

**Progress report  
phase 1 excavation of a century-old municipal refuse midden,  
Kamfersdam, Kimberley.**

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*"Any community still in possession of its original ash-heap is most fortunate indeed...[It is] a most precious cultural heritage...because an ash-heap is the only really accurate, undistorted and sensitive record of a community's past...archives and documents record the deeds and decisions of such worthies as councillors, mayors and pastors [while] the humble ash-heap reflects an entirely unconscious picture of the real life and times of the community"*

- Garth Sampson, archaeologist, 1991

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**Introduction**

On 4 June 2001, one of us (DM) identified a proposed borrow pit site intended for use in the casino development in the vicinity of the Kimberley Golf Course, Kamfersdam, as being capped by a century-old historic municipal rubbish midden, protected by the National Heritage Resources Act of 1999 (Morris 2001 - Appendix 2). Work which was about to commence on the site was halted. A report on the site was submitted to relevant persons and authorities on 5-7 June 2001. On 8 June 2001 an investigation, as recommended, was begun by a team that was augmented (by JK; with assistants Robert Mzite and Sono Chiya seconded by the construction company Protech), by arrangement by Sadia Chand in Cape Town. A permit application for the investigation was submitted on 8 June, and provisional permission to proceed was given by the local SAHRA office. This preliminary report indicates, briefly, our findings thus far. It presents our recommendations based thereon.

**Field observations, 8-10 June 2001**

In general, our findings (see below and Appendix 1) confirm the initial assessment

(Morris 2001, Appendix 2) that the site is an important and in places quite undisturbed rubbish midden that is of the order of a century old. Some disturbance has occurred on parts of the proposed borrow pit site in relation to sewage works in the twentieth century (itself part of the heritage of Kimberley). Notably, the site does not appear to have been robbed by bottle diggers. That portion of it sampled in this investigation has high archaeological integrity and is considered to be significantly conservation-worthy. In fact, its richness and the quality of preservation found exceeds initial expectations. Recommendations based on these preliminary findings are given below.

Finds<sup>1</sup> include quantities not only of glass, porcelain, earthenware and metal items, but also well-preserved faunal remains including chicken, sheep, fish (bones and scales), oyster, and probably cattle, possibly pig. An archaeozoologist in Kimberley has agreed to do the identifications for the project.

Amongst the wide variety of objects found are buttons, small glass beads, a toy lead soldier, a white clay bisque-fired bonnet-doll (rarely found in South African dumps - Lastovica & Lastovica 1982:78), the finely crafted boot from a toy figure seemingly made from bone, a brass medallion, part of a cup from the Grand Hotel, a pipe bowl, carbon rods, parts of a leather shoe, different portions of "Codd" mineral water bottles (including datable embossed inscriptions, a seal, and glass "marble" stopper), and horse shoes. Quantities of (mainly) highly corroded to less-corroded metal objects were found - including nails, screws, wire, thin lead sheet, and a spade. An embossed "Codd" mineral water bottle from "Eugene S. Whyte" of Cradock (unusual, since most such bottles are from local Kimberley manufacturers) appears to confirm a maximum age of circa 1898/9 (Lastovica & Lastovica 1982:85) - which is in accord with the initial report on this site (Morris 2001) and the known history of dumping in the vicinity (Brits 1993, Morris 1994, 2001). Other embossed Codd's found that provide dating evidence include "Henderson Bros." (1890-1907); "A.E. Bradley" (1890-1910); and "J. Delaney & Co, De Beers" (1892-1910). For background on the history of dumping in this vicinity, see Morris (2001, Appendix 2).

The major finding, we believe, is that this is, in significant part, a high integrity archaeological deposit, in primary context. While parts of the site have been disturbed, large portions appear to be *in situ*, representing a unique historical testimony to the period when it was deposited approximately a century ago. No other known site of this period in Kimberley is as well preserved (others have been ransacked by bottle diggers and by those who have sought to subsist on the sale of dug-up items, including bone and metal, so that what remains in them is a skewed representation of much diminished archaeological and historical value). We submit that in these terms this site must be regarded as a highly significant heritage site that deserves further attention and conservation.

## Recommendations

1. It is recommended that the three days originally proposed to us for an investigation is insufficient to recover a representative sample from this midden. It is estimated that at least another ten days are needed to do it justice. In addition, surface collections and, if time allows, test trenches should be made in the areas that will be destroyed in the event of SAHRA issuing a borrow pit permit.

