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**PHASE 1 HIA REPORT FOR THE SWARTRUGGENS MINING & PROSPECTING RIGHTS  
APPLICATION ON PORTION 38 OF THE FARM RUSTVOORBY 383JP  
NEAR SWARTRUGGENS IN THE NORTHWEST PROVINCE**

For:

***Kuhle Environmental Consultants (Pty) Ltd***

REPORT: **APAC023/33**

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***April 2023***

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**Although all efforts are made to identify all sites of cultural heritage (archaeological and historical) significance during an assessment of study areas, the nature of archaeological and historical sites are as such that it is always possible that hidden or subterranean sites, features or objects could be overlooked during the study. APELSE Archaeological Consulting can't be held liable for such oversights or for costs incurred as a result thereof.**

**Clients & Developers should not continue with any development actions until SAHRA or one of its subsidiary bodies has provided final comments on this report. Submitting the report to SAHRA is the responsibility of the Client unless required of the Heritage Specialist as part of their appointment and Terms of Reference**

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## SUMMARY

APelser Archaeological Consulting (APAC) was appointed by Kuhle Environmental Consultants (Pty) Ltd to conduct a Phase 1 HIA for a Mining & Prospecting Rights Application (MRA/PRA) on Portion 38 of Rustvoorby 383JP. The study & development area is located a few kilometers north of the town of Swartruggens in the Northwest Province.

Background research indicates that there are some cultural heritage sites and features in the larger geographical area within which the study area falls. The assessment of the study area identified some material of cultural heritage (archaeological and/or historical) origin or significance in the study and application area. This report discusses the results of both the background research and physical assessment and provides a number of recommendations on the way forward.

**From a Cultural Heritage perspective, it is recommended that the proposed MRA/PRA be allowed to continue, taking into consideration the mitigation measures recommended at the end of this document.**

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## **1. INTRODUCTION**

APelser Archaeological Consulting (APAC) was appointed by Kuhle Environmental Consultants (Pty) Ltd to conduct a Phase 1 HIA for a Mining & Prospecting Rights Application (MRA/PRA) on Portion 38 of Rustvoorby 383JP. The study & development area is located a few kilometers north of the town of Swartruggens in the Northwest Province.

Background research indicates that there are some cultural heritage sites and features in the larger geographical area within which the study area falls. The assessment of the study area identified some material of cultural heritage (archaeological and/or historical) origin or significance in the study and application area.

The client indicated the location and boundaries of the study area and the assessment focused on this portion.

## **2. TERMS OF REFERENCE**

The Terms of Reference for the study was to:

1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the portion of land that will be impacted upon by the proposed development;
2. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;
3. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;
4. Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources;
5. Review applicable legislative requirements;

## **3. LEGISLATIVE REQUIREMENTS**

Aspects concerning the conservation of cultural resources are dealt with mainly in two Acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

### **3.1. The National Heritage Resources Act (Act 25 of 1999)**

According to the Act the following is protected as cultural heritage resources:

- a. Archaeological artifacts, 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 of 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. Sites of Archaeological and palaeontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, palaeontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment (AIA) only looks at archaeological resources. An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m<sup>2</sup> or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m<sup>2</sup>
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

**Structures**

Section 34 (1) of the Act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

Alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

### **Archaeology, palaeontology and meteorites**

Section 35(4) of the Act deals with archaeology, palaeontology and meteorites. The act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial)

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

**The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.**

### **Human remains**

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position of otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

- b. destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- c. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated to) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

### **3.2. The National Environmental Management Act (Act 107 of 1998)**

This Act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

The specific requirements that specialist studies and reports must adhere to are contained in Appendix 6 of the EIA Regulations.

## **4. METHODOLOGY**

### **4.1. Literary Review**

A review of available literature was undertaken in order to place the development area in an archaeological and historical context. The sources utilized in this regard are indicated in the bibliography. These include Bergh (1999), Huffman (2007) & Lombard et.al (2012).



#### **4.2. Field survey**

The field assessment component of the study was conducted on the 12<sup>th</sup> of April 2023 according to generally accepted HIA practices and aimed at locating all possible objects, sites, and features of heritage significance in the area of the proposed development. The location/position of all sites, features and objects is determined by means of a Global Positioning System (GPS) where possible, while detail photographs are also taken where needed. Where possible grids were walked in the area where development is proposed.

