

Introduction

The Institute for Cultural Resource Management was approached to undertake an archaeological survey of the area to be affected by the proposed N3 toll road. This road is situated between the Tugela Toll Plaza, KwaZulu-Natal, and approximately 10km north of Warden, Free State.

There has been no prior systematic archaeological survey in this area. Lewis-Williams (1984) has undertaken a survey of selected rock art sites in the Harrismith magisterial district, however this did not include the farms to be affected by the proposed road. In 1974 Maggs' surveyed the N3 road from the Tugela River to De Beers Pass by means of aerial photography. In this report (unpub.) he noted several significant Iron Age and/or Historical stone walling sites, especially on the farms Keversfontein and Goedgedacht. Maggs (1976) has undertaken an aerial photography survey of selected parts of the Free State and KwaZulu-Natal. These surveys indicate that archaeological sites exist in the area to be affected by the road. A full archaeological survey was thus required.

The terms of reference for this report are to:

- identify archaeological, historical and cultural sites on the proposed route (ie cultural resources);
- assess the significance of these sites

Legislation Pertaining to Cultural Resources

Archaeological sites are protected by various forms of legislation, such as the National Monuments Act. This Act makes it an offense to damage, alter, destroy or remove artefacts from archaeological, historical and palaeontological sites as well as human graves without permission from the National Monuments Council. Permission is granted in the form of a permit, which may include restrictions regarding the development of that site. This restriction often necessitates some form of archaeological mitigation. This Act is binding for any research and development. All buildings, sites, and structures older than fifty years are protected under this legislation.

The National Monuments Act makes it clear that cultural sites older than fifty years, as well as palaeontological sites, require a permit if they are to be damaged or destroyed. Engineering activities are not excluded from this legislation. The only occasion a permit is not required for engineering activity, is if the cultural remains are to be moved from their original site. Nonetheless, an institute such as a museum or the National Monuments Council have to be informed prior to the removal of the remains. Failure to do so is an offence.

Methodology

Both a desktop analysis and a foot survey were undertaken as part of this project. The desktop analysis took place at the Natal Museum, since this museum is the provincial repository for all known archaeological sites in KwaZulu-Natal. The National Museum, at Bloemfontein was consulted regarding archaeological sites in the Harrismith magisterial district. All archaeological sites are given a National Site Number, that corresponds to the relevant 1:50 000 map. Material from these sites is given accession numbers, and forms part of a museum's collection for education, display and research.

The desktop analysis is undertaken to determine already recorded sites and the probability of archaeological sites occurring in a given area. This is achieved by analysing existing records of archaeological sites in the area, as well as noting the geology, topography, soil types and water sources. This method of site 'detection' is fairly accurate when dealing with agriculturist sites, since ecology and farming are interrelated. Only one site, 2829BC4, has been previously recorded in the study area.

The desktop analysis included the use of aerial photographs to determine the location of sandstone outcrops and structures with or without stone walling. These are easily identifiable through the use of a magnifying glass. This approach allowed me to identify sensitive areas along the route of the proposed road.

The foot survey entailed walking the study area and is limited in that it cannot detect subsurface features, or features obscured by tall or dense vegetation. Both of these constraints occurred during the foot survey. To counter these constraints I concentrated on specific areas that were more likely to yield archaeological site information.

These were:

- erosion gullies;
- termite mounds;
- animal burrows; and,
- higher vantage points enabling a view of the remains of settlements;

In addition to these physical features, previous experience of Iron and Stone Age settlement patterns, as well as local topography, informed me of potential site locations.

Description of Archaeological Concepts

Archaeological sites in sub-Saharan Africa are grouped primarily into three ages, or time periods. These three periods are further subdivided into various time units (Table 1). These nomenclatures are, however, used for convenience in dating and referring to specific technologies and/or economies. They do not reflect the subtle differences between socioeconomic groups, nor do they imply some form of lineal social evolution or spatial separateness on the landscape. The people living in the study area were hunter-gatherers, Bantu-speaking farmers, and European colonists.

