

## PHASE 1

# ARCHAEOLOGICAL IMPACT ASSESSMENT

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### *Low-cost Housing Project*

Mothapo, Mankweng

Portion 2 of Bezuidenhoutst 992 LS

NORTHERN PROVINCE

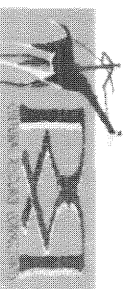
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## SYNOPSIS

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A Phase 2 Archaeological Impact  
Assessment of the presently identified  
sites is recommended.

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## AIM

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The aim was to undertake a Phase 1 *Archaeological Impact Assessment* on approximately 50ha at Moithapo, Mankweng (Portion 2 of Bezuidenhoutstuit 992 1S), where a low-cost housing scheme has been proposed, to assess the impact of the proposed project in terms of archaeological/historical sites and features and to make recommendations. The task was performed on February 25, 1999.

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## METHOD

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A survey of the whole area demarcated for development was done on foot by an archaeologist and one assistant. Locations were recorded by means of a GPS (Garmin, 45XL), and archaeological features were photographed with a Kodak Digital DC120 camera. A schematic map of a particular important site and its associated features was drawn.

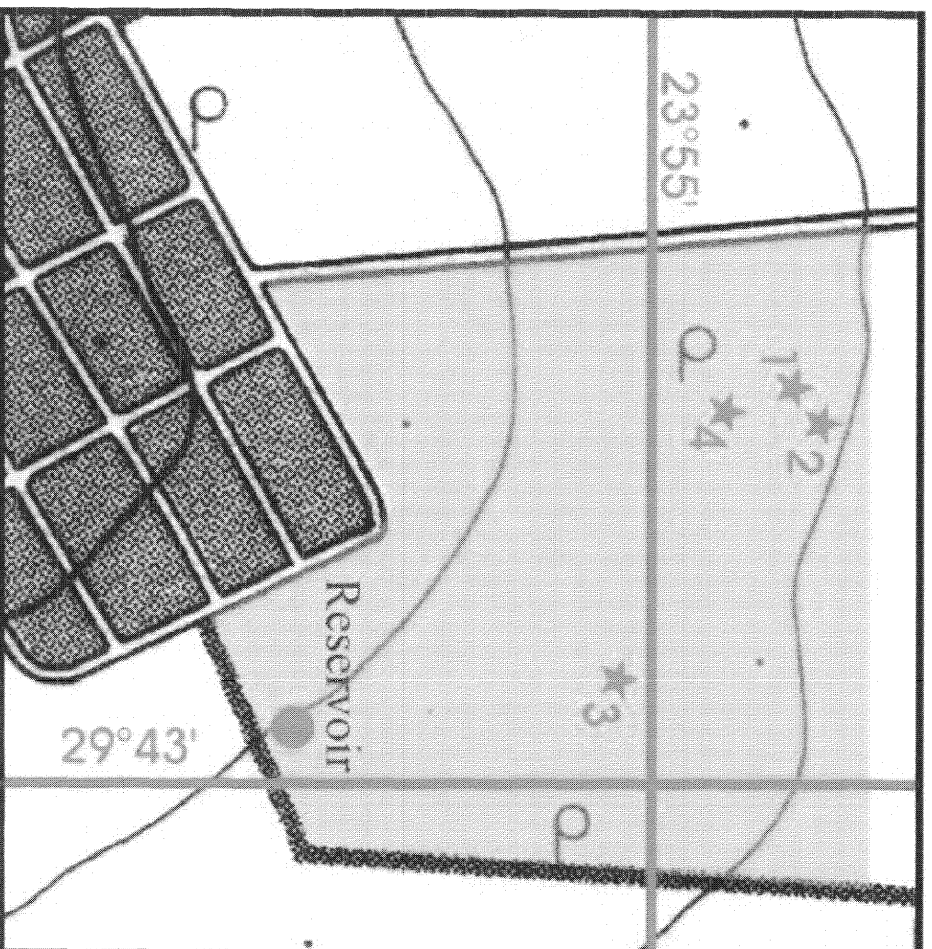
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## DESCRIPTION

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The main part of the area slopes downward in a north-northeasterly direction. It is characterised by aloe clusters, euphorbias and thorn trees. A few rocky outcrops occur in the area.

