Appendix G.10

HERITAGE ASSESSMENT

HERITAGE SCOPING REPORT

For the proposed Kromhof Wind Energy Facility, Free State Province

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EXECUTIVE SUMMARY

Kromhof Wind Power (Pty) Ltd proposes the development of the Kromhof Wind Energy Facility (WEF) as part of the Verkykerskop Wind Energy Facility (WEF) Cluster, near Harrismith, Free State Province. Beyond Heritage was appointed to assess the potential impacts to heritage resources by the Project. This report is for the scoping phase of the Project and is based on a desktop study that provides a brief review of the local heritage and potential sites to be avoided. Key findings include:

- Heritage resources in the study area consist of structures and ruins older than 60 years, burial sites;
- The larger region around Verkykerskop is characterised by Later Iron Age stone walled sites likely an indicator of Batlokwa and Basia occupation;
- The study area is indicated to be of insignificant, moderate, and very high palaeontological sensitivity according to SAHRIS, and additional studies are required for the EIA phase;
- To comply with the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) and with cognisance of known heritage resources in the area, the development footprint should be subjected to a field-based Heritage Impact Assessment (HIA) of the final impact areas.

The table below provides information regarding the outcome of the Department of Forestry, Fisheries and the Environment (DFFE) Screening tool in terms of the Archaeological and Cultural Heritage as well as the Paleontological theme sensitivities associated with the proposed project and the specialist sensitivity verification (more detail is included in Appendix A).

ASPECT	SCREENING TOOL SENSITIVITY	VERIFIED SENSITIVITY	PLAN OF STUDY	RELEVANT SECTION MOTIVATING VERIFICATION
Archaeological and Cultural Heritage	Low	Medium	Phase 1 Heritage Impact Assessment	Section 38 NHRA Requirements
Palaeontology	Very high	Insignificant, Moderate, Very High	Paleontological Impact Assessment	Section 7.2. SAHRA Requirements SAHRIS Paleontological Map

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ABBREVIATIONS

AIA: Archaeological Impact Assessment
ASAPA: Association of South African Professional Archaeologists
BIA: Basic Impact Assessment
CRM: Cultural Resource Management
ECO: Environmental Control Officer
EIA: Environmental Impact Assessment*
EIA: Early Iron Age*
EIA Practitioner: Environmental Impact Assessment Practitioner
EMPr: Environmental Management Programme
ESA: Early Stone Age
GPS: Global Positioning System
HIA: Heritage Impact Assessment
LIA: Late Iron Age
LSA: Late Stone Age
MEC: Member of the Executive Council
MIA: Middle Iron Age
MPRDA: Mineral and Petroleum Resources Development Act
MSA: Middle Stone Age
NEMA: National Environmental Management Act
PRHA: Provincial Heritage Resource Agency
SADC: Southern African Development Community
SAHRA: South African Heritage Resources Agency
UNESCO: The United Nations Educational, Scientific and Cultural Organization
WEF: Wind Energy Facility

**Although EIA refers to both Environmental Impact Assessment and the Early Iron Age, both are internationally accepted abbreviations and must be read and interpreted in the context it is used.*

GLOSSARY

Archaeological site (remains of human activity over 100 years old)

Earlier Stone Age (2 million to 300 000 years ago)

Middle Stone Age (300 000 to 30 000 years ago)

Later Stone Age (30 000 years ago until recent)

Historic (approximately AD 1840 to 1950)

Historic building (over 60 years old)

Lithics: Stone Age artefacts

1. INTRODUCTION

Beyond Heritage was contracted by WSP (Pty) Ltd to conduct a heritage scoping study for the Kromhof WEF (Figure1.3), as part of the Verkykerskop Cluster Development (Figure 1.1 and 1.2), located near Harrismith in the Phumelela Local Municipality and Thabo Mofutsanyane District Municipality, near the town of Harrismith, in the Free State Province of South Africa. The affected farm portions are indicated below:

Table 1. Farm portions affected by the Project.

KROMHOF WEF	FARM LEIDEN NO. 2	0	F01500000000000200000
	Farm Myn-Burg No. 3	0	F01500000000000300000
	Farm Naauw Kloof No. 4	0	F01500000000000400000
	Farm Krom Hof No. 530	0	F01500000000053000000
	Farm Puntje No. 1240	0	F01500000000124000000
	Farm Aanfield No. 253	0	F01500000000025300000
	Farm Aanfield No. 253	1	F01500000000025300001
	Farm Ox Hoek No. 98	0	F01500000000009800000
	Farm Ox Hoek No. 98	1	F01500000000009800001
	Farm Ox Hoek No. 98	2	F01500000000009800002
	Farm Ox Hoek No. 98	3	F01500000000009800003
	Farm Markgraaff's Rest No. 478	0	F01500000000047800000

The report outlines the approach and methodology utilised for the scoping phase of the Project. Possible impacts are identified, as well as potential risks to the Project.

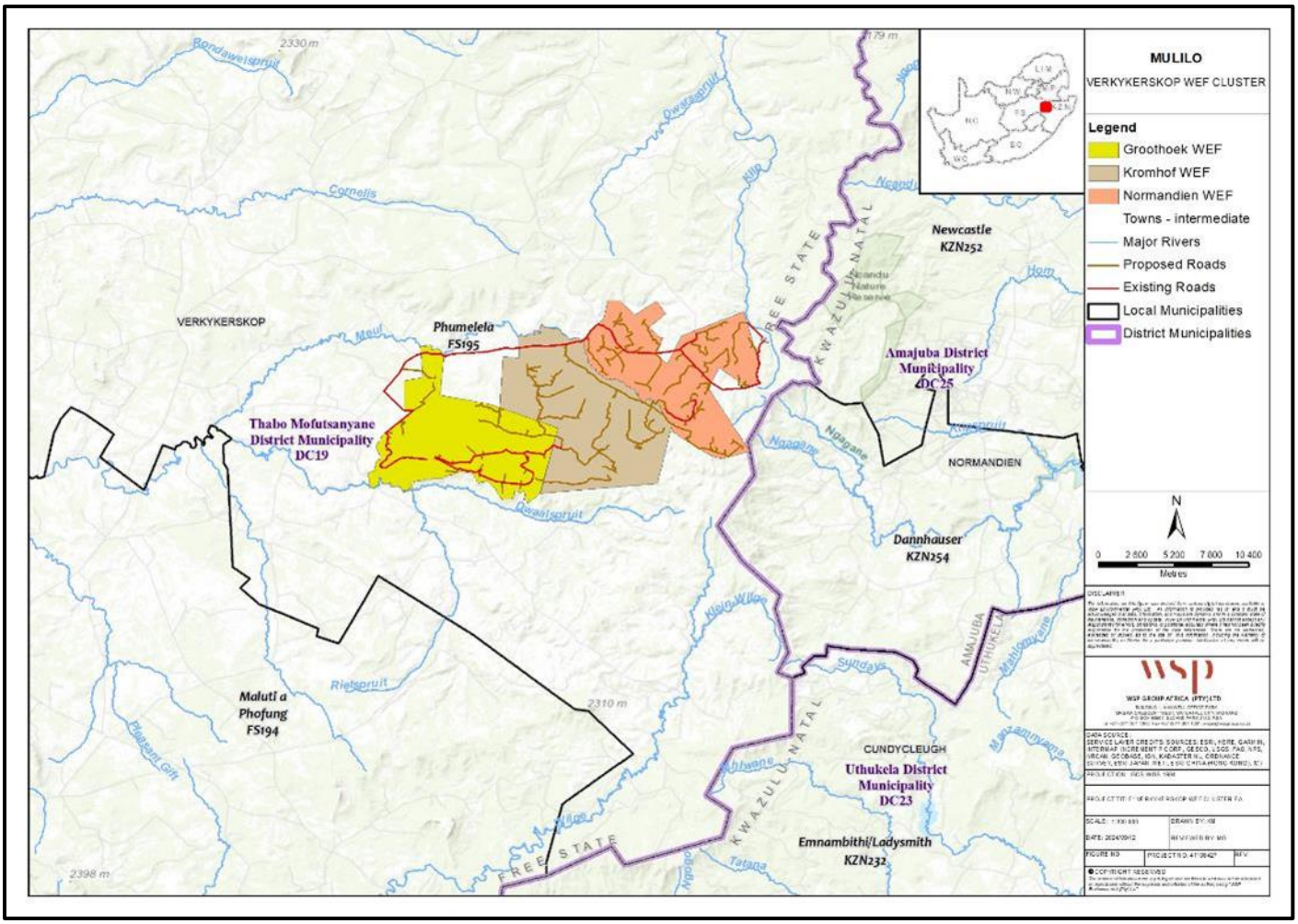


Figure 1.1. Regional setting of the study area (Map provided by WSP Group Africa (Pty) Ltd).