TABLE 1: ARCHAEOLOGICAL PERIODS THROUGH TIME

Period	Sub-division	Abbreviation	Approximate age	Stone Age	Early Stone Age	ESA
2 million years ago to 120 000 years ago			Middle Stone Age	MSA	120 000 years ago to 30 000 years ago	
Late Stone Age	LSA	30 000 years ago to the last century				
Age	EIA	1 700 years ago to 1000 years ago		Late Iron Age	LIA	1000 years ago to AD 1830
		Historical Period	HIST	post-1830 AD		

Definition of an archaeological site Archaeological sites have been defined using various criteria. I use the definition used by the Natal Museum for a recent project to determine site significance and predictive modelling (Wahl 1996). These definitions vary according to the type of site analysed, and are:

Stone Age

"ten or more stone artefacts; or fewer than ten stone artefacts but which occur in association with other stone Age and/or Iron Age artefacts";

"other...artefacts" include art, beads, grinding stones, engravings, pottery, and places of spiritual/religious importance.

Iron Age

more than "ten sherds, but [including] sites with fewer than ten sherds, but that occur in association with other Iron Age and/or Stone Age artefacts";

"other artefacts" include engravings, graves, grindstones, stone walling, settlements, and places of spiritual/religious importance (Wahl 1996:11).

Environmental Background

The proposed route for the road passes through several vegetation types, water sources and geological formations. The large rivers such as the Meulrivier, Wilge River, Great Gift River, as well as perennial streams and rock pools are freshwater sources for past and present inhabitants of the affected area.

The vegetation (Acocks1975) from south to north is:

- Southern Tall Grassveld;
- Highland Sourveld and Dohne Sourveld;

- Highland Sourveld to Cymbopogon-Themeda Veld Transition ;
- Themeda Veld to Cymbopogon-Themeda Veld Transition (patchy); and,
- Cymbopogon-Themeda Veld (sandy).

The geological groups and formations in the Harrismith district are, from south to north (Geological Survey 1994):

- Ecca Group
- Vryheid Formation;
- Volksrust Formation.
- Beaufort Group
- Adelaide Formation;
- Tarkastad Formation (not occurring in area of the road).

These formations include (Maggs 1976; Geological Survey 1994):

- alternating shales;
- mudstone;
- sandstone;
- dolerite;
- lava; and,
- quartzites

The combination of the geology, soils and hydrology initially indicated that certain areas were archaeologically sensitive, especially for farming communities who are reliant on environmental factors. For example, Sweetveld grasslands with sandstone or dolerite for building material appear to be favoured landscapes. The shale deposits in the Harrismith district are known to have palaeontological sites.

Description and Assessment of Sites in the Study Area

Table 2 lists each site and its significance. Each site is allocated a recorder's number in the field and a national site number at a later stage.

The sites recorded in this survey include:

1. Human burials - the intentional internment of a person in a defined grave.
2. Monument - the erection of a feature in commemoration of a specific person, group of people, or an activity.
3. Markers - individual or a cluster of objects used to demarcate a boundary.
4. Rock art - the use of a painting medium on a rock face to depict an image.
5. Palaeontological sites - the remains of fossilised flora and fauna.
6. Settlements - the construction of houses for domestic activities.
7. Stone walling - the erection of walls for livestock pens or boundaries
8. Trees - trees planted for specific socio-political reasons, or to depict a cultural attribute, and thus have cultural significance.

Human burials

I define Sotho and Zulu graves according to current geopolitical boundaries. While this is not an ideal definition, the geographical distance between the two grave styles reinforces my definition. Furthermore there appears to be a difference in the construction methods of the graves. The graves recorded in the study area belong to Sotho, Nguni and European people. The graves differ in construction according to each social group. Both Sotho and Zulu graves tend to be stone cairns made from locally available raw materials. In the study area, Sotho graves tend to be wider and longer than the Zulu graves, have headstones, and are grouped together near a settlement, whereas Zulu graves are often isolated occurrences, and in association with livestock pens. Archaeological excavations and/or anthropological

research may be able to confirm my view. European graves differ from Sotho and Zulu graves in that they have more ornate headstones, are made from marble, and have Christian epitaphs.

