

# **ARCHAEOLOGICAL IMPACT ASSESSMENT FOR THE SAKATA WAREHOUSE, GAUTENG**

A Phase I report prepared for Phillipa Holden, Environmental Consultant

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## **EXECUTIVE SUMMARY**

*Archaeological sites were not found inside the project area. Further investigation is therefore not required.*

## **INTRODUCTION**

Sakata Seed Southern Africa (Pty) Ltd intends to erect a new warehouse on Portion 65 (a Portion of Portion 1) of the Farm Rhenosterspruit 495 JQ near the Lanseria airport, Gauteng. The warehouse itself will be about 4500 m<sup>2</sup> in the centre of a development about 120m (E/W) by 90m (N/S). In addition, a new road will encircle the building, using some of the existing road network, and new cables will connect the warehouse to an existing transformer about 100m to the south.

Designed by Fred Spencer (Spencer Associated Architects), the new warehouse will incorporate various environmental-friendly features. Among others, the height will remain below eye level from the office block, rain water will be captured for re-use and solar panels will generate electricity.

In terms of heritage issues, Rhenosterspruit sits in the Secondary Zone 2 of the Cradle of Mankind World Heritage site. To satisfy legal requirements (National Heritage Resources Act No. 25 of 1999), Mrs Susan Allen, Director Quality Assurance and Seed Production, commissioned Archaeological Resources Management (ARM) to examine the proposed warehouse area. A full Heritage Impact Assessment is unnecessary because (1) the farm has been in European ownership for decades, (2) no graves exist on the property and (3) there are no land claims. ARM therefore concentrated on the possibility of archaeological, historical and paleontological sites in the project area.

Furthermore, because the proposed development lies within Secondary Zone 2, the geological substratum must be considered, as well as the visual proximity to Maropeng and Sterkfontein.

## **BACKGROUND**

In the larger district, a range of sites are on record in the Archaeological Survey files at the University of the Witwatersrand. Within the Cradle, Earlier Stone Age (ESA: about 1 million to 400 000 years ago) artefacts such as handaxes, cleavers and other bifaces occasionally occur, but Middle Stone Age (MSA: 400 000 to 40 000 years ago) points and blades are more frequent (Kuman 1994; Mason 1962). Later Stone Age sites (LSA: 40 000 to 1000 years ago) cluster in areas, such as the Magaliesberg, where rock shelters are more common (Wadley 1987). Late Iron Age stonewalling associated with Mzilikazi, called the Doornspruit type after the farm where it was first recorded (Jones 1935; Huffman 2007), is on record near the Cradle Restaurant to the south. Similar enclosures are visible on Google Earth about 1.5km west of the proposed development.

## **METHOD**

One ARM staff examined the proposed development area on 22 January 2013 in the company of Mrs S Allen, the Director, and F Spencer, the architect for the project. Localities were marked with a hand-held GPS instrument calibrated for Garmin WGS 84. The project area occurs on the 1: 50 000 map sheet 2527DD Broederstroom (**Figure 1**).

The South African Heritage Resources Agency recognises National and Provincial Monuments for conservation purposes. None of these exist in the immediate project area. For other sites, ARM uses five main criteria to determine significance: site integrity (i.e. primary vs. secondary context), amount of deposit, range of features (e.g., middens, hearths and houses), uniqueness and potential to answer present research questions. Sites with no significance do not require mitigation, low to medium may require further work before development and sites with high significance must be mitigated; sites with maximum significance should not be disturbed at all. Graves, regardless of historic importance, have high social significance.

