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**A PHASE 1 HERITAGE IMPACT ASSESSMENT & REPORT FOR THE
PROPOSED KENLEAF EXTENSION 35 TOWNSHIP DEVELOPMENT
ON PORTIONS 196 & 197 OF RAND COLLIERIES AGRICULTURAL HOLDINGS
NEAR BRAKPAN, EKURHULENI, GAUTENG**

For:

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REPORT: **APAC023/26**

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SUMMARY

APelser Archaeological Consulting (APAC) was appointed by Aquastrat Solutions (Pty) Ltd to conduct a Phase 1 Heritage Impact Assessment for the proposed development of the Kenleaf Extension 35 Township Development. The study and proposed development area is located on Portions 196 & 197 of Rand Collieries Agricultural Holdings, near Brakpan in the Greater Ekurhuleni Municipality of Gauteng.

The fieldwork was conducted on the 18th of March 2023.

Background research indicates that there are some cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls, with no known ones located in the specific study area. Over and above some recent historical buildings, no other archaeological and/or historical (cultural heritage) sites, features or material of any significance was identified in the area during the field assessment. This report discusses the results of both the background research and physical assessment and provides recommendations on the way forward.

From a Cultural Heritage point of view, it can be concluded that the proposed Kenleaf Extension 35 development should be allowed to continue taking into consideration the recommendations provided at the end.

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1. INTRODUCTION

APelser Archaeological Consulting (APAC) was appointed by Aquastrat Solutions (Pty) Ltd to conduct a Phase 1 Heritage Impact Assessment for the proposed development of the Kenleaf Extension 35 Township Development. The study and proposed development area is located on Portions 196 & 197 of Rand Collieries Agricultural Holdings, near Brakpan in the Greater Ekurhuleni Municipality of Gauteng. The fieldwork was conducted on the 18th of March 2023.

Background research indicates that there are some cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls, with no known ones located in the specific study area. Over and above some recent historical buildings, no other archaeological and/or historical (cultural heritage) sites, features or material of any significance was identified in the area during the field assessment.

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

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 potential 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; and
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 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.)

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. A 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 000m²
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

Structures

Section 34(1) of the Act state that no person may demolish any structure or part thereof that 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 paleontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological 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 paleontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and paleontological 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 or 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. Review of literature

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 section of the study was conducted on the 18th of March 2022 according to generally accepted HIA practices contained in the SAHRA 2007 Minimum Standards related to the Archaeological & Paleontological Components of Impact Assessments & Reports. The assessment 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 detailed photographs are also taken where needed.

4.3. 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. The significance of each site is assessed and documented.

5. DESCRIPTION OF THE AREA

The study & proposed development area is located on Portions 196 & 197 Rand Collieries Agricultural Holdings (AH), near Brakpan in the Ekurhuleni Metropolitan Municipality of Gauteng.

The topography of the area is flat and open, with no rocky outcrops or ridges present. The area would have been used in the past for small-scale agricultural purposes such as ploughing & crop growing, as well as livestock keeping and grazing. The area is bordered by existing urban residential and business-related developments and settlements. A number of buildings and structures are present in the study and proposed development area footprint, and include both a modern and recent homestead with related outbuildings, as well as older homestead (farmhouse?) and farming-related structures. Dense grass cover during the assessment in sections of the study area hampered visibility on the ground, but it is unlikely that any significant cultural heritage (archaeological and/or historical) resources would have been missed as a result. The original natural and historical landscape would have been extensively altered through past agricultural activities and urbanization, and if any sites, features or material (other than the older farmstead buildings) of cultural heritage origin or significance did exist here it would have been disturbed or destroyed to a large degree.