#### **4.3. Oral histories**

People from local communities are sometimes interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography.

#### **4.4. Documentation**

All sites, objects, features and structures identified are documented according to a general set of minimum standards. Co-ordinates of individual localities are determined by means of the Global Positioning System (GPS). The information is added to the description in order to facilitate the identification of each locality.

### **5. DESCRIPTION OF THE AREA AND PROJECT**

The study and Application Area is situated on Portion 38 of the farm Rustvoorby 383JP, north of Koster in the Northwest Province.

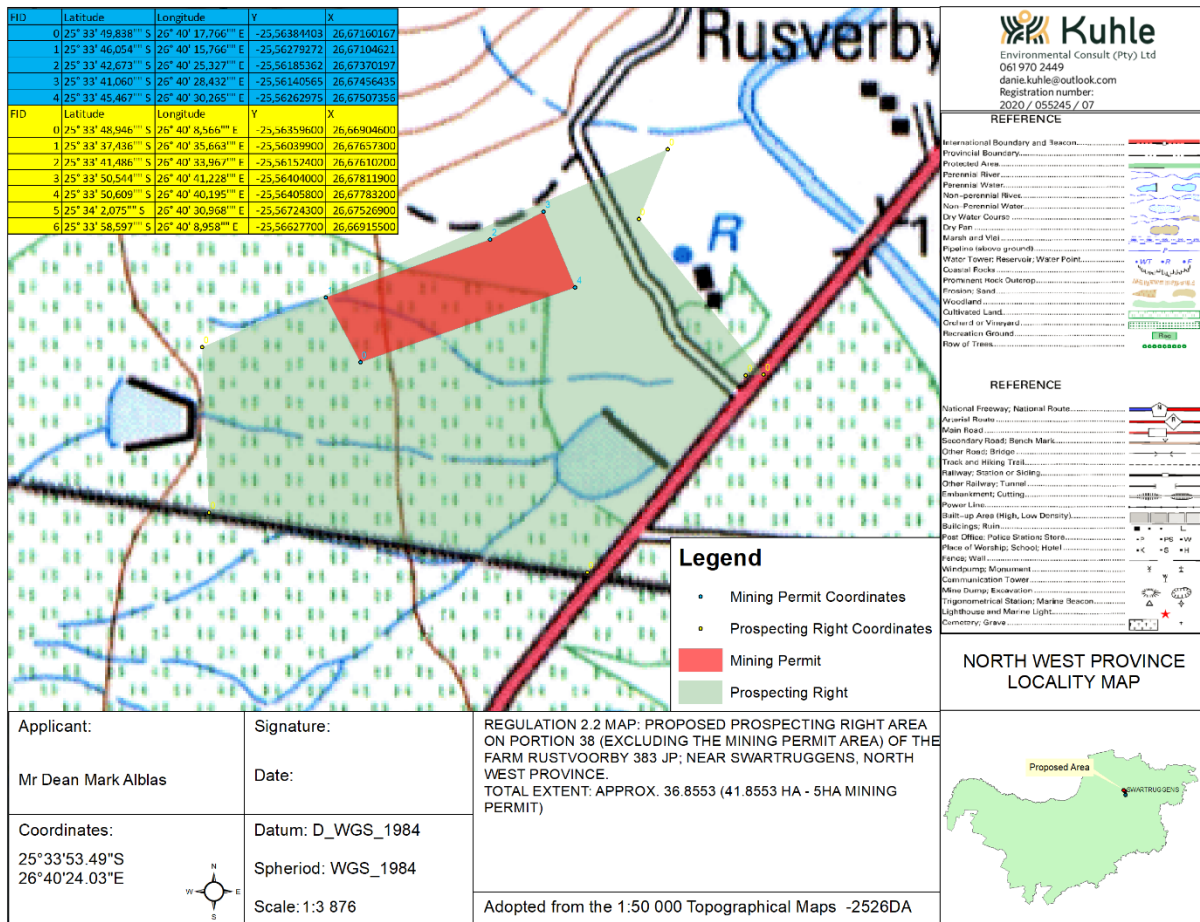
The topography of the study and application area is for the most part fairly low and open, with no rocky ridges or outcrops present. The area has been fairly extensively impacted in the recent past through agricultural activities (ploughing/crop growing and livestock grazing), and as result the original natural and historical landscape has been nearly completely altered. Other impacts include a fairly large earthen dam that were associated with the agricultural activities here. If any significant archaeological and/or historical sites, features or material did exist here it would have been disturbed or destroyed to a large degree.



