



Archaetnos Culture & Cultural
Resource Consultants
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**A REPORT ON A HERITAGE IMPACT ASSESSMENT FOR A PROPOSED
RESIDENTIAL DEVELOPMENT ON PORTION 18 OF THE FARM
DOORNHOEK 392 JQ, HEKPOORT, GAUTENG**

For:

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REPORT: AE951

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SUMMARY

Archaetnos cc was requested by Plan-Enviro cc, on behalf of Plumari Game Lodge, to conduct a Heritage Impact Assessment for a low density residential development on portion 18 of the farm Doornhoek 392 JQ, near Hekpoort in Gauteng.

The fieldwork undertaken revealed a number of features and sites of cultural (archaeological/historical) heritage significance on the property. **The proposed development can however continue, although a number of mitigation measures to minimize the impact on these resources, put forward in the conclusions and recommendations, needs to be implemented.**

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1. INTRODUCTION

Archaetnos cc was requested by Plan-Enviro cc, on behalf of Plumari Game Lodge, to conduct a Heritage Impact Assessment for a low density residential development on portion 18 of the farm Doornhoek 392 JQ, near Hekpoort in Gauteng.

The fieldwork undertaken revealed a number of objects, features and sites of cultural (archaeological/historical) heritage significance on the property. These included Late Iron Age (LIA) stone walled sites, historical sites and graves. **The proposed development can however continue, although a number of mitigation measures to minimize the impact on these resources, put forward in the conclusions and recommendations, needs to be implemented.**

The client indicated the area where the proposed development is to take place, and the survey was confined to this area.

2. TERMS OF REFERENCE

The Terms of Reference for the survey were to:

1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property (see Appendix A).
2. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value (see Appendix B).
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. Recommend suitable mitigation measures should there be any sites of significance that might be impacted upon by the proposed development.
6. Review applicable legislative requirements.

3. CONDITIONS & ASSUMPTIONS

The following conditions and assumptions have a direct bearing on the survey and the resulting report:

1. Cultural Resources are all non-physical and physical man-made occurrences, as well as natural occurrences associated with human activity. These include all sites, structure and artifacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development. Graves and cemeteries are included in this.

2. The significance of the sites, structures and artifacts is determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. The various aspects are not mutually exclusive, and the evaluation of any site is done with reference to any number of these aspects.
3. Cultural significance is site-specific and relates to the content and context of the site. Sites regarded as having low cultural significance have already been recorded in full and require no further mitigation. Sites with medium cultural significance may or may not require mitigation depending on other factors such as the significance of impact on the site. Sites with a high cultural significance require further mitigation (see Appendix B).
4. The latitude and longitude of any archaeological or historical site or feature, is to be treated as sensitive information by the developer and should not be disclosed to members of the public.
5. All recommendations are made with full cognizance of the relevant legislation.
6. It has to be mentioned that it is almost impossible to locate all the cultural resources in a given area, as it will be very time consuming. Developers should however note that the report should make it clear how to handle any other finds that might occur.

4. 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).

4.1 The National Heritage Resources Act

According to the above-mentioned law 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.

Archaeology, palaeontology and meteorites

Section 35(4) of this act states that no person may, without a permit issued by the responsible heritage resources authority:

- 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.

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) 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)**.

Unidentified/unknown graves are also handled as older than 60 until proven otherwise.

4.2 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.

5. METHODOLOGY

5.1 Survey of literature

A survey of literature, to place the archaeological sites identified during the survey in context, was undertaken in this case.

5.2 Field survey

The survey was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural significance in the area of proposed development. If required, the location/position of any site was determined by means of a Global Positioning System (GPS), while photographs were also taken where needed.

The survey was undertaken on foot, while the area's parameters were determined by vehicle.

5.3 Documentation

All sites, objects features and structures identified were documented according to the general minimum standards accepted by the archaeological profession. 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.

6. DESCRIPTION OF THE AREA

The area is located on portion 18 of the farm Doornhoek 392 JQ in the Hekpoort area of Gauteng (**Figure 1**).

Although parts of the area have been disturbed through agricultural activities in the recent past (ploughing and cattle grazing), some of the original natural vegetation still exists (Mixed Bushveld [**Figure 2**]). During the survey, large sections of the area had recently burned, making visibility easier. The area is located in close proximity to the other farm portions surveyed by Archaetnos cc during both 2008 and 2009 (refer to AE868, 940 & 950), and earmarked for tourism development.

