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**A REPORT ON A PHASE I HERITAGE ASSESSMENT FOR THE PROPOSED
EXPANSION OF THE ROODEKRAAL FREE RANGE CHICKEN FARM
OPERATIONS, LOCATED NEAR POTCHEFSTROOM, NORTHWEST PROVINCE**

For:

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SUMMARY

APelser Archaeological Consulting was appointed by Shangoni Management Services (Pty) Ltd to conduct a Phase I Heritage Impact Assessment for the proposed expansion of the Roodekraal Free Range Chicken Farm (Fouries Poultry), located on the Remaining Extent of Portion 2 of the farm Roodekraal 454IQ, located near Potchefstroom in the Northwest Province.

The area where the proposed expansion is to take place is located on fairly flat, open section of the farm that had been agriculturally changed (ploughed) in the past. A small stream/erosion donga also crosses through a section of the farm portion. No archaeological or historical sites or features were identified in the area, although a number of Iron Age pieces of pottery were identified. The results of the survey, in the context of the archaeology and history of the larger area, will be discussed in the report, while recommendations on possible mitigation measures will be given as well.

If the recommendations put forward at the end of this document are implemented, then, from a Cultural Heritage point of view, there would be no objection to the continuation of the proposed development.

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1. INTRODUCTION

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The client indicated the location of the proposed expansion and the survey was limited to this. Although there was dense grass cover in the area, visibility was fairly good.

2. TERMS OF REFERENCE

The Terms of Reference for the study were to:

1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located in the area where the proposed development will be located;
2. Assess the significance of any possible 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 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 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)**.

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 HIA practices and was aimed at locating all possible objects, sites and features of cultural heritage (archaeological and historical) 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) where possible, while photographs were also taken where needed.

The assessment was undertaken mainly on foot.

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 Roodekraal Free Range Chicken Farm (Fouries Poultry) is located on the farm Roodekraal 454IQ, close to Potchefstroom in the Northwest Province. The expansion of the farm is proposed, with the planned development of new chicken houses located on the remaining extent of portion 2 of the farm.

The topography of the area is flat, with fairly dense grass veld and scarce tree cover characterizing the area. A small stream/erosion donga crosses through a section of the area as well. It seems as if the area was ploughed in sections in the past and as a result has been extensively disturbed. Bordering the area is fields currently being used, and a dirt access road has also impacted the study area.

Although the grass cover was fairly dense visibility was still good. During the survey the stream/erosion donga was especially focused on to see if any cultural material (such as stone tools) were exposed here as a result of water erosion.