Five sites had been identified, some of which need to be investigated more intensively. They were numbered in chronological order as the assessment proceeded from the eastern most part of the area.

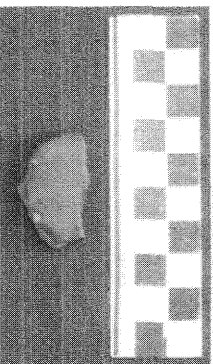
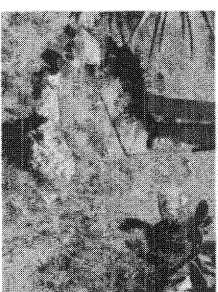
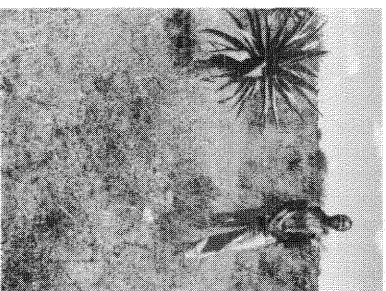
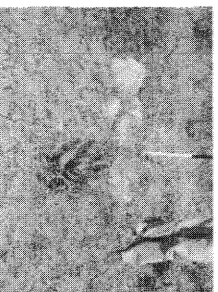


## Site 1a

S23°54'51.1" E29°42'44.1"

This site marks the location of a rocky outcrop where four circular house foundations had been discovered. In a near-by footpath a red coloured polished was found. In the photograph below, the floors are marked by a tree stump, the assistant, the gauge-rod and an ochre coloured bag. Close investigation revealed another, almost invisible stone foundation, which lies between the feature indicated by the tree stump and the bag, half way between the assistant and the gauge-rod. In the feature indicated by the gauge-rod, a grinding stone was also discovered. This structure is approximately 3 - 3.5m in diameter. The feature indicated by the bag is approximately 2.5 - 3m in diameter.

No other features or associated cultural material was found.



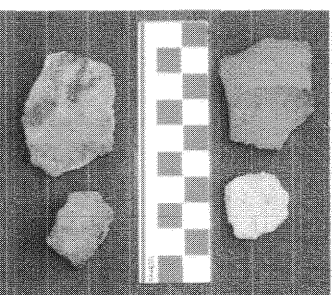
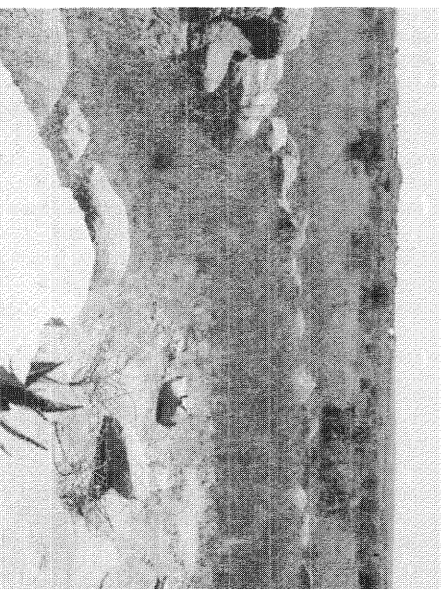
### Site 1b

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This is a low roofed rockshelter on the north-eastern side of the little rock koppie. The entrance faces north. The roof is stained black, either by smoke from a hearth or manganese. In front of the shelter, a single layer of rocks forms a halfmoon shaped structure. Immediately to the right of the shelter is a wider run-off, which resulted in a mud layer at the base of the rock in front of the shelter in a slight depression. It seems that the shelter was also utilised recently, for a glue tin was also found just outside the shelter as well as broken glass inside.

The surface of the deposit inside the shelter is littered with this broken glass. A small test pit was sunk into the surface of the shelter. Some charcoal were found in the grey soil. The deposit is only approximately 2cm deep, with the rock floor directly beneath it. However, it seems that a deeper layer exists in the rear end of the shelter.

Both sides immediately in front of the shelter also show some depositing, where a few broken Late Stone Age (LSA) tools together with at least five potsherds were found.

