

**RECONNAISSANCE OF FOUR
PROPOSED QUARRY AREAS IN THE
BRITS AND ODI 1 DISTRICTS, NORTH-WEST PROVINCE**

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SUMMARY

Reconnaissance of four proposed quarry areas in the Brits and Odi 1 districts, North-West Province

A reconnaissance to establish the nature, extent and significance of cultural resources were made in four proposed quarry areas in the Brits and Odi 1 districts, North-West Province.

The areas under consideration are largely undisturbed by mining and agricultural activities. Due to dense vegetation and irregular topography, the location of primary archaeological sites is very difficult. A number of sites were, however, identified during the reconnaissance. It is judged that they would eventually be impacted upon by the proposed development. It is recommended (see section 7) that the development can continue, but only if detailed surveys of all the areas are done and mitigatory measures implemented as necessary.

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RECONNAISSANCE OF FOUR PROPOSED MINING QUARRY IN THE BRITS AND ODI 1 DISTRICTS, NORTH-WEST PROVINCE

1. AIMS OF THE SURVEY

The National Cultural History Museum was requested by **Ekokonsult Inc** to survey four different areas of the Brits and Odi 1 districts, in which it is proposed to quarry granite blocks (gabbro norite). The aim was to evaluate the archaeological, historical and cultural importance within the boundaries of the proposed development.

2. TERMS OF REFERENCE

The **Terms of Reference** for the study was to assess the significance of the cultural resources in the identified areas, in terms of their historical, social, religious, aesthetic and scientific value.

3. CONDITIONS AND ASSUMPTIONS

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

- **Cultural resources** are all nonphysical and physical human-made as well as natural occurrences that are associated with human activity. These include all sites, structures and artifacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development.
- The **significance** of the sites 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. It must be kept in mind that the various aspects are not mutually exclusive and that the evaluation of any site is done with reference to any number of these.
- Significance is site specific and relates to the content and context of the site. Sites regarded as having low significance have already been recorded in full and require no further mitigation. Sites with medium to high significance require

further mitigation.

- The latitude and longitude of an archaeological site are to be treated as sensitive information by the developer, and should not be disclosed to members of the public.
- All recommendations are made with full cognizance of the relevant legislation, in this case the National Monuments Act (No 28 of 1969).

4. METHODOLOGY

4.1 Preliminary investigation

4.1.1 Survey of the literature

A survey of all relevant literature was conducted with the aim of reviewing the previous research done and to determine the potential of the area. In this regard various anthropological, archaeological and historical sources were consulted - see list of references below.

4.1.2 Data sources

The Archaeological Data Recording Centre (ADRC), housed at the National Cultural History Museum in Pretoria, was consulted.

4.1.3 Other sources

The relevant topocadastral and other maps were studied - see list of references below.

4.2 Field survey

Due to the irregular nature of the terrain, the dense vegetation and size of the areas involved, and due to time and budget constraints, it was impossible to completely cover all four areas by foot. It was therefore decided only to do a number of spot checks. This was done according to generally accepted archaeological practices, and was aimed at locating all possible sites, objects and structures. Each area was divided into blocks, making use of natural and human-made topographical elements. A number of these blocks were then surveyed in detail. In each block, areas with a potential for human use were investigated. Special attention was given to outcrops, cliffs were inspected for rock shelters, while stream beds and unnatural topographical occurrences such as trenches, holes and clusters of exotic and indigenous trees were investigated.

4.3 Documentation

All sites, objects and structures identified were documented according to the general minimum standard accepted by the archaeological profession. Coordinates of individual

localities were determined by means of the **Global Positioning System (GPS)**¹ and plotted on a map.

4.4 Presentation of the information

In discussing the results of the survey, a chronological rather than a geographical approach was followed to present an overview of human occupation and land use in the area. This helps the reader to better understand and facilitate the potential impact of the development.

5. DESCRIPTION OF THE AREA SURVEYED

The areas surveyed are located on sections of the farms Hartebeestpoort 410JQ, Elandsfontein 440JQ, Zwartkopjes 427JQ and Hoekfontein 432JQ, in the Brits and Odi 1 districts, North-West Province. The areas feature as small hills and in some cases have a very broken topography. The geology is made up of gabbro, hyperite and norite of the Bushveld Igneous Complex. Some syenite, gabbro and diabase dykes occur sporadically in the area.

The vegetation of the study area is classified by Acocks (1978:48-49) as Sourish Mixed Bushveld. This is a rather open savanna with **Acacia caffra** the dominant tree, in a fairly tall and dense grassveld dominated by **Cymbopogon**, **Hyparrhenia** and **Themada**.

