

Comprehensive and Professional Solutions for all Heritage Related Matters
CK 2006/014630/23 **VAT NO.: 4360226270**

**REPORT ON A PHASE 1 HERITAGE ASSESSMENT
FOR THE PROPOSED ICARUS SPP DEVELOPMENT
ON THE REMAINING EXTENT OF PORTION 6 AND PORTIONS 26, 28 & 43
OF THE FARM BRAKSPRUIT 370IP
NEAR KLERKSDORP, NORTHWEST PROVINCE**

For:

ENVIRONAMICS

REPORT: APAC022/102

by:

A.J. Pelsler
Accredited member of ASAPA

October 2022

P.O.BOX 73703

LYNNWOOD RIDGE

0040

Tel: 083 459 3091

Fax: 086 695 7247

Email: apac.heritage@gmail.com

Member: AJ Pelsler BA (UNISA), BA (Hons) (Archaeology), MA (Archaeology) [WITS]

©Copyright

APELSER ARCHAEOLOGICAL CONSULTING

The information contained in this report is the sole intellectual property of APELSER Archaeological Consulting. It may only be used for the purposes it was commissioned for by the client.

DISCLAIMER:

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. APELSER 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

A handwritten signature in black ink, appearing to be 'A. Pelser', written in a cursive style.

SUMMARY

APelser Archaeological Consulting (APAC) was appointed by Environamics, on behalf of Subsolar Energy (Pty) Ltd, to undertake a Phase 1 HIA for the proposed Icarus SPP development on the Remaining Extent of Portion 6 & Portions 26, 28 and 43 of the farm Brakfontein, near Klerksdorp in the Northwest Province.

A number of known cultural heritage sites (archaeological and/or historical) exist in the larger geographical area within which the study area falls. There are no known sites in the specific study and development area footprint, but a number were identified in the study area during the assessment. The report will discuss the results of the desktop and field assessment and provide recommendations on the way forward at the end of the document.

From a Cultural Heritage point of view the proposed development actions can continue, taking into consideration the mitigation measures proposed in the report.

CONTENTS

	page
SUMMARY	3
CONTENTS.....	4
1. INTRODUCTION	5
2. TERMS OF REFERENCE	5
3. LEGISLATIVE REQUIREMENTS	5
4. METHODOLOGY	8
5. DESCRIPTION OF THE AREA.....	9
6. DISCUSSION.....	16
7. CONCLUSIONS AND RECOMMENDATIONS	30
8. REFERENCES	31
APPENDIX A – DEFINITION OF TERMS	33
APPENDIX B – DEFINITION/ STATEMENT OF SIGNIFICANCE.....	34
APPENDIX C – SIGNIFICANCE AND FIELD RATING.....	35
APPENDIX D – PROTECTION OF HERITAGE RESOURCES.....	36
APPENDIX E – HERITAGE MANAGEMENT IMPACT ASSESSMENT PHASES.....	37

1. INTRODUCTION

APelser Archaeological Consulting (APAC) was appointed by Environamics, on behalf of Subsolar Energy (Pty) Ltd, to undertake a Phase 1 HIA for the proposed Icarus SPP development on the Remaining Extent of Portion 6 & Portions 26, 28 and 43 of the farm Brakfontein, near Klerksdorp in the Northwest Province.

A number of known cultural heritage sites (archaeological and/or historical) exist in the larger geographical area within which the study area falls. There are no known sites in the specific study and development area footprint, but a number were identified in the study area during the assessment.

The client indicated the location and boundaries of the Project Area, and the assessment focused on this area.

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

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 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- 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

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.

4. METHODOLOGY

4.1. Survey of literature

A survey 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.

4.2 Field survey

The field assessment section of the study was conducted 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 was determined by means of a Global Positioning System (GPS), while detailed photographs were also taken where possible.

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. Mr. Allman, owner of the property, provided some information on the study area.

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 were determined by means of the Global Positioning System (GPS). The information was added to the description in order to facilitate the identification of each locality.

5. DESCRIPTION OF THE AREA

APelser Archaeological Consulting (APAC) was appointed by Environamics, on behalf of Subsolar Energy (Pty) Ltd, to undertake a Phase 1 HIA for the proposed Icarus SPP development on the Remaining Extent of Portion 6 & Portions 26, 28 and 43 of the farm Brakfontein, near Klerksdorp in the Northwest Province.