Beyond this, in the event of quarrying, continued sampling could be made if the midden capping the calcrete in the borrow pit area was moved to one side. (Sampled material in that case would of course be unprovenanced, its context destroyed, but owing to what we believe was rapid original deposition, it would probably all be more or less contemporaneous).

2. It is further recommended that in view of its archaeological and historical significance, at least a portion of this midden must be preserved *in situ*. We as heritage workers would be failing in our duty to future generations if we allow the site to be destroyed in its entirety.

If no alternative site for the borrow pit can be found, we suggest that an east-west strip of the midden at the northern end of the proposed borrow pit site be set aside, fenced, and preserved for the future. An area has been identified for this purpose on the basis of midden preservation, depth of deposit, and its location at or near the edge of the calcrete source area indicated on the site sketch from the geo-technical analysis. We trust that a compromise can be reached that will enable development to proceed, while completing our investigation, and preserving a portion of this exceptional site.

That the site could become highly desirable to bottle-diggers and subsistence-sifters needs to be borne in mind in its future management.

3. It is recommended, in line with cultural resource management philosophy in South Africa (e.g. Deacon *nd*), that information on the site and from this project be made available locally in the form of a "story board" or display (which would warmly resonate the concerns for heritage and tourism that were a key feature in Teemane's casino bid). Indeed with a board-walk and display lecterns, the site itself could be turned into a tourist attraction with a difference.

The study should also be written up in a professional report for publication, drawing together various strands of information and analysis (see below).

## What remains to be done

1. Agreement as to the way forward.
2. Completion of test excavations and collections. Estimated time: at least ten days of fieldwork.
3. Washing, marking, bagging and boxing of material at McGregor Museum laboratory. (Permit conditions will stipulate where the material is to be housed; the

museum accepts material subject to minimum standards of curation).

4. Analysis of material. This will involve specialist input. An archaeozoologist has already agreed to identify the fauna. Basic details concerning the cultural material will need to be augmented by specialist examination of glass, porcelain and other items.

5. Publication of results and erection of "story board" or display, possibly even a boardwalk on site.

### **Budget implications**

Each of these steps has budget implications for which the following rough parameter estimates are provided:

1. Agreements: These will involve small administrative costs relative to discussions with SAHRA, developer and other relevant parties. Overall, an administration fee of 2.5% is added to project cost to cover these and associated costs (telephone calls, faxes, email, printing, etc).

2. Excavation: 10 days of excavation - McGregor Museum archaeologist at R150/hour plus subsistence of R154/day plus expenses (and time-and-a-half over weekends). Casual labour at R40/day if they are not already employed and merely seconded to the project.

3. Cleaning and storage:

Washing: Casual labour in the archaeology department @ R40/day x 1 day+ (depending on eventual size of sample);

Marking: Casual labour in the archaeology department @ R40/day x 5 days+ (depending on eventual size of sample);

Bagging and boxing: Casual labour in the archaeology department @ R40/day x 1 day+ (depending on eventual size of sample) plus costs of materials (bags, staples, boxes and shelf cost at combined standard rate of R50/box).

4. Analysis: Sorting of material and baseline description by archaeologist @ standard rate of R150/hour - probably 5 days+ (depending on eventual size of sample). Specialist work at rates to be determined by individual specialists.

5. Preparation of display/story board: costing depends on design and size (display expertise and facilities locally available).

### **Conclusion**

The initial identification of the site and estimate of its age and significance is supported by the work conducted thus far. The site can be regarded as highly significant by comparison with similar but less well preserved sites in Kimberley. It is submitted that further work is required, and a portion of the site must be preserved. There is tourism potential in the site and/or the information derived from it, and this aspect deserves to be explored further.

## Note

1. Three stone age flakes were also found (not in the test excavation), evidently derived from the original calcrete surface where, indications suggest, there may have been a very low density of Pleistocene cultural material, possibly Middle Stone Age or Fauresmith in age.