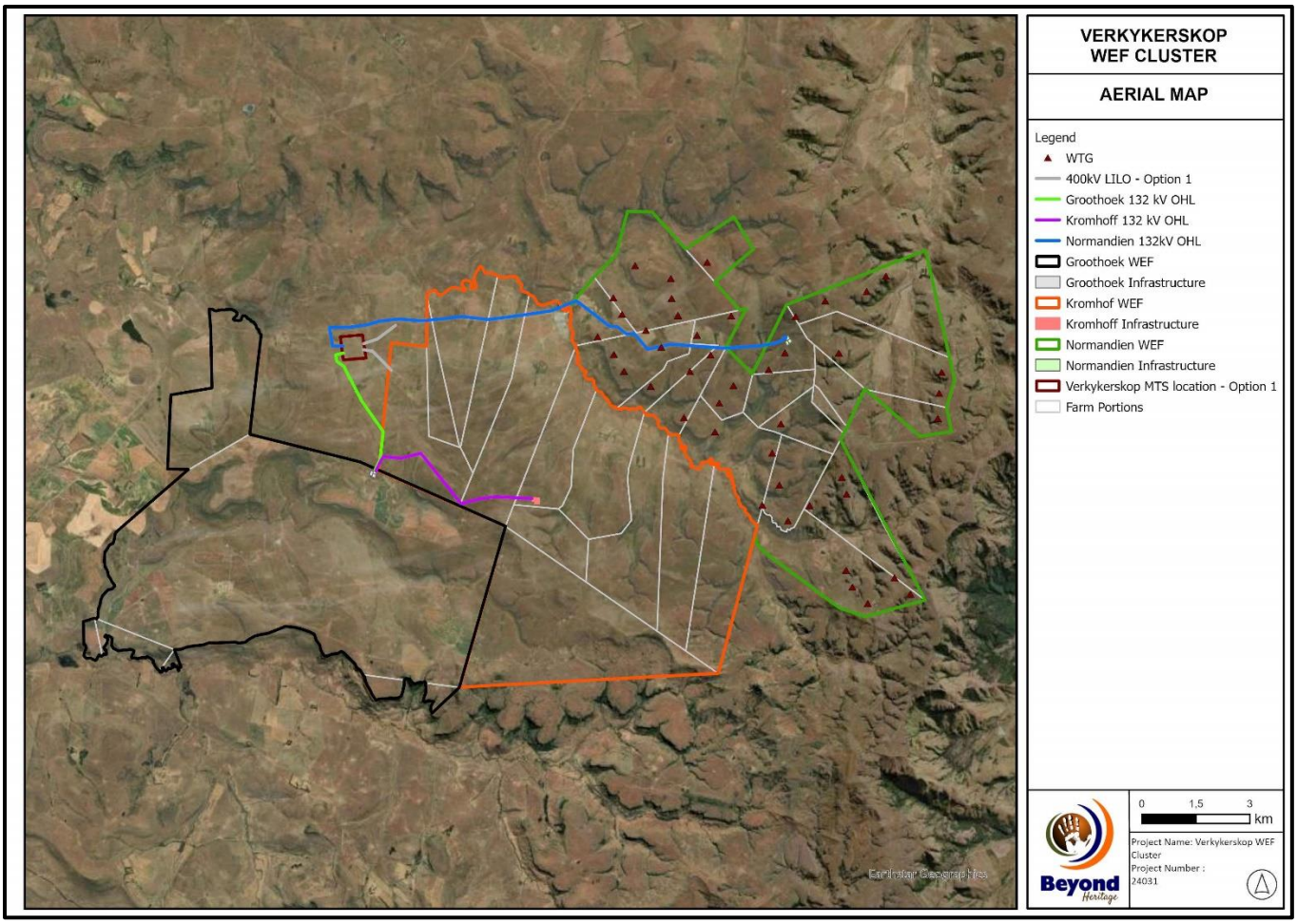


Figure 1.2. Aerial view of the study area.

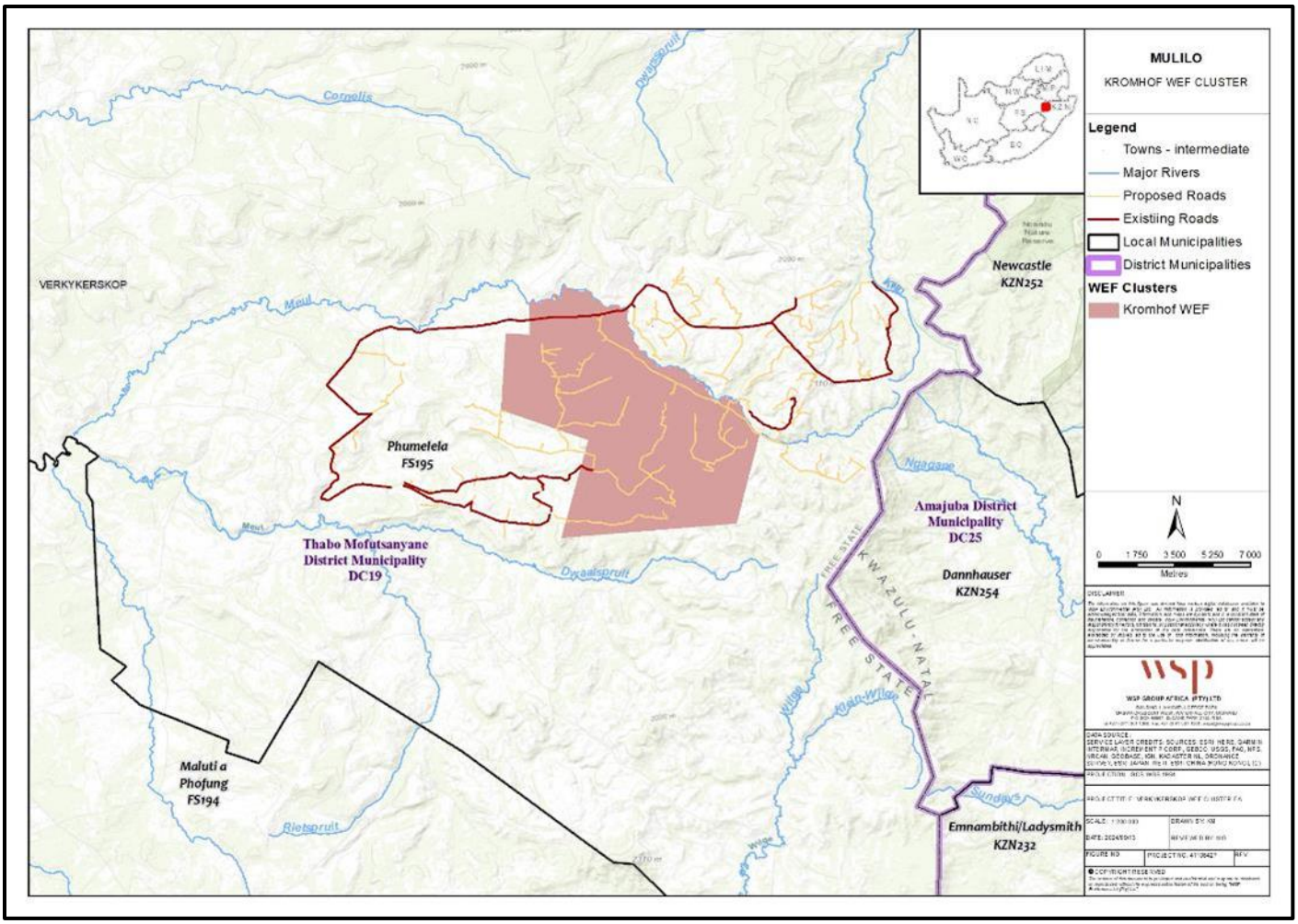


Figure 1.3. Local setting of the study area (Map provided by WSP Group Africa (Pty) Ltd).