**Figure 1: General location of the study & application area indicated by the red polygon (Google Earth 2023).**



**Figure 2: Closer view of the study & application area footprint (Google Earth 2023).**



**Figure 3: Topographical Locality Map of the study and application area (courtesy Kuhle Environmental Consult (Pty) Ltd).**

## 6. DISCUSSION

The Stone Age is the period in human history when lithic (stone) material was mainly used to produce tools. In South Africa the Stone Age can be divided basically into three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. A basic sequence for the South African Stone Age (Lombard et.al 2012) is as follows:

Earlier Stone Age (ESA) up to 2 million – more than 200 000 years ago

Middle Stone Age (MSA) less than 300 000 – 20 000 years ago

Later Stone Age (LSA) 40 000 years ago – 2000 years ago

It should also be noted that these dates are not a neat fit because of variability and overlapping ages between sites (Lombard et.al 2012: 125).

There are no known Stone Age sites in the area, although some rock engravings are known to occur in the larger geographical area around Koster & Rustenburg (Bergh 1999: 4-5). A number of individual MSA/LSA stone tools were also identified in the area of Zeerust, west of the study area, during previous assessments by the author (Pelser 2013 & 2016).

***Some Stone Age material were identified in the study area during the April 2023 assessment, and will be discussed further on in this report.***

The Iron Age is the name given to the period of human history when metal was mainly used to produce artifacts. In South Africa it can be divided in two separate phases (Bergh 1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D.

Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) indicates that a Middle Iron Age should be included. His dates, which are widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D.

Middle Iron Age (MIA) 900 – 1300 A.D.

Late Iron Age (LIA) 1300 – 1840 A.D.

A survey of the Groot Marico area documented more than 100 LIA sites adding to the well-known sites such as stone-walled complexes of Buispoort and Braklaagte, the Mmakgame megasite, the 18th century capital of the Hurusthwe at Kaditshwene and the copper mines of Dwarsberg in the Madikwe Game Reserve. All these sites are dated to between the 15th and 19th Centuries AD (Hutten 2012:8-9).

In a band stretching roughly from Brits in the east to Zeerust in the west there are many known Iron Age sites (Bergh 1999: 7-8). These all belong to the Later Iron Age (Bergh 1999:8-9). No EIA sites are known to occur in the area (Bergh 1999: 6). By the end of the 18th century the Ba Hurutshe stone walled sites (capitals) were located at Kaditshwene and Tshwenyane north of Zeerust (Bergh 1999: 106). Prof. J.Boeyens of UNISA did extensive archaeological research on this and other sites in the region (Boeyens 2003). A number of Late Iron Age stone walled sites and features were also located during recent assessments in the larger area by the author (Pelser 2013: 15-16; 18-20). During earlier times the area was settled by the Fokeng. In the 19th century this group inhabited this area with other Tswana groups including the Kwena and the Po (Bergh 1999: 15 9-10). During the difaqane these people moved further to the west, but they returned later on (Bergh 1999: 11).

Tom Huffman's research work shows that Iron Age sites, features or material could possibly be found in the area. This could include the so-called Uitkomst facies of the Urewe Tradition dating to between AD1650 and AD1820 (Huffman 2007: 171); Rooiberg facies of the same tradition dating to between AD1650 and AD1750 (p.175); Olifantspoort facies of Urewe dating to between AD1500 and AD1700 (p.191); the Madikwe facies of the Urewe Tradition dating to between AD1500 & AD1900 (p.193) and finally the Buispoort facies of the same tradition dating to between AD1700 and AD1840 (Huffman 2007: 203).