The topography of the study area is mostly flat and open, with some low hills, rocky ridges and outcrops present in sections in and bordering it. Although there are some clumps of trees in the area, large trees are scarce. Grass cover was relatively dense and hampered visibility on the ground to some extent. The study and proposed development area footprint would have been extensively used in the recent historical past for agricultural purposes and activities related to this would have extensively impacted on and altered the original natural and historical landscape. Large scale urban and other developments is absent, although some developments bordering the area is evident. The existing Brakspruit Substation and Eskom Powerline and servitudes have also impacted on the area. If any sites, features or material of cultural heritage (archaeological and/or historical) origin or significance did exist here in the past it would have been extensively disturbed or destroyed as a result of these activities.

However, some cultural heritage sites and features were identified during the field assessment

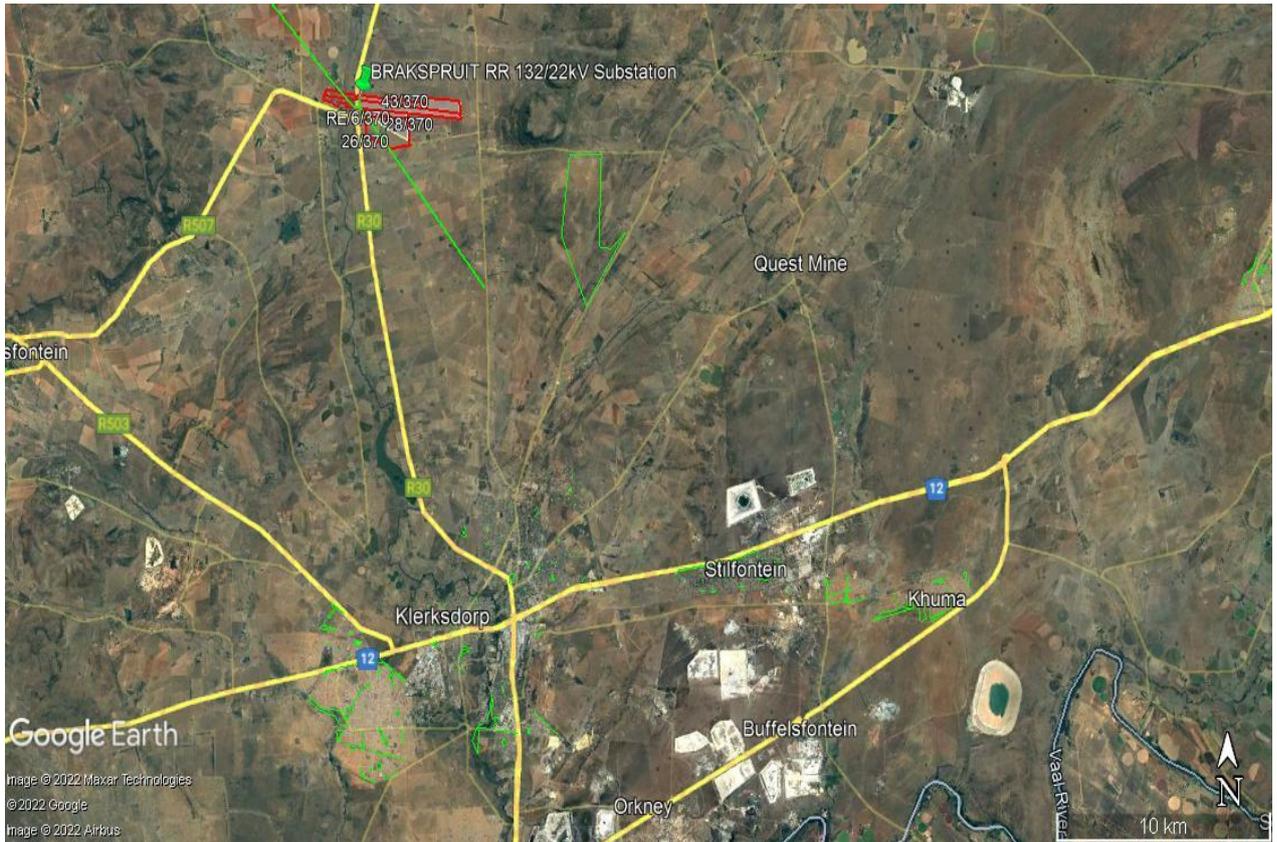


Figure 1: General location of the study & proposed development area in red polygon (Google Earth 2022).