1.1 Terms of Reference

The main aim of this scoping report is to determine if any known heritage resources occur within the study area and to predict the occurrence of any possible heritage significant sites that might present a fatal flaw to the proposed project. The objectives of the scoping report were to:

- Conduct a desktop study:
    - Review available literature, previous heritage studies and other relevant information sources to obtain a thorough understanding of the archaeological and cultural heritage conditions of the area;
    - Gather data and compile a background history of the area;
    - Determine whether the area is renowned for any cultural and heritage resources, such as Stone Age sites, Iron Age sites, informal graveyards, or historical homesteads.
- Report

The reporting of the scoping component is based on the results and findings of the desk-top study, wherein potential issues associated with the proposed project will be identified, and those issues requiring further investigation through the Impact Assessment (IA) Phase highlighted. Reporting will aim to identify the potential impacts of the proposed project activity on heritage resources. Reporting will also consider alternatives should any significant sites be impacted on by the proposed project. This is done to assist the developer in managing heritage resources in a responsible manner, in order to protect, preserve and develop them within the framework provided by Heritage Legislation.

1.2 Nature of the development

1.2.1. Project Details (as provided)

The proposed Kromhof WEF will be developed within a project area of approximately 5 721 hectares (ha). The proposed project description is outlined in Table 2 & 3 below.

Table 2: Kromhof WEF Technical Details

DETAIL	KROMHOF
Applicant Name	Kromhof Wind Power (Pty) Ltd
Municipalities	Thabo Mofutsanyana District Municipality Phumelela Local Municipality
Extent	7269 ha
Buildable area	150 ha

DETAIL	KROMHOF
Export Capacity	Up to 300MW
Power system technology	Wind
Number of Turbines	Up to 55
Rotor Diameter	up to 200m
Hub Height	up to 140m
Hard Standing Dimensions	up to 0,8 ha per turbine
Turbine Foundations	Area of 0,07ha per turbine and crane platform/pad – 0,5ha. Excavation up to 4 m deep, constructed of reinforced concrete to support the mounting ring. Once tower established, footprint of foundation is covered with soil.
Substation	4 x 33kV/132kV onsite collector substation (IPP Portion), each being up to 2ha.
Powerlines	33kV cabling to connect the wind turbines to the onsite collector substations, to be laid underground where practical.
Construction camp and laydown area	Construction compounds including site office inclusive of Concrete Batching plant of up to 1ha Site office of 4 ha laydown area of 8ha
Internal Roads	Up to 8m in width
O&M Building	O&M office of up to 1ha.

DETAIL	KROMHOF
BESS	Battery Energy Storage System (BESS) (200MW/800MWh). Li-ion solid state batteries Export Capacity of up to 800MWh Total storage capacity 200MW Storage capacity of up to 6-8 hours The BESS will be housed in containers covering a total approximate footprint of up to 7ha

Table 3: Grid Connection Technical Details

DETAIL	INFORMATION
Grid length and connection point	— On-site MTS (Preferred) — 20km 132kV line plus off-site MTS (Alternative)
Footprints of the substation areas at the start and end of the line – with associated capacities	— Up to 1 ha. — 33 kV to 132 kV collector substation to receive, convert and step-up electricity from the WEF to the 132 kV grid suitable supply.
Tower options	— Double circuit
Width of assessment corridor (distance either side of centre line)	— 400m width in total, 200m either side of centre line.

1.2.2. Project Alternatives

The following alternatives will be considered in the impact assessment:

Layout Alternatives

- The layout alternatives will be developed at the end of the Scoping Phase for assessment in the EIA Phase.

No-Go Alternative

- The no-go alternative, i.e. the Kromhof WEF will not be developed.

1.3 The receiving environment

The study area is rural in character and sparsely developed. Farmsteads/homesteads are found scattered throughout the Verkykerskop WEF Cluster area. Infrastructure includes fences, windpumps, and access roads all associated with farming activities in the study area. The Project area is undulating with steep hills throughout.

2. APPROACH AND METHODOLOGY

The assessment is to be undertaken in two phases, a scoping phase and a Heritage Impact Assessment (HIA) phase, as part of the EIA process, this report concerns the scoping phase. The aim of the scoping phase is to assess the study area at a desktop level to compile a background history of the study area, to identify possible heritage issues or fatal flaws that should be avoided during development.

This was accomplished by means of the following phases (the results are represented in section 7 of this report):

2.1 Literature search

A literature search was conducted utilising data from published articles on the archaeology and history of the area. The aim of this is to extract data and information on the area in question, looking at archaeological sites, historical sites and graves of the area.

2.2 Information collection

South African Heritage Resources Information System (SAHRIS) was consulted to collect data from Cultural Resource Management (CRM) practitioners who undertook work in the area to provide the most comprehensive account of the history of the area where possible.

2.3 Public consultation

A full public consultation process will be facilitated by the Environmental Assessment Practitioner (EAP). Any heritage concerns raised during this process will be addressed in the HIA.

2.4 Google Earth and mapping survey

Google Earth and 1:50 000 maps of the area were utilised to identify possible places where archaeological sites might be located.

2.5 Genealogical Society of South Africa (GSSA)

The database of the genealogical society was consulted to collect data on any known graves in the area.

3. LEGISLATION

For this project, the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) is of importance and the following sites and features are protected:

a. Archaeological artefacts, structures and sites older than 100 years.
b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography.
c. Objects of decorative and visual arts.
d. Military objects, structures and sites older than 75 years.
e. Historical objects, structures and sites older than 60 years.
f. Proclaimed heritage sites.
g. Grave yards and graves older than 60 years.
h. Meteorites and fossils.
i. Objects, structures and sites or scientific or technological value.

The national estate includes the following:

a. Places, buildings, structures and equipment of cultural significance.
b. Places to which oral traditions are attached or which are associated with living heritage.
c. Historical settlements and townscapes.
d. Landscapes and features of cultural significance.
e. Geological sites of scientific or cultural importance.
f. Archaeological and paleontological importance.
g. Graves and burial grounds.
h. Sites of significance relating to the history of slavery.
i. Movable objects (e.g. archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.).

Section 34 (1) of the act deals with structures which is older than 60 years. Section 35(4) of this act deals with archaeology, paleontology, and meteorites. Section 36(3) of the NHRA deals with human remains older than 60 years. Unidentified/unknown graves are also treated as older than 60 until proven otherwise.

3.1 Heritage Site Significance and Mitigation Measures

The presence and distribution of heritage resources define a Heritage Landscape. In this landscape, every site is relevant. In addition, because heritage resources are non-renewable, heritage surveys need to investigate an entire project area. In all initial investigations, however, the specialists are responsible only for the identification of resources visible on the surface.

This section describes the evaluation criteria used for determining the significance of archaeological and heritage sites. National and Provincial Monuments are recognised for conservation purposes. The following interrelated criteria were used to establish site significance:

» The unique nature of a site;
» The integrity of the archaeological/cultural heritage deposit;
» The wider historic, archaeological and geographic context of the site;
» The location of the site in relation to other similar sites or features;
» The depth of the archaeological deposit (when it can be determined or is known);
» The preservation condition of the site; and
» Potential to answer present research questions.

The criteria above will be used to place identified sites with in SAHRA's (2006) system of grading of places and objects which form part of the national estate (Table 4). This system is approved by the Association of South African Professional Archaeologists (ASAPA) for the Southern African Development Community (SADC) region.

Table 4. Heritage significance and field ratings

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION
National Significance (NS)	Grade 1	-	Conservation; national site nomination
Provincial Significance (PS)	Grade 2	-	Conservation; provincial site nomination
Local Significance (LS)	Grade 3A	High significance	Conservation; mitigation not advised
Local Significance (LS)	Grade 3B	High significance	Mitigation (part of site should be retained)
Generally Protected A (GP. A)	-	High/medium significance	Mitigation before destruction
Generally Protected B (GP. B)	-	Medium significance	Recording before destruction
Generally Protected C (GP.C)	-	Low significance	Destruction

4. REGIONAL OVERVIEW

4.1 General Information

4.1.1. Literature search

The reports indicated in Table 5 were conducted in the greater study area and were consulted for this report:

Table 5. Heritage reports conducted in the greater study area.