***No Iron Age sites, features or material were identified in the study area during the February 2023 fieldwork.***

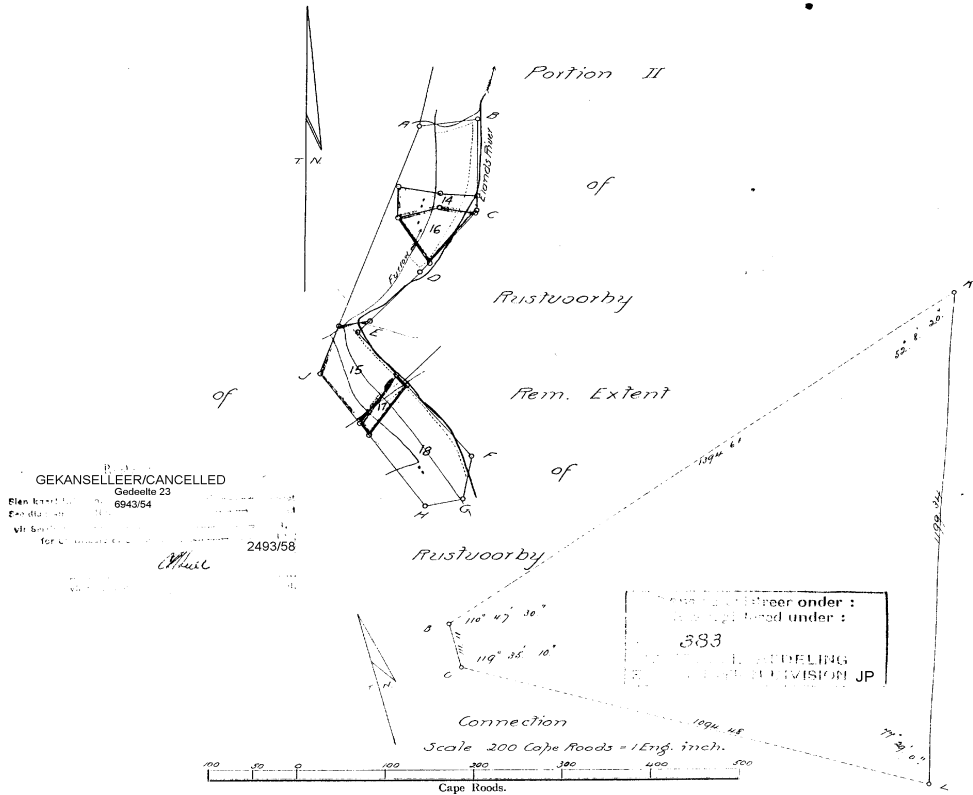
The first Europeans in the area were travelers, hunters and missionaries such as Schoon & McLuckie and Moffat & Archbell in 1829; Cornwallis Harris in 1836 & Livingstone in 1847 (Berg 1999: 12-13). They were followed by the first Voortekkers after 1844. The greater Magaliesberg and Rustenburg area saw much action during the Anglo-Boer War (1899-1902). British troops reached Rustenburg on 14 June 1900. Three battles were fought in the larger area during the War: one at Buffelspoort on 3 December 1900, one at Nooitgedacht on 13 December 1900 and one at Vlakfontein on 29 May 1901 (Bergh 1999: 51-52).

The town of Swartruggens is located by the Elands River, 69km from the town of Zeerust, 56km west of the city of Rustenburg and 34km north-west of Koster. It takes its name 'Swartruggens' from a series of hills there, formerly known as Zwartruggens, a Dutch name for 'black ridges'. The town was established in 1875 on the farm Brakfontein. After the Siege of Mafeking, during the Second Anglo-Boer War, one of the supply depots established by Robert Baden-Powell as he moved towards Pretoria was in Swartruggens. A cemetery for British War dead from the Second Anglo-Boer War is located in the town. ([www.wikipedia.org](http://www.wikipedia.org)).

***No historical sites, structures and features were recorded in the study & application area during the April 2023 field assessment.***

The oldest map for the farm Rustvoorby 383JP (for Portion 1) from the Chief Surveyor General's database ([www.csg.dla.gov.za](http://www.csg.dla.gov.za)) dates to 1908. The farm was then numbered as No.895, and was situated in the District of Rustenburg, Ward of Zwart Ruggens and the Transvaal Colony of the time. It shows that the whole of the farm was originally granted by Deed to one J.N. ter Blanche on the 30<sup>th</sup> of December 1861, and that it was surveyed formally 1<sup>st</sup> in October 1879 (**CSG Document 10GNMM01**).

