

**HERITAGE IMPACT ASSESSMENT OF A SECTION OF THE
KRAAIPAN SECONDARY ROAD, VRYBURG AND
DITSBOTLA DISTRICTS, NORTH WEST PROVINCE**

For:

ENVIRONMENTAL IMPACT MANAGEMENT SERVICES
PO Box 2083
PINEGOWRIE
2123

Survey conducted and report prepared by the:

NATIONAL CULTURAL HISTORY MUSEUM
PO Box 28088
SUNNYSIDE
0132

Telephone - (012) 324 6082
Telefax - (012) 328 5173

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SUMMARY

Heritage impact assessment of a section of the Kraaipan Secondary Road, Vryburg and Ditsobotla Districts, North West Province

The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural importance found within the boundaries of the road which it is proposed to upgrade.

Based on what was found and its evaluation, it is recommended that the proposed development can continue in the area, on condition of acceptance of the following recommendations:

- The identified sites, features and areas, as discussed in section 7 and presented in Appendix 2, should be avoided under all circumstances.
- The developer should be notified that if archaeological sites are exposed during construction work, it should immediately be reported to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made.

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HERITAGE IMPACT ASSESSMENT OF A SECTION OF THE KRAAIPAN SECONDARY ROAD, VRYBURG AND DITSOBOTLA DISTRICTS, NORTH WEST PROVINCE

1. THE SURVEY

The National Cultural History Museum was contracted by **Environmental Impact Management Services** to survey a section of road that is to be upgraded. The aim of the survey was to locate, identify, evaluate and document sites, objects and structures of cultural importance found within the boundaries of the area that is to be impacted by the developed.

2. TERMS OF REFERENCE

The scope of work consisted of conducting a Phase 1 archaeological survey of the site in accordance with the requirements of Section 38(3) of the National Heritage Resources Act (Act 25 of 1999).

This include:

- Conducting a desk-top investigation of the area
- A visit to the proposed development site

The objectives were to

- Identify possible archaeological, cultural and historic sites within the proposed development areas;
- Evaluate the potential impacts of construction, operation and maintenance of the proposed development on archaeological, cultural and historical resources;
- Recommend mitigation measures to ameliorate any negative impacts on areas of archaeological, cultural or historical importance.

3. DEFINITIONS AND ASSUMPTIONS

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

- X **Cultural resources** are all nonphysical and physical human-made occurrences, as well as natural occurrences that are associated with human activity. These include all sites, structures and artefacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development.
- X The **significance** of the sites and artefacts are 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.

- X 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.
- X The latitude and longitude of archaeological sites are to be treated as sensitive information by the developer and should not be disclosed to members of the public.

4. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are mainly dealt within two acts. These are the South Africa Heritage Resources Act (Act 25 of 1999) and the Environmental Conservation Act (Act 73 of 1989).

4.1 South African Heritage Resources Act

Archaeology, palaeontology and meteorites

In terms of Section 35(4) of this act, no person may, without a permit issued by the responsible heritage resources authority destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or material or any meteorite; bring onto, or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

Structures:

Section 34(1) of this act states that no person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

“Structure” means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith;

“Alter” means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or other decoration or any other means.

Human remains:

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

(a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

(b) 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 administered by a local authority; or

(c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

4.2 Environmental Conservation Act

This act states that a survey and an evaluation of cultural resources should be undertaken in areas where development, which will change the face of the environment, is to be made. The impact of the development on the cultural resources should also be determined and proposals to mitigate this impact is to be formulated.

5. METHODOLOGY

5.1 Preliminary investigation

5.1.1 Survey of the literature

A survey of the relevant literature was conducted with the aim of reviewing the previous research done and determining the potential of the area. In this regard, various anthropological, archaeological and historical sources were consulted - see the list of references below. Nothing pertaining to this particular area was found, although a number of references to events in the larger area exist.

5.1.2 Data bases

The **Archaeological Data Recording Centre** (ADRC), housed at the National Cultural History Museum, Pretoria, was consulted. The **Environmental Potential Atlas** was also consulted.

5.1.3 Other sources

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

5.2 Field survey

The field survey was done according to generally accepted archaeological practices, and was aimed at locating all possible sites, objects and structures. The area that had to be investigated was identified by Environmental Impact Management Services by means of maps. The area was investigated by driving the specific road, after which the road shoulders and adjacent topographical features such as trenches, holes, outcrops and clusters of trees as well as man-made occurrences were investigated on foot.

Where possible, local people were interviewed in an effort to obtain information on the existence of known sites.