ALP1

This site consists of three graves, one possible grave, and two rectangular houses. Three graves are sandstone cairns with small headstones while, while the possible grave is a circle of stones that may indicate a much older, or more disturbed, grave. Two graves are in an east-west orientation, while the third grave is in a north-south orientation.

BD1

Two possible graves exist approximately 50m from the main livestock pen of this site. The graves consist of sandstone cairns beside a sandstone boulder and are approximately 2m long and 1m wide in an east-west orientation. The graves do not appear to have been excavated deeply into the soil. These are probably Sotho graves.

GW1

This grave is approximately 600m from the proposed road and is unlikely to be directly affected. The grave is that of a British soldier dating to the Anglo-Boer War. There is an unmarked sandstone headstone.

KFN1

There are two graves between the stone walled settlement and the more recent house. The graves are small stone cairns and may be associated with either settlement. More graves may exist in the tall grasses. The proposed road will effect these graves.

Schaapsdrift

According to the previous owner of Schaapsdrift, there are several Sotho graves on his farm. These graves are not in the direct path of the road.

SUS1

There are 35 graves in an east-west orientation. The graves are mostly sandstone cairns that are 2m x 1m in size and in various stages of preservation. The most eastern graves are not cairns, but surrounded by a rectangular row of stones or a low cement wall. Most of these graves have small headstones on the western side of the grave, while others have metal sign boards. The signboards and larger headstone have inscriptions, although all are not legible nor dated.

The only dated grave dates to 15 September 1973, and belongs to Ms A. Mahlaba. The headstone from this grave is in the shape of a Christian cross. Another grave belongs to Mr Z. Mavimba, and two others belong to people with the surname of Tshabalala. Several graves appear to be older than the one dating to 1973.

These graves are not in the direct path of the proposed road. There is a settlement further south of these graves and the people living there may know more about the deceased's relatives.

SVK1

The graveyard belongs to the Wessels family who lived on the farm Somersvlakte before and after 1890 AD. Some buildings of the nearby farmhouse appear to be older than 100 years old and coincide with the dates of the graves.

There are two rows of graves in a north-south orientation surrounded by a fence and bluegum trees. The northern row of four graves have no headstones, nor any other identifying features, and appear to predate the southern row of graves. The southern row of four graves have marble headstones and epitaphs. These are in various stages of preservation.

The graves are, as follows:

- No headstone, nor gravestone. Parts of the grave are forming a sink-hole.
- No headstone, nor gravestone. Parts of the grave are forming a sink-hole.
- Flat sandstone slab forming the gravestone with a small sandstone headstone. There are two dead bushes which grew on the grave.
- Flat sandstone gravestone and a possible headstone.

- Grave of Ms Wessels who died in 1898. She was three years old. Marble headstone with a praying angel.
- Grave of Mr Wessels who died in 1942. Marble headstone depicting an open book; ceramic flowers on the grave.
- Grave of Mrs Eager (n,e Wessels) who died in 1939. Marble headstone depicting an open book; ceramic flowers on the grave.
- Grave of Mr Wessels who died in 1922. Marble headstone depicting an open book and a pedestal above the book.

UTZ1

The farm Uitzigt has an old farmhouse and family graveyard that will be directly affected by the road. It was not possible to gain access to the graveyard, however, Mr D. Coetzee of the farm Greywell, informed me that the graves belong to his relatives, possibly his great grandmother and her relatives.

UV1

This site is situated between the two proposed road options on the farm Uitvlugt. The site is that of a single household with three graves and possibly a further two graves. The graves are sandstone cairns in an approximately east-west orientation. Four graves are currently below a fence, while the remaining ?grave is approximately 40m from the main building. The graves are probably not older than fifty years old, however, this date still needs to be confirmed.