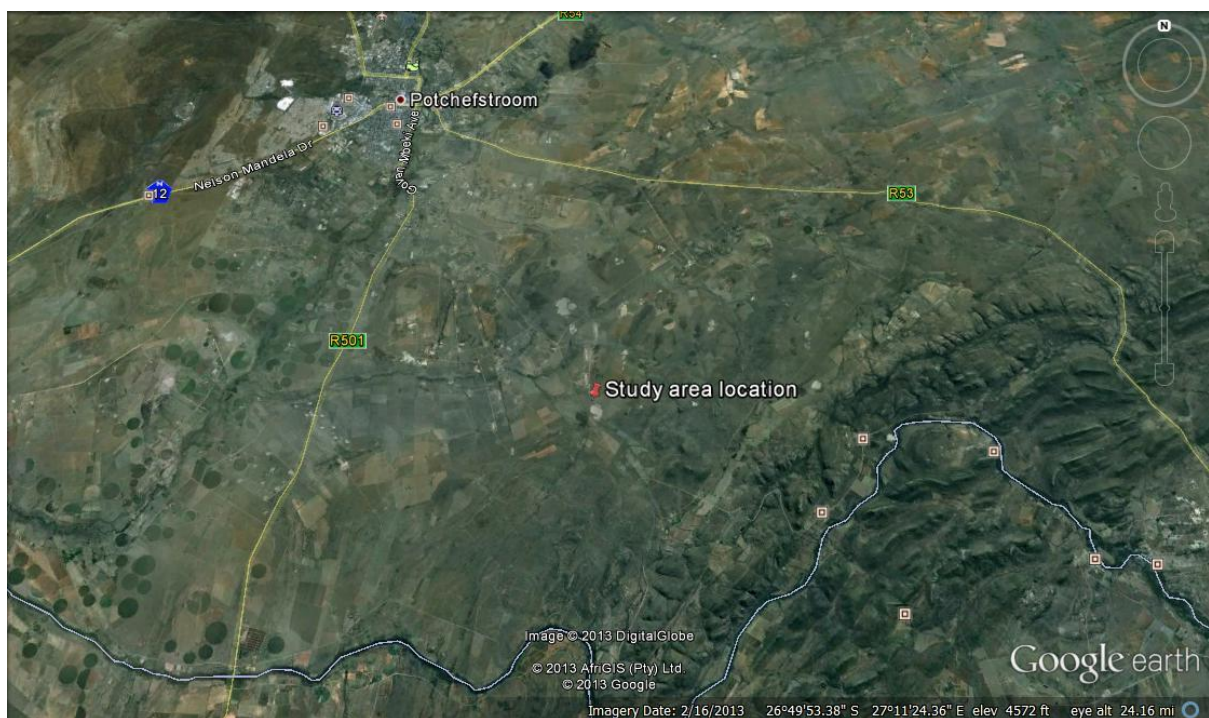


Figure 1: General location of the study area (Google Earth 2013 – image date 2/16/2013).

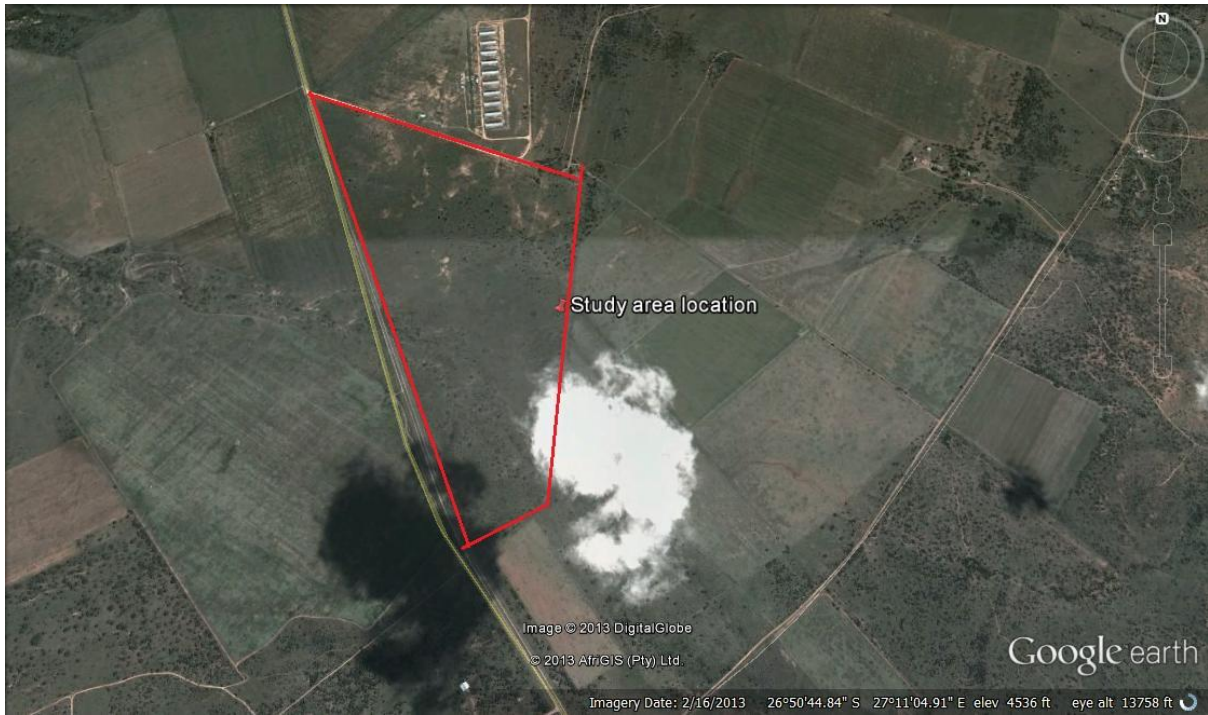


Figure 2: Closer aerial view of the study area (Google Earth 2013 – image date 2/16/2013). Note the ploughed fields bordering the area and the existing operations.



