



A Pelsers Archaeological Consulting
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**A REPORT ON A PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT
FOR THE EAGLE'S PRIDE HATCHERY RECTIFICATION
NOOITGEDACHT 525JR, NEAR BRONKHORSTSPRUIT
GAUTENG**

For:

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REPORT: APAC012/23

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SUMMARY

APelser Archaeological Consulting was appointed by Shangoni Management Services, on behalf of Eagle's Pride Hatchery (Pty) Ltd, to conduct an Archaeological Impact Assessment (AIA) for a Section 24 (G) application for Rectification at their Bronkhorstspuit Rearing Farm and Hatchery near Bronkhorstspuit in Gauteng. The study was commissioned in response to SAHRA's recommendation that a Phase 1 AIA should be conducted. Over and above the AIA on the property two known grave sites had to be assessed as well.

Over and above the two grave sites, three other sites were also identified. The one is the old farmhouse on the property, while two possible Late Iron Age features were also identified. None of the sites will be impacted negatively by any development, although some recommendations are made in terms of their management.

If the recommendations put forward at the end of this document are implemented, then, from an Archaeological/Heritage point of view, there would be no objection to the continuation of the proposed rectification process.

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1. INTRODUCTION

A Pelser Archaeological Consulting was appointed by Shangoni Management Services, on behalf of Eagle's Pride Hatchery (Pty) Ltd, to conduct an Archaeological Impact Assessment (AIA) for a Section 24 (G) application for Rectification at their Bronkhorstspuit Rearing Farm and Hatchery near Bronkhorstpsuit in Gauteng. The study was commissioned in response to SAHRA's recommendation that a Phase 1 AIA should be conducted. Over and above the AIA on the property two known grave sites had to be assessed as well.

Over and above the two grave sites, three other sites were also identified. The one is the old farmhouse on the property, while two possible Late Iron Age features were also identified.

The boundary of the property that had to be assessed was indicated to A.Pelser, and the fieldwork focused on this area.

2. TERMS OF REFERENCE

The Terms of Reference for the study, based on the methodology employed by Heritage/Archaeological Impact Assessors, are normally to:

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

In this instance A PELSER ARCHAEOLOGICAL CONSULTING was requested to conduct a Phase 1 Archaeological Impact Assessment (AIA) only while also assessing two known existing cemeteries on the property.

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 above-mentioned 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 mentioned 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 this 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 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)**.

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

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 consulted in this regard are indicated in the bibliography.

4.2 Field survey

The assessment was conducted according to generally accepted AIA practices and in this case was aimed at assessing the significance of the known graves located in the area of, while also aiming at locating and recording any possible archaeological sites, features or artifacts in the area. The location/position of all sites, features and objects are determined by means of a Global Positioning System (GPS) where possible, while photographs are also taken where needed.

The assessment was undertaken mainly on foot and the client indicated the boundaries of the area that had to be assessed.

4.3 Oral histories

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

4.4 Documentation

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

5. DESCRIPTION OF THE AREA

The Eagle's Pride Hatchery and Rearing farm near Bronkhorstspuit is located on portions of the farm Nooitgedact 525JR, and is an existing enterprise. Large sections are fairly flat and open, although a rocky ridge runs roughly through the middle of the property. Past agricultural activities (ploughing and crop growing) have impacted on the area and if any sites of archaeological or historical significance (other than those known) did exist here in the past these would have been disturbed or destroyed to a large degree.