WG4

There are approximately fifty graves at this Sotho cemetery. The cemetery is approximately 100m from the nearest house, and 500m from the proposed road. I recorded the cemetery from inside my vehicle since the informers could only indicate where the graves existed in broken Afrikaans - SeSotho being their home language. I believe that it would be inappropriate to record the graves in detail without negotiating further with the families of the deceased, especially when some living relatives were in the vicinity of the cemetery.

All graves are in an east-west orientation and consist of four rows in a north-south direction. The more recent graves are approximately 1m high, 2m long and 1.5m wide. The graves are sandstone cairns with small sandstone headstones.

WG6

This site is approximately 300m south of WG4, and consists of six sandstone cairns of varying sizes. The graves may be contemporary with, or part of WG5 described below, however, they were separated for convenience. The graves appear to be older than the graves at WG4. Fig. 1 shows these graves and can be viewed as typical examples of Sotho graves recorded in the study area.

The owner of the farm informed me of one group of graves that may be affected by the road. I was not, however, able to locate these graves according to Mr Mandy's directions. These graves are still visited by relatives who do not live on the farm. If these graves exist, but have not been recorded, mitigation would be required.

Monument

AFG1

This monument, or memorial, is situated on the farm Afgunst (fig. 2) in the path of the proposed road, at a point where an alternate route option is available. The monument was erected in honour of Lieut-Comm GPG Kidston and Flight-Lieut TA Gladstone who were killed in an aeroplane accident in the vicinity of the monument on 5 May 1931. The monument serves as a beacon for pilots and as a reminder of these men.

Markers

Many individual stone markers, that appear to be older than fifty years (J. Walker pers. comm.), were observed during the course of the survey. The markers occur as single stele on the landscape and are probably related to old farm boundaries. Due to the large quantity of these markers they were not plotted on the map. The markers are of low significance.

Rock Art

The four rock art sites recorded in the study area can be attributed to San gatherer-hunters and/or possibly Sotho agriculturists. These three sites are highly significant and mitigation is required if the construction of the road affects these sites.

BD2

This site is situated in a sandstone outcrop facing the Meulrivier, directly below BD1. BD2 is a small overhang 5m wide, 2m deep and 2m high. The remains of a stone wall enclose part of the site. The art consists of four separate panels of images in red or white paint and are as follows:

The main panel (fig. 3) consists of several human figures, of which one is an identifiable male, in dancing, or trance, postures. Several humans hold sticks in their hands, while one holds a bow. Only one human is partly faded, while the others are well preserved.

The second panel consists of two human figures facing left or forward. The heads of these human figures have exfoliated from the rock face.

The third panel consists of two white human figures which superimpose two faded red humans. The left white human has a quiver on his back and appears to be holding either a bow or two sticks. The second white human is partially faded.

The fourth panel is faded and smeared and consists of red and white paint. The images may be human.

KK1

KK1 is located on a sandstone koppie approximately 200m to the north of the proposed road. The site overlooks the Wilge River, and is situated halfway up the koppie. The site is an overhang approximately 60m long, ranges from 1m to 2.5m deep, and 1m to 10m high. The art includes both San and Sotho paintings, as well as several initials scratched over and nearby the images. The panels are as follows:

The first panel contains a black fingerpainted human who is surrounded by a charcoal oval. There appears to be some red pigment to the left of the human. This panel was probably painted by a Sotho speaker, since it is not in the 'traditional' San painting style. Similar fingerpaintings have been recorded elsewhere in KwaZulu-Natal (Anderson 1996; Prins 1994).

The second panel is located approximately 30m to the right of the first panel. The panel consists of ten red humans in various postures, one yellow eland torso, one yellow indeterminate animal, and six areas of indeterminate paint. One human is a male, another has a quiver on his/her back, and another appears to be touching the tail of the indeterminate yellow animal. The letter 'B' has been scratched over the rightmost paintings. The humans are either sitting, crouching, standing with their legs apart or have one leg raised.