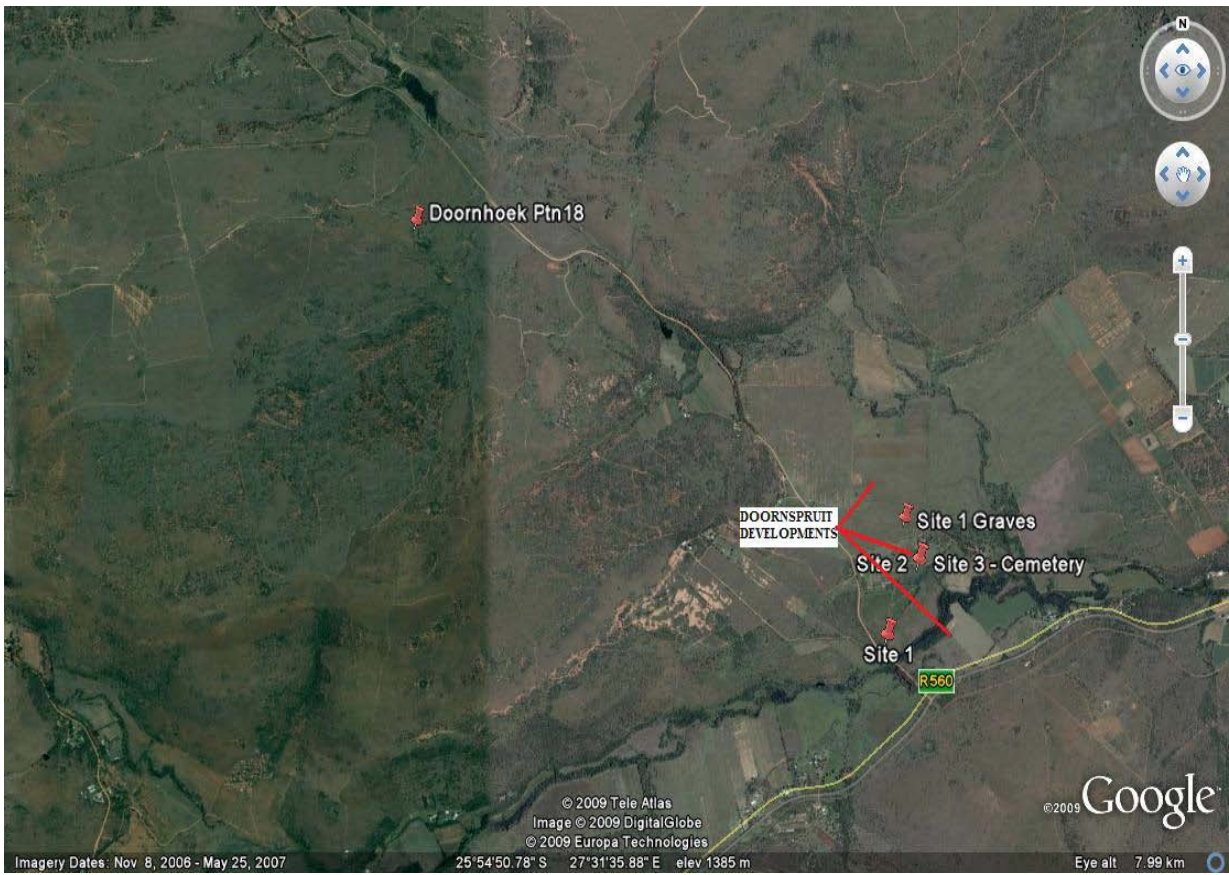


Figure 1: Location of development area



Figure 2: General view of the survey area

7. DISCUSSION

During the survey some objects, features and sites of archaeological and historical (cultural heritage) significance were identified on the property. The new development will impact to some degree on these heritage resources, although possibly not directly.

The resources recorded include some Late Iron Age stone walling, some recent historical features and sites and graves. To put these into context we include a short discussion on the different periods in southern African archaeology.

7.1 Stone Age

The Stone Age is the period in human history when lithic material was mainly used to produce tools (Coertze & Coertze 1996: 293). In South Africa the Stone Age can be divided in three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. The division for the Stone Age according to Korsman & Meyer (1999: 93-94) is as follows:

Early Stone Age (ESA) 2 million – 150 000 years ago
Middle Stone Age (MSA) 150 000 – 30 000 years ago
Late Stone Age (LSA) 40 000 years ago – 1850 - A.D.

