

SPECIALIST REPORT
SPECIALIST REPORT AND MANAGEMENT PLAN
FOR A LATE IRON AGE ROCK ENGRAVING SITE WITHIN THE PROPOSED
DEVELOPMENT OF THE LYDENBURG MALL (MORNING TIDE COMPLEX), ON
THE REMAINDER OF PORTION 7 OF THE FARM ROODRAAI 34 JT,
MASHISHING (LYDENBURG)

MPUMALANGA PROVINCE

REPORT COMPILED FOR
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EXECUTIVE SUMMARY

An archaeological scoping assessment was conducted in 2006 on the *remainder of portion 7 of the farm Rooibraai 34 JT*, on the outskirts of the town Lydenburg (Mashishing), Mpumalanga. Sections on the farm were earmarked for the Lydenburg Mall (Morning Tide Development Complex), Morning Tide Power Line and the Albrina residential development. The current report concentrates only on the rock engraving site which will fall within the development area for the Lydenburg Mall (Morning Tide Development Complex), (see Appendix 1).

A Phase 1 Heritage Impact Assessment (HIA) was conducted in April 2006 (Phase 1 HIA for the Morning Tide Development Complex, Morning Tide Power Line and Abrina Residential development by Archaeology Africa cc, P. Birkholtz), (SAHRA Arch. Ref. 9/2/236/0002). A review comment by SAHRA, was issued on 23 October 2007. The rock engraving site (identified in the report by Mr. Birkholtz) was listed as RDR 8.

The review comment by SAHRA (23 October 2007) states the following (see Appendix 3):

- The rock engraving (RDR 8) must be preserved *in situ* and a surrounding buffer zone must be demarcated as a green open space in which no activities and direct impacts from the development may be allowed. A management plan which includes monitoring during the construction and operational phases and sustainable conservation must be compiled.

The area for the proposed development is currently vacant, and zoned as residential / commercial. The area consists of open landscapes with very few trees. The section where the rock engraving is situated is directly north of the Weltevreden dirt road, east of the R36 (Lydenburg - Machadodorp road) and south of the Doringbergspruit. Some indistinct Late Iron Age (LIA) stone and agricultural terrace walls are scattered in the surrounding area. The LIA resources are possibly connected to the history of the Bokoni or Pedi groups.

The owners / developers indicated that the site will be preserved *in situ* as a green open space. As far as the survey could establish this site RSR 8 is the only site which will be affected by the footprint of the Lydenburg Mall. The rock engraving site will need special management requirements and will have to be monitored throughout the construction phase as well as on a regular base thereafter. It is recommended that the developments continue in this section as per the requirements and management guidelines in this report.

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PART I**

A. BACKGROUND INFORMATION TO THE PROJECT

AFRIKA Enviro & Biology in association with the owners / developers of the Lydenburg Mall development requested Adansonia Heritage Consultants to assist with mitigation measures and a management plan for a rock engraving site to be preserved *in situ* and included as a green open space in the proposed development on the remainder of *portion 7 of the farm Roodraai 34 JT*.

A Phase 1 Heritage Impact Assessment (HIA) was conducted in May 2006 (*Morning Tide development Complex, Morning Tide Power Line and Abrina Residential development*) by Archaeology Africa cc, Mr. P. Birkholtz (SAHRA Arch. Ref. 9/2/236/0002, Appendix 3).

The area for the proposed development is currently vacant, and zoned as residential / commercial. The area consists of open landscapes with very few trees. The small rocky outcrop where the rock engraving is situated is directly north of the Weltevreden dirt road, east of the R36 (Lydenburg - Machadodorp road) and south of the Doringbergspruit (see Fig. 1). Some indistinct Late Iron Age (LIA) stone and agricultural terrace walls are scattered in the surrounding area. The LIA resources are possibly connected to the history of the Bokoni or Pedi groups.

The owners / developers burnt the area and visibility during the investigation was excellent. The area was scrutinized for more engraved sites, but it is positive that the site as described in the 2006 Phase 1 study, is the only one in this section.