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



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

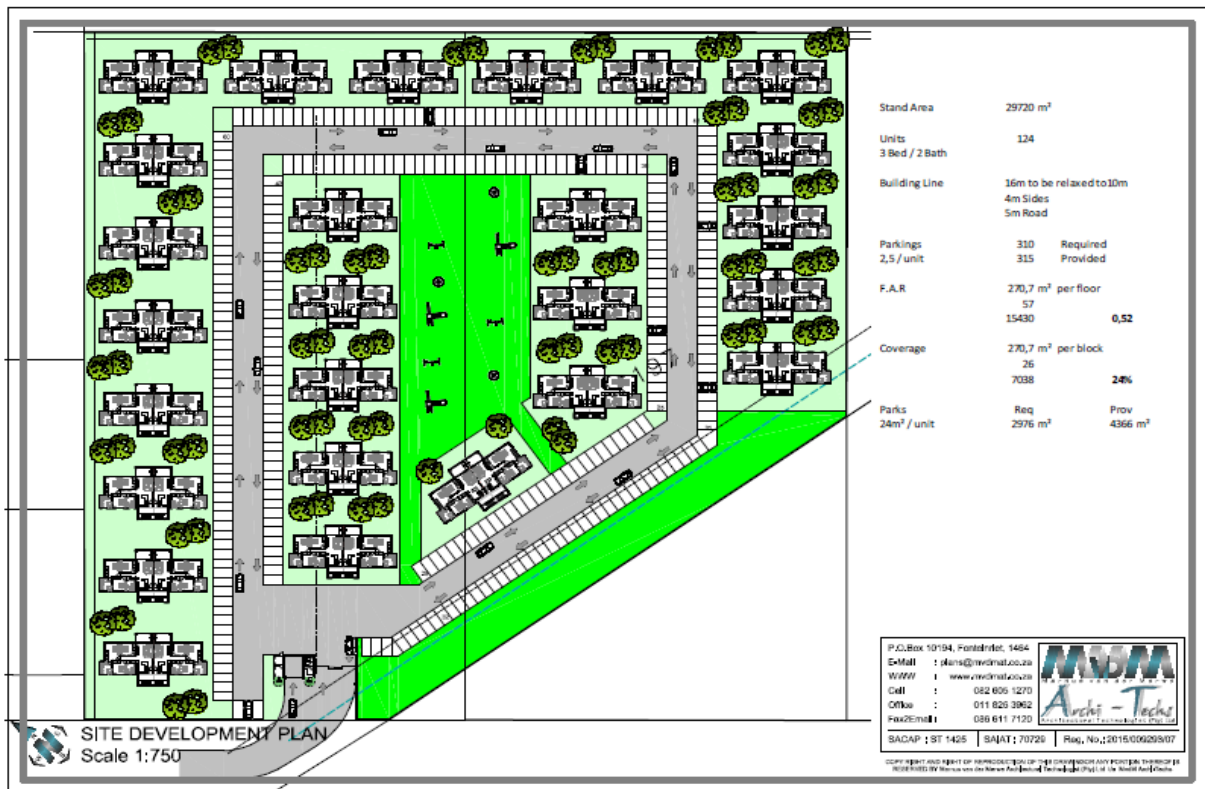


Figure 3: Site development plan (copyright MvdM Archi-Techs – provided by Aquastrat Solutions).

6. RESULTS AND DISCUSSION

6.1. Literature Review

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).

No known Stone Age sites or artifacts are present in the study area. The closest known Stone Age sites are those of Linksfield, Primrose, Waldrif and others (Bergh 1999: 4). If any Stone Age artifacts are to be found in the area, then it would more than likely be single, out of context, stone tools.

No Stone Age sites or material were identified in the study area during the March 2023 field assessment. If any were to be present, they would most likely be individual stone tools or low density scatters in open-air surface scatters around the area.

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.

No Early Iron Age sites are known in the larger geographical area, while LIA sites such as those at Melvillekoppies, Bruma and Klipriviersberg are the closest known ones (Bergh 1999: 7).

No Iron Age sites, features or objects were found during the March 2023 field assessment.

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. The first Europeans to move through and into the area were the groups of Cornwallis Harris (1836) and David Livingstone in 1847 (Bergh 1999: 13). These groups were closely followed by the Voortrekkers after 1844 (Bergh 1999: 15). White settlers started to occupy huge tracts of land, claiming it as farms after the late 1840s. The larger area also played a role during the Anglo-Boer War (1899-1902), with a Black Concentration Camp also established (near Springs) during the War (Bergh 1999: 51; 54).

“The name Brakpan comes from a small pan on a farm called Weltevreden, which was filled with very brackish water and was probably referred to as the “brakpan,” and it was near this pan that the first settlement started. In 1888, a coal seam was discovered and a coal mine under the name of Brakpan Collieries was started. When a railway line was constructed from Germiston to Springs, Brakpan became one of the stations along the route. With gold fever running high on the Witwatersrand in the early years of the twentieth century, it was not long before gold was discovered. In 1905, Brakpan Mines Company sunk its first two gold mining shafts. One of its claims to fame was that it had the highest mine dump in the world at that time, 120 meters (390 ft) above ground level. From 1905 the village began to grow rapidly, remaining a suburb of Benoni until 1912 when it was granted the status of a municipality and proclaimed as a town. Brakpan's central position makes it a good distribution center for industry, especially engineering works and foundries.

In the late 1990’s the municipality approved the construction of a huge casino and entertainment complex, Carnival City, which opened the town to tourists and provided much-needed jobs for the people. The first activity which drew people to the area was the British coal mining in 1888 and the large coal powered power station also built by the British. A tram line to Johannesburg was built at this time to service the power station. The Main Reef Road (today part of the R29) linked Brakpan to all the other mining towns in the Witwatersrand. Brakpan was a suburb of Benoni from 1914–1919, when it was granted municipal status. The Brakpan miners were involved in the miners' strike of 1922. The town has gradually lost its importance as a gold mining area as the surrounding mines suffered from low yield over high cost. Many British residents emigrated during the apartheid era leaving a vacuum in the town which was filled by mostly Afrikaner farmers who had lost interest in farming. Situated between Springs and Benoni, it forms part of the Ekurhuleni Metro. The main road through town is Voortrekker Street” (www.wikipedia.org).

Some recent historical structures were identified and recorded in the study area in March 2023, and will be discussed in more detail in the sections to follow.