Author	Year	Project	Findings
Dreyer, C.	2005	Archaeological and Cultural History Assessment of the Proposed Oxidation Dam at Memel.	A graveyard of 24 graves, a single grave.
Dreyer, C.	2007	First Phase Archaeological and Cultural Heritage Investigation of the Proposed Leisure Residential Development at Molenriviersdraai 173, Harrismith, Free State.	Old farm buildings, clusters of rock paintings.
Dreyer, C.	2008a	Archaeological and Culture Historical Assessment of the Proposed Residential Developments at Verkykerskop, near Harrismith, Free State.	Graves. Historical buildings
Dreyer, C.	2008b	Archaeological and Culture Historical Assessment of the Proposed Water Reservoir Dam at Annasdal 668, Verkykerskop, Free State.	No sites were identified.
Dreyer, C.	2012	First Phase Archaeological & Heritage Assessment of The Proposed PV Solar Power Installations at Glen Lenie 183, Harrismith, Free State.	No sites were identified.
Becker, E.	2015	Environmental Impact Assessment for the Proposed: Majuba-Venus 765 kV Transmission Power Lines (EIA: 12/12/20/1157), Turn-in at the Majuba Sub-station (EIA: 12/12/20/1161), Extension of the Majuba Sub-station (EIA: 12/12/20/1161), Turn-in at the Venus Sub. Heritage Resources: Specialist Report.	Iron Age stone walling, rock art, Stone Age sites were recorded near Verkykerskop.
Rossouw, L.	2008	Phase 1 Archaeological Impact Assessment of 8 Gravel Quarries Along the R34 Between Memel and Vrede, Free State Province.	Graves
Rossouw, L.	2013	Phase 1 Archaeological Impact Assessment of Verkykerskop, Phumelela Local Municipality, Free State Province.	Grave sites and the old Annasdal homestead and kraal were noted outside the study area.
Rossouw, L.	2014	Phase 1 Archaeological Impact Assessment of the proposed new National Route 5 / R712 interchange and Wilge River bridge alterations and additions, Harrismith, FS Province.	Historical bridge, kraal/rectangular stone structures, graves.
Huffman, T.N., Steel, R.	1996	Archaeological Ruins at Lancaster Quarry, Harrismith.	Iron Age stone walling (Type V site)

4.1 2. Public consultation

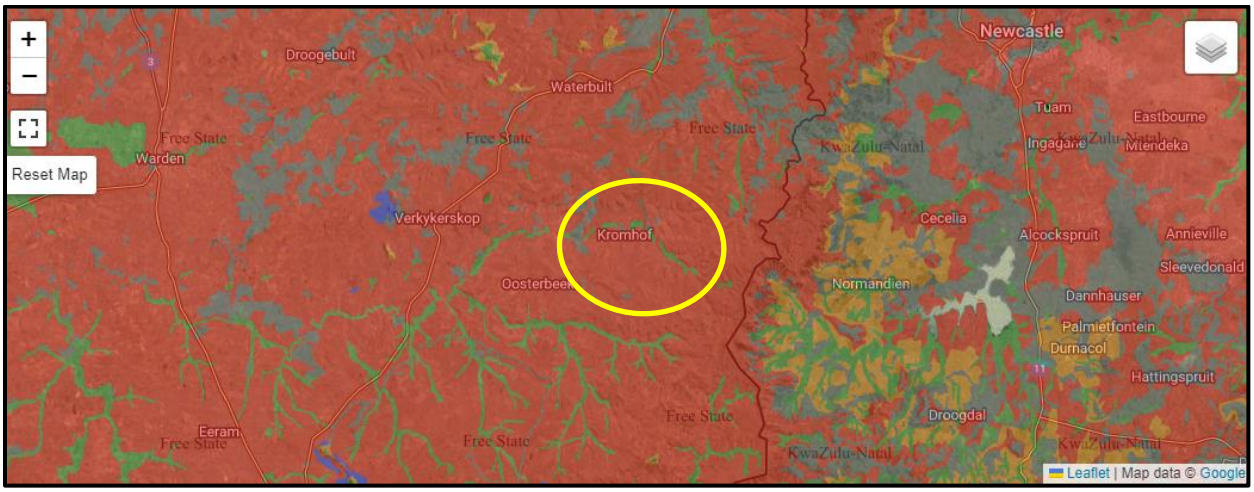
A public participation process is facilitated by the EAP and potential heritage concerns raised will be included in the HIA report.

4.1.3. Google Earth and mapping survey

Google Earth and 1:50 000 maps of the area was utilised to identify possible places where archaeological sites might be located.

4.2. Palaeontology

The study area is of insignificant, moderate, and very high paleontological sensitivity (Figure 4.1) and further studies will be required in the EIA phase. An independent study will have to be conducted for this project in the IA phase.



Colour	Sensitivity	Required Action
RED	VERY HIGH	Field assessment and protocol for finds is required
ORANGE/YELLOW	HIGH	Desktop study is required and based on the outcome of the desktop study; a field assessment is likely
GREEN	MODERATE	Desktop study is required
BLUE	LOW	No palaeontological studies are required however a protocol for finds is required
GREY	INSIGNIFICANT/ZERO	No palaeontological studies are required
WHITE/CLEAR	UNKNOWN	These areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map.

Figure 4.1. Palaeontological sensitivity map of the approximate study areas (yellow polygon).

4.3. Archaeology of the greater study area

The archaeological record for the greater study area consists of the Stone Age, Iron Age and Historical Period.

4.3.1. Stone Age

South Africa has a long and complex Stone Age sequence of more than 2 million years. The broad sequence includes the Later Stone Age, the Middle Stone Age and the Earlier Stone Age. Each of these phases contains sub-phases or industrial complexes, and within these we can expect regional variation regarding characteristics and time ranges. For (CRM) purposes it is often only expected/ possible to identify the presence of the three main phases. Yet sometimes the recognition of cultural groups, affinities or trends in technology and/or subsistence practices, as represented by the sub-phases or industrial complexes, is achievable. The three main phases can be divided as follows;

- Later Stone Age (LSA); associated with Khoi and San societies and their immediate predecessors. - Recently to ~30 thousand years ago.
- Middle Stone Age (MSA); associated with Homo sapiens and archaic modern human - . 30-300 thousand years ago.
- Earlier Stone Age (ESA); associated with early Homo groups such as Homo habilis and Homo erectus. - 400 000-> 2 million years ago.

The Stone Age within the southern Highveld is largely represented through sparce surface scatters of Middle and Later Stone Age lithics. These scatters are often found along the erosion gullies of rivers and streams. Early Stone Age Acheulian hand axes have been recorded further north of Verkykerskop (Rossouw 2013). Although no prominent Stone Age sites are present near the Project area, some surveys in the larger area have recorded rock art (Becker 2015, Dreyer 2007), indicating the movement of LSA people through this landscape.

4.3.2. Iron Age

No Sites dating to the Early or Middle Iron Age have been recorded or is expected for the study area. The landscape only saw extensive Iron Age occupation from the Late Iron Age with extensive research conducted on LIA sites within the Free State (Maggs 1976).

The Project area falls geographically within the outer region of LIA occupation settlement sites referred to as Type V and Type N sites (Maggs 1976). Type V sites consist of a ring of enclosures which are then connected by stonewalling and creates a ring of connected enclosures within a larger enclosure (Maggs 1976). Settlement Type V consists of the standard core of cattle enclosures surrounded by beehive houses and grain bins, but outer walls are usually absent. Corbelled huts have been associated with this type. As the geographical layout of Type N and Type V overlap, it was seen that some Type N settlements were reoccupied and altered into the Type V sites. The main difference being that Type V does not have an outer wall enclosure as Type N does. Type V sites are dated to the 16th and 17th centuries.

The larger area is known to have been occupied by Batlokwa and Basia people, with a memorial stone which commemorates the burial sites of at least eight Batlokwa chiefs situated near Verkykerskop on the farm Morgenlicht 869 (Dreyer 1999). The Batlokwa and Basia occupied the area until the Mfecane when they were displaced from the landscape.

During the mid-17th century Europeans started to settle in modern-day Cape Town. During and after the conflict caused by the Mfecane (1820-1840), during the reign of king kaSenzangakhona Zulu, known as

Shaka, Dutch-speaking farmers started to migrate to the interior regions of South Africa. This is a period that is marked by various skirmishes and battles between the local inhabitants, Dutch settlers and the British (Giliomee & Mbenga 2007).