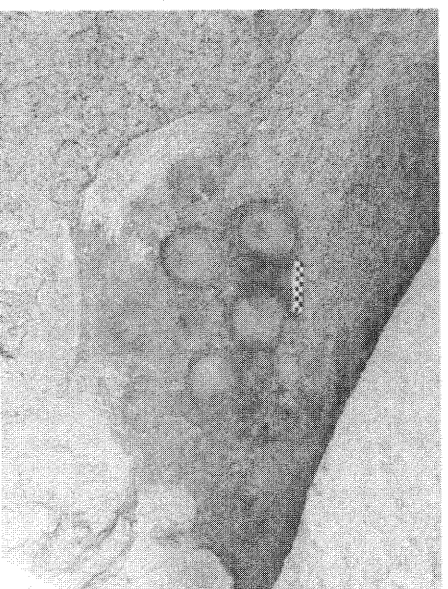


### Site 1c

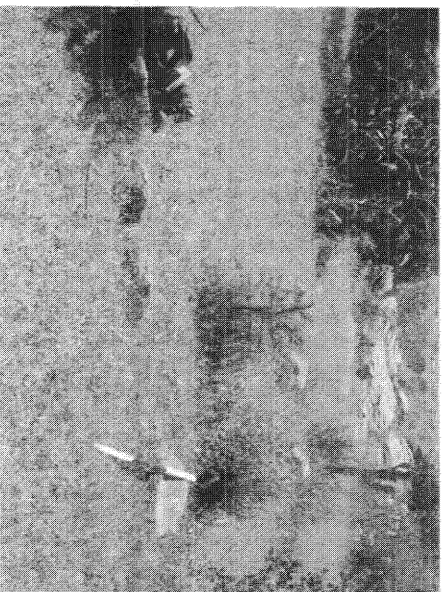
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On the eastern side of this same rock koppie seven, and two incomplete, depressions were found on the surface of a rock. This could either be interpreted as a *moruba* game or preparation area where marula nuts were cracked. It is a pleasant site, for its location is shadowed during the middle of the day. The *moruba* game was usually

played by herder boys and are thus usually encountered near/at grazing areas, but they were also occasionally played by men at/close to home. The Bushmen (San) used similar holes to crack marula nuts to get to the nutritious kernel. The *moruba* game however usually consists of at least 12 depressions. It is thus more likely to be a marula preparation area, unless some of the rock had broken away.







Site 2

S23°54'54.0" E29°42'43.3"

At another rocky kopple west of the above mentioned site, part of a stone enclosure was found. It consists of one layer only and forms an incomplete circle. The radius is estimated at about 9 - 10m. A grinding stone was found right next to it.

Site 3

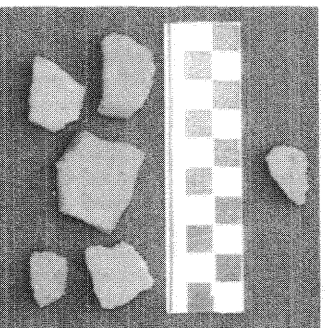
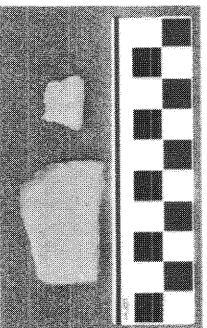
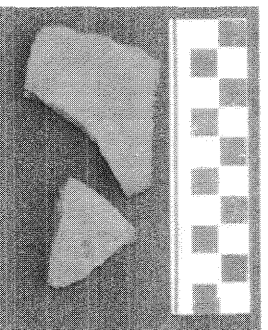
S23°55'03.1" E29°42'53.7"

On the eastern side of Site 1 occurs another rocky kopple with a flat outcrop on its eastern flank. A few old gnarled marula trees as well as some euphorbias grow on its southern side. In between these, four graves are located. One grave has a vertical headstone while the others consist merely of packed rocks. A few dark, polished potsherds were found on the rocky kopple.



Approximately 30m from these graves, a decorated lipped potsherd was recovered in a foot path. Less than 10m from this find another sherd was found, yet undecorated, in a slightly eroded area.

More undecorated and one decorated potsherd was found, mainly in foot paths in the area between this site and the existing reservoir. No finds were made on the surface, all finds coming from eroded areas.