The closest known Stone Age sites in the vicinity of Hekpoort are known as the Magaliesberg Research Area. It consists of nine sites including rock shelters in the Magaliesberg Mountains. These date back to the Middle and Late Stone Age (Bergh 1999: 4; Korsman & Meyer 1999: 94-95).

Rock art and rock engraving sites have also been identified close to Hekpoort. These date back to the Late Stone Age (Bergh 1999: 5).

Some scattered stone tools were identified in the area during an earlier survey for Plumari (Doornhoek Portion 1), while a fairly large number of rock engravings associated with the San was also located during the same said survey in November 2008 (See Pelsers & van Vollenhoven, 2008: AE 868). No similar artifacts were recorded during the 2009 survey on Doornspruit.

7.2 Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce tools and weapons (Coertze & Coertze 1996: 346). In South Africa it can be divided in two separate phases according to Van der Ryst & Meyer (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.

Previous research indicates that one of the few Early Iron Age sites that have been properly researched, are situated at Broederstroom, a site to the east of Hekpoort (Bergh 1999: 6). The site is dated to 350 AD and apart from hut remains indications of iron smelting was also found (Van der Ryst & Meyer 1999: 98).

Late Iron Age sites have been identified in the area around the town of Brits. In a band stretching roughly from Brits in the east to Zeerust in the west many Iron Age sites have been discovered previously (Bergh 1999: 7-8). This area includes Hekpoort. During the survey on Doornhoek by Archaeos in 2008 a number of stone walled LIA sites were recorded, similar to the ones recorded during this survey.

During earlier times and in the 19th century it seems as if this area was not inhabited, due to better climatic conditions in the Magaliesberg Mountain (Bergh 1999: 10-11). During the Difaqane the Ndebele of Mzilikazi moved through this area, followed by a commando of Voortrekkers in 1837 (Bergh 1999: 11).

7.3 Historical Age

The historical age started with the first recorded oral histories in the area. Early travelers moved through this part of the Northwest Province. This included David Hume in 1825, Robert Schoon and William McLuckie in 1829 and Dr Robert Moffat and Reverend James Archbell later in 1829 (Bergh 1999: 12, 117-119). The Voortrekkers moved into this area in the 1830's (Bergh 1999: 15).

The expedition of Dr Andrew Smith traveled through this area in 1835 and William Cornwallis Harris in 1836. The well known explorer Dr David Livingston passed through this area in 1847 (Bergh 1999: 13, 119-122).

The area around Hekpoort also saw some action during the Anglo-Boer War. Blockhouses were erected by the British at Kommandonek, Pampoennek, Olifantsnek, Silkaatsnek, Broederstroom, Kalkheuvel, Nooitgedacht and Hekpoort (Van Vollenhoven & Van den Bos 1997: 107-128).

There also was a skirmish at Silkaatsnek in the Magaliesberg Mountain nearby on 11 July 1900 (Bergh 1999: 51). Other skirmishes in the vicinity of Hekpoort include the Battles of Buffelspoort on 3 December 1900, Nooitgedacht on 13 December 1900 and Vlakfontein on 29 May 1901 (Bergh 1999: 54). A number of historical features were recorded during 2008 by Pelsers & van Vollenhoven on Portion 1 of Doornhoek (AE868).

Site 1 – Stone walling

This is a fairly large LIA settlement site, consisting of a surrounding wall containing a number of features such as huts, possible grain bin stands and livestock enclosures. A recently dug trench for a water pipe goes through a portion of the site (**Figure 3**). Some pieces of pottery (undecorated) were identified on the surface. The site, as well other similar sites on the property, probably belongs to the later part of the Late Iron Age, dating to

between the mid 17th and mid 19th centuries. They could have been abandoned by their inhabitants (Tswana speakers) when Mzilikazi and his Ndebele moved through the Magaliesberg area during the early 1830's.

The site is located between S 25.90404 & E 27.51399.

Although the site is deemed of medium significance, the development will not impact on it directly, and the documentation done during the survey is deemed as sufficient mitigation. The slight damage caused (inadvertently) by the water pipe trench can be rectified, and no cultural deposit was disturbed.