4.3.3. Historical context of Verkykerskop

Verkykerskop is a village which was established on the farm Aansluit. The village was named after a large hill nearby from which one could see the landscape. The named means 'spy hill' (Raper 2004). It is however argued which hill is the exact Verkykerskop hill. Many of the original homesteads in Verkykerskop have been altered into tourist buildings.

4.3.4. Battlefields and war history

The Basotho Wars which took place between 1858 and 1868 affected the town of Harrismith whereby there was conflict between the Basotho people and white settlers regarding the boundaries and ownership of lands. In 1869, the conflict concluded when the Convention of Aliwal-North was used to formally draw the boundaries of present-day Lesotho.

During the Anglo Boer War (1899-1902), Harrismith was the setting for much conflict. On the 4th August 1900, Harrismith was surrendered to the British forces and the British camped near Basuto Hill. The British proceeded to build lines of blockhouses which would link Harrismith to Oliviershoek Pass and Kroonstad. This was done in an attempt to block Boer troops and make it possible to catch Boer soldiers. After the end of the war, the British remained in Harrismith until the outbreak of World War One (samilitaryhistoy.org).

4.3.5. Graves and Burial sites

No known cemeteries are situated in the study area.

4.3.6. Cultural Landscape

The area is largely undeveloped and has areas which area cultivated and part of farmlands. Development in the study area is limited to farming infrastructure such as access roads, fences, and agricultural developments, and farmsteads/homesteads.

5. PROBABILITY OF OCCURRENCE OF SITES

Based on the above information, it is possible to determine the probability of finding archaeological and cultural heritage sites within the study area to a certain degree. For the purposes of this section of the report, the following terms are used – low, medium and high probability. Low indicates that no known occurrences of sites have been found previously in the general study area. Medium probability indicates some known occurrences in the general study area are documented and can therefore be expected in the study are. High probability indicates that occurrences have been documented close to or in the study area and that the environment of the study area has a high degree of probability having sites.

» Palaeontological landscape

Fossil remains*. Medium probability.*

» Archaeological And Cultural Heritage Landscape

NOTE: *Archaeology is the study of human material and remains (by definition) and is not restricted in any formal way as being below the ground surface*.

*Archaeologica*l remains dating to the following periods can be expected within the study area:

» **Stone Age finds**

ESA: *Low Probability*
MSA*: Low Probability*
LSA: Low to Medium Probability
LSA –Herder: Low Probability
Rock Art Sites – Medium to high Probability

» **Iron Age finds**

EIA: *Low Probability*
MIA*: Low Probability*
LIA: Medium Probability

» **Historical finds**

Historical period: *High Probability*
Historical dumps: *Medium Probability*
Structural remains: *High Probability*
Cultural Landscape*: Medium probability*

» **Living Heritage**
For example, rainmaking sites: *Low Probability*

» **Burial/Cemeteries**

Burials over 100 years: *Medium Probability*
Burials older than 60 years*: High Probability*

Subsurface excavations including ground levelling, landscaping, and foundation preparation can expose any number of these.

6. ASSUMPTIONS AND LIMITATIONS

The study area was not subjected to a field survey as this will be conducted in the EIA phase. It is assumed that information obtained for the wider area is applicable to the study area and the authors acknowledge that the brief literature review is not exhaustive on the literature of the area. Due to the subsurface nature of cultural deposits, the possibility exists that some features or artefacts may not have been published. Similarly, the possible occurrence of graves and other cultural material cannot be excluded. This study did not assess the impact on medicinal plants and intangible heritage as it is assumed that these components would be highlighted through the public consultation process if relevant. It is possible that new information could come to light in future, which might change the results of this scoping report.

7. FINDINGS

Based on areal imagery and a desktop assessment the study area includes heritage sensitive areas that specifically relate to historical occupation of the Project area and potential associated burial sites (Figure 7.1). Based on the distribution of such sites on the landscape additionally sensitive areas were noted and indicated as areas of heritage potential. Features visible on areal imagery were overlain on the map showing possible sensitivities. A Site Sensitivity Verification based on the DFFE Screening tool is included as Appendix A.

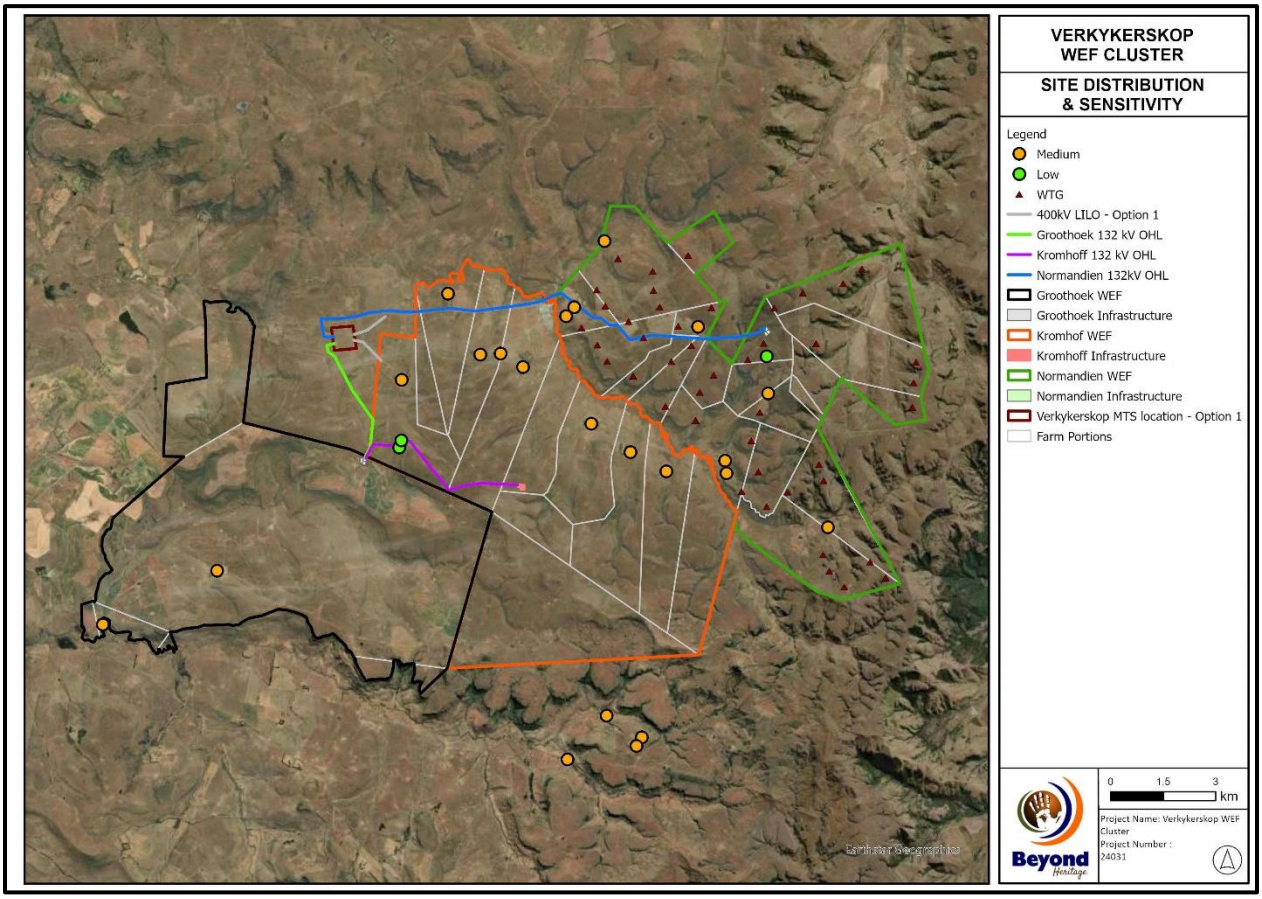


Figure 7.1. Map showing areas of heritage potential and possible heritage sensitivities in the Project Area.

8. POTENTIAL SIGNIFICANCE OF HERITAGE RESOURCES

Based on the current information obtained for the area at a desktop level, it is anticipated that apart from the burial sites, any other heritage resources that occur within the development areas could have a Generally Protected B (GP. B) or lower field rating and should be mitigatable. Graves are of high social significance (Field rating GP A) and should preferably be preserved *in situ*.