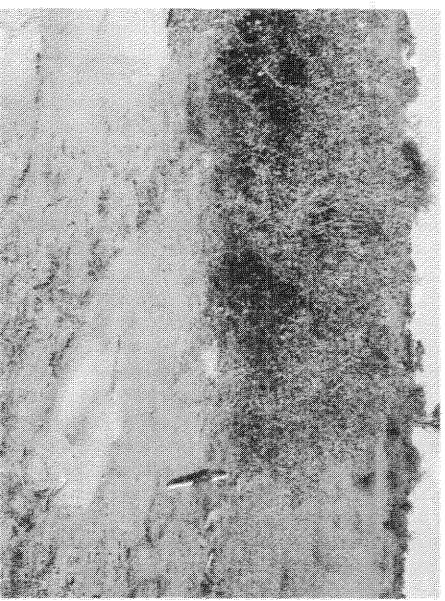
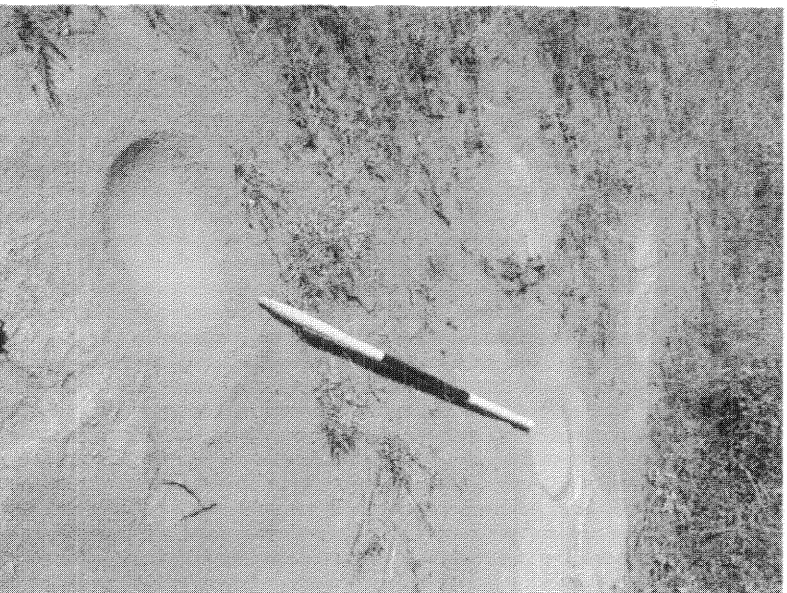


#### Site 4

S23°54'56.1"

E29°42'34.1"

This site indicates the location of two well used grinding stones - and one incomplete - on a flat outcrop. These depressions occur within the rock. Right next to it is a small, single layer, circular stone wall, with a length of approximately 0.5m. It is possible that more of the wall is covered by the dense shrubbery.



### EVALUATION

#### General

It seems that this area was well inhabited during prehistorical times. The entire area seems to be of archaeological importance. At least two other important archaeological sites are located within a few kilometres from this area (Mankweng, Unit F & Turfloop 987 LS). A proper assessment of the area in general would thus be of great significance, as one would be able to identify the peoples and time periods concerned.

#### Site 1a

At this stage it is difficult to identify the builders, the date of occupation, the size or significance of this site. No diagnostic features or cultural material that can be ascribed to this particular occupation had been found.

#### Sites 1b & c

At present the little rock shelter seems to be under threat. Signs of modern activities had been found. Activities such as these could destroy important information about the prehistorical inhabitants or users. Abundant stone artifacts had been found in the area as well as a few kilometres away. Although this shelter would have been too small to accommodate a band of hunter-gatherers, it could have been utilized during hunting trips.



This site could be linked to Site 1c, as marula pips were an important part of the San's diet, being rich in Vitamin C. The depth of the holes could be indicative of extended use. At present no specific dates for the occupation of Site 1b can be given.

#### Site 2

This stone enclosure would not have existed in isolation, and it is suspected that more structures might be found. Some dense bush occur in the immediate vicinity of this structure, and it is possible that other structures such as this one, might be recovered. It is felt that the low visibility of this structure can be ascribed to stone robbing by later inhabitants. No other cultural material was found that could establish the identity of the builders.

#### Site 3

Four graves were identified. It is however possible that more graves can be hidden by the shrubbery (in the background of the photograph), as these graves apparently lies on the periphery of a possible graveyard.