SIDES.		ANGLES.		(y) CO-ORDINATES (x)	
AB	26.20	A	118° 43' 10"	A	- 503.28
BC	111.11	B	80° 37' 6"	B	- 209.76
CD	98.13	C	140° 30' 20"	C	- 404.56
DE	100.32	D	177° 11' 20"	D	- 210.25
EF	197.30	E	363° 51' 0"	E	- 743.44
FG	52.68	F	128° 37' 10"	F	- 903.06
GH	26.57	G	112° 23' 0"	G	- 922.62
HJ	199.72	H	114° 37' 10"	H	- 963.92
JA	320.76	J	122° 49' 30"	J	- 303.80
				K	- 6.87
				L	- 118.59
					+ 1872.95
					+ 1807.04
					+ 1808.88
					+ 1872.79
					+ 1941.282
					+ 1812.36
					+ 1822.98
					+ 1844.72
					+ 1985.09
					+ 406.84
					+ 84.69



The above Figure lettered *ABCDEFGHIJ* represents *57 Morgen 238* Square Rods of Land, being *Portion I* of the Farm

**RUSTVOORBY No 383**

situate in the District of *Rustenburg* Ward *Zwart Ruggens*. Transvaal Colony.

Bounded as indicated above.

The whole Farm was originally granted to *J N ter Blanche* by Deed of Grant No.

dated the *30* day of *December* 1861 and was surveyed in *October* 1879 by Surveyor *A.H. Dornell*.

The Beacons were pointed out by *D.J.J. & S.H. Bisschoff* and have been properly erected according to Law by me *G. J. A. van der Merwe*.

Surveyed in *April* 1908 Government Land Surveyor

No. 2031 Examined. The numerical data of this Diagram are sufficiently consistent. This Diagram belongs to Deed of Transfer No. issued this day in favour of

Approved *G. J. A. van der Merwe* Surveyor-General Deeds Office, Pretoria. Registrar of Deeds.

Surveyor-General's Office, Pretoria.

Figure 4: 1908 map of Portion 1 of Rustvoorby 383JP ([www.csg.dla.gov.za](http://www.csg.dla.gov.za)).

## Results of the April 2023 assessment

No Iron Age (LIA) stone-walled settlement sites and remains or material were identified in the area, with similarly no recent historical period sites, features or material recorded here. The largest part of the area has been extensively impacted and altered through agricultural activities (ploughing, crop growing and livestock raising & grazing) and if any other significant heritage sites did exist here in the past, it would have been extensively disturbed or destroyed as a result. The earthen dam/s in the area would also have impacted on any sites or material of cultural heritage origin and significance if they were present here in the past. Dense vegetation in large part of the study area hampered visibility on the ground, although there were some open patches of eroded soil. It is therefore possible that some material could have been missed

However, a number of individual Stone Age artefacts were identified in the area, and specifically in some of the open patches of soil. These will be discussed in the next section.

Google Earth images of the study and application area (dating from 2011 onwards) clearly show the impact of the agricultural activities here, with very little of the original natural and historical landscape remaining as a result.



**Figure 5: The area in 2011. Note the extensive old ploughed fields and farm dam (Google Earth 2023).**



**Figure 6: The area in 2017. Although the old ploughed fields are still evident, the are clearly being covered more and more by vegetation. No structures or remains of structures are visible on any of the Google Earth images (Google Earth 2023).**





**Figure 7: General view of a section of the area.**



**Figure 8: Another section. Some parts are more open and eroded.**



**Figure 9: General view of a part of the area. Note the dense grass cover.**



**Figure 10: General view showing the section with old ploughed fields.**



**Figure 11: A view of the large earthen dam in the area.**



**Figure 12: It is in eroded open areas like this that individual Stone Age material were identified.**



**Figure 13: Another general view of the area.**

**1. Stone Age material**

A few individual Middle to Later Stone Age (MSA/LSA) stone tools were found scattered across portions of the area. Although it is possible that there could be more single Stone Age tools located here, the area does not contain a high density of material and is deemed of Low Significance. No further mitigation measures are required.