8.1. Cumulative Impact

Renewable energy projects within a 50km radius will have an added cumulative impact on heritage resources and the cultural landscape. The cumulative impacts to heritage resources by the proposed Project can be mitigated to an acceptable level with the adherence of correct mitigation measures as included in this report and in the Heritage Impact Assessment (HIA) for the Project. With adherence to the recommendations the proposed Project is expected to have a low cumulative impact.

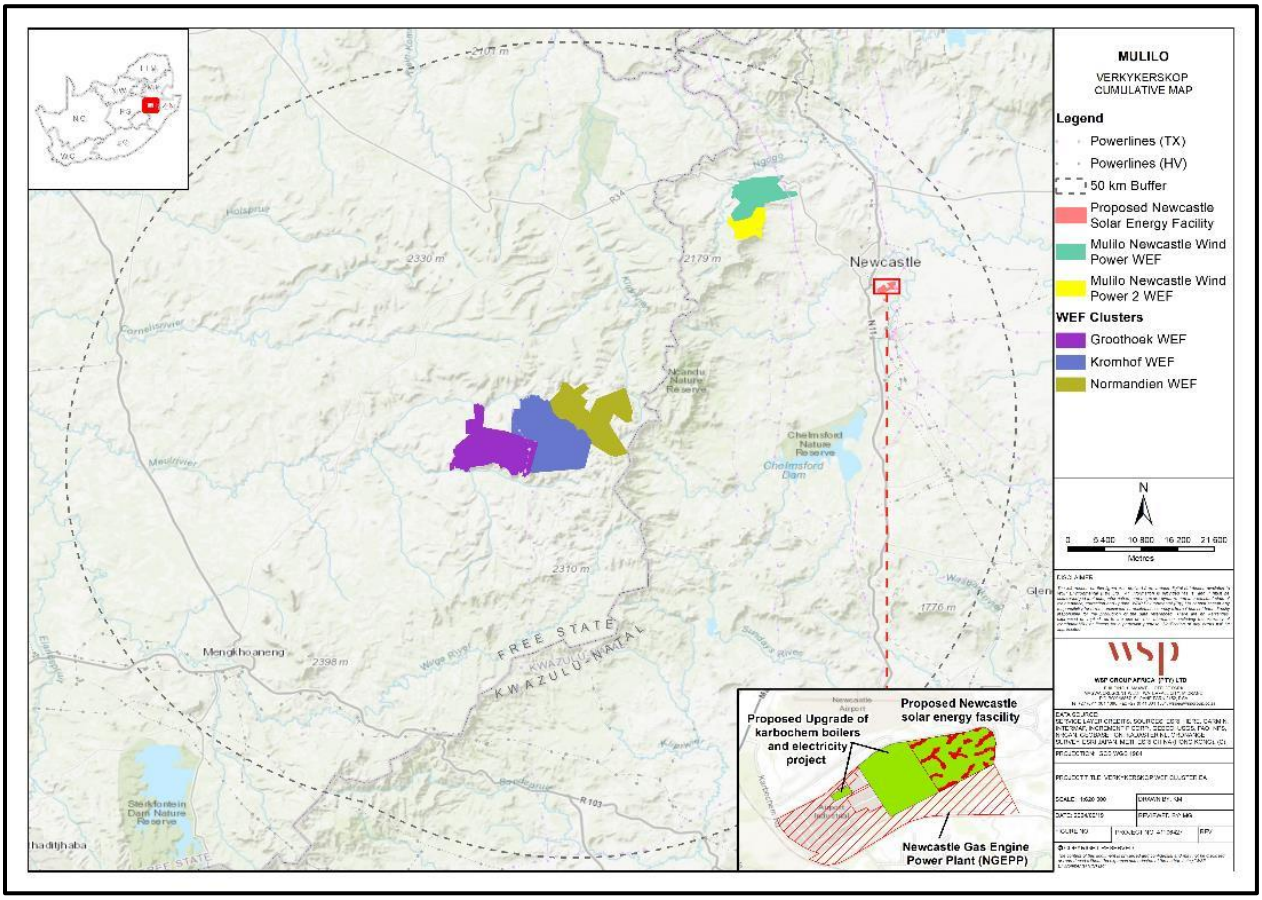


Figure 8.1. Projects within a 50 km radius from the proposed Project (Map provided by WSP Group Africa (Pty) Ltd).

9. CONCLUSION AND PLAN OF STUDY FOR EIA

The area has historically been occupied and although the cultural landscape attests to more recent occupation, heritage resources such as structures (including farmsteads/ruins and associated burial sites) and associated landscape elements older than 60 years are of importance and are protected by Section 34 & 36 of the NHRA. Iron Age stone walled settlements also occur in the larger area relating to Batlokwa and Basia occupation and is protected by Section 35 of the NHRA.

To comply with the NHRA and with cognisance of known heritage resources in the area, it is recommended that the final footprint should be subjected to a HIA. During this study, the potential impact on heritage resources will be determined as well as levels of significance of recorded heritage resources. The HIA should also provide management and mitigation measures, ensuring that all the requirements of the SAHRA are met. In order to compile an integrated HIA, the following requirements apply:

- The study area is of insignificant, moderate, and very high paleontological sensitivity and additional studies are required for the EIA phase;
- The visual impact of the WEF on the farmsteads that is older than 60 years and archaeological sites should be assessed by the Visual Specialist considering the sense of place and impact on the cultural landscape;
- During the public participation and stakeholder consultation process facilitated by the EAP, advertisements & site notices must reference the NHRA and address heritage concerns from stakeholders.

10. LIST OF PREPARERS

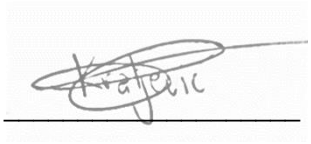
Lara Kraljević (Archaeologist)

11. STATEMENT OF COMPETENCY

The author of the report completed her masters in archaeology at the University of Pretoria specialising in chemical and mineralogical studies of Iron Age ceramics. Lara is an accredited member of the Association of South African Professional Archaeologists (ASAPA) (#661). She has co-authored over 100 impact assessments in Gauteng, Limpopo, Mpumalanga, Northern Cape, Eastern Cape, and North West Provinces in South Africa.

12. STATEMENT OF INDEPENDENCE

I, Lara Kraljević as duly authorised representative of Beyond Heritage, hereby confirm my independence as a specialist and declare that neither I nor the Beyond Heritage have any interest, be it business, financial, personal or other, in any proposed activity, application or appeal in respect of which the client was appointed as the EAP, other than fair remuneration for work performed on this project.

SIGNATURE: 

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samilitaryhistoyr.org Cited April 2024

Appendix A – SSVR

HERITAGE SITE SENSITIVITY VERIFICATION REPORT

Beyond Heritage was appointed to conduct a *Heritage Assessment* as part of the Scoping and Environmental Impact Assessment (EIA) (S&EIA) process for the proposed Verkykerskop Wind Energy Facility (WEF) for the Groothoek Wind Energy Farm near Reddersburg in the Free State Province.

This report serves as the *Heritage* and Palaeontological Site Sensitivity Verification Report for the proposed project.

This *Heritage and Palaeontological* site sensitivity verification report relates to the Screening Tool Report completed for the site in February 2024. A desktop study was conducted to inform the specialist reports required for the proposed project and confirm the site sensitivity.

The table below provides information regarding the outcome of the Screening tool in terms of the *Heritage* theme sensitivities associated with the proposed project and the specialist sensitivity verification.