An Environmental Authorisation for the proposed development was granted by the Mpumalanga Department of Economic Development, Environment and Tourism on 28 October 2011 (See Appendix 4), and the development for the proposed Lydenburg Mall, will start during August / September 2013.

The aims for this report are to advise the client in terms of the specifications as set out in the National Heritage Resources Act no., 25 of 1999 (NHRA), to source all relevant information on this rock engraving site and to propose a management plan for its current and future preservation, during and after the development phase of the Lydenburg Mall. The study area is indicated in Appendix 1 & Fig. 1-2. Photographic evidence is included in the text (Fig. 4 – 8).

- This study is a follow-up on the HIA that was conducted in May 2006 (SAHRA Arch. Ref. 9/2/236/0002).
- Type of development: Business development of 11.40ha.
- The area is zoned as residential / commercial.
- Location of Province, Magisterial district / Local Authority and Property (farms): The area falls within the Mpumalanga Province under the jurisdiction of the Thaba Chweu local municipality and the Ehlanzeni District municipality.
- Land owners / developers: Ralindo Pty (Ltd).

- **Terms of reference:** As specified by section 38 (3) of the NHRA, the following information is provided in this report.
 - a) The identification and mapping of a rock engraving site;
 - b) Management plan of the rock engraving site during and after the development phase.

- **Legal requirements:**

The legal context of the report is grounded in the National Heritage Resources Act no. 25, 1999, as well as the National Environmental Management Act (1998) (NEMA).

- **National Heritage Resources Act**

The National Heritage Resources Act no. 25, 1999 (NHRA) aims to promote good management of the national estate, and to enable and encourage communities to conserve their legacy so that it may be bequeathed to future generations. Heritage is unique and it cannot be renewed, and contributes to redressing past inequities.¹ It promotes previously neglected research areas.

All archaeological and other cultural heritage resources are evaluated according to the NHRA, section 3(3). A place or object is considered to be part of the national estate if it has cultural significance or other special value in terms of:

¹National Heritage Resources Act, no. 25 of 1999. p. 2.

- (a) its importance in the community, or pattern of South Africa's history;
- (b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.²

- **Graves**

- **SAHRA Policy on burial grounds**

The policy is that graves and cemeteries should be left undisturbed, no matter how inaccessible and difficult they are to maintain. It is our obligation to empower civil society to nurture and conserve our heritage. It is only when essential developments threaten a place of burial, that human remains should be disinterred to another cemetery or burial ground.

From a historical point of view and for research purposes, it is vital that burial sites are not disturbed. The location and marking of an individual's grave tells a life story, where he / she died possibly defending (or attacking) a particular place or situation and makes it easier to understand the circumstances of his / her death.³

- **Section 38 of the NHRA**

Please take note that the phase 1 Heritage impact assessment has already been conducted in May 2006 (SAHRA Arch. Ref. 9/2/236/0002). The proposed development is a listed activity in terms of Section 38 (1) of the NHRA. Section 38 (2) of the NHRA requires the submission of a HIA report for authorisation purposes to the responsible heritage resources agency, (SAHRA).

²National Heritage Resources Act, no. 25 of 1999. pp. 12-14

³SAHRA, Burial sites, <http://www.sahra.org.za/burial.htm>, Access, 2008-10-16.

The significance of the rock engraving site, RDR 8 (identified in the report by Mr. Birkholtz)⁴ was described as follows (p. 48):

- “Although Iron Age engravings cannot be considered unique features of the Lydenburg landscape, it is still of immense significance, RDR 8 is of Very High Significance.”
- “Due to the extraordinary significance of the LIA rock engravings, as well as the importance of context in rock art, it is recommended that the site be preserved *in situ*.

The following mitigation would be required:

- The site and surrounding buffer zone must be demarcated as a green open space in which no development impacts may be allowed;
- A management plan must be compiled with which the sustainable conservation of the site can be achieved. Such a management plan would include aspects such as monitoring during the construction and operational phases.”