5.3 Documentation

All sites, objects and structures identified were documented according to the general minimum standards 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. This information was added to the description in order to facilitate the identification of each locality.

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.

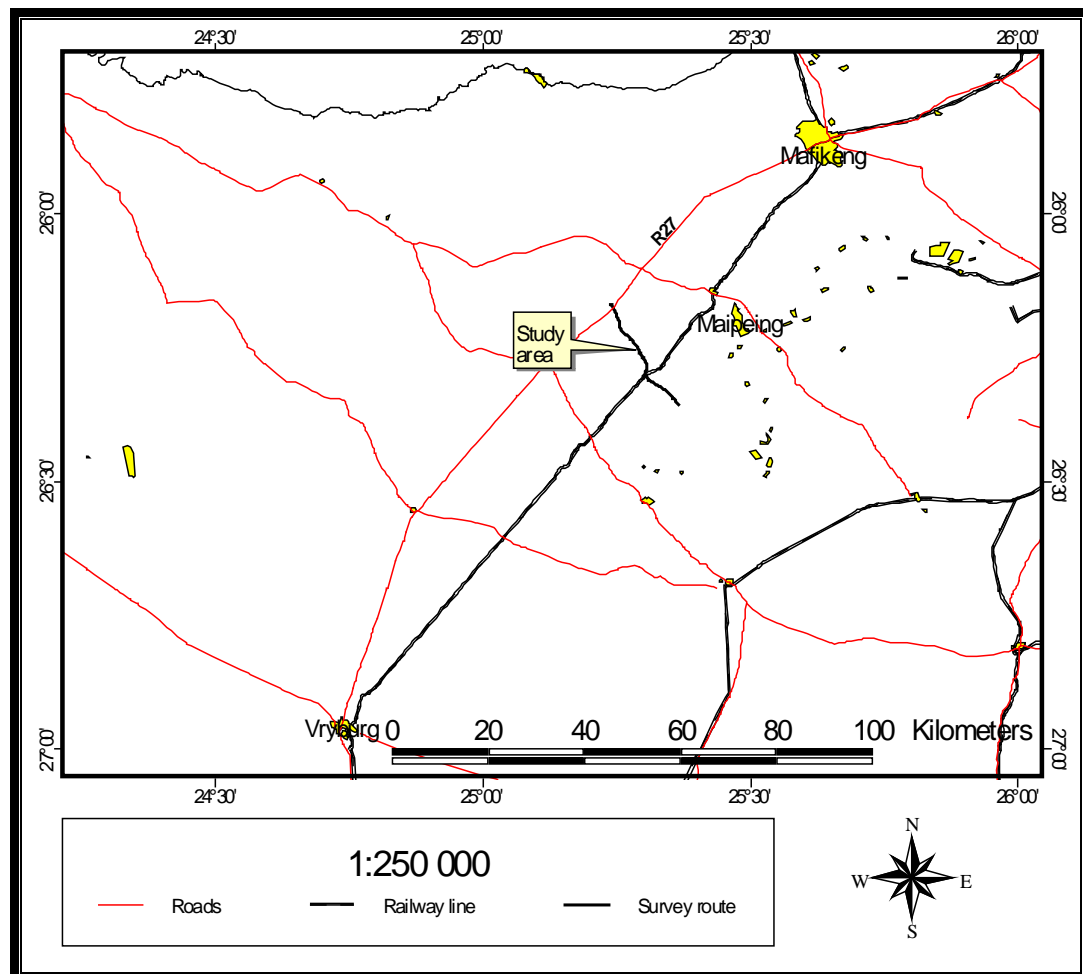
Map datum used: Hartebeeshoek 94 (WGS84).