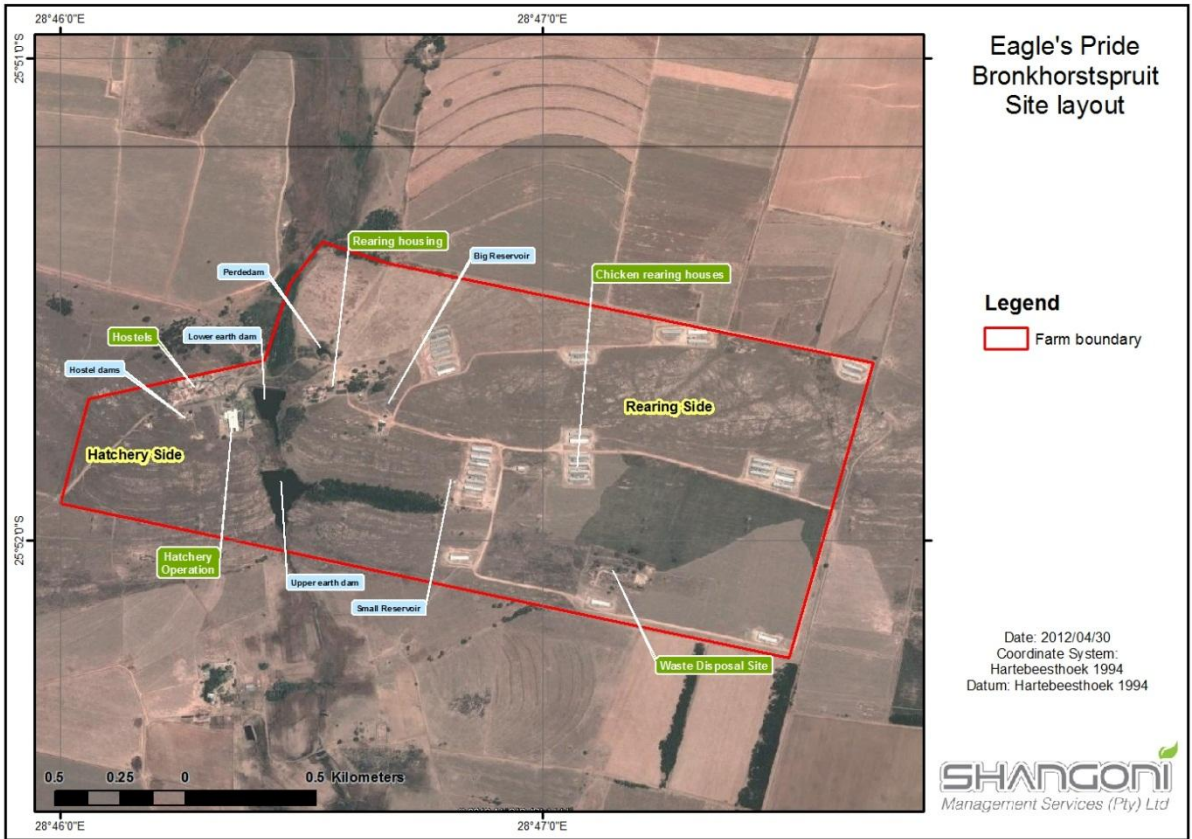


Figure 1: Layout of Eagle’s Pride Bronkhorstspruit.



Figure 2: Closer aerial view of property (Google Earth 2012 – Image date 2011/09/13).



Figure 3: One view of the area. Note the rocky ridge and ESKOM powerlines and pylons.



Figure 4: Another view of the area towards the entrance.

6. DISCUSSION

The Stone Age is the period in human history when 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 these 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 Stone Age sites or occurrences (stone tools) were identified in the area during the assessment. According to Bergh there are no known Stone Age sites (including rock art sites) in the area close to Bronkhorstspuit. The closest known Stone Age site is the so-called Fort Troje site near Cullinan to the north-west, while rock painting sites were recorded close to Witbank (Bergh 1999: 4-5).

The Iron Age is the name given to the period of human history when metal was mainly used to produce artifacts (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.

There are no known Iron Age sites close to Bronkhorstspuit (Bergh 1999: 6-7). Two of the sites (features) recorded during the assessment could be remnants of LIA settlement, but this is difficult to determine without any uncertainty as the two features could be related to the early historical European farmers moving into the area. The sites will be discussed later on in the document.

The historical period started with the moving into the area of people who could read and write (European travellers, missionaries, the Voortrekkers). The earliest group moving through the area was that of Schoon in 1836, as well as the Voortrekker groups known as the Trichardt-Van Rensburg trek (Bergh 1999: 15). The town was originally a railway station (established in 1894), and became a town in around 1905 (www.routes.co.za).

During the first Anglo-Boer War (1880-1881), as well as during the Anglo-Boer War of 1899-1902, a number of skirmishes were fought in the area. The Battle of Bronkhorstspuit was fought here on 20 December 1880. There was a British Concentration Camp for blacks close to (north of) the railway station during the Anglo-Boer War of 1899-1902 (Bergh 1999: 46; 54). Three of the sites date to the historical time-period and will be discussed in the results section of this report.

The oldest map of the farm that could be found dates to around 1904, and indicates that it was granted to one C.M.Vermaak in March 1862 (www.csg.dla.gov.za).