A review comment by SAHRA was issued on 23 October 2007 states as follows:

- The rock engraving (RDR 8) must be preserved *in situ* and a surrounding buffer zone must be demarcated as a green open space in which no activities and direct impacts from the development may be allowed. A management plan which includes monitoring during the construction and operation phases and sustainable conservation must be compiled.

- **Section 35 of the NHRA**

Section 35 (4) of the NHRA stipulates that no person may, without a permit issued by SAHRA, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object. This section may apply to any significant archaeological sites that may be discovered. In the case of such chance finds, the heritage practitioner will assist in investigating the extent and significance of the finds and consult with an archaeologist about further action. This may entail removal of material after documenting the find or mapping of larger sections before destruction.

- **Section 36 of the NHRA**

Section 36 of the NHRA stipulates that no person may, without a permit issued by SAHRA, destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years, which is situated outside a formal cemetery

⁴ Birkholtz, P., *Phase 1 Heritage Impact Assessment for the Morning Tide development Complex, Morning Tide Power Line and Abrina Residential development*, 2006.

administered by a local authority. It is possible that chance burials might be discovered during construction work.

- **Section 34 of the NHRA**

Section 34 of the NHRA stipulates that no person may alter, damage, destroy, relocate etc, any building or structure older than 60 years, without a permit issued by SAHRA or a provincial heritage resources authority. It is possible that other historical or LIA structures which are not indicated in the Phase 1 study (2006) might be discovered during construction work.

B. BACKGROUND TO ARCHAEOLOGY AND HISTORY OF THE STUDY AREA

The extensive Late Iron Age (LIA) settlements in the Lydenburg (Mashishing) area are associated with the rock engravings which are abundant in the open grasslands surrounding the town. Some of the best examples of the Bantu agriculturist rock engravings can be found on the farm Boomplaas, north-west of Lydenburg. Many of these rock art features depict stone walled settlement layout plans (engravings of ground plans representing the shape of settlements people built and lived in), as is illustrated by Maggs (1995).⁵

The rock engravings are of high significance as we know far less about this category of rock art than of the more familiar hunter gatherer art. The rock engravings are widespread in the eastern half of South Africa although relatively few sites have been recorded.⁶

Research by Maggs, Van Hoepen and others show that there exists a close link between the practice of building stone walls and the engraving of homestead pattern images. In the late precolonial period, many of the agricultural communities which built in stone also made engravings near their homes. Both similarities and differences between engraved and built settlement patterns may provide us with a deeper understanding of the patterns. Some engravings may even show aspects of a pattern that are otherwise of low archaeological visibility and therefore liable to be overlooked. Research on the LIA stone walls therefore needs to proceed in association with work on related engravings.⁷ They can however, also have a deeper, symbolic meaning and in order to understand the agriculturist engravings, the religious and symbolic systems of these communities should be studied as well.⁸

⁵ Maggs, T., 1995. *Neglected Rock art: The rock engravings of agriculturist communities in South Africa*, pp. 135-136.

⁶ Maggs, T., 1995, p. 141.

⁷ Maggs, T., 1995, p. 141.

⁸ Maggs, T. *Neglected Rock art: The rock engravings of agriculturist communities in SA* pp.133-134.

Research undertaken by scholars such as Evers (1975) and Marker & Evers (1976) in the Lydenburg area, and Collett (1979; 1982) in the Badfontein Valley have revealed the existence of extensive settlements comprised of terracing, cattle tracks and areas with concentrated enclosures or homesteads.⁹ The stone walled enclosures and cattle tracks found at many of these sites indicate the significance of herding activities. Agricultural activities in turn are indicated by the location of numerous grinding stones as well as terracing used for leveling sloped areas for use as agricultural fields. Ceramic evidence has revealed that the stone walled sites from the Lydenburg district belonged to the *Marateng* phase, which has a strong association with the Pedi.¹⁰