Figure 3: General view of a section of the study area. Note the grass cover and tree-less environment.



Figure 4: Another view of the area. The stream/erosion donga is visible.



Figure 5: A view of a portion of the existing operations. Similar structures will be built on the development portion.

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).

Based on Bergh (1999: 4 – 5) there are no known Stone Age sites in the study area, although there are some known in the Vredefort Dome area. The fact that there are no known Stone Age sites in the area might be indicative of the lack of Stone Age research. No Stone Age sites or artifacts were found during the heritage impact assessment.

The Iron Age is the name given to the period of human history when metal was mainly used to produce artifacts. In South Africa it can be divided in two separate phases according to (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 to exist in the area, although there are a fairly large number of Late Iron Age stone walled sites in the bigger geographical area that includes Potchefstroom, Parys, Klerksdorp and other towns (Bergh 1999: 6-7). The author of this report worked extensively on LIA sites in the Dome area. According to Huffman's research the LIA sites in the larger area could belong to various facies of the Urewe pottery tradition, including Ntsuanatsatsi, Uitkomst, Olifantspoort, Thabeng and Buispoort. These facies (or pottery traditions) date to between AD1450 and AD1840, and was found at sites like Buffelshoek in the Vredefort Dome area by Mike Taylor (Huffman 2007: 167; 171; 191, 195 and 203).

Some undecorated pieces of pottery were found during the survey. The finds will be discussed in the next section.

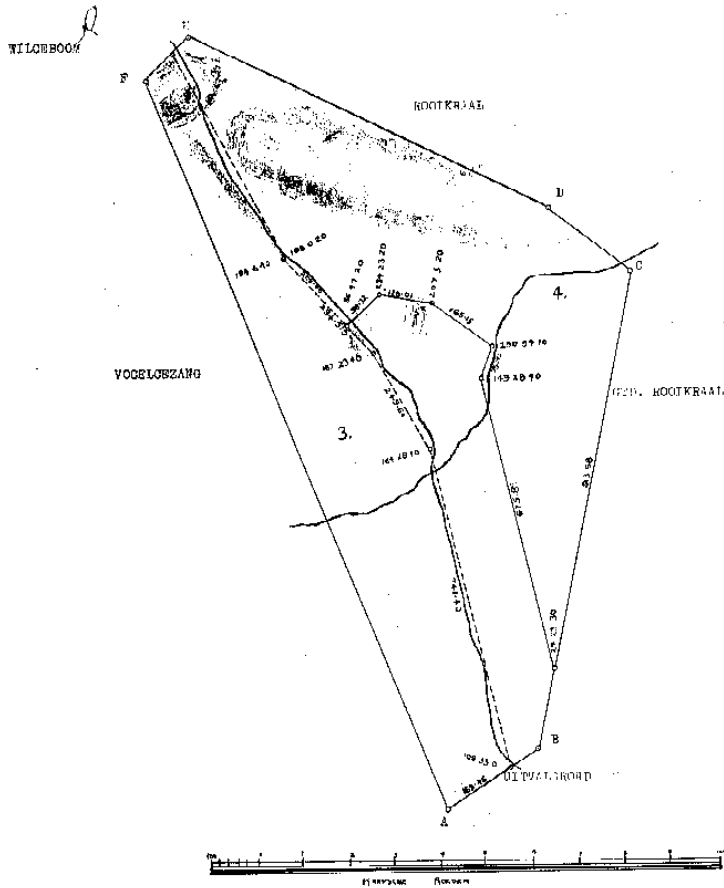
The historical period started with the moving into the area by the first Europeans. The first group to move through the area was that of Cornwallis Harris in 1836 (Bergh 1999: 13), closely followed by the Voortrekkers and white farmers, with Potchefstroom one of the earliest towns established in the trans-Vaal in 1839 (Bergh 1999: 14; 89). During the Anglo-Transvaal War (1880-1881) a British garrison in Potchefstroom was besieged by the Boers (Bergh 1999: 47), while during the Anglo-Boer War (1899-1902) there were a number of skirmishes and battles around the area, such as a Frederikstad (p.51; 54), while there was a Black concentration camp at Frederikstad and a white concentration camp west of Potchefstroom (Bergh 1999: 54).