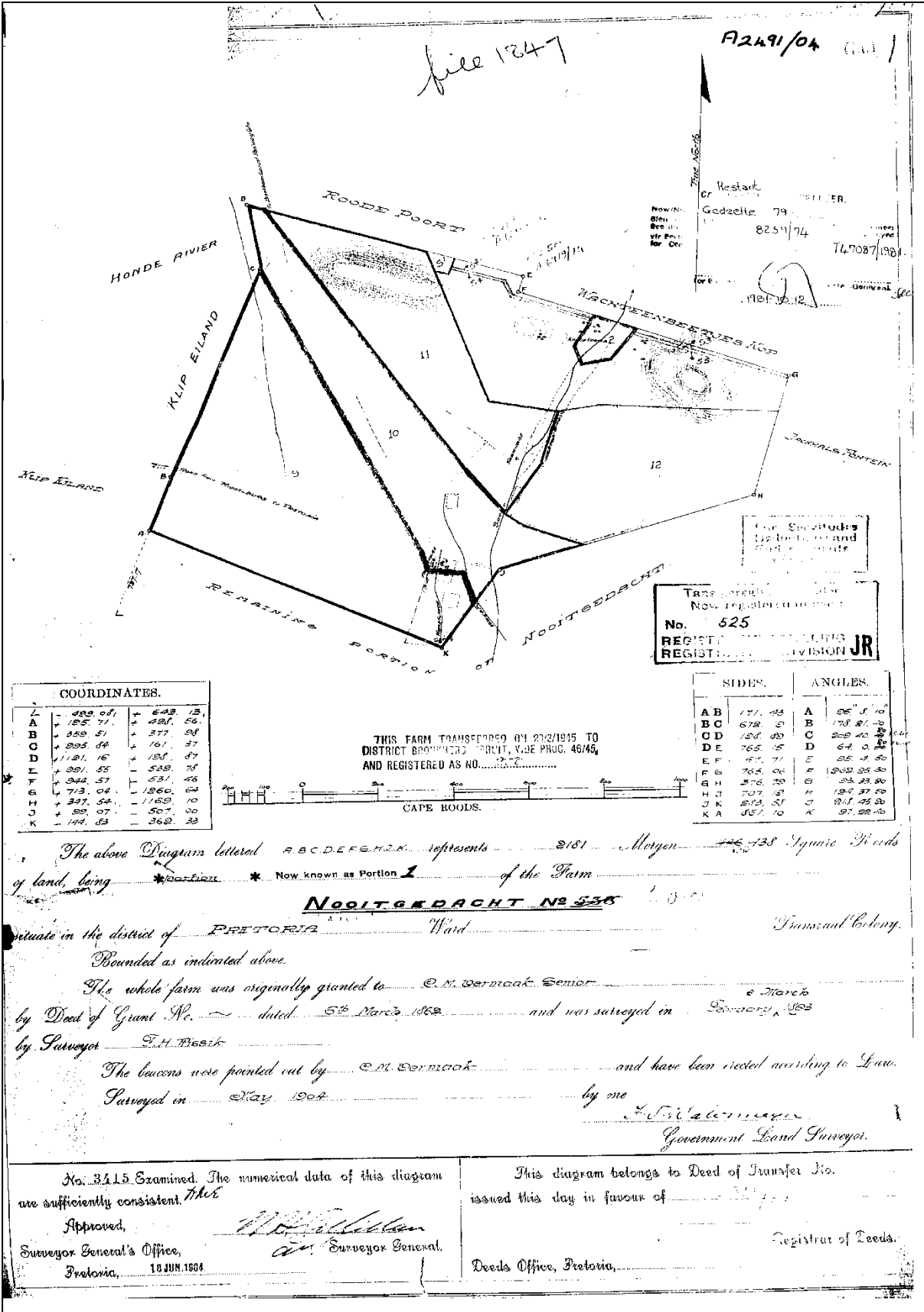


Figure 5: Map of farm from the Chief Surveyor General database (www.csg.co.za). Document number 10KTT001.

Results of fieldwork

The assessment focused on the two known grave sites, while a survey was also undertaken in areas such as the rocky ridge running through the property and others with the potential of finding archaeological sites.

The first grave site contains two formal graves located close to the original farmhouse on the property and belongs to the original farm owner and his wife (Pers.comm Lourens Theunissen 28/11/2012). The first grave is that of Alwyn Petrus Geldenhuys who passed away in 1942, while the second grave is that of Sara Susanna Geldenhuys (born Swanepoel) who died in 1963. Unfortunately the detail photographs of these graves' headstone were deleted by mistake and the detailed inscription on the headstone as a result has not been recorded.