During the survey it was noticed that mining activities are already taking place in two areas: on the western border of Hartebeestpoort 410JQ and on the northern side of the hill on Elandsfontein 440JQ.

6. DISCUSSION

6.1 Stone Age

Stone Age tools were found to occur throughout all four areas during the reconnaissance. These are mostly Middle Stone Age in origin and occur without exception as surface material. A few smaller rock shelters, that show potential for containing Late Stone Age material, were located in three of the areas. However, no site of special significance (such as Kruger Cave or Jubilee shelter - both located in the Magaliesberg) was identified and it is doubtful if any similar site would be found. However, the occurrence of these two very important sites indicate that intensive Stone Age occupation of the area took place for

¹ According to the manufacturer a certain deviation may be expected for each reading. Care was, however, taken to obtain as accurate a reading as possible, and then correlate it with reference to the physical environment before plotting it on the map.

long periods of time and it will therefore have to be considered during future development.

6.2 Iron Age

Stone walled sites dating to the Iron Age, were identified in the different areas. Most of these are judged to be insignificant. However, a few are quite extensive and show walling, terracing, pottery, slag and faunal remains as surface indicators. The sites are mostly located on saddles or in valleys on the northern slopes of the different hills, though some are also found on the southern side. The size of the sites in this latter category might be an indication of their importance.

These sites form in all probability part of the Tswana settlement of the larger geographical area and they can probably be linked with other sites not located in the areas under consideration, eg. Van Schalkwyk (1994) and Pistorius & Steyn (1995). They date most probably to within the last 300 years and might still have emotional and historical significance to current Tswana communities. They were most probably abandoned with the arrival of the Ndebele of Mzilikazi during the early part of the 19th century.

6.3 Historic

A number of cemeteries were identified. These are, in all cases, situated just outside the areas to be quarried. During the development of the infrastructure for the proposed quarrying, these places will have to be kept in mind and avoided at all costs.

Although white trekkers and pioneers settled from early times in the larger geographical area, and a number of battles were fought in the vicinity during the Second Anglo-Boer War, no site or reference to any such incident could be traced for the areas under consideration.

7. CONCLUSIONS AND RECOMMENDATIONS

It can be stated categorically that all four areas have a high potential for archaeological sites, especially Iron Age sites.

It seems as if the area on Elandsfontein 440JQ would be the best proposition to commence with the quarrying activities as it seems, provisionally, to have the least archaeological sites. The area on Hoekfontein 432JQ have many more archaeological sites. However, it is much larger than the previous area and there are sections that do not have any sites, which can be quarried first. A similar viewpoint can be taken on the other two areas, ie. Hartebeestpoort 410JQ and Zwartkopjes 427JQ.

It is judged that within the scope of the proposed development, all the sites would

eventually be impacted upon by the development activities. If the development continues, the archaeological sites will have to be considered. Therefore, although it is recommended that the development can continue, this can only be done after detailed surveys of all the areas have been done and mitigation measures implemented as deemed necessary by a qualified archaeologist. This does not need to be done all at once, but can be done in phases as the mining plan is developed.

It is also suggested that the developers be notified that archaeological sites might be exposed during the excavation. If anything is noticed, it should be reported immediately to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the find can be made.

8. REFERENCES

8.1 Unpublished sources

8.1.1 Data base

Archaeological Data Recording Centre, (former) Tvl section, National Cultural History Museum, Pretoria.

8.2 Published sources

8.2.1 Books and journals

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- Van Warmelo, N.J. 1977. **Anthropology of Southern Africa in Periodicals to 1950.** Pretoria: Government Printer.

8.2.2 Maps

1: 50 000 Topocadastral maps - 2527DA, 2527DB

9. PROJECT TEAM

J van Schalkwyk

APPENDIX 1: GLOSSARY AND ABBREVIATIONS

This section is included to give the reader some necessary background. It must be kept in mind, however, that these dates are all relative and serve only to give a very broad framework for interpretation.

STONE AGE

Early Stone Age (ESA)	2 000 000 - 150 000 Before Present
Middle Stone Age (MSA)	150 000 - 30 000 BP
Late Stone Age (LSA)	30 000 - until c. AD 200

IRON AGE

Early Iron Age (EIA)	AD 200 - AD 1000
Late Iron Age (LIA)	AD 1000 - AD 1830

HISTORICAL PERIOD

Since the arrival of the white settlers - c. AD 1830 in this part of the country