DESKTOP HERITAGE SURVEY OF THE PROPOSED PARK PADDOCKS FARM EXPANSION

FOR THE INDEPENDENT ENVIRONMENTAL ADVISOR

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EXECUTIVE SUMMARY

A desktop heritage survey was undertaken for the proposed PARK PADDOCKS Farm expansion. The farm occurs 10.5 km southwest of Nottingham Road, and approximately 2km southeast of Fort Nottingham. The proposal is to expand the poultry farm in an area that has been cultivated for many years.

The desktop study noted that there were no known archaeological or historical sites, and that area is of low significance. The desktop study noted that while the area is of very high palaeontological significance the maximum depth of the excavations will be 600mm, and thus not affect fossiliferous deposits.

No further mitigation in terms of an HIA will be required.

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Abbreviations

| HP | Historical Period |
|-----|------------------------------------|
| IIA | Indeterminate Iron Age |
| LIA | Late Iron Age |
| EIA | Early Iron Age |
| ISA | Indeterminate Stone Age |
| ESA | Early Stone Age |
| MSA | Middle Stone Age |
| LSA | Late Stone Age |
| HIA | Heritage Impact Assessment |
| PIA | Palaeontological Impact Assessment |

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INTRODUCTION

Park Paddocks Farm is an existing poultry operation on Sub 18 of the Farm Vlak Plaats No.

1314 FT.

The poultry operation has two aspects to it: laying fertilized eggs and rearing. The laying

houses are located on the south western side of the property, while the rearing houses are located

on the eastern side, with the main dwelling to the north of the poultry houses.

The laying operation currently consists of six (6) houses for rearing chicks and laying hens. It

is proposed to establish an additional two (2) rearing houses of the same size, ie. the number of

chicks will increase from 28 000 to 38 000.

The rearing operation currently has one (1) 6 500 poultry houses as well as five (5) houses for

laying. It is proposed to convert all existing houses to rearing houses and establish an additional

two (2) 6 500 rearing houses.

Each cycle is as follows:

Rearing: Weeks 0 – 21

Laying: Weeks 22 – 63

The laying aspect of the poultry operation will move into two sets of four new poultry houses

proposed to be constructed to the west of the existing houses. The new laying houses are

proposed to be 150m x 15m which will each house 14 400 pullets and 1 450 roosters.