The third panel is 7m to the right of the second panel. The images included an indeterminate white animal and white paint, an indeterminate red animal, and three red humans. Two humans are facing each other, while a third human male is in a running position.

KK2

KK2 is located 400m east of KK1 along the same sandstone band. The overhang is 60m long, ranges from 1m to 10m deep, and is 20m at its highest point. Several stone artefacts were found in the drip line and the shelter has

archaeological deposit in places. There are eleven art panels along the rock face, of which many are faded due to a natural varnish coating. Images are described according to their panels.

- Faded humans, an indeterminate animal and some indeterminate paint.
- Group of nine images. Two humans are males, each holding a bow and in a running position. One male has a quiver with red and white arrows. The other humans are in standing, crouched or bent-over postures.
- Three humans with an orange indeterminate animal superimposed on two of the humans. To the right is an animal torso in black paint. There are several charcoal lines scratched over this panel.
- White eland with a red head, two white humans and an indeterminate white image.
- Two indeterminate red images.
- Several indeterminate red and white images and a red human. The human has a double row of white dots on his/her abdomen with a white bad forming an 'x' below.
- This panel is one of the more interesting panels in this shelter. Apart from the several indeterminate images, there are black and red human legs, black and white paint, at least two humans and an indeterminate animal. One human is a male who is holding a curved object in the left hand and a stick or bow in the right hand. To the left of this human is an indeterminate animal with its tail in an upright position and three lines extending from its mouth or nose.
- Faded red and white paint.
- Row of five faded red humans and a faded black human.
- Two large animal torsos and indeterminate paint.
- Approximately 30m to the right is an area of indeterminate paint.

2829BC4

This site was recorded several years ago. The art is of a single faded eland. No cultural remains were observed on the floor of the cave.

Palaeontological sites

Three farms have known palaeontological sites, of which two have been partly analysed by palaeontologists. The Harrismith district is noted for its palaeontological remains. The shales of the Harrismith region are known to contain fossil remains. While I am unqualified to identify and assess palaeontological sites, the locations of known sites were noted since they are protected by legislation and would require mitigation.

GDS1

The farm Gedacthenis has an important fossil find which is currently housed at the Harrismith museum. The fossil is a tree that was located in the maize fields of this farm several years ago. According to the owner of the farm several other fossils have been found in adjacent fields. There are two alternative routes for the road on this farm and both will affect the fossil beds.

Greywell

The fossil remains from this farm are located near the grave of the British soldier (GW1). Three years ago palaeontologists from the University of Pretoria analysed the remains of a dinosaur located in a nearby donga. The analyses of the dinosaur remains indicate that the find was significant. I will be presently in contact with the palaeontologists responsible for this analyses to obtain further information regarding the fossils. In addition to the dinosaur remains, fossilised trees were also observed by palaeontologists.

The location of the fossil remains are approximately 1km from the proposed road. However, the geological formations at the dinosaur site similar to the location of the proposed road.

Strathmore

I was informed of palaeontological sites in the direct path of the proposed road during a telephonic conversation with the owner of the farm . When I went to survey this farm, however, all the access gates were locked and I could not enter the farm. The adjacent farmer would not allow me to survey his farm and I could thus not enter Strathmore via Mr Van Niekerk's land.

Stone-built Settlements

A settlement may have one or more houses and may thus represent a nuclear or extended family. Not all settlements have structural remains and may be visible as circular or rectangular features on the landscape, often associated with artefacts and/or a cultural deposit. These settlements belong to Sotho, Zulu or European people.

ALP1

This site consists of a livestock pen, two rectangular features upslope of the livestock pen and possibly four graves on the downslope side of the pen. The livestock pen is 4m in diameter and has no stone walling. The two rectangular features are 10m x 5m and approximately 20m from the livestock pen. A cultural deposit probably exists at this site.

BD1

The site is on a flat section of a sandstone koppie overlooking the southern banks of the Meulrivier. There are thirteen circular stone structures ranging from 2m to 4m in diameter. The largest structure is a 10m x 10m square wall with a semicircular wall attached to