE10 - 201	Historic - fair modern cottage & "dipping" kraal	S34.11512° E24.61196°	Low	none - avoided in latest layout monitor surrounds during construction
IE11 - 208	MSA/ESA - in situ pieces in quarry	S34.15411° E24.65198°	Low-Med	none - avoided in latest layout
IE12 - 166	Stone Age quarry & low density stone artefact scatter	S34.08255° E24.65075°	Low-Med	none - avoided in latest layout

**Table 1:** Extract of Nilssen's (2019) archaeological and cultural heritage impact assessment report indicating the site sensitivity significance and mitigation recommendations for IE8.

The IE8 Stone Age quarry site was visited on 3 August in the company of the Impofu Cluster team (EGP, ECO, and Contractor personnel). The aim of the site visit was to demarcate the temporary conservation fence alignment. The IE8 quarry is sited in a quartzite outcrop rich area; outcrops near the IE8 quarry site, likewise, evidenced past



quarrying activities with infrequent artefacts and debris of the Earlier (ESA), Middle (MSA), and possibly even the Later Stone Age (LSA) scattered about the outcrops. The development layout avoids general impact on the outcrops and the IE8 quarry site will serve as proxy to monitor unintended impact. Development is, however, reasonably expected to impact on infrequent low significance (surface and) subsurface lithic artefacts. Phase 2a heritage monitoring during the course of construction will confirm or reject this expectation.

The Contractor commenced with the temporary fencing of the IE8 quarry immediately after the site visit (3–4 August). Site photographs of the completed temporary IE8 quarry site conservation was provided by EIMS–EGP for inclusion in this report.



**Plate 1:** General view of the IE8 Stone Age quarry site (site visit) [1]



**Plate 3:** General view of the IE8 Stone Age quarry site surrounds (site visit) [1]



**Plate 2:** General view of the IE8 Stone Age quarry site (site visit) [2]



**Plate 4:** General view of the IE8 Stone Age quarry site surrounds (site visit) [2]

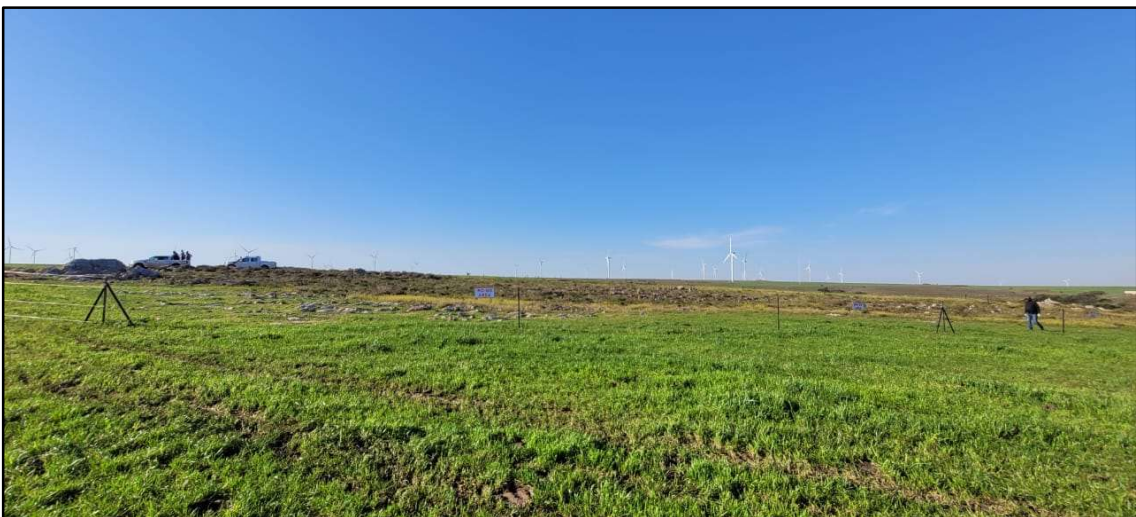




**Plate 5:** Stone Age quarry site IE8 with temporary conservation fencing and signage in place (courtesy IEMS–EGP) [1]



**Plate 6:** Stone Age quarry site IE8 with temporary conservation fencing and signage in place (courtesy IEMS–EGP) [2]



**Plate 7:** Stone Age quarry site IE8 with temporary conservation fencing and signage in place (courtesy IEMS–EGP) [3]