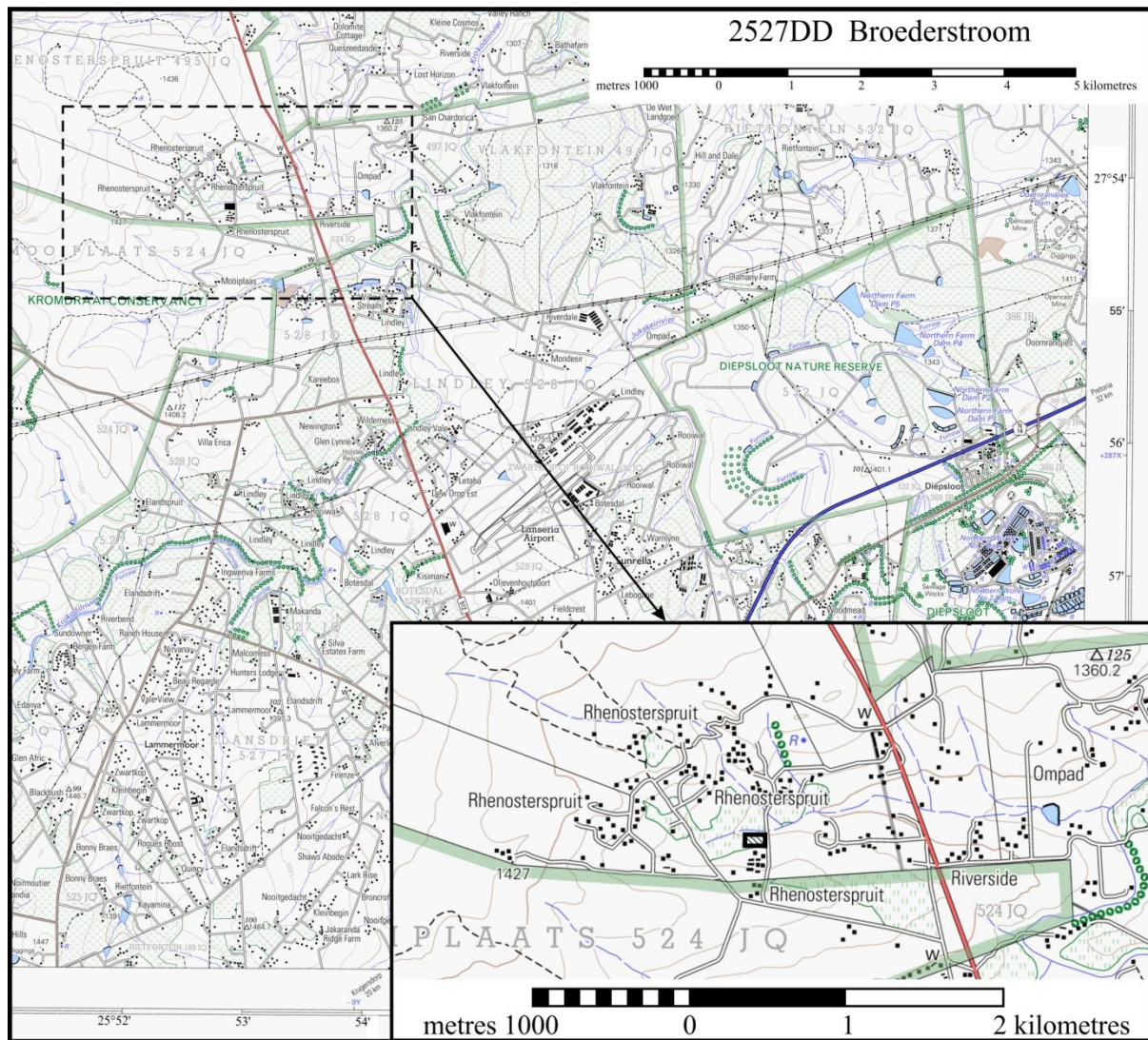


Figure 1. Location of project area on the 1:50 000 map 2527DD.

## RESULTS

The Sakata building complex stands on the slopes of a low dolerite hill: it does not sit on dolomite. As a result, quartz rock of various sizes lay scattered across the terrain. The immediate warehouse area (25 54 16.2S 27 52 51.7E) has been under cultivation for several decades. Indeed, the Second Edition of the 1: 50 000 map, surveyed in 1969, marks the area as a cultivated field. The proposed location stands above the 100 year flood line, but it is nevertheless in the valley bottom (**Figure 2**). Pebbles in the ploughed fields, other than the local quartz, are therefore derived from past floods.

One quartzite pebble in a ploughed field below the proposed warehouse showed signs of flaking. Its identification, however, is ambiguous. It may have been a small ESA biface, a



rough out, or a MSA core. Whatever the precise identity, the artefact has *no significance*: it was in a secondary context; it was isolated (no other artefacts were noted elsewhere, neither in the fields, deep soil pit or exposed fence lines); and it cannot answer any present research questions.



Figure 2a. Project zone looking north.



Figure 2b. Project zone looking south. Proposed warehouse will cover tall grass and some ploughed area in centre.

## **RECOMMENDATION**

The dearth of artefacts, valley location and dolerite substratum show that sites of archaeological, historical and paleontological interest are not present inside the project area.

In terms of universal values, the proposed development is not visible from Maropeng or Sterkfontein. Indeed, the project area sits inside a small catchment area with a limited viewshed: it is not visible even from the Cradle Restaurant. Thus, the development does not affect the 'sense of place' of the major cave sites or of the general fossil area.

Consequently, there are no heritage reasons why the development should not proceed.

## **Acknowledgements**

I thank Dr Kathy Kuman for examining photographs of the artefact. Wendy Voorvelt prepared the figures.

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