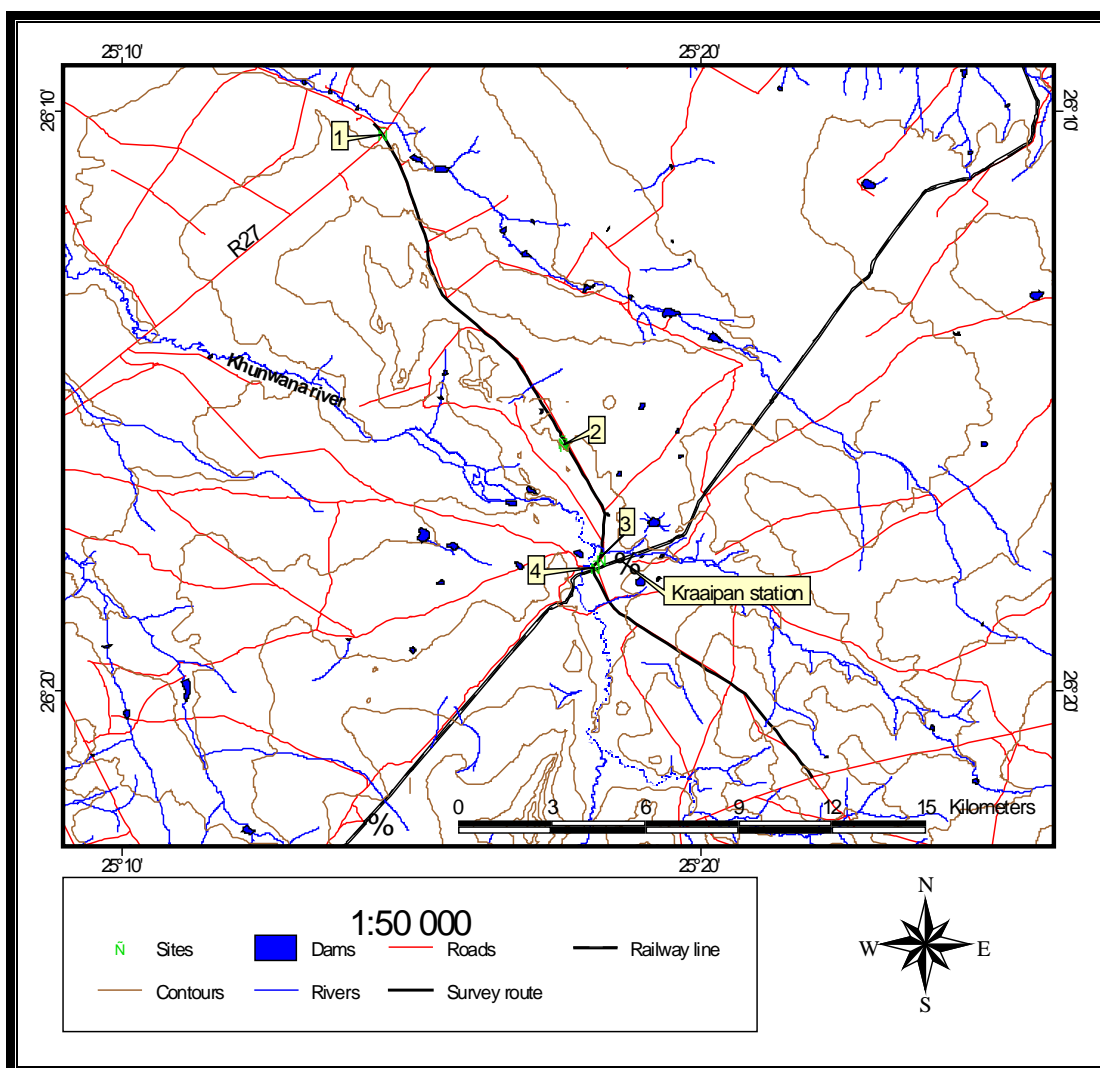
6. DESCRIPTION OF THE AREA

The area investigated is a 21 km stretch of gravel road. It starts approximately 50 km from Mafikeng at the junction with the road between Mafikeng and Vryburg (R27), passing the railway station known as Kraaipan and continuing for approximate 10 km before joining up with another gravel road (Fig. 1 & 2).

The topography of the area consists of gently rolling plains, bisected by a number of smaller rivers. The geology of the area is made up of sand, except for an area which roughly corresponds with that which the road follows. The first section consists of a chert outcrop, which changes to granite south of the railway line at Kraaipan.

The vegetation to the north of the railway line is classified as Kalahari plains thorn bushveld, which changes to Dry sandy highveld grassland south of the railway line.





7. DISCUSSION

A number of sites were identified and must be considered during development work

7.1 Stone Age

A few stone tools dating to the Middle Stone age were identified as surface material. These occur in the different outcrops next to the road. However, being surface objects, they are not in primary context anymore and therefore have very low to no significance.

7.2 Iron Age

Some very rudimentary stone walling occur on an outcrop on the western side of the road. The walls was produced by removing smaller stones and incorporating it with the larger rock formations of the outcrop, in effect creating flat open spaces for settling on. Some faunal

remains and one undecorated piece of pottery was identified, making the identification and dating of the site difficult. However, they are associated with the Iron Age as contemporary sources such as Smith (1975), who was one of the first whites to pass through the area, described such walls. Similarly Breutz (1955), who later did surveys in the area, also recorded the existence of walled sites.