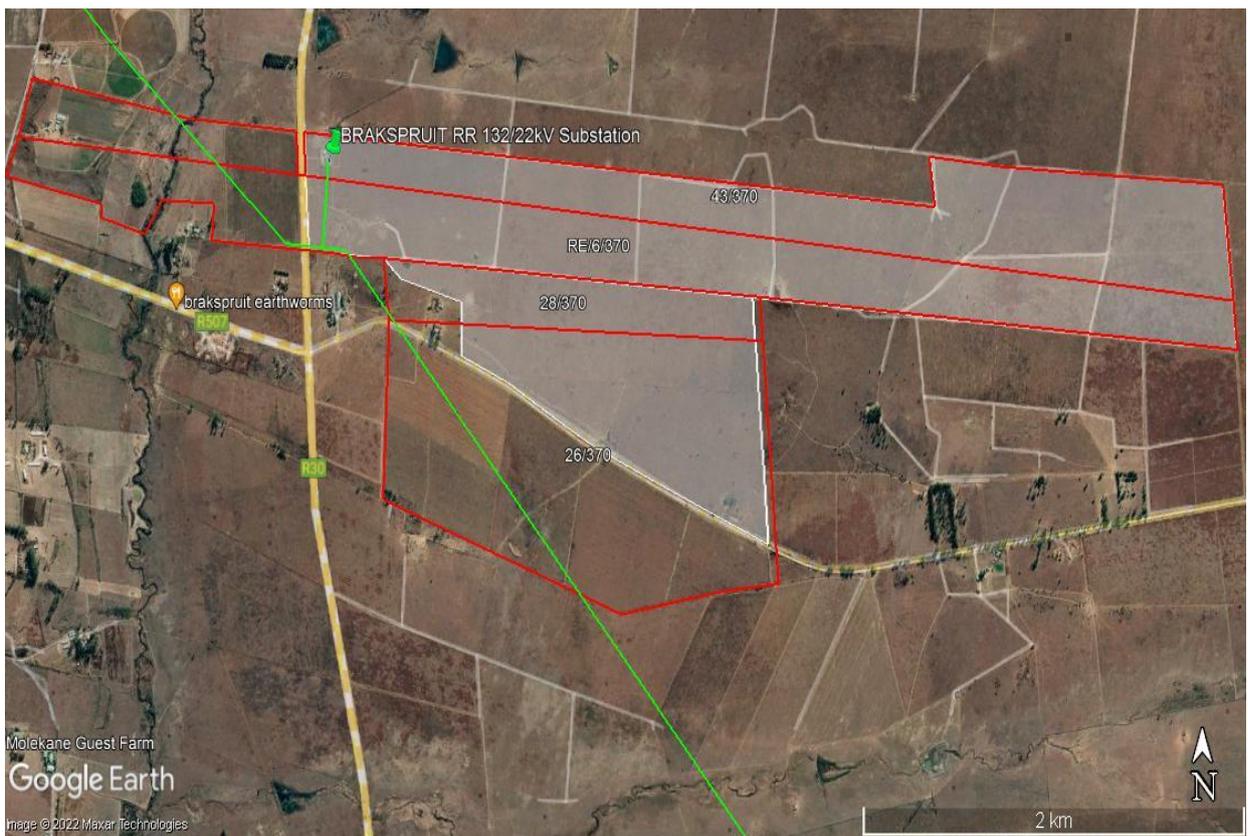


Figure 2: Closer view of the study & development area footprint (Google Earth 2022).



Figure 3: General view of part of the study area.



Figure 4: Another general view. Note the fairly flat and open nature of the area.



Figure 5: A view of the area with the existing Eskom Powerline visible.



Figure 6: Although the area is mostly flat there are some small rocky outcrops present in places.



Figure 7: Another view showing the flat and open nature of the study & proposed development area.



Figure 8: In many sections the grass cover was very dense, hampering visibility on the ground.



Figure 9: Another section of the area.



Figure 10: A low ridge/hill located just outside on the eastern boundary of the study & development area. Some heritage sites and features were identified around and close to this ridge.



Figure 11: A view of the existing Brakfontein Substation on Portion 43 of the farm.



Figure 12: Another general view of part of the study area.

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).

According to Bergh there are no known Stone Age sites close to Klerksdorp, although a number of rock engraving sites are known to occur in the larger geographical area (Bergh 1999: 4-5). Stone Age tools as well rock engravings are known to occur at the Goudkoppie Hill heritage site located in Klerksdorp.