#### Site 4

The embedded grinding stones is indicative of agricultural practices. The single layer wall could be part of a house structure. This needs further investigation.

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### RECOMMENDATIONS

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In view of the above, it is recommended that a Phase 2 Archaeological Impact Assessment be undertaken on the above mentioned sites. The areas in the immediate vicinity of each will have to be reconnoitred further. The details could be finalised through mitigation on site.

Depending on the Phase 2 report and its recommendations, it would be of the utmost importance that the archaeologist be notified once the initial surface preparation (clearing of plant growth, etc.) has been done and again once the digging of house foundations, water trenches and other earth works are initiated.

- If any graves and/or middens are encountered during initial clearing of the surface or during subsoil removal, the archaeologist should be notified immediately.
- If any stonewalled structures are identified.

**The presently identified sites should be treated as follow:**

#### Site 1a

The area will have to be reconnoitred carefully to establish the extent of the occupied area. This may include some debushing. Limited excavations will be necessary in order to acquire cultural material in situ which will assist to establish the identity of the builders. The site should be surveyed and site plans drawn. If the site proves to be of particular importance radiocarbon datings will have to be made.

#### Site 1b

A limited excavation in the back of the cave is advised in order to obtain material for radiocarbon datable material. The immediate area will have to be reconnoitred properly. A site plan including the dimensions of the shelter as well as the stone structures in front of the shelter should be drawn. Some excavation should be conducted in front of the cave in order to find cultural remains.

It is also advised that this site in particular should not be imposed on by buildings, and should rather be included in a park or cultural centre.

#### Site 1c

This site should be documented (measured and photographed) properly for archival storage purposes.

#### Site 2

This site will have to be reconnoitred for similar or other structures that could be linked to this structure. More cultural material is needed to establish the identity and time period. Proper measurement of the structure and possibly some limited excavations are recommended. A site plan will be drawn.

#### Site 3

The graves will have to be either protected from intruders, i.e properly fenced in or the remains have to be exhumed. It is however possible that these were located within a cattle kraal. Limited excavations will be necessary to establish this fact. Some of the skeletal remains will have to be radiocarbon dated. The human remains may also be indicative of their sex, age, religion and identity of the group of people they belonged to.

#### Site 4

The shrubby will have to be removed in order to verify the presence of other house foundations or other related structures. Depending on the findings, a limited excavation may be necessary. A site plan will be drawn.

As these grinding stones are also immovable, it is also recommended that this be included in a park or a cultural centre where interpretation of the prehistorical and historical value can be done.

- ♦ All material already sampled, as well as those from Phase 2 will be lodged with the *Pietersburg Museum* together with all documentation such as finds lists, daily reports, site description and a full report.
- ♦ A copy of the report will be sent to the *National Monuments Council (MMC)*.
- ♦ A complete documentation form regarding this survey as well as the Phase 2 survey will be lodged with the *National Cultural History Museum* in Pretoria, which will be included in their data base regarding all archaeological finds in the Northern Province.

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## CONCLUSION

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Southern Africa has some of the longest, best known archaeological sites in the world. It is expected that knowledge concerning the cultural development of the later Pleistocene in the future will increase as a result of continuous large scale excavations of rock shelters and open air sites, improved palaeo environment reconstructions and the application of accelerated dating techniques. Progress concerning earlier time sequences will depend on the discovery of sites from which much information can be gained, as well as the development and application of new analytical techniques.

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## BIBLIOGRAPHY

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- Deacon, J. 1996. *Archaeology for Planners, Developers and Local Authorities*. National Monuments Council. Publication no. P021E.
- Deacon, J. 1997. *Report: Workshop on Standards for the Assessment of Significance and Research Priorities for Contract Archaeology*. In: Newsletter No 49, Sept 1998. Southern African Association of Archaeologists.