7.3 Historical period

7.3.1 The railway line between Bulawayo (Zimbabwe) and Botswana in the north, and the Cape to the south runs through Mafikeng. During the Anglo-Boer War, this line played an important role in the operation of armoured trains in the area, transporting goods, ammunition and soldiers. As events would soon demonstrate, the railway line became a battleground of explosions and destruction during the siege Mafikeng, which lasted for 217 days, from October 1899 to May 1900. It therefore had to be well guarded to ensure an open line. One measure was the erection of corrugated iron blockhouses and defence works along the line. Both Kraaipan and Maritsani, as small stations, formed part of the blockhouse line between Mafikeng and Polfontein.

However, in most areas these blockhouses were either removed after the war in a deliberate clearing up action, or the material was taken by local people for use (Van Vollenhoven & van den Bos 1997).

Kraaipan

The first shots of the war were fired at Kraaipan when about 800 Boers under Gen. JH (Koos) De la Rey, 'adviser' to General Piet Cronjé, ambushed an armoured train, called *Mosquito*, at Kraaipan. A few British soldiers died during this event and a small cemetery containing their graves still exists today (Fig. 3).

Historically speaking, this is an important area/site, but apart from the cemetery, nothing remains to remind one of this event. The railway station has been extended, houses and informal settlements occupy the area, etc. all contributing to detract from the sense of place that could have existed here as a result of the historical event.

Maritsani

Maritsani station is located to the north east of Kraaipan and was an important supply station for water for the Boers. During the relief of Mafikeng in May 1900, a battle took place near the Maritsane River, west of Maritsane station on 13 May 1900. It was the only big attempt by the Boers, under Commandant PJ Liebenberg, in trying to stem General Hunter's advance further eastwards. A small cemetery and memorial stone commemorating the British dead is located next to the R27 road, but it is well outside the study area (Fig. 4).

7.3.2 At the intersection of the gravel road and the R27, a small marble stone commemorate a certain Manie van Rensburg, who tragically died here on 22 October 1964 (Fig. 5).

7.3.3 A contemporary cemetery containing as many as 50 graves occurs in Kraaipan, adjacent to the church.

8. IDENTIFICATION OF RISK SOURCES

The following project actions may impact negatively on archaeological sites and other sites of cultural importance. The actions are most likely to occur during the construction phase of the proposed project.

- Road widening and the construction of culverts may expose and uncover ESA and MSA tools.
- Borrow pits, construction camps, access roads, etc. may expose and uncover ESA and MSA tools.

9. RECOMMENDATIONS

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Based on what was found and its evaluation, it is recommended that the proposed development can continue in the area, on condition of acceptance of the following recommendations:

- The identified sites, features and areas, as discussed in section 7 and presented in Appendix 2, should be avoided under all circumstances.
- The developer should be notified that if archaeological sites are exposed during construction work, it should immediately be reported to a museum, preferably one at which an archaeologist is available, so that an investigation and evaluation of the finds can be made.

10. REFERENCES

10.1 Data bases

Archaeological Data Recording Centre, National Cultural History Museum, Pretoria.

Environmental Potential Atlas, Department of Environmental Affairs and Tourism.

10.2 Literature

Acocks, J.P.H. 1975. *Veld Types of South Africa*. Memoirs of the Botanical Survey of South Africa, No. 40. Pretoria: Botanical Research Institute.

Breutz, P-L. 1955. *The tribes of the Mafeking area*. Ethnological Publications No. 32. Pretoria: Government Printer.

Holm, S.E. 1966. *Bibliography of South African Pre- and Protohistoric archaeology*. Pretoria: J.L. van Schaik.

Lye, W.F. 1975. *Andrew Smith's journal of his expedition into the interior of South Africa, 1834-1836*. Cape Town: A A Balkema.

Mason, R.J. 1962. *Prehistory of the Transvaal*. Johannesburg: Witwatersrand University Press.

Richardson, D. 2001. *Historic sites of South Africa*. Cape Town: Struik Publishers.

Saks, D.Y. 1997. Trooper CC Hawkins and the South African War. *Military History Journal* 10(5).

Smit, A.P. & Maré, L. 1985. *Die beleg van Mafeking. Dagboek van Abraham Stafleu*. Pretoria: Raad vir Geesteswetenskaplike Navorsing.

Van Riet Lowe, C. n.d. *The distribution of Prehistoric rock engravings and paintings in South Africa*. Archaeological Survey, Archaeological Series No. 7.