Some Stone Age material (stone tools) was identified in the area during the October 2022 assessment, but is located just outside the development footprint. The material is located on the open surface, scattered around a quarry/dam, and not in an in situ, stratified setting. It is possible that similar scatters could be located in the study & development area but were not visible as a result of grass cover. However, if any were to be present it would most likely be single artifacts or small scatters of tools in an open-air surface context.

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal 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) however indicates that a Middle Iron Age should be included. His dates, which now seem to be 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.

There are no known EIA/MIA sites in the area, although there are some Late Iron Age sites in the larger geographical area north and west of the town (Bergh 1999: 6-7). One such site is Palmietfontein (around 30km north of the town), excavated in 1975 by D.A.White. In an article on this work it is also indicated that the area north of Klerksdorp is relatively rich in terms of Late Iron Age sites, and that the Rolong capital of Thabeng (Platberg) lies within this area (White 1977: 89).

Based on the research by Huffman it is possible that sites related to the so-called Olifantspoort facies of the Urewe Tradition, dating to around AD1500-1700, and the Thabeng facies of the same tradition (AD1700-1840) could possibly be found in the area ((Huffman 2007: 207).

No Iron Age sites, features or cultural material was found during the assessment of the area.

The historical age generally starts with the first recorded oral histories in an area. It includes the moving into the area of people that were able to read and write. The earliest traveller through this area was Cornwallis Harris in 1836, followed by missionaries and the Voortrekkers (Bergh 1999: 13-14).

According to Wikipedia the town was founded in 1837 when the Voortrekkers settled on the banks of the Schoonspruit which flows through the town. Most prominent of the first settlers was C.M. du Plooy who claimed a large farm called Elandsheuwel. He gave plots of land and communal grazing rights on this farm to other Voortrekkers in return for their labour in building a dam and an irrigation canal. This collection of smallholdings was later given the name of Klerksdorp in honour of the first landdrost (magistrate) of the area, Jacob de Clerq.

In August 1886 gold was discovered in the Klerksdorp district by M.G. Jansen van Vuuren as well as on the Witwatersrand, which lies about 160 km to the east. As a consequence, thousands of fortune-seekers descended on the small village, turning it into a town with 70 taverns and even a stock exchange of its own. However, the nature of the gold reef demanded expensive and sophisticated equipment to mine and extract the gold, causing the majority of diggers to move away in the late 1890s and leading to a decline in the gold mining industry.

During the Second Boer War (1899-1902), heavy fighting occurred in the area, which also housed a large concentration camp. The most famous of the battles around Klerksdorp, is that of the Battle of Ysterspruit during which the Boers under General Koos de la Rey achieved a great victory. On April 11, 1902, the Battle of Rooiwal, the last major engagement of the war, was fought near Klerksdorp during which a Boer charge was beaten off by entrenched British troops. The graves of the victims of the British Concentration Camps near Klerksdorp are located in the old cemetery just outside of town.

Klerksdorp was connected by rail to Krugersdorp on 3 August 1897 and to Kimberley in 1906. The gold mining industry was revived by large mining companies in 1932, causing the town to undergo an economic revival, which accelerated after World War II.

The above information was obtained from (www.wikipedia.org.za).

Most of the cultural heritage sites and features identified & recorded in the area during the October 2022 assessment dates to the recent historical period.