FIG. 1 GENERAL LOCATION OF THE PROPOSED DEVELOPMENT



FIG. 2: AERIAL OVERVIEW OF THE PROPOSED DEVELOPMENT



FIG. 3: TOPOGRAPHICAL MAP OF THE PROPOSED DEVELOPMENT

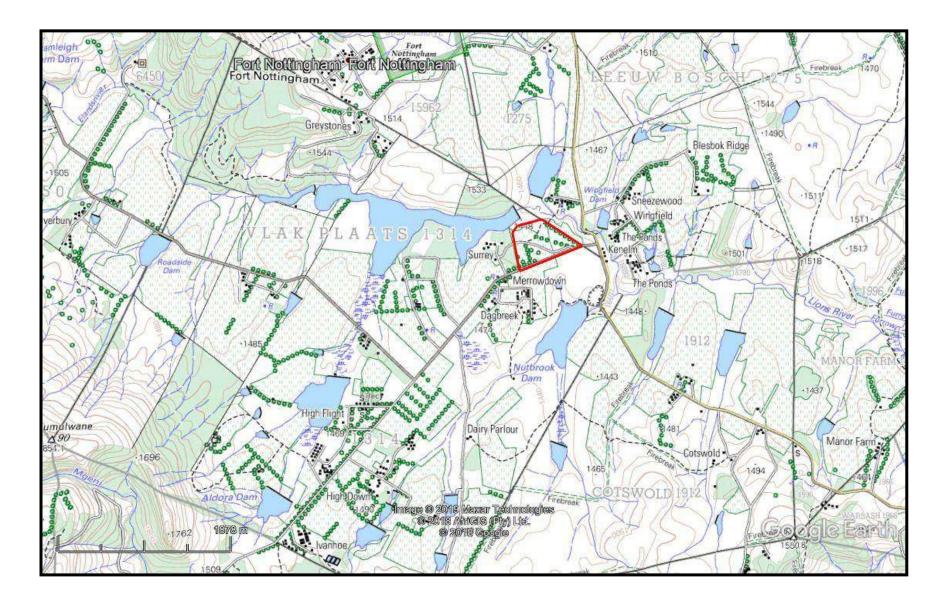


FIG. 4: SCENIC VIEWS OF THE STUDY AREA



KWAZULU NATAL AMAFA AND RESEARCH INSTITUTE, ACT 05, 2018

"General protection: Structures.—

- No structure which is, or which may reasonably be expected to be older than 60 years, may be demolished, altered or added to without the prior written approval of the Council having been obtained on written application to the Council.
- Where the Council does not grant approval, the Council must consider special protection in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- The Council may, by notice in the Gazette, exempt—
- A defined geographical area; or
- defined categories of sites within a defined geographical area, from the provisions of subsection where the Council is satisfied that heritage resources falling in the defined geographical area or category have been identified and are adequately protected in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- A notice referred to in subsection (2) may, by notice in the Gazette, be amended or withdrawn by the Council.

General protection: Graves of victims of conflict.—No person may damage, alter, exhume, or remove from its original position—

- the grave of a victim of conflict;
- a cemetery made up of such graves; or
- any part of a cemetery containing such graves, without the prior written approval of the Council having been obtained on written application to the Council.
- General protection: Traditional burial places.—
- No grave—
- not otherwise protected by this Act; and
- not located in a formal cemetery managed or administered by a local authority, may be damaged, altered, exhumed, removed from its original

position, or otherwise disturbed without the prior written approval of the Council having been obtained on written application to the Council.

The Council may only issue written approval once the Council is satisfied that—

- the applicant has made a concerted effort to consult with communities and individuals who by tradition may have an interest in the grave; and
- the applicant and the relevant communities or individuals have reached agreement regarding the grave.

General protection: Battlefield sites, archaeological sites, rock art sites, palaeontological sites, historic fortifications, meteorite or meteorite impact sites.—

- No person may destroy, damage, excavate, alter, write or draw upon, or otherwise disturb any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- Upon discovery of archaeological or palaeontological material or a
 meteorite by any person, all activity or operations in the general vicinity of
 such material or meteorite must cease forthwith and a person who made
 the discovery must submit a written report to the Council without delay.
- The Council may, after consultation with an owner or controlling authority, by way of written notice served on the owner or controlling authority, prohibit any activity considered by the Council to be inappropriate within 50 metres of a rock art site.
- No person may exhume, remove from its original position or otherwise disturb, damage, destroy, own or collect any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- No person may bring any equipment which assists in the detection of metals and archaeological and palaeontological objects and material, or

excavation equipment onto any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, or meteorite impact site, or use similar detection or excavation equipment for the recovery of meteorites, without the prior written approval of the Council having been obtained on written application to the Council.

 The ownership of any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site, on discovery, vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government."

METHOD

The method for Heritage assessment consists of several steps.

The first step forms part of the desktop assessment. Here we would consult the database that has been collated by Umlando. This databases contains archaeological site locations and basic information from several provinces (information from Umlando surveys and some colleagues), most of the national and provincial monuments and battlefields in Southern Africa (http://www.vuvuzela.com/googleearth/monuments.html) and cemeteries in southern Africa (information supplied by the Genealogical Society of Southern Africa). We use 1st and 2nd edition 1:50 000 topographical and 1937 aerial photographs where available, to assist in general location and dating of buildings and/or graves. The database is in Google Earth format and thus used as a quick reference when undertaking desktop studies. Where required we would consult with a local data recording centre, however these tend to be fragmented between different institutions and areas and thus difficult to access at times. We also consult with an historical architect, palaeontologist, and an historian where necessary.

The survey results will define the significance of each recorded site, as well as a management plan.

All sites are grouped according to low, medium, and high significance for the purpose of this report. Sites of low significance have no diagnostic artefacts or features. Sites of medium significance have diagnostic artefacts or features and these sites tend to be sampled. Sampling includes the collection of artefacts for future analysis. All diagnostic pottery, such as rims, lips, and decorated sherds are sampled, while bone, stone, and shell are mostly noted. Sampling usually occurs on most sites. Sites of high significance are excavated and/or extensively sampled. Those sites that are extensively sampled have high research potential, yet poor preservation of features.

Defining significance

Heritage sites vary according to significance and several different criteria relate to each type of site. However, there are several criteria that allow for a general significance rating of archaeological sites.