The site is maintained by Eagle's Pride, although it is not fenced-in. The graves will not be negatively impacted by any development activities, but to avoid any possible accidental damage it is recommended that the site is fenced-in with an access gate, and that it should be kept clean periodically. No future development should be allowed closer than 20m from the edge of the perimeter fence.

GPS Location: S25.86060 E28.77781

Cultural Significance: High (graves always have a High Significance)

Heritage Significance: Grade III

Field Rating: National Grade I significance - should be managed as part of the national estate.

Mitigation: See above



Figure 6: View of grave site 1 on the property.

The second site is that of the old farmstead. It is built of sandstone and could possibly be older than 60 years of age or older. The house is currently used for staff residence and is in a good condition although there has been some additions and changes to the original structure over the years. It is recommended that the house is maintained and managed and that no changes or additions to it should be undertaken without the required permitting.

GPS Location: S25.86091 E28.77680

Cultural Significance: Medium

Heritage Significance: Grade III

Field Rating: General protection B (IV B) - site should be recorded before destruction (medium significance)

Mitigation: See above



Figure 7: Old farmstead on the property.

The second grave site belongs to farm labourers and other individuals associated with the deceased farmworker community. It contains 6 graves, of which 3 are stone packed without any headstones, while three of the graves belong to the Ndala family. Last mentioned three graves all have formal headstones and dressing, with legible inscriptions on the headstones.

The age of the stone packed graves is difficult to determine, but they are probably less than 60 years of age and similar to the identifiable ones. The first Ndala grave belongs to one Stefans Fani Ndala (died 1987), while the second is that of Reverend J.B. Ndala (deceased date 1969). The final grave is that of Letta N.Ndala who passed away on 1991.

It is recommended that these graves should also be fenced-in to avoid accidental damage and that it should be cleaned and managed. An access gate should be allowed in order to assist descendants to visit their family graves.

GPS Location: S25.86320 E28.77251

Cultural Significance: High (graves always have a High Significance)

Heritage Significance: Grade III

Field Rating: National Grade I significance - should be managed as part of the national estate

Mitigation: See above



**Figure 8: The second grave site on the property.
The site should also be maintained and managed.**

The fourth and fifth sites are stone packed features (circular enclosures or kraals) that could date to the Late Iron Age, or is perhaps related to the earlier farming activities on the property. No cultural material (such as pottery) was identified close to these features. Both sites are located on the rocky ridge in the area.

The sites are not significant, and will not be impacted on by future developments. However, the sites should still be avoided and if any future development cannot avoid these features then the required mitigation measures will have to be implemented. This could entail detailed mapping, as well as possible archaeological excavations before destruction.

GPS Location: S25.86236 E28.79064 & S25.86159 E28.78771

Cultural Significance: Medium

Heritage Significance: Grade III

Field Rating: General protection B (IV B) - site should be recorded before destruction (medium significance)

Mitigation: See above



Figure 9: The first stone packed enclosure on the site.



**Figure 10: The second stone walled enclosure.
This could possibly be an old livestock enclosure.**



Figure 11: Aerial view of location of sites recorded (Google Earth 2012 – Image date 13/09/2012).

7. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it is possible to say that the assessment for the Eagle’s Pride Rearing Farm and Hatchery near Bronkhorstspuit in Gauteng was completed successfully. The sites recorded on the property included 2 known grave sites, as well as the original farmstead and some unidentifiable stone walled features. These last mentioned features could date to either the LIA or to the historical farming on the site.

It is believed that the proposed development can continue, taking cognizance of the following recommendations:

1. that both grave sites should be fenced-in, cleaned periodically and Managed in order to avoid accidental disturbance.
2. that the other stone walled features should be avoided as well. Should any future development that cannot avoid these sites be undertaken then these sites should be mitigated by measures such as mapping and drawing and possible archaeological excavations.

Finally the subterranean presence of archaeological and/or historical sites, features or artifacts are always a distinct possibility, and this aspect needs to be kept in mind at all times. Care should therefore be taken during any development activities that if any of these are accidentally discovered, a qualified archaeologist be called in to investigate. This would include the discovery of previously unknown graves.

8. REFERENCES

Aerial views of the area and site distribution: Google Earth 2012

Layout Map of Eagle's Pride site: Courtesy Shangoni Management Services

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.

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

www.csg.dla.gov.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.