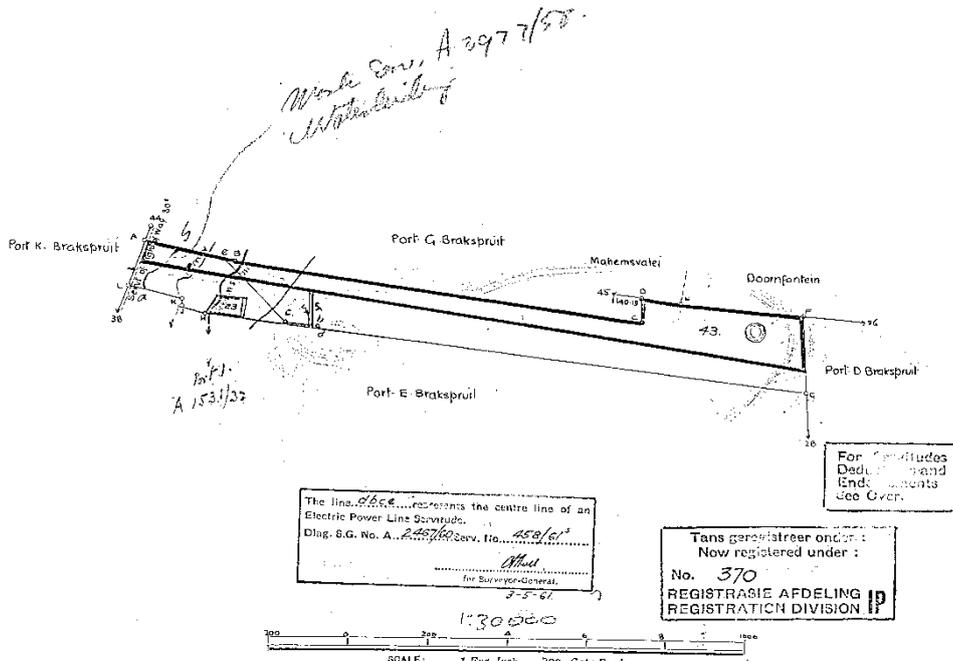
The oldest map obtained from the Chief Surveyor General's database (www.csg.dla.gov.za) for the farm Brakfontein (Portion 6), dates to 1914. It shows that farm was then numbered as No.5 and was located in the District of Klerksdorp (previously Potchefstroom) and the Schoonspruit Ward. The whole farm was originally granted to one J.P. Delpont on the 12th of July 1859, with Portion 1 surveyed in April 1914 (Document 10591000).

File 1288.

S.G. N° A. 1668/14

Sides.	Angles.	(Y) Co-ordinates (X)
AB 251.04	A 56.12.20	A + 4628.74 - 2118.83
BC 1040.05	B 106.5.20	B + 4280.10 - 2344.69
CD 61.15	C 200.27.10	C + 4471.46 - 3379.03
DE 100.00	D 78.43.44	D - 4532.43 - 3374.28
EF 300.97	E 182.51.20	E + 4520.56 - 3473.57
FG 196.30	F 38.24.30	F + 4499.20 - 3781.80
GH 1528.83	G 20.12.10	G + 4303.49 - 3997.02
HJ 63.64	H 167.45.20	H + 4446.04 - 2274.85
JK 16.89	J 99.24.10	J + 4465.26 - 2214.48
KL 139.73	K 265.17.40	K + 4481.48 - 2216.57
LA 122.34	L 84.31.20	L + 4512.63 - 2060.30
		20 + 4440.14 - 4634.77
		26 + 4131.03 - 3610.43
		38 + 4464.38 - 2664.48
		44 + 4665.91 - 2131.16
		45 + 4667.24 - 2242.15

1668



The above Figure lettered A B C D E F G H J K L represents 448 Morgen Square Rods of Land, being Port G Brakspruit N°5

as appears on the Diagram S.G. No. A 3036/13 framed by Surveyor J. L. M. Leibbrondt in April 1913 relating to Deed of Gift Transfer No. dated 12.7.1855 made in favour of J. P. Delport situate in the District of Batekeshoorn, Keersterdorp Ward, Lower Schoon Spruit, Province of Transvaal, bounded as indicated above, and have been properly executed according to Law. The beacons were pointed out by J. J. Boshol, C. A. Schoeman Surveyed in April 1913 by me. J. L. M. Leibbrondt Band Surveyor.

No. 1 1668 Examined. The numerical data of this Diagram are sufficiently consistent. Approved: H. Maxwell Edwards, Examiner of Diagrams, Surveyor-General's Office, Pretoria, 26 MAY 1914. This Diagram belongs to Deed of made this day in favour of 4714/14 Registrar of Deeds, Pretoria.

Figure 13: 1914 map for Portion 6 of the farm Brakfontein 370IP (www.csg.dla.gov.za).

Results of the October 2022 Fieldwork

A number of sites were found in the area during the assessment, with some located outside of the proposed development footprint area that had to be assessed. These sites will therefore not be impacted on directly (See **Site Distribution Map** below).

Site 1 is a homestead/farmstead with a number of associated structures that include a kraal, sheds and other features. There are also some structures that had recently been demolished on the site. The site is located outside of the proposed development area footprint and will therefore not be directly impacted. No mitigation measures are therefore required.