6.2. Results of the March 2023 Field Assessment

As noted earlier, besides some recent historical buildings (farming-related homestead and outbuildings) no other archaeological and historical sites, features and material were identified in the study and proposed development area. The old homestead and outbuildings have some heritage significance and will be discussed below.

6.2.1 Stone Age Sites

None identified

6.2.2 Iron Age Sites

None identified

6.2.3 Historic Sites

A number of structures/features are located in the area, including a homestead and related outbuildings associated with earlier small-scale agricultural activities here. These structures are in a good condition in terms of their preservation. The exact age of the homestead and related structures could not be determined without a doubt during the assessment, but originally might have dated from the 1940's (therefore making them older than 60 years of age). However, the significance of the homestead and related outbuildings have been diminished to a large degree by many changes/alterations and additions over the years, with the result that not much of the original structures remain. Some of the outbuildings – such as a garage - would have been constructed at a much more recent date.

The cultural heritage significance of the site and related features can be rated as Low to Medium as a result of the many changes and additions made to them over recent years, with the result that little of its historical origin and fabric still remains. From this perspective the structures need not have to be preserved and can be demolished. However, as they have a historical origin and would be older than 60 years of age the homestead and some of the related features are protected by the National Heritage Resources Act and a demolition permit from the SAHRA will be required before demolition can be undertaken. As part of the application process, public participation needs to be undertaken that will include the erection of site notices indicating the intent to demolish; placement of legal notices in a newspaper inviting interested and affected parties to comment on the process; the detailed assessment of the homestead and related structures) and then the permit application to the Provincial Heritage Resources Agency – Gauteng (PHRA-G).

GPS Location: S26°15'18.97 E28°21'03.38

Cultural Significance: Low to Medium

Heritage Significance: None

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

Mitigation: See above.



Figure 4: General view of a section of the study and development area.



Figure 5: Another view showing the dense vegetation cover in parts of the area, as well as the bordering residential/urban settlements.



Figure 6: General view with the historical homestead and some related structures visible.



Figure 8: Another general view of the study & proposed development area.



Figure 9: The historic homestead and related structure in the area.



Figure 10: Another farming-related structure on the property.



Figure 11: Closer view of one of the more recent structures on the site. This is likely a worker homestead.



Figure 12: Recent garage on the site next to the homestead.



Figure 13: Front view of the historic homestead. Although sections of the original (1940's) house still remains (such as the roof, verandah and foundations) it has been altered and added to extensively over the years.



Figure 14: back view of the homestead.



Figure 15: A modern structure (store room) on the property.



Figure 16: A view of the modern homestead on part of the property.



Figure 17: Closer view of the study & development area showing the location of the old farmstead with its related structures (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

Some sites, features and material of cultural heritage origin and significance were found in the area during the assessment, and the current site layout provided will impact on these sites. The impact of the proposed development on the recorded and known heritage sites is however deemed as Negligible.

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

Results: 1+1+2×1 = 4 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). With the study and development area having been fairly extensively impacted in the recent past through agricultural and related activities this is however seen as highly unlikely.

7. CONCLUSIONS AND RECOMMENDATIONS

APelser Archaeological Consulting (APAC) was appointed by Aquastrat Solutions (Pty) Ltd to conduct a Phase 1 Heritage Impact Assessment for the proposed development of the Kenleaf Extension 35 Township Development. The study and proposed development area is located on Portions 196 & 197 of Rand Collieries Agricultural Holdings, near Brakpan in the Greater Ekurhuleni Municipality of Gauteng. The fieldwork was conducted on the 18th of March 2023.

Background research indicates that there are some cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls, with no known ones located here. A recent historic farmstead (including homestead and related outbuildings) associated with earlier small-scale agricultural activities were identified during the assessment. These structures are in a good condition in terms of their preservation. The homestead and related structures originally might have dated from the 1940's, making them older than 60 years of age. The significance of the homestead and related outbuildings have been diminished to a large degree by many changes/alterations and additions over the years, with the result that not much of the original structures remain.

The cultural heritage significance of the site and related features can be rated as Low to Medium, with little of its historical origin and fabric still remaining. From this perspective the structures can be demolished. As they have a historical origin and would be older than 60 years of age, a demolition permit from the SAHRA will be required before demolition can be undertaken. As part of the application process, public participation needs to be undertaken that will include the erection of site notices indicating the intent to demolish; placement of legal notices in a newspaper inviting interested and affected parties to comment on the process; the detailed assessment of the homestead and related structures and then the permit application to the Provincial Heritage Resources Agency – Gauteng (PHRA-G). Only once the permit has been issued can the demolition work be undertaken.

Finally, from a Cultural Heritage perspective, the proposed Kenleaf X35 development should be allowed to continue taking into consideration the recommended mitigation measures provided above.

The often-subterranean nature of cultural heritage 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

General and Closer views of study & development area location, footprint & Sites recorded: Google Earth 2023.

Proposed Site Development Plan: Copyright MvdM Archi-Techs (provided to APAC cc by Aquastrat Solutions (Pty) Ltd.

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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.