Recent research has linked the LIA stone walled settlements in the Mpumalanga escarpment (Lydenburg area) more specifically to the Bokoni. During the 16th and 17th centuries the Bakoni built a vast complex of stonewalled settlements in this area. These cities were carefully planned around terraced farms and roads that were built to lead cattle to pasture while keeping the cows out of the gardens. In the late 1700's the sites had populations of 30 000 to 50 000 people.¹¹

The historical Bokoni region in Mpumalanga stretched between Orighstad and Carolina and was occupied by pre-colonial farming societies that built stonewalled homesteads, roads and terraces. Delius and Schoeman argued that it was a key location in the precolonial trade system which formed a strategic area between the coast and interior.¹² This gave the Bokoni substantial power but it also attracted other expanding groups such as the Swazi and Pedi. The resulting conflict eventually led to the destruction of Bokoni in the 19th century. Bokoni eventually fell under the control of the Pedi. Many people fled the area during the periods of violence, and those who remained were incorporated into the Pedi state. The terraces and stonewalled sites fell into disuse, but the initial footpaths of the Bokoni were used by other groups to trade with the coast.¹³

C. DESCRIPTION OF AREA TO BE AFFECTED BY THE PROPOSED DEVELOPMENT

The proposed project will involve the following:

⁹ Birkholtz, P., *Phase 1 Heritage Impact Assessment for the Morning Tide development Complex, Morning Tide Power Line and Abrina Residential development*, 2006, p.15.

¹⁰ Birkholtz, P., *Phase 1 Heritage Impact Assessment for the Morning Tide development Complex, Morning Tide Power Line and Abrina Residential development*, 2006, p. 14.

¹¹ Rossouw, C. A new experience in local tourism, *in Lowvelder* (9 June 2009), p. 7.

¹² Coetzee T., & Schoeman, A., Mapping Trace in Bokoni, *Archaeological Bullitin* 2011, p. 7.

¹³ Coetzee & Schoeman, Mapping Trace in Bokoni, *Archaeological Bullitin* 2011 p. 9.

- Type of development: Business development of 11.40ha on a residential / commercial zoned area.

The area that will be affected by the proposed development is indicated in Appendix 1. The two LIA sites LIA 6 & LIA 7 identified by Birkholtz (2006), will not be affected by the Lydenburg Mall development.

D. LOCALITY

The small rocky outcrop where the rock engraving is situated is directly north of the Weltevreden dirt road, east of the R36 (Lydenburg - Machadodorp road) and south of the Doringbergspruit (see Fig. 6 & 7). Some indistinct Late Iron Age (LIA) stone and agricultural terrace walls are scattered in the surrounding area (RDR 6 & 7). The LIA resources are possibly connected to the history of the Bokoni or Pedi groups. The general study area is currently vacant, and consists of open landscapes with very few trees. (See Appendix 1).