GPS Location of Site: S26 40 50.10 E26 35 56.80

Cultural Significance: Medium to Low

Heritage Significance: Low

Field Ratings: General protection B (IV B): site should be recorded before destruction (Medium significance)

Mitigation: See Above



Figure 14: A view of the kraal and associated structure at Site 1.



Figure 15: Homestead/farmstead and associated structures at Site 1.



Figure 16: Another structure at Site 1.



Figure 17: The remains of a recently demolished structure at Site 1.

Site 2 consists of a small number of Middle to Later Stone Age (MSA/LSA) stone tools, located in and around a small quarry or dam on the farm. The site and finds are situated outside of the direct area of impact of the proposed development and no mitigation measures are recommended. Although there is a possibility of similar small scatters being present in the development area footprint, these scatters and material are not in any primary context (located in an open-air surface context) and would more than likely only be represented by single or low density scatters of material.

GPS Location of Site: S26 41 02.00 E26 36 59.90

Cultural Significance: Low to Medium

Heritage Significance: Grade III: Other heritage resources of local importance and therefore worthy of conservation.

Field Ratings: General protection B (IV B): site should be recorded before destruction (Medium significance)

Mitigation: See Above



Figure 18: MSA/LSA stone tools at Site 2.



Figure 19: The general location of Site 2.

Sites 3 & 4 is again located outside of the proposed development area footprint, and situated on and around a low hill/rocky ridge just outside of the eastern boundary of the footprint. The sites (both most likely forming part of a larger site) consists of some sections of stone walling, representing enclosures and possibly terracing associated with Late Iron Age (LIA) settlement in the larger geographical area. Although no cultural material such as pottery were recorded that could help with identifying the exact origin or age of the site/s, it is possible that it is related to the Thabeng (Platberg) BaRolong settlement in the larger area dating to between the 1700's and 1800's AD.

Although the stone walling on the sites are not very extensive or well-preserved, it is still deemed to be of some archaeological and cultural heritage significance. Therefore although the propose development will not impact on them directly, it is recommended that the sites should be avoided and if this is not possible then suitable archaeological mitigation measures such as mapping and limited archaeological excavations should be implemented. The best course of action however would be to avoid any rocky ridges or low hills in the area.

GPS Location of Sites: S26 41 02.90 E26 36 59.10 (Site 3); S26 41 01.40 E26 36 57.60 (Site 4)

Cultural Significance: Medium to High

Heritage Significance: Grade III: Other heritage resources of local importance and therefore worthy of conservation.

Field Ratings: General protection A (IV A): site should be mitigated before destruction (High/Medium significance)

Mitigation: See Above



Figure 20: Possible LIA stone-walling on Site 3.



Figure 21: Remnants of a stone-walled enclosure at Site 3.



Figure 22: Stone-walling at Site 4.

Site 5 consists of the remnants (foundations) of a number of recent historical homesteads, probably associated with a small settlement (farm labourer?) on Portion 6 of the farm. The site also contains a number of refuse dumps (ash middens) and is located close to and around a low hill in the area. Although the age is difficult to determine, it is likely less than 60 years of age based on the fairly modern cultural material noted on these refuse dumps.

It is however recommended that the site should be avoided by the proposed development if possible, as there is always a possibility of unknown and unmarked burials being associated with settlements such as these. If the development cannot avoid the site then suitable mitigation measures will have to be implemented, including mapping and detailed documentation. As part of this, social consultation will have to be undertaken in order to trace any possible previous inhabitants of the settlement to assist with oral and other evidence.

GPS Location of Site: S26 40 38.40 E26 35 40.10

Cultural Significance: Medium to High

Heritage Significance: Grade III: Other heritage resources of local importance and therefore worthy of conservation.

Field Ratings: General protection B (IV B): site should be recorded before destruction (Medium significance)

Mitigation: See Above



Figure 23: A view of the low hill close to which Site 5 is situated.



Figure 24: One of the refuse middens at Site 5.



Figure 25: Some modern cultural material at one of the middens.



Figure 26: Foundations of one of the homesteads at Site 5.



Figure 27: The foundations of another homestead.

The most significant site (Site 6) recorded during the assessment is an informal cemetery located on Portion 28 of the farm, close to the southern boundary of Portion 6. It consists of approximately 30 visible graves. Most of the graves are stone-packed without any formal headstones, but one of the graves have granite headstone with inscription. This inscription identifies the deceased as one Amos Mmamba? Who had passed away in 2008. It is possible that the site & graves on it could be associated with the Site 5 settlement recorded during the field assessment.