These criteria are:

1. State of preservation of:

- 1.1. Organic remains:
- 1.1.1. Faunal
- 1.1.2. Botanical
- 1.2. Rock art
- 1.3. Walling
- 1.4. Presence of a cultural deposit
- 1.5. Features:
- 1.5.1. Ash Features
- 1.5.2. Graves
- 1.5.3. Middens
- 1.5.4. Cattle byres
- 1.5.5. Bedding and ash complexes

2. Spatial arrangements:

- 2.1. Internal housing arrangements
- 2.2. Intra-site settlement patterns
- 2.3. Inter-site settlement patterns

3. Features of the site:

- 3.1. Are there any unusual, unique or rare artefacts or images at the site?
- 3.2. Is it a type site?
- 3.3. Does the site have a very good example of a specific time period, feature, or artefact?

4. Research:

- 4.1. Providing information on current research projects
- 4.2. Salvaging information for potential future research projects

5. Inter- and intra-site variability

- 5.1. Can this particular site yield information regarding intra-site variability, i.e. spatial relationships between various features and artefacts?
- 5.2. Can this particular site yield information about a community's social relationships within itself, or between other communities?

6. Archaeological Experience:

6.1. The personal experience and expertise of the CRM practitioner should not be ignored. Experience can indicate sites that have potentially significant aspects, but need to be tested prior to any conclusions.

7. Educational:

- 7.1. Does the site have the potential to be used as an educational instrument?
- 7.2. Does the site have the potential to become a tourist attraction?
- 7.3. The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.

8. Other Heritage Significance:

- 8.1. Palaeontological sites
- 8.2. Historical buildings
- 8.3. Battlefields and general Anglo-Zulu and Anglo-Boer sites
- 8.4. Graves and/or community cemeteries

- 8.5. Living Heritage Sites
- 8.6. Cultural Landscapes, that includes old trees, hills, mountains, rivers, etc related to cultural or historical experiences.

The more a site can fulfill the above criteria, the more significant it becomes. Test-pit excavations are used to test the full potential of an archaeological deposit. This occurs in Phase 2. These test-pit excavations may require further excavations if the site is of significance (Phase 3). Sites may also be mapped and/or have artefacts sampled as a form of mitigation. Sampling normally occurs when the artefacts may be good examples of their type, but are not in a primary archaeological context. Mapping records the spatial relationship between features and artefacts.

RESULTS

DESKTOP STUDY

The desktop study consisted of analysing various maps for evidence of prior habitation in the study area, as well as for previous archaeological surveys. There have been no prior surveys in the study area. The archaeological sites tend to be open Stone Age scatters of low significance (fig. 5). The other sites are HP sites relating to the colonial expansion of The Midlands. Anderson (2005, 2019) undertook surveys nearby and had similar results.

The Farm Vlak Plaats 1314 was first surveyed in 1853 (fig. 6). No houses are shown on the SGD.

FIG. 5: LOCATION OF KNOWN HERITAGE SITES IN THE GENERAL AREA



FIG. 6: VLAK PLAATS SGD (1853)

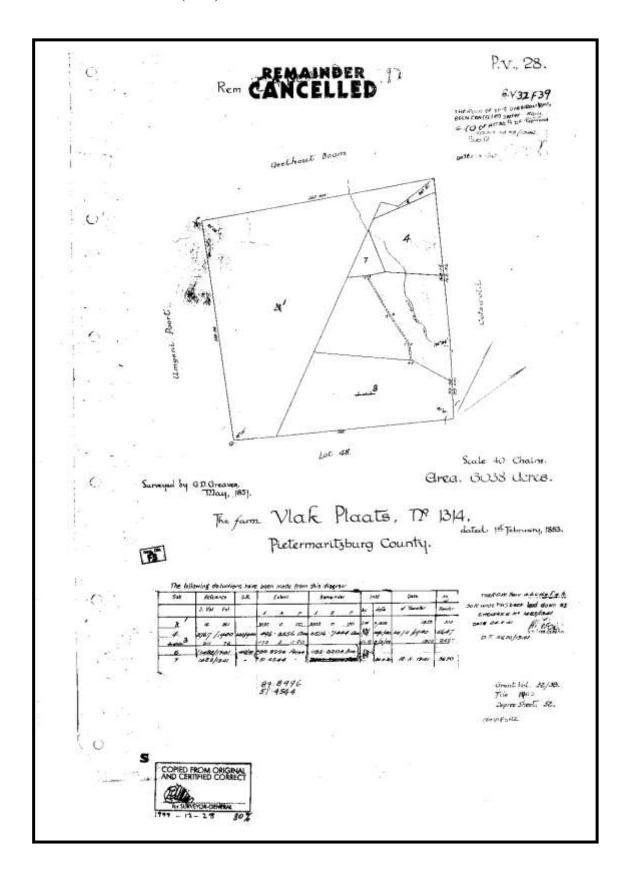
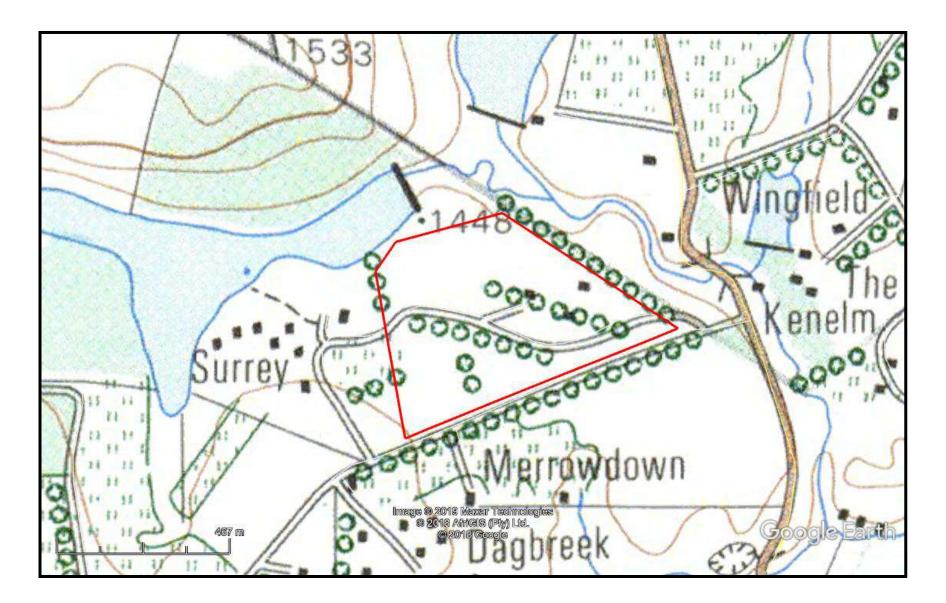