## Acknowledgements

We wish to thank Dr Hennie Erasmus, Environmental Control Officer for the construction project, who first alerted DM to the possibility of archaeological traces at the site; and for his regular visits during the weekend. Ms Sadia Chand of Chand Environmental Consultants provided every help in facilitating the work that commenced on 8 June, providing for JK to join the team for an emergency weekend assessment; and for her regular interest in the progress of the work and discussions on the way forward, with ourselves and with project management. Ms Johlene May and Ms Nomvula Mbangela of SAHRA accompanied us to the site and gave provisional permission to begin the excavation ahead of receiving a formal permit. Mr Peter Beaumont, Research Associate of the McGregor Museum loaned excavation gear. Mr Colin Fortune, Acting Director of the McGregor Museum, who is also familiar with Kimberley's historic middens, visited the site over the weekend. Mr Alan Kwon Hoo, Architect, visited to verify the position of the midden and that portion we seek to preserve. By no means least, we thank our helpers, seconded from Protech by Mr Charles Radebe: Mr Robert Mzite and Mr Sono Chiya - who were soon skilled at sorting, contributing all-importantly to the investigation.

## References

- Brits, L. 1993. Kimberley's refuse dumps. *Bottle and Bygones Newsletter* 9:1-2.
- Lastovica, E. & Lastovica, A. 1982. *Bottles and bygones: a guide for South African collectors*. Cape Town: Don Nelson.
- Morris, D. 1994. Managing Kimberley's Kamfersdam Dump. *Martevaan* 10:1-2.
- Morris, D. 2001. Report on historical rubbish midden at Kamfersdam. Unpublished report, 5 June 2001. (See Appendix 2)
- Sampson, C.G. 1991. A different way of recovery. *Muniviro: Newsletter for local and regional authorities* 8(3):9.

## Appendix 1

### Test Trench: progress of excavation to 10 June 2001.

Choice of sample point: A portion of the midden was selected for sampling on the basis of likely depth of deposit and surface indications of apparent artefact richness.

Grid: A grid was set up over an area of 6 x 2 metres.

Excavation: Squares C2 and D2 were excavated (C2 to calcrete bedrock over part of the square, with a patch of deposit remaining in less than half the square at 800 mm depth. By the end of 10 June D2 had been lowered to 400 mm). The nature of the deposit (rubbish midden, probably dumped from Scotch carts) meant that clear vertical stratification was unlikely in a deposit of this limited depth, so that a strategy to dig in 100 mm spits was decided upon (allowing any vertical variability to be monitored even though no clear stratification could be distinguished). In addition, bucket counts were kept, and changing artefact quantities per volume of deposit can be tracked.

Field notes: Notes, that will be archived along with the collection, detail every step of the investigation. These document variations in densities, textures and colouring in the deposit, revealing features that are probably typical of rubbish middens. Compactness and "feel" suggested this deposit was most likely *in situ*, and thus of high archaeological integrity.

Finds: The report (above) provides some account of the finds. One point we wish to make, though, is that complete bottles and so-called "collectables" that are not in any way damaged are extremely rare (perhaps one or two finds in the two excavated squares would qualify). The implication is that bottle-diggers must destroy vast volumes of archaeological deposit in search of these items. Careful excavation, by contrast, has revealed numerous fascinating finds which after only three days begin to build a real-life picture of conditions in Kimberley a hundred years ago.

## Appendix 2

### Report on historical rubbish midden at Kamfersdam

David Morris  
McGregor Museum, Kimberley  
5 June 2001

#### Introduction

On 4 June 2001, I was called to inspect the site of a proposed borrow pit at Kamfersdam. The site was inspected in the company of Dr Hennie Erasmus, together with a surveyor and a contractor. It was found that the proposed borrow-pit is capped by a historical rubbish midden of the order of a century old, which is protected by the National Heritage Resources Act of 1999. Work on the site was halted.

A similar, much larger, midden exists on the north side of the railway line on Kamfersdam, where extensive bottle-digging has occurred, but where the National Monuments Council (now SAHRA) stepped in to control activities in the late 1980s (Brits 1993; Morris 1994). The midden at the proposed borrow pit has not been dug over by bottle diggers and is thus potentially much better preserved. It is also possible that it represents a remnant of the earliest phase of systematic dumping at Kamfersdam.

#### Field observations

A small sample of items was collected to obtain some indication of the age of the midden.