**Figure 14: Individual Stone tool at Site 1.**



**Figure 15: MSA flake at Site 2.**



**Figure 16: A second tool (MSA core) at Site 2.**



**Figure 17: The MSA tool at Site 3.**

## GPS Location of Sites

S25 33 48.90 E26 40 23.10 (1)

S25 33 47.90 E26 40 16.90 (2)

S25 33 48.60 E26 40 33.30 (3)

**Cultural Significance:** Low

**Heritage Significance:** None

**Field Ratings:** General protection C (IV C): Phase 1 is seen as sufficient recording and it may be demolished (Low Significance sites)

**Mitigation:** None required



**Figure 18: The location of the Stone Age sites (finds) in the area (Google Earth 2023)**

## Impact Assessment and Mitigation Measures

*The significance of impacts is determined using the following criteria:*

**Probability:** describes the likelihood of the impact actually occurring

- **Improbable:** the possibility of the impact occurring is very low, due to the circumstances, design or experience.
- **Probable:** there is a probability that the impact will occur to the extent that provision must be made therefore.

- **Highly probable:** it is most likely that the impact will occur at some stage of the development.
- **Definite:** the impact will take place regardless of any prevention plans and there can only be relied on mitigation measures or contingency plans to contain the effect.

**Duration:** the lifetime of the impact

- **Short Term:** the impact will either disappear with mitigation or will be mitigated through natural processes in a time span shorter than any of the phases.
- **Medium Term:** the impact will last up to the end of the phases, where after it will be negated.
- **Long Term:** the impact will last for the entire operational phase of the project but will be mitigated by direct human action or by natural processes thereafter.
- **Permanent:** the impact is non-transitory. Mitigation either by man or natural processes will not occur in such a way or in such a time span that the impact can be considered transient.

**Scale:** the physical and spatial size of the impact

- **Local:** the impacted area extends only as far as the activity, e.g., footprint
- **Site:** the impact could affect the whole or measurable portion of the abovementioned property.
- **Regional:** the impact could affect the area including the neighboring residential areas.

**Magnitude/Severity: Does the impact destroy the environment, or alter its function**

- **Low:** the impact alters the affected environment in such a way that natural processes are not affected.
- **Medium:** the affected environment is altered, but functions and processes continue in a modified way.
- **High:** function or process of the affected environment is disturbed to the extent where it temporarily or permanently ceases.

**Significance: This is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required.**

- **Negligible:** the impact is non-existent or unsubstantial and is of no or little importance to any stakeholder and can be ignored.
- **Low:** the impact is limited in extent, has low to medium intensity; whatever its probability of occurrence is, the impact will not have a material effect on the decision and is likely to require management intervention with increased costs.
- **Moderate:** the impact is of importance to one or more stakeholders, and its intensity will be medium or high; therefore, the impact may materially affect the decision, and management intervention will be required.



- **High:** The impact could render development options controversial or the project unacceptable if it cannot be reduced to acceptable levels; and/or the cost of management intervention will be a significant factor in mitigation.

The significance is calculated by combining the criteria in the following formula:

Sum (Duration, Scale, Magnitude) x Probability

S = Significance weighting; Sc = Scale; D = Duration; M = Magnitude; P = Probability

With some sites, features and material of cultural heritage origin and significance found in the area during the assessment, the current site layout provided will have an impact. The impact of the proposed development on recorded and known heritage sites is however deemed as Negligible as the Stone Age sites and material is deemed of Low Significance.

Aspect	Description	Weight
<b>Probability</b>	Improbable	1
	<b>Probable</b>	<b>2</b>
	Highly Probable	4
	Definite	5
<b>Duration</b>	Short Term	1
	Medium Term	3
	<b>Long Term</b>	<b>4</b>
	Permanent	5
<b>Scale</b>	Local	1
	<b>Site</b>	<b>2</b>
	Regional	3
<b>Magnitude/Severity</b>	<b>Low</b>	<b>2</b>
	Medium	6
	High	8
<b>Significance</b>	<b>Sum (Duration, Scale, Magnitude)</b>	<b>x Probability</b>
	<b>Negligible</b>	<b>≤20</b>
	Low	>20≤40
	Moderate	>40≤60
	High	>60

**Results: 4+2+2×2 = 16 i.e. ≤20**

The impact of the proposed development on the recorded and known cultural heritage sites in the area is therefore deemed as Negligible based on the Impact Assessment criteria used. However, there is always a possibility of sites, features and material being missed as a result of various factors such as vegetation cover hampering visibility on the ground, as well as the often-subterranean nature of cultural heritage resources (including low stone-packed or unmarked graves).