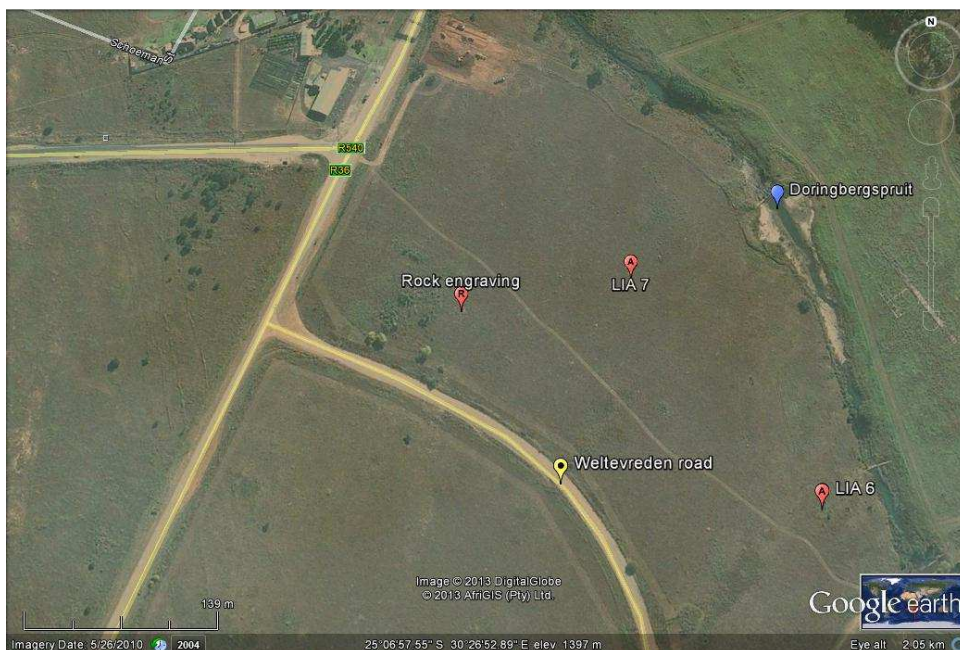


Fig. 1: Locality of rock engraving site: The residential area of Lydenburg (Mashishing) is located directly north of the Doringbergspruit.

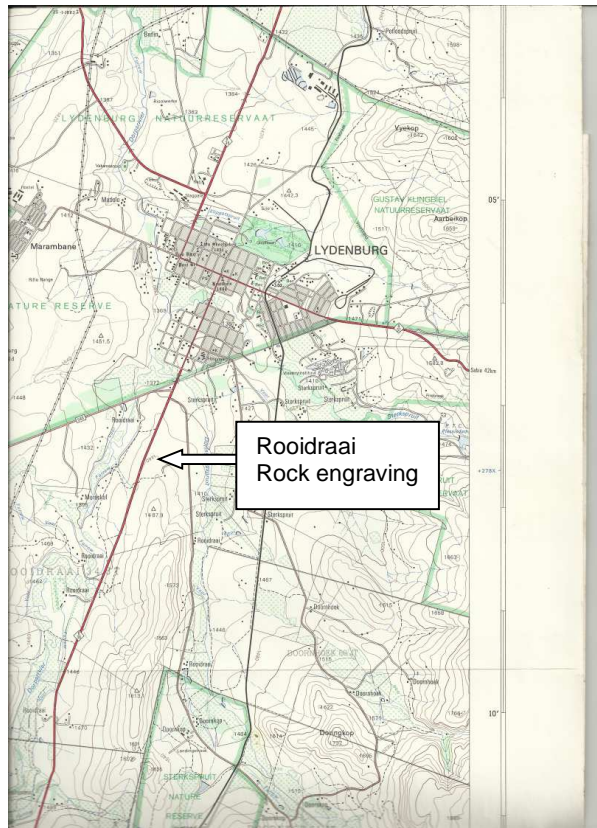


Fig. 2: Topographical map 1:50 000 topographical map, 2530AB LYDENBURG.

- **Description of methodology:**

Google images of the site (Appendix 1 & Fig. 1), indicate the study area of the proposed development. In order to reach a comprehensive conclusion regarding the archaeological resources in the study area, the following methods were used:

- The Phase 1 HIA by Archaeology Africa cc, Mr. P. Birkholtz, May 2006, was studied (SAHRA Arch. Ref. 9/2/236/0002) (see Appendix 3).
- The fieldwork and survey was conducted extensively on foot, with three people;
- The terrain consists of open grassland which was burnt to make visibility easier;
- The relevant data was located with a GPS instrument (Garmin Etrex) datum WGS 84, and plotted. Co-ordinates were within 4-6 meters of identified sites;
- Evaluation of the resources which might be impacted upon by the footprint, was done within the framework provided by the National Heritage Resources Act, no. 25 (1999);
- Personal communication with relevant stakeholders on the specific study area, were held, Mr. A de la Hunt and Mr. D. van der Walt.