Table 1: Heritage theme sensitivity for the Verkykerskop WEF

ENVIRONMENTAL THEME	DFFE SCREENING TOOL SENSITVITY	VERIFIED SENSITIVITY	APPLICABLE PROTOCOL	SPECIALIST SENSITVITY VERIFICATION (PLAN OF STUDY)
Heritage (archaeological and cultural sensitivity)	Low	Low	Section 38 NHRA Requirements	Phase 1 Heritage Impact Assessment
Palaeontology	Very High	Very High	Section 7.2. SAHRA Requirements	Palaeontological Impact Assessment

HERITAGE SENSITIVITY

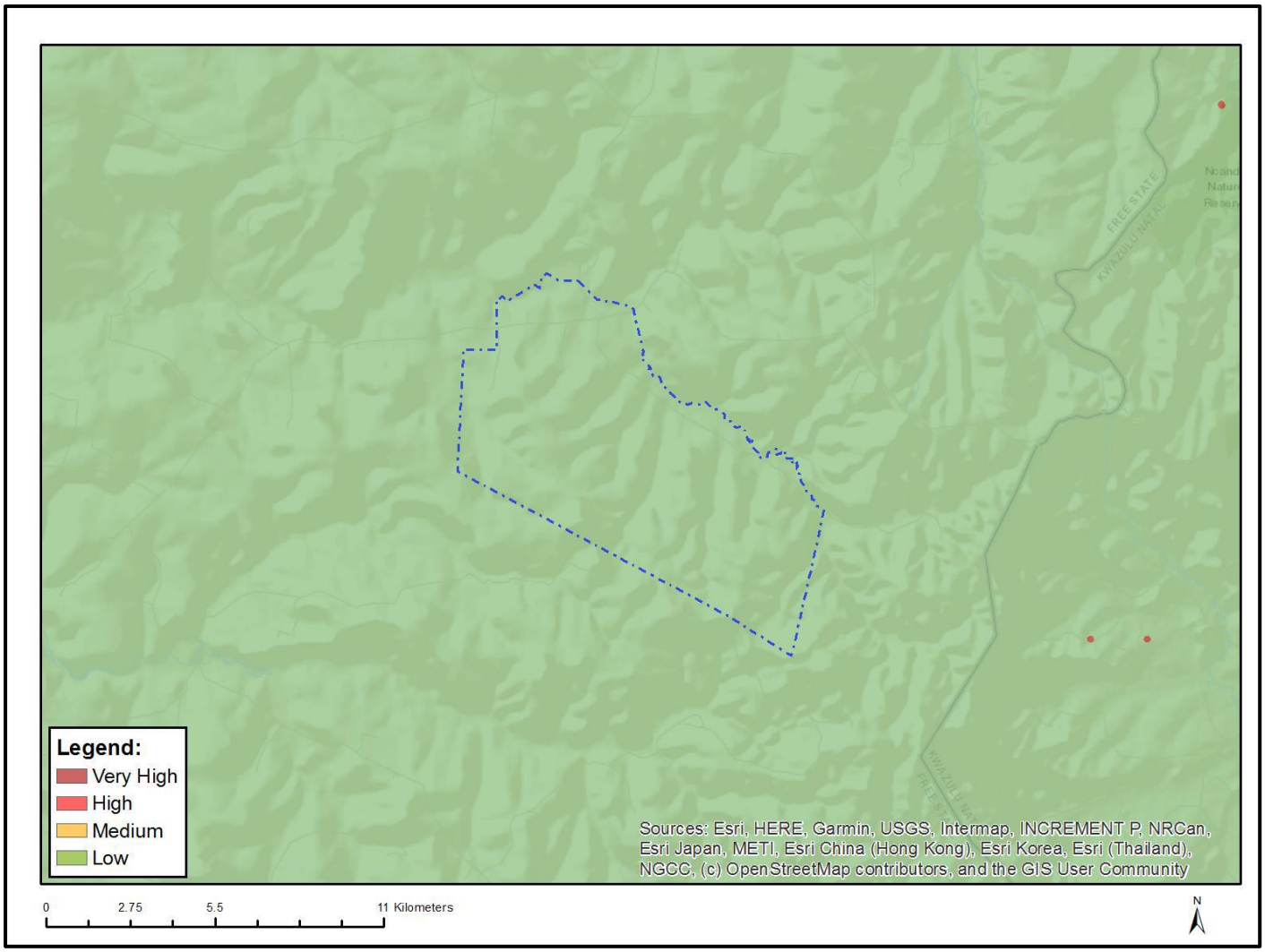


Figure 1. **DFFE Heritage Sensitivities.**

Sensitivity Features: Sensitivity	***Feature(s)***
High	*Within 150m of a Grade IIIa Heritage site*
High	*Within 100m of a Grade IIIb Heritage site*
High	*Within 50m of a Grade IIIc Heritage site*
Low	*Low sensitivity*

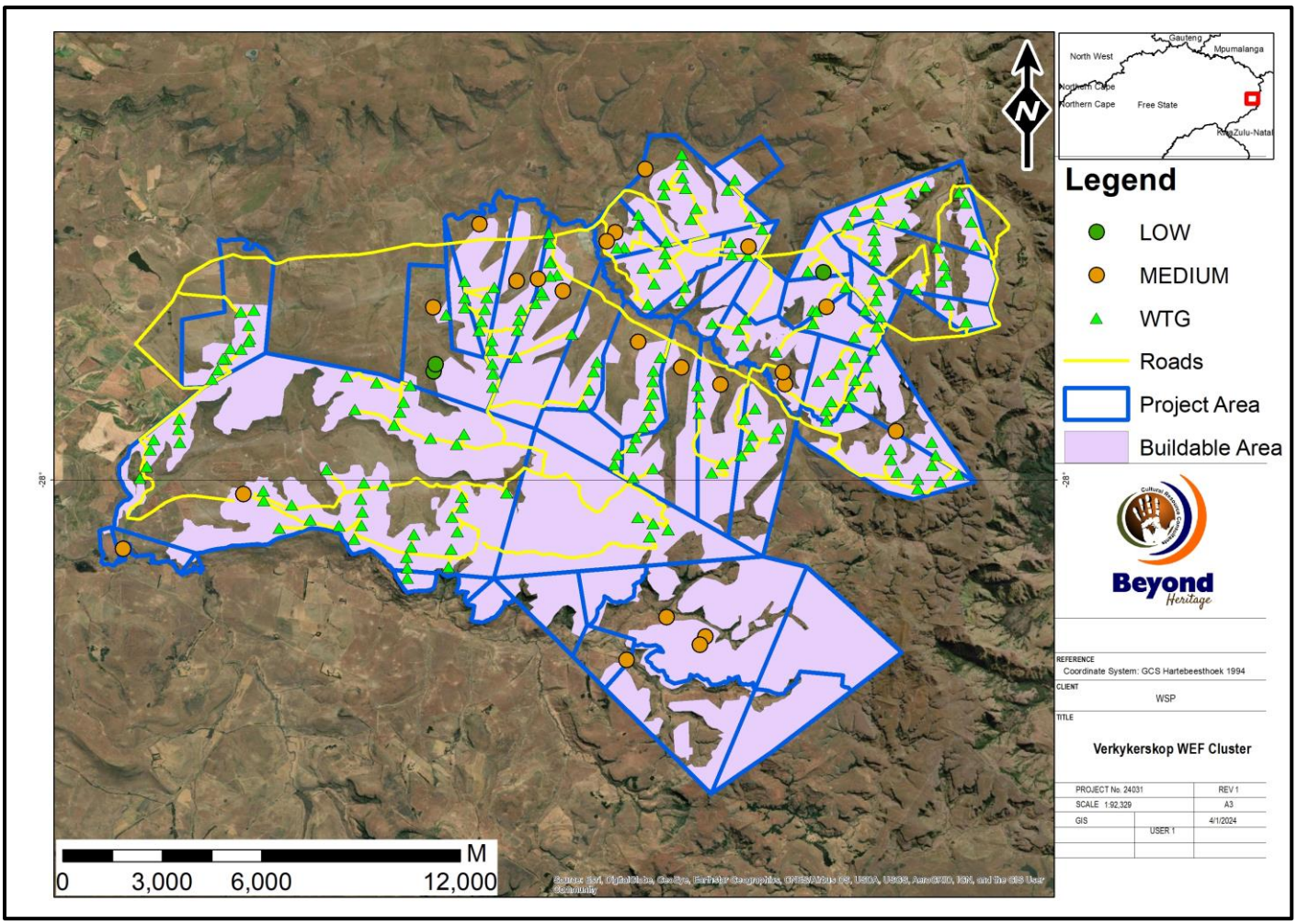


Figure 2. **Verified Heritage Sensitivities (Desktop Based) – Cultural Heritage.**

The area has historically been occupied and although the cultural landscape attests to more recent occupation, heritage resources such as structures (including farmsteads/ruins and associated burial sites) and associated landscape elements older than 60 years are of importance and are protected by Section 34 & 36 of the NHRA. There are no fatal flaws and high significance sites are localised and can be mitigated.