- Bottle fragments included a nearly complete "Codd" mineral water bottle of "Henderson Bros." This company was in existence in Kimberley, 1890-1907. The bottle fixes the age of the midden at approximately  $102 \pm 9$  years (Lastovica & Lastovica 1982:87). Illustrated in Figure 1.
- Two mineral water "egg-ended Codd" bottle fragments, each with portions of the inscription "A.E. Bradley" of Kimberley, fixing the age of the midden at  $101 \pm 10$  years (Lastovica & Lastovica 1982:87).
- A bonnet doll in bisque-fired white clay. Lastovica and Lastovica indicate that "bonnet dolls, so named because a hat is moulded as an integral part of the dolls' heads...are rarely dug from South African dumps" (1982:78). It is thus particularly noteworthy that one such specimen was turned up during our brief and unsystematic inspection of the dump. Illustrated in Figure 2.
- A range of other glass and porcelain fragments; and several glass bottle stoppers. These included fragments of medicine and ginger beer bottles. See illustration in Figure 2 - from broken plate. [Plates from the Kimberley Sanatorium (1897-1902) have previously been found at Kamfersdam (Morris 1994)].

- Part of a mouth organ. Illustrated in Figure 2.
- Two horseshoes. Metal items are generally highly corroded - an indication that the dump is not recent. Horseshoes in an urban dump could bespeak an era before motorised vehicles became commonplace (although horse-drawn vehicles still plied the roads, bringing fresh produce to the Market Square, for instance, up to the 1960s). Metal (mainly tins) was recovered from Kamfersdam in 1918 (see below).
- Two fragments of bone. Organic remains appear to be rare. There is much evidence of burning, which explains the relative absence of organic remains.

## Discussion

The midden contains elements that are probably about a century old (three identifiable items could date back as far as 1890, i.e. 111 years, although in each case they could be younger with known age ranges of between  $102\pm 9$  and  $101\pm 10$  years). This is in accord with what is known of the history of dumping at Kamfersdam.

The Kimberley Mayor's Minutes for the year 1898 record agitation for a "better system than the haphazard and unsatisfactory removal [of refuse] by private persons that had been in existence for some years" (Brits 1993; Morris 1994). A railway extension was constructed from the "Kimberley-Bechuanaland" line, to a siding where loads were tipped into awaiting carts. Deposition commenced on 1 September 1899. Some 3000 loads were deposited before the Siege of Kimberley interrupted the project in October 1899; but it was soon continued and the railway was extended another 144 yards in 1900, with dumping rates reaching up to 40 loads per day. Dumping at Kamfersdam was discontinued in 1921, when old quarries around town were brought into use for combined waste management and land reclamation. Metal, especially in the form of condensed milk and jam tins, was recovered from Kamfersdam Dump in 1918 (Brits 1993; Morris 1994).

## Conclusions and recommendation

By virtue of its age and as an old municipal rubbish dump, the site is protected by the National Heritage Resources Act of 1999, and may not be disturbed except in terms of a permit issued by the South African Heritage Resources Agency. The National Monuments Council's (now SAHRA) brochure "Archaeology for planners, developers and local authorities" states that "sites worthy of conservation include...old municipal rubbish dumps" (Deacon 1992:3).

On the significance of such sites, Sampson makes the point that "any community still in possession of its original ash-heap is most fortunate indeed...[it is] a most precious cultural heritage". He explains that this is so "because an ash-heap is the only really accurate, undistorted and sensitive record of a community's past...archives and documents record the deeds and decisions of such worthies as councillors, mayors and pastors [while] the humble ash-heap reflects an entirely unconscious picture of the real life and times of the community" (1991:9).

It is suggested that a representative sample of the midden be excavated in order to



assess its significance before any further decision is taken.

The fact that this midden has not been extensively exploited by bottle-diggers - as the other Kamfersdam dump has been (along with several other similar deposits, e.g. the Kemo dump, and those on the Kenilworth Road) - means that its integrity, as an archaeological deposit, may be higher, and it may on that account be more conservation-worthy. If deposition at Kamfersdam was extended outwards from Kimberley (it is unlikely to have been extended inwards), it is then also possible that this midden represents the oldest phase of dumping at Kamfersdam.

### **Steps to be taken**

1. Report the find to the South African Heritage Resources Agency (SAHRA) in Kimberley and Cape Town. (The matter was reported telephonically to SAHRA Kimberley on 5 June 2001; copies of this report to be submitted to Kimberley and the national office).
2. Undertake more detailed investigation.
3. Investigate possible alternative borrow pit sites.
4. Prepare permit application to SAHRA depending on more detailed recommendations and/or outcome of alternative borrow pit investigation as in 2 and/or 3 above.

### **References**

- Brits, L. 1993. Kimberley's refuse dumps. *Bottle and Bygones Newsletter* 9:1-2.
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