- GPS: Co-ordinates of the perimeters of the study area:

Co-ordinates		
	Latitude	Longitude
Rock engraving	S 25° 06' 56.96"	E 30° 26' 52.11"
LIA 6	S 25° 07' 02.02"	E 30° 27' 02.08"
LIA 7	S 25° 06' 56.02"	E 30° 26' 57.03"

E. DESCRIPTION OF IDENTIFIED SITES

This study concentrates only on the rock engraving site, as the LIA sites RDR 6 & 7 fall outside the Lydenburg Mall development area. RDR 6 & 7 consist both of poorly preserved and indistinct LIA stone walling. Google images show a layout comprised of concentric circles. RDR 7 represents the closest Iron Age stone walled site to the rock engraving.¹⁴

All comments should be studied in conjunction with the figures and appendices, which indicate the areas, and which corresponds with the summary below. Photographs (Fig. 6 & 7) show the general view of the study area. Visibility was good after the veld was burnt.

Site location	Description/Comments	Proposed building location
Rock Engraving	This single site is situated on a rocky outcrop consisting of dolerite (diabase). These outcrops occur in the landscape around Lydenburg, which consists of a predominant shale nature. (See description of rock engraving below), (See Fig. 3, 4, 5, 6 & 7).	S25° 06' 56.96" E30° 26' 52.11"
RDR 6 (LIA)	Poorly preserved LIA stone walls. The google image (Appendix 1) show very faint concentric circles. This section falls outside of the study area.	S25° 07' 02.02" E30° 27' 02.08"
RDR 7 (LIA)	Poorly preserved LIA stone walls. The google image shows almost no indication of LIA stone walls (Appendix 1). This section falls outside of the study area.	S25° 06' 56.02" E30° 26' 57.03"

The single engraving is situated on a small rocky outcrop consisting of dolerite (diabase), of approximately 50² in size. The engraving was done on a single large rock which measured 1450mm in length, 300mm at the top (east) end, 550mm in the middle section at its base (west). It appears as if a piece of the rock was broken off but no loose pieces of the same rock could be linked to the above. The area was scrutinized for more engravings in the direct vicinity, but it revealed no other sites. The rock engraving consists of 11 distinct segments, and possibly two or three indistinct segments. It is not currently clear if it resembles a LIA settlement layout plan

¹⁴ Birkholtz, P. 2006 *Phase 1 HIA for the Morning Tide Development Complex, Morning Tide Power Line and Abrina Residential Development*, pp. 44-45.

associated with the nearby indistinct stone walls.

Dolerite and diabase have a very dark weathered outer skin or patina. When parts of this are removed a strong contrast with the heart material results.¹⁵ The rock engraving of Rooidraai (RDR 8) was done by pecking the patina away with another stone. The freshly engraved surface weathers, forming a patina of its own which after many years approaches that of the original surface, thus making some engravings very difficult to see.¹⁶ This is clearly the case with the Rooidraai engraving (see Fig 4 & 5).