PALEONTOLOGICAL SENSITIVITY

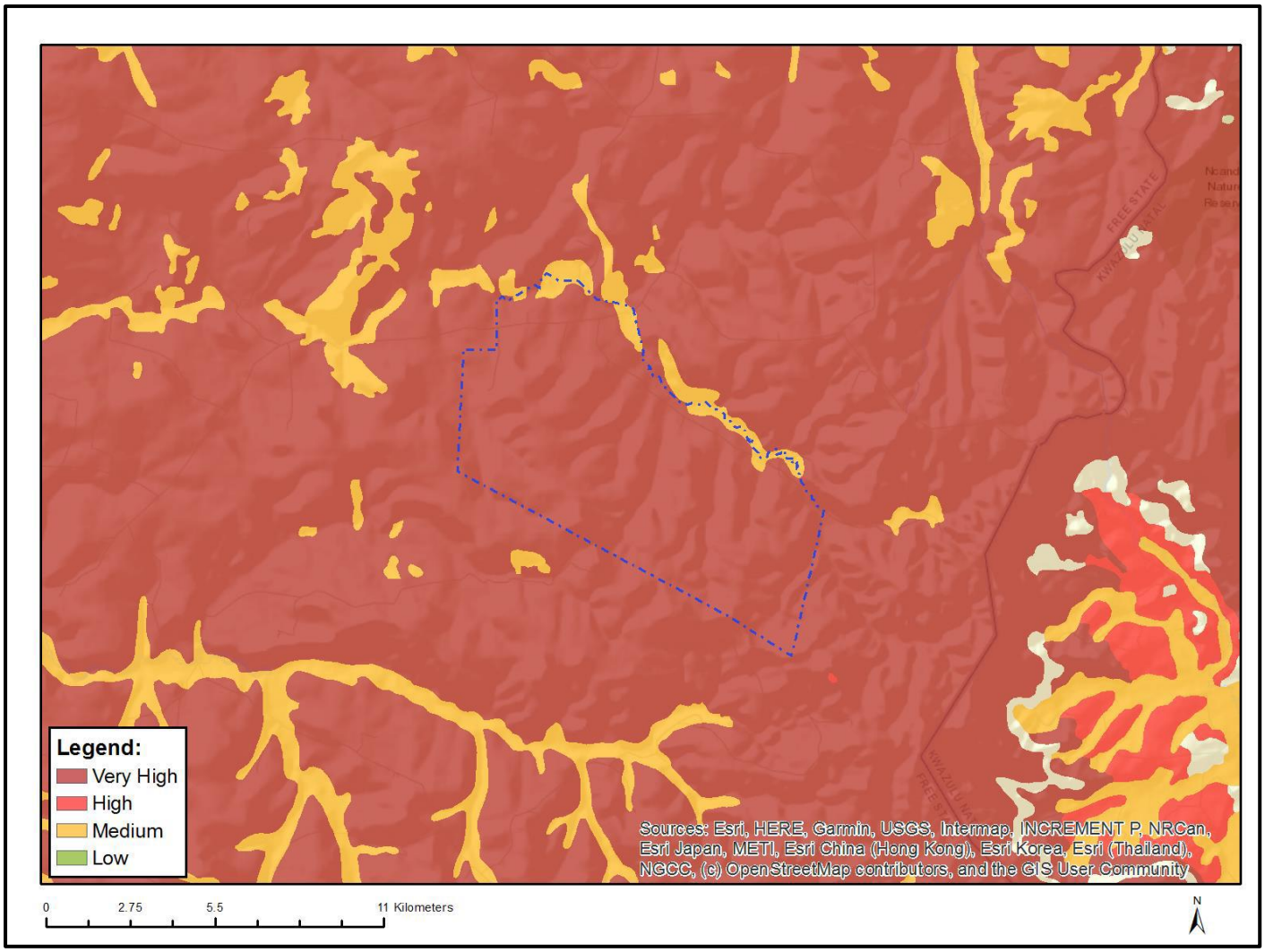
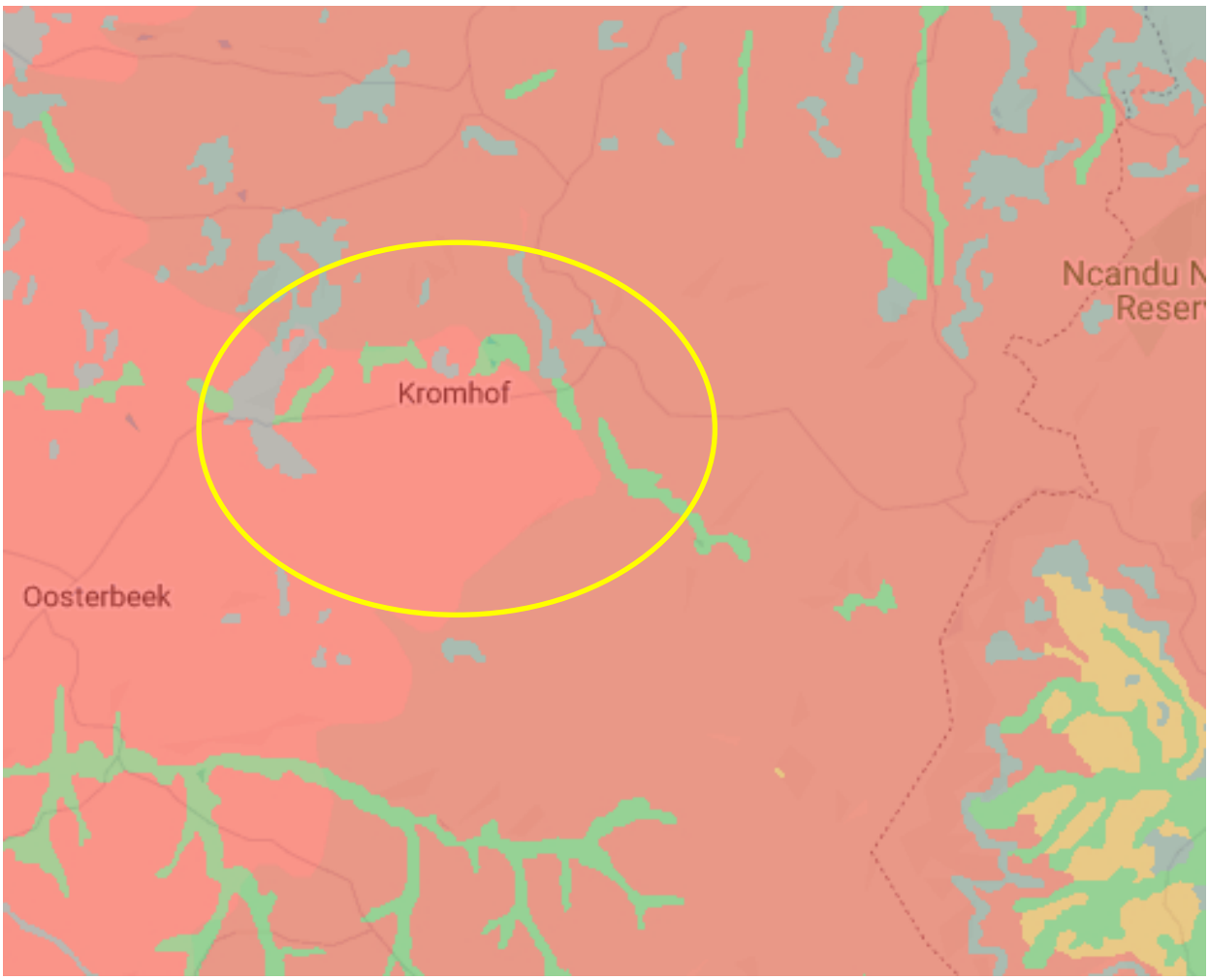


Figure 3. DFFE Paleontological Sensitivities.

Sensitivity	***Feature(s)***
Medium	*Features with a Medium paleontological sensitivity*
Very High	*Features with a Very High paleontological sensitivity*



Colour	Sensitivity	Required Action
RED	VERY HIGH	Field assessment and protocol for finds is required
ORANGE/YELLOW	HIGH	Desktop study is required and based on the outcome of the desktop study; a field assessment is likely
GREEN	MODERATE	Desktop study is required
BLUE	LOW	No palaeontological studies are required however a protocol for finds is required
GREY	INSIGNIFICANT/ZERO	No palaeontological studies are required
WHITE/CLEAR	UNKNOWN	These areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map.

Figure 4. Preliminary verified sensitivities – Palaeontology.

The study area is of insignificant, medium and very high palaeontological sensitivity based on the SAHRA Paleontological Sensitivity Map (Figure 4) and further studies will be required in the EIA phase.