Graves always carry a High Significance Rating from a Cultural Heritage point of view. As such great care should be taken to avoid any possible negative impacts through development activities on it. The best course of action is to fence-in the site with a proper boundary fence, to implement a buffer/exclusion zone of approximately 30m around its outer perimeter fence and to include an entrance gate to possible descendants in order to provide them with unhindered access to the graves. If this is not possible then the option to exhume and relocate the graves is available. This can only be done after a proper public consultation process has been completed in an effort to trace and identify any possible descendants to obtain their consent to undertake the exhumation and relocation work. Permits from various authorities such as SAHRA (for graves older than 60 years of age and unknown), COGTA, Department of Health and Local Government are also required to be obtained for this purpose.

GPS Location of Site: S26 40 41.16 E26 35 49.95

Cultural Significance: High

Heritage Significance: Grade III: Other heritage resources of local importance and therefore worthy of conservation.

Field Ratings: General protection B (IV B): site should be recorded before destruction (Medium significance)

Mitigation: See Above



Figure 28: A view of the Site 6 cemetery.



Figure 29: The grave of Amos Mmamba who passed away in 2008.

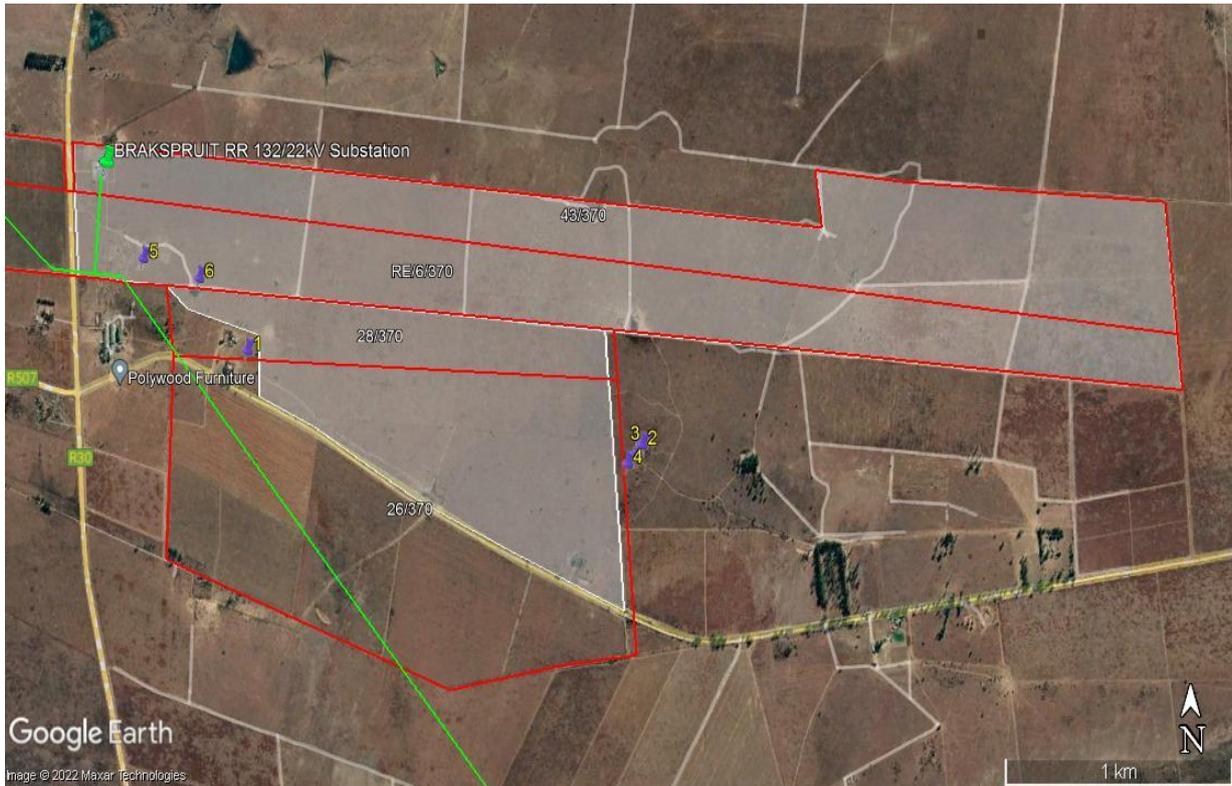


Figure 30: A view of the location and distribution of sites recorded during the assessment (Google Earth 2022).