Old maps from the Chief Surveyor General's Database (www.csg.dla.gov.za) provide information on the farm Roodekraal. The oldest map that could be obtained (dated 1894) indicated that the farm was originally numbered 678 and was situated in the Potchefstroom District. It was surveyed in November 1893, and the whole of the farm was originally granted to one C.J.Uys on 24 June 1854 (CSG Document B17117).

Zyden	Hoeken	Co-ordinaten
AB	240.55	A + 1480.52 - 3526.94
BC	1100.50	B + 1665.42 - 3372.89
CD	228.08	C + 1763.47 - 2276.76
DE	890.58	D + 1569.54 - 2156.72
EF	139.90	E + 734.28 - 1847.80
FA	1773.54	F + 650.32 - 1959.71

A 2066/93

Handwritten signature



PLAATSELIJKE REGISTREERDIENST

Bovenstaande Figuur A tot F stelt voor gedeelte 2 van de plaats

ROODEKRAAL N^o 678

gelegen in het distrikt Potchefstroom wijk Vaal Rivier
Zuid Afrikaansche Republiek en bevat 1550 Morgen 240 vierkante Roeden
De geheele plaats werd oorspronkelyk in Leening uitgegeven aan
C.J.Uys. volgens Transport dd 24 Juni 1854.
De bakens zyn aangewezen door G.Swarts.
en zyn behoortlyk opgericht volgens wet.
Gemeten in November 1893.

door my
(Get) J.F. INOES CUNNEVIS.

Landmeter.

No. 2222/93 Goedgekeurd. De zyden hoeken en Grootte van deze kaart zyn onderling bestaanbaar.

(Get) G.R. VOMWELLIOW

Landmeter Generaal.

Landmeter Generaals Kantoor, 24 Jan 1894

Ik I.C. Minnaar, Registrateur van Akten certificeer dat deze kaart behoort tot transport No. 2906/1896 op heden uitgerekt ten zwaure van GERHARDUS JULIUS SWART, Registraris Kantoor.

(Get) H.C. MINNAAR.

25/6/96

Registrateur van Akten.

J. O. H.

Figure 6: Old map of the farm (CSG B17117).

Results of fieldwork

As mentioned no Stone Age artifacts were identified in the study area. A small stream/erosion donga running through a section of the area was scrutinized for the possibility, but none was identified. Similarly, no recent historical remains were found. The area has been disturbed through agriculture in the past, and if sites did exist here it would have been extensively disturbed or destroyed.

Although no significant Iron Age sites (such as LIA stone walled settlement features) were identified, a few individual pieces of undecorated pottery were recorded in the study area. All these were found next to the dirt road that borders the development area, and in the loose soil wall formed when the road was scraped. The origin of these pieces of pottery is unknown, and if there were any stone walled features it might have been destroyed long ago. Dating these finds are also difficult as they are undecorated, but it is possible that they fit in with the time frames established for the larger region, and date therefore anywhere between AD1450 – AD1840.

The Heritage Significance of these finds are therefore Low and no mitigation measures are required, considering the recommendations put down below.

GPS Location of finds: **S26 50 52.1 E72 10 59.4; S26 50 51.1 E27 10.59.4 & S26 50 50.2 E27 10 59.4.**



Figure 7: One of the pieces of pottery found in the area.