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June 7, 1999

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**THE LAW**

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The **National Monuments Act (No. 28 of 1969)** protects all palaeontological, archaeological and historical sites and material older than 50 years. It is an offence to destroy, damage, alter, remove from its original site, or excavate any such site or material without a permit from the National Monuments Council. A person convicted of an offence in terms of the Act, could be liable for a fine of up to R10000 or two years imprisonment, or both. *See Addendum 1 for extracts from this act.*

In terms of the **Environmental Conservation Act (No. 73 of 1989)** the **Integrated Environmental Management Procedure, Guideline Document 1** identifies certain man-made areas and features that are listed as environments which must be included in an environmental impact assessment report. These include archaeological and palaeontological sites, graves and burial sites, buildings and sites of religious, social and cultural significance.

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**ARCHAEOLOGICAL IMPACT ASSESSMENT**

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To minimise the impact of development on archaeological sites, and the impact of archaeological sites on development projects, and to avoid costly delays if a site is discovered during the course of construction work, it is important to hire an archaeologist well in advance to survey the area. It is important that developers realise that only qualified professional archaeologists should be employed to undertake survey work.

The developer is responsible for the costs involved in hiring an archaeologist to investigate the site.

**Phase 1**

The archaeologist hired to do the work will submit a phase 1 report. On the basis of the recommendations and assessment of significance made in the report, a decision can be taken on how the development may proceed. In most cases development will be able to go ahead as planned after the sites have been recorded.

**Phase 2**

In some cases, mitigation in a Phase 2 programme will be necessary and may involve excavation or collection of archaeological material. The purpose behind mitigation is to sample the site so that the evidence can be stored permanently in a museum where it can be consulted at a later date for record and research purposes.

**Phase 3**

More rarely, the site may be so important that it will warrant modification of the development in a Phase 3 programme. If this happens, the archaeologist, the National Monuments Council and the developer can confer on the action to be taken. It may be possible to incorporate an Iron Age village into a green belt in a housing scheme, or to modify a high rise building plan by covering rare 18<sup>th</sup> century foundations and associated rubbish dumps beneath a parking lot to avoid destroying them completely. Such solutions are possible if the archaeologist is consulted early enough in the planning process.

Permission for the development to proceed can be given only once the National Monuments Council is satisfied that steps have been taken to ensure that the archaeological sites will not be damaged, or that they have been adequately recorded and sampled.

If this chain of action is followed, we stand a chance of saving something of our archaeological heritage for future generations and of avoiding conflict between developers and cultural conservationists. The National Monuments Council must ensure that the historical and cultural heritage of all South Africans is protected. Careful planning can minimise the impact of archaeological surveys on development projects by selecting options that cause the least amount of inconvenience and delay.

## ADDENDUM 2

### EXTRACTS FROM THE NATIONAL MONUMENTS ACT (NO 28 OF 1969, AS AMENDED IN 1986) THAT ARE RELEVANT TO ARCHAEOLOGICAL SITES

- 12(2A) No person shall destroy, damage, excavate, alter, remove from its original site or export from the Republic -
- (a) any meteorite or fossil; or
  - (b) any drawing or painting on stone or a petroglyph known or commonly believed to have been executed by Bushmen; or
  - (c) any drawing or painting on stone or a petroglyph known or commonly believed to have been executed by any other people who inhabited or visited the Republic before the settlement of the Europeans at the Cape; or
  - (d) any implement, ornament or structure known or commonly believed to have been made, used or erected by people referred to in paragraphs (b) and (c); or
  - (e) the anthropological or archaeological contents of graves, caves, rock shelters, middens, shell mounds or other sites used by such people; or
  - (f) any other historical site\*, archaeological or palaeontological finds, material or object,

except under the authority of and in accordance with a permit issued under this section.

[\* An "historical site" is defined as "any identifiable building or part thereof, marker, milestone, gravestone, landmark or tell older than 50 years."]

## Report on Workshop on Standards for the Assessment of Significance and Research Priorities for Contact Archaeology

SA3 (Southern African Association of Archaeologists) Biennial Conference  
University of Venda, 10 July 1998

*Janette Deacon*  
*National Monuments Council*

Opportunities for archaeological contract work will expand in southern Africa in the next few years. To make the best of the opportunities, medium-term (3-5 year) research and heritage conservation priorities need to be established as a matter of urgency in consultation with CRM practitioners, provincial and national heritage agencies and research archaeologists. The following factors are relevant.