It is clear from the Desktop Research as well as physical assessment conducted in April 2023 that there are a fairly large number of both archaeological and historical sites, structures and features in larger geographical area around Swartruggens and the specific study & application area. Three sites, dating to the Stone Age times, were identified and recorded in the area during the recent assessment.

## **7. CONCLUSIONS AND RECOMMENDATIONS**

APelser Archaeological Consulting (APAC) was appointed by Kuhle Environmental Consultants (Pty) Ltd to conduct a Phase 1 HIA for a Mining & Prospecting Rights Application (MRA/PRA) on Portion 38 of Rustvoorby 383JP. The study & development area is located a few kilometers north of the town of Swartruggens in the Northwest Province.

Background research indicates that there are some cultural heritage sites and features in the larger geographical area within which the study area falls. Three sites were identified in the study and application area during the assessment. All three contain individual Stone Age tools (with Site 2 containing two artefacts) and was deemed as of Low Significance.

***Based on the Impact Assessment criteria used, the potential impact of the MRA/PRA and future mining-related activities on any significant sites of Cultural Heritage origin would be Negligible. Therefore, from a Cultural Heritage perspective, it is recommended that the proposed MRA/PRA be allowed to continue.***

Finally, it should be noted that although all efforts are made to locate, identify and record all possible cultural heritage sites and features (including archaeological remains) there is always a possibility that some might have been missed as a result of grass cover and other factors. The subterranean nature of these resources (including low stone-packed or unmarked graves) should also be taken into consideration. Should any previously unknown or invisible sites, features or material be uncovered during any development actions then an expert should be contacted to investigate and provide recommendations on the way forward.

## **8. REFERENCES**

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## **APPENDIX A: DEFINITION OF TERMS:**

**Site:** A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

**Structure:** A permanent building found in isolation or which forms a site in conjunction with other structures.

**Feature:** A coincidental find of movable cultural objects.

**Object:** Artifact (cultural object).

(Also see Knudson 1978: 20).

## **APPENDIX B: DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE**

**Historic value:** Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.

**Aesthetic value:** Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.

**Scientific value:** Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period

**Social value:** Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

**Rarity:** Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.

**Representivity:** Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

## **APPENDIX C: SIGNIFICANCE AND FIELD RATING:**

### **Cultural significance:**

- Low: A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- Medium: Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.
- High: Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

### **Heritage significance:**

- Grade I: Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II: Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate
- Grade III: Other heritage resources of local importance and therefore worthy of conservation

### **Field ratings:**

- i. National Grade I significance: should be managed as part of the national estate
- ii. Provincial Grade II significance: should be managed as part of the provincial estate
- iii. Local Grade IIIA: should be included in the heritage register and not be mitigated (high significance)
- iv. Local Grade IIIB: should be included in the heritage register and may be mitigated (high/medium significance)
- v. General protection A (IV A): site should be mitigated before destruction (high/medium significance)
- vi. General protection B (IV B): site should be recorded before destruction (medium significance)
- vii. General protection C (IV C): phase 1 is seen as sufficient recording and it may be demolished (low significance)

## **APPENDIX D: PROTECTION OF HERITAGE RESOURCES:**

### **Formal protection:**

National heritage sites and Provincial heritage sites – Grade I and II

Protected areas - An area surrounding a heritage site

Provisional protection – For a maximum period of two years

Heritage registers – Listing Grades II and III

Heritage areas – Areas with more than one heritage site included

Heritage objects – e.g. Archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

### **General protection:**

Objects protected by the laws of foreign states

Structures – Older than 60 years

Archaeology, palaeontology and meteorites

Burial grounds and graves

Public monuments and memorials



## **APPENDIX E: HERITAGE IMPACT ASSESSMENT PHASES**

1. Pre-assessment or Scoping Phase – Establishment of the scope of the project and terms of reference.
2. Baseline Assessment – Establishment of a broad framework of the potential heritage of an area.
3. Phase I Impact Assessment – Identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
4. Letter of recommendation for exemption – If there is no likelihood that any sites will be impacted.
5. Phase II Mitigation or Rescue – Planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
6. Phase III Management Plan – For rare cases where sites are so important that development cannot be allowed.