Van Vollenhoven, A. & Van den Bos, J. 1997. *'n Kultuurhulpbronstudie van die Britse blokhuisstelsel van die Tweede Anglo-Boere-oorlog (1899-1902) in die voormalige Transvaal (ZAR)*. Pretoria: Raad vir Geesteswetenskaplike Navorsing.

Van Warmelo, N.J. 1935. *A Preliminary survey of the Bantu Tribes of South Africa*. Ethnological Publications No. 5. Pretoria: Government Printer.

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

Wilson, H.W. 1901. *With the Flag to Pretoria: A History of the Boer War, 1899-1900*. London: Harmsworth Brothers.

9.3 Maps

1: 50 000 Topocadastral maps – 2625AA, 2625AB, 2625AD

11. PROJECT TEAM

J van Schalkwyk

J van den Bos (military history)

APPENDIX 1: STANDARDIZED SET OF CONVENTIONS USED TO ASSESS THE IMPACT OF PROJECTS ON CULTURAL RESOURCES

Significance of impact:

- low where the impact will not have an influence on or require to be significantly accommodated in the project design
- medium where the impact could have an influence which will require modification of the project design or alternative mitigation
- high where it would have a “no-go” implication on the project regardless of any mitigation

Certainty of prediction:

- Definite: More than 90% sure of a particular fact. Substantial supportive data to verify assessment
- Probable: More than 70% sure of a particular fact, or of the likelihood of that impact occurring
- Possible: Only more than 40% sure of a particular fact, or of the likelihood of an impact occurring
- Unsure: Less than 40% sure of a particular fact, or the likelihood of an impact occurring

Recommended management action:

For each impact, the recommended practically attainable mitigation actions which would result in a measurable reduction of the impact, must be identified. This is expressed according to the following:

- 1 = no further investigation/action necessary
- 2 = controlled sampling and/or mapping of the site necessary
- 3 = preserve site if possible, otherwise extensive salvage excavation and/or mapping necessary
- 4 = preserve site at all costs

Legal requirements:

Identify and list the specific legislation and permit requirements which potentially could be infringed upon by the proposed project, if mitigation is necessary.

APPENDIX 2: SURVEY RESULTS²

[Previous site numbers relate to other known sites on a particular ¼ degree sheet already documented in the ADRC, and does not necessarily refer to sites occurring on or close to the specific area of development.]

Map datum used: Hartebeeshoek 94 (WGS84).

1. Site number: 2625AA1

Location: Ferndale 286: S 26E10'26.0"; E 25E14'31.0"

Description: Small marble memorial stone next to the road. Inscription on the stone (translated from Afrikaans) reads: Manie van Rensburg, who tragically died here on 22 October 1964.

Discussion: This feature is some 20 metres distance from the road and it is therefore unlikely that it would be impacted on by the proposed development.

Significance of impact: Low

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

2. Site number: 2625AD5

Location: Setlagole Native Reserve: S 26E15'48.0"; E 25E17'40.0" - S 26E15'44.5"; E 25E17'37.8"

Description: Rudimentary stone walls found on a ridge running parallel to the road. The walls probably date to the Late Iron Age or to early historical times.

Discussion: This ridge is some distance from the road and it is unlikely that the development would impact on it.

Significance of impact: Low

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

3. Site number: 2625AD3

Location: Setlagole Native reserve: S 25E17'46.0"; E 25E18'17.0"

Description: Contemporary cemetery adjacent to the church

Discussion: This site is approximately 80 metres from the road, next to buildings and it is therefore unlikely that the development would impact on it.

Significance of impact: Low

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

4. Site number: 2625AD2

Location: Setlagole Native Reserve: S 26E17'53.0"; E 25E18'15.0"

Description: Cemetery containing three graves, of which only two have markers, of British soldiers who died during the attack on the armoured train.

Discussion: This site is situated approximately 120 m from the road and is therefore unlikely to be impacted on by the development

Significance of impact: Low

Recommended management action: 1 = no further investigation/action necessary

Legal requirements: None

²² See Appendix 1 for an explanation of the conventions used in assessing the cultural remains.

APPENDIX 3: 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 1840 in this part of the country

ADRC - Archaeological Data Recording Centre

core - a piece of stone from which flakes were removed to be used or made into tools

SAHRA - South African Heritage Resources Agency

APPENDIX 4: ILLUSTRATIONS



Figure 3. The military cemetery at Kraaipan



Figure 4. The Maritzani memorial.



Figure 5. The Manie van Rensburg memorial