1. In South Africa, the Department of Environmental Affairs and Tourism published on 5 September 1997 its long-awaited List of Activities which may have a substantial detrimental effect on the environment and the regulations regarding activities identified under Section 21(1) of the Environment Conservation Act (No. 73 of 1989). These effectively make environmental impact assessments compulsory for the listed activities.
2. The National Heritage Bill, designed to replace the National Monuments Act in South Africa, came before the Cabinet and Parliament in 1998. It could become law from 1 April 1999. Amongst other innovations, it makes impact assessments compulsory where historical, archaeological and palaeontological sites are affected by development but are not protected by other legislation.
3. In neighbouring African countries, the tempo of contract work is also rising as new legislation and requirements of the World Bank are implemented.

It seems widely accepted that CRM practitioners do mitigation to rescue the research potential of a site which would otherwise be lost. The following kinds of sites were identified as being worthy of mitigation:

### Stone Age / Hunter Gatherer

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| <ul style="list-style-type: none"> <li>• any open air site with bone or other organic material;</li> <li>• any cave or rock shelter with deposit;</li> <li>• rock paintings and rock engravings (record context as well as images);</li> <li>• quarry sites with possibilities for core re-fitting;</li> <li>• long sequence sites;</li> <li>• coastal and inland shell middens;</li> <li>• any sites with Howiesons Poort, Stillbay or Robberg artefacts;</li> <li>• human remains or burials;</li> <li>• fish traps;</li> <li>• placement of Earlier Stone Age sites in the</li> </ul> | <ul style="list-style-type: none"> <li>• landscape - are they associated with river valleys, water sources or quarries?</li> <li>• evidence for modernity in Middle Stone Age sites;</li> <li>• sites with evidence for interaction between Stone Age and Iron Age or colonial people;</li> <li>• Later Stone Age sites with Barnabata pottery;</li> <li>• pastoral sites, especially in the Eastern Cape;</li> <li>• caches of ostrich eggshells or other items;</li> <li>• hunting blinds;</li> <li>• evidence for exploitation of raw material sources such as haematite or specularite.</li> </ul> |
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## Iron Age / Agriculturist

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- Sites that will help to clarify the ceramic sequence of the Early Iron Age in the northern and eastern regions of southern Africa;
- any Bambaria settlement;
- Early Iron Age sites with evidence for structures or long term occupation;
- sites with evidence for political or social hierarchies;
- evidence of the organization of metal production;
- burials with evidence for social differentiation, health and nutrition;
- evidence for trade within and outside of the Zimbabwe culture area;
- sites in areas that are under-researched to build up the culture-historical sequence;
- special-purpose sites such as rainmaking, circumcision, mining, furnaces, cattle posts vs living sites, salt making;
- Blackburn and Moor Park sites in KwaZulu-Natal;
- well preserved early Moloko sites with middens for evidence of diet and subsistence or stone walling;
- any Zimbabwe-style stone walling should be mapped in sufficient detail to estimate factors such as population size and grain-bin variability;
- evidence for contemporary cultural interaction, for example between Khrami and Moloko;
- sites with architectural styles and information on materials used for housing, even in the recent past;
- evidence for the introduction of maize, either direct or in the style of grindstones used;
- sites with botanical remains of cultigens;
- information on the distribution, size and characteristics of dolly-holes for gold mining;
- evidence for textiles or weaving in addition to spindle whorls;
- evidence for games and contextual information relating to them;
- figurine caches and spatial relationships to settlements;
- check stone outcrops near stonewalled sites for engravings.

## Historical / Colonial

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- sites connected with whaling and sealing;
- ships or ship/boat structures on land;
- shipwreck survivor camps;
- sites in the interior with nineteenth century ceramics (RESUNACT is preparing guidelines for identification);
- single occupation sites in urban environments with deposits such as wells, cisterns and depressions;
- 17<sup>th</sup> century or early 18<sup>th</sup> century sites in Cape Town;
- sites that are connected with national and international slave trade routes;
- LSA sites with metal items such as brass buttons;
- documentary and archival searches should be done before going into the field;
- sites that could inform on the effects of military forces on indigenous local populations;
- the symbolic significance of textiles, beads and other items imported by traders;
- sites with oral traditions of sacred significance - oral histories increase significance and are therefore relevant to archaeology;
- historical graves need sensitive removal during mitigation and this is often best done in collaboration between archaeologists and funeral specialists.