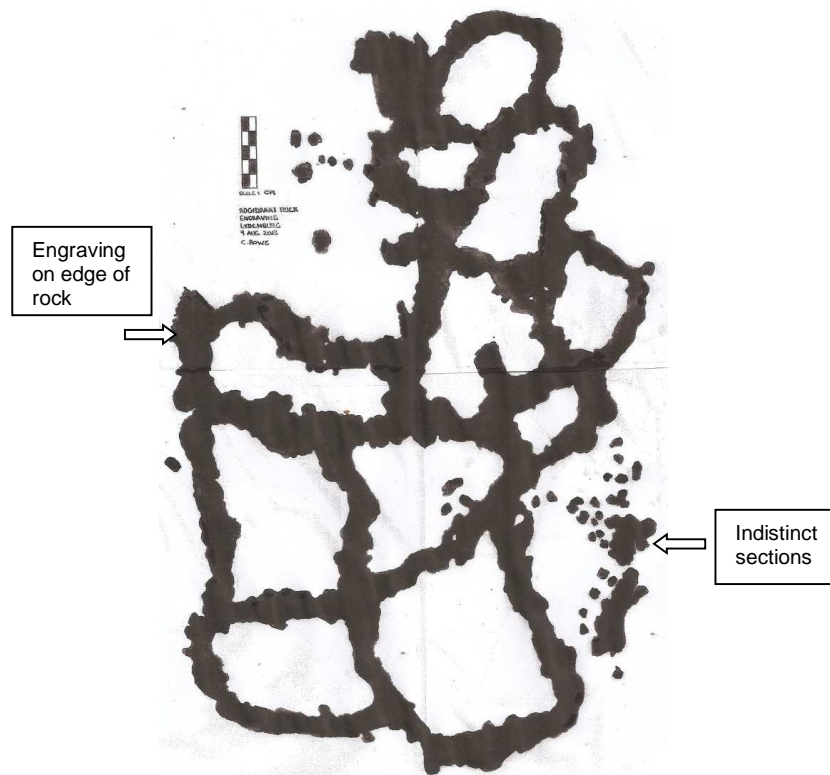


Fig. 3: Rock engraving RDR 8, Rooidraai.

¹⁵ Dowson, T., *The rock engravings of southern Africa*, p. 1.

¹⁶ Dowson, T., *The rock engravings of southern Africa*, p. 1.



Fig. 4: The loose dolerite stone with the rock engraving. The arrow indicates the edge of the stone where a piece has broken off. The engraving might have continued further.



Fig. 5: RDR 8, The Rooidraai rock engraving. The patina resembles that of the natural rock.



Fig. 6: The arrow indicates the rocky outcrop.



Fig. 7: A closer view of the small rocky outcrop.

F. RECOMMENDATIONS

In the Phase 1 report by Archaeology Africa, Mr. Birkholtz identified the site and described the significance of the site as follows (p. 48):

- “Although Iron Age engravings can not be considered unique features of the Lydenburg landscape, it is still of immense significance, RDR 8 is of Very High Significance.”
- “Due to the extraordinary significance of the LIA rock engravings, as well as the importance of context in rock art, it is recommended that the site be preserved *in situ*.

The following mitigation would be required:

- The site and surrounding buffer zone must be demarcated as a green open space in which no development impacts may be allowed;
- A management plan must be compiled with which the sustainable conservation of the site can be achieved. Such a management plan would include aspects such as monitoring during the construction and operational phases.”

The review comment by SAHRA (23 October 2007) states the following:

- The rock engraving (RDR 8) must be preserved *in situ* and a surrounding buffer zone must be demarcated as a green open space in which no activities and direct impacts from the development may be allowed. A management plan which includes monitoring during the construction and operation phases and sustainable conservation must be compiled.

As far as the survey could establish, this site RSR 8 is the only site which will be affected by the footprint of the Lydenburg Mall. It is therefore recommended that the development of the proposed Lydenburg Mall continue as per the review comments of SAHRA as well as with the management guidelines as set out in Part II. The owners of the proposed Lydenburg Mall development indicated that they intend to preserve the rock engraving site *in situ* as part of a green open space. A 5m buffer zone must demarcate the rock engraving site which must be constantly monitored during the construction and operational phases by a qualified archaeologist.

G. CONCLUSION

This report concentrated only on the Rooibraai rock engraving site (RDR 8), which the owners / developers will preserve *in situ* as part of a green open space. This will allow for the site to be studied in its original environment in future.

Archaeological material or graves are not always visible during a field survey and therefore some significant material may only be revealed during construction activities of the proposed development. It is therefore recommended that the owners be made aware of this possibility and when human remains, clay or ceramic pottery etc. are observed, a qualified archaeologist must be notified and an assessment be done. Further research might then be necessary in this regard for which the developer will be responsible.

Adansonia Heritage Consultants cannot be held responsible for any archaeological material or graves which were not located during the survey.