Figure 3: Site 1 – LIA stone walling. Note the trench Cutting through the site

Site 2 & Site 5 – Historical features

Both these sites (**Figures 4 & 5**) contain the foundations of small, square or rectangular stone built structures. The exact age of these are unknown, but they are probably older than 60 years of age and might have been used for farm labour housing. These sites might fall just outside the development area and will therefore not be impacted upon by the development. Site 2 is located at S 25.90705 & E 27.51618 and Site 5 at S 25.90771 & E 27.52146.

The sites have a low to medium significance, and should the development in any way impact directly on them detailed mapping and drawing should be undertaken.



Figure 4: Site 2



Figure 5: Site 5

Sites 3 & 4 – LIA Stone walling

Both these sites contain sections of low stone walling, similar to those on other better preserved LIA sites on Doornhoek. They probably formed part of the larger LIA settlement complex in the area. **Because of their preservation, these sites are deemed to have low significance and the documentation carried out during the survey is seen as sufficient mitigation.**

Site 3 is located at S 25. 90789 & E 27.51892 and Site 4 at S 25.90802 & E 27.52067.



Figure 6: Site 3

Site 6 – LIA Settlement site

This is a fairly large and well preserved stone walled settlement unit, containing features such as livestock enclosures, hut bays, grainbin stands and other features. The walls are well preserved and in some places nearly 1m in height. Because of its preservation the site is highly significant and should not be disturbed. It is also very suitable for incorporation into the tourist development for Plumari. The site is located at **S 25.90898 & E 27.52146**.

It is recommended that should the development impact on the site, suitable mitigation measures be implemented. This could include archaeological excavations and detailed mapping and drawing. If it is decided to incorporate the site into the development, a suitable Management Plan must be drafted and implemented.



Figure 7: Site 6 – Entrance to settlement



Figure 8: Site 6 – Outer wall and hut bays



Figure 9: Site 6 – More stone walling



Figure 10: Site 6 – Grain bin stand

Site 7 – Historical and recent graveyard

This graveyard contains 8 graves with granite headstones and legible inscriptions. Individuals from the Naude, Meintjies, Ackerman, Visser and Heunis families are buried here, with the oldest (date of death) being 1937 and most recent 1999. The graves are located at **S 25.90596 & E 27.52256**.

It is recommended that the graveyard be cleaned up, properly fenced in and looked after and that it should in no way be disturbed by the planned development.



Figure 11: Site 7 graveyard

Site 8 – Recent historical farmstead

This site contains very structures, such as the farm house, cement and brick dam, rondavel and other related buildings. The structures and farmstead could be older than 60 years of age. The site might not be impacted on by the proposed development, but should it be considered to demolish the farmstead it is recommended that an architectural historian be contacted to investigate the significance. The site is located at **S 25.90560 & 27.52397**.



Figure 12: Site 8 - Farmhouse



Figure 13: Site 8 – possible farm labour house



Figure 14: Site 8 – cement and brick dam

8. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it is possible to say that the assessment of the area was conducted successfully. A number of features and sites of varying degrees of cultural heritage significance were identified during the survey. The most significant of these were the historical cemetery.

The following mitigation measures are recommended:

- (a) **Cemetery (Site 7):** The cemetery should be cleaned and fenced-in to prevent possible damage or vandalism during the development project. Access to the site must be made possible to descendants, should they be located and wish to visit the graves. The cleaning and fencing should be done under supervision of an accredited member of ASAPA (Association of Southern African Professional Archaeologist), specifically one specializing in graves.
- (b) **LIA Stone walled site (Site 6):** The site could be incorporated into the tourism development. A Heritage Management Plan should be drafted. If required, mitigation measures could include archaeological excavations, detailed mapping and drawing and possible reconstruction.
- (c) **Historical farmstead (Site 8):** If required, an Architectural Historian needs to be called in to investigate the significance of the site
- (d) **Sites 1 – 5:** No mitigation measures needed, as the documentation during the survey are deemed sufficient

It is therefore recommended that the proposed development can continue once these mitigation measures have been implemented. However, the subterranean presence of archaeological or historical objects, features or sites should also always be considered. If

any of these are uncovered during any construction work or other development activities a professional archaeologist should be called in to investigate.

REFERENCES

**Aerial view of location of development area and Site distribution (Appendix C):
produced on Google Earth**

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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

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.

Appendix C – Aerial view of the location of the survey area and Site distribution