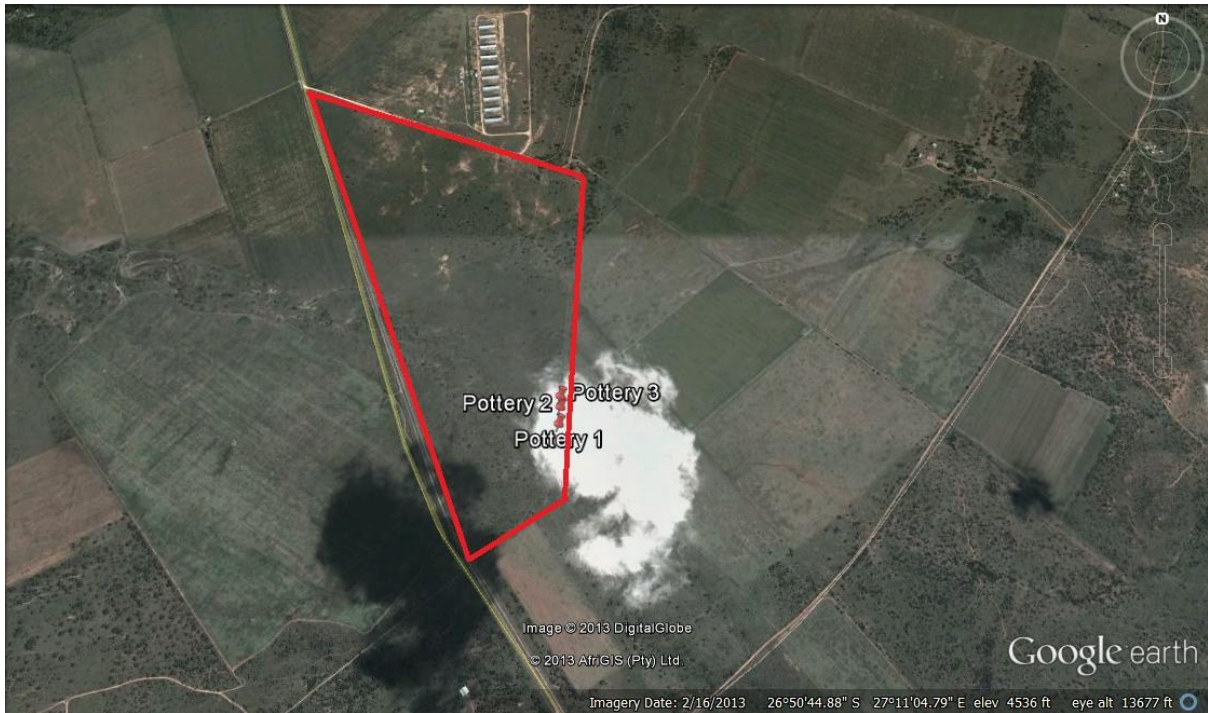


Figure 8: Aerial view of location of pottery finds within the study area (Google Earth 2013 – image date 2/16/2013).

7. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it is possible to say that the Phase I HIA for the proposed expansion of the Roodekraal Free Range Chicken Farm, located on the remaining extent of portion 2 of Roodekraal 454IQ, have been conducted successfully. The area where the development will be situated is flat and has been disturbed in the recent past through agricultural activities. If any significant sites did exist here in the past it would have been disturbed or destroyed to a large degree.

No Stone Age or Historical sites, features or objects were found. A few pieces of undecorated pottery, dating to the Late Iron Age, were found, but these finds are insignificant from an archaeological heritage point of view as they are out of context and not related to any stone walled features. From a Heritage point of view the development could therefore be allowed to continue.

However, 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. This could include unknown and unmarked burials. If during any development activities, if any sites, features and objects of a cultural heritage (archaeological or historical) nature, are exposed, an expert should be called in to investigate and suitable mitigation measures are implemented. All development in these areas should be halted until the situation had been satisfactorily resolved.

8. REFERENCES

Aerial view of regional location of development, site location and distribution of find: Google Earth 2013 – Imagery date 2/16/2013.

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

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.