Based on the assessment it is recommended that the development can continue, taking consideration of the recommendations made at the end of this report. Furthermore it should be noted that although all efforts were made to cover the total area and therefore to identify all possible sites or features of cultural (archaeological and/or historical) heritage origin and significance, that there is always the possibility of something being missed. This will include low stone-packed or unmarked graves. This aspect should be kept in mind when development work commences and if any sites (including graves) are identified then an expert should be called in to investigate and recommend on the best way forward.

7. CONCLUSIONS AND RECOMMENDATIONS

APelser Archaeological Consulting (APAC) was appointed by Environamics, on behalf of Subsolar Energy (Pty) Ltd, to undertake a Phase 1 HIA for the proposed Icarus SPP development on the Remaining Extent of Portion 6 & Portions 26, 28 and 43 of the farm Brakfontein, near Klerksdorp in the Northwest Province.

A number of known cultural heritage sites (archaeological and/or historical) exist in the larger geographical area within which the study area falls. There are no known sites in the specific study and development area footprint. A number of sites were found in the area during the assessment, with some located outside of the proposed development footprint area that had to be assessed. These sites will therefore not be impacted on directly.

Sites 1-4 falls outside of the area of direct impact and no mitigation measures are therefore required. However, with Sites 3&4 located on and close to the eastern boundary of the development area – and on and around a low ridge – it is recommended that all efforts should

be made to avoid any development on and around ridges like these in the larger area. Sites 3 & 4 should be avoided.

Site 5 consists of the remnants of a number of recent historical homesteads, probably associated with a small farm labourer settlement on Portion 6 of the farm. It is recommended that the site should be avoided by the proposed development if possible, as there is always a possibility of unknown and unmarked burials being associated with settlements such as these. If the development cannot avoid the site then suitable mitigation measures will have to be implemented, including mapping and detailed documentation. As part of this, social consultation will have to be undertaken in order to trace any possible previous inhabitants of the settlement to assist with oral and other evidence.

Site 6 is the most significant site recorded during the assessment and is an informal cemetery located on Portion 28 of the farm, close to the southern boundary of Portion 6. It consists of approximately 30 visible graves. It is possible that the site & graves on it could be associated with the Site 5 settlement recorded during the field assessment. Graves always carry a High Significance Rating from a Cultural Heritage point of view. As such great care should be taken to avoid any possible negative impacts through development activities on it. The best course of action is to fence-in the site with a proper boundary fence, to implement a buffer/exclusion zone of approximately 30m around its outer perimeter fence and to include an entrance gate to possible descendants in order to provide them with unhindered access to the graves. If this is not possible then the option to exhume and relocate the graves is available. This can only be done after a proper public consultation process has been completed in an effort to trace and identify any possible descendants to obtain their consent to undertake the exhumation and relocation work. Permits from various authorities such as SAHRA (for graves older than 60 years of age and unknown), COGTA, Department of Health and Local Government are also required to be obtained for this purpose.

To concluded, from a cultural heritage point of view the development can continue, taking cognizance of the recommended mitigation measures provided.

The subterranean nature of the cultural heritage (archaeological and/or historical) resources, including low stone-packed or unmarked graves, should however always 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

Aerial views of General and Closer study area location as well as Sites Recorded: Google Earth 2022.

Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies**. Pretoria: J.L. van Schaik.

Huffman, T.N. 2007. Handbook to the Iron Age: **The Archaeology of Pre-Colonial Farming Societies in Southern Africa**. Scottsville: University of KwaZulu-Natal Press.

Knudson, S.J. 1978. **Culture in retrospect**. Chicago: Rand McNally College Publishing

Company.

Lombard, M., L. Wadley, J. Deacon, S. Wurz, I. Parsons, M. Mohapi, J. Swart & P. Mitchell. 2012. **South African and Lesotho Stone Age Sequence Updated (I)**. South African Archaeological Bulletin 67 (195): 120–144, 2012.

Republic of South Africa. 1999. **National Heritage Resources Act** (No 25 of 1999). Pretoria: the Government Printer.

Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.

White, D.A. 1977. The Excavation of an Iron Age Site at Palmietfontein near Klerksdorp. **The South African Archaeological Bulletin, Vol. 32, No. 125 (Jun., 1977), pp. 89-92.**

Chief Surveyor General Database – www.csg.dla.gov.za. Document No: 10591000.

www.wikipedia.org.za

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.