FIG. 7: LOCATION OF PROPOSED DEVELOPMENT IN 1937



FIG. 8: LOCATION OF PROPOSED DEVELOPMENT IN 1972



The 1937 aerial photograph of the general study area indicates that it was already cultivated and afforested (fig. 7). There are no buildings visible on this map.

The 1972 topographical map indicates that there are two buildings in the study area. One is the current house and the other occurs where the existing hatchery is placed. The house will not be affected by the development proposal.

PALAEONTOLOGICAL SENSITIVITY

The area is rated as having very high palaeontological sensitivity. Normally this would require a PIA at a desktop level if not a site visit. However, the impact of each of the proposed new buildings are small in size and will not extend beyond 600mm in depth (at a maximum) and the pillars are 6m apart. There will be no impact on fossiliferous deposits.

FIG. 9: PALAEONTOLOGICAL SENSITIVITY MAP



MANAGEMENT PLAN

The proposed planned expansion will have no impact on palaeontological layers, as the maximum depth of each pillar will be 600mm.

If any artefacts that do occur in the study area, will be in a secondary context and have no significance.

No further HIA management is required.

CONCLUSION

A desktop heritage survey was undertaken for the proposed Park Paddocks Farm expansion. The farm occurs 10.5 km southwest of Nottingham Road, and approximately 2km southeast of Fort Nottingham. The proposal is to expand the poultry farm in an area that has been cultivated for many years.

The desktop study noted that there are would not have any archaeological or historical sites. The desktop study noted that while the area is of very high palaeontological significance the maximum depth of the excavations would be 600mm, and thus not affect fossiliferous deposits.

No further mitigation in terms of an HIA will be required.

REFERENCES

60_033_15118 2929BD 1986, 2002

EXPERIENCE OF THE HERITAGE CONSULTANT

Gavin Anderson has a M. Phil (in archaeology and social psychology) degree from the University of Cape Town. Gavin has been working as a professional archaeologist and heritage impact assessor since 1995. He joined the Association of Professional Archaeologists of Southern Africa in 1998 when it was formed. Gavin is rated as a Principle Investigator with expertise status in Rock Art, Stone Age and Iron Age studies. In addition to this, he was worked on both West and East Coast shell middens, Anglo-Boer War sites, and Historical Period sites.

DECLARATION OF INDEPENDENCE

I, Gavin Anderson, declare that I am an independent specialist consultant and have no financial, personal or other interest in the proposed development, nor the developers or any of their subsidiaries, apart from fair remuneration for work performed in the delivery of heritage assessment services. There are no circumstances that compromise the objectivity of my performing such work.

Gavin Anderson

Archaeologist/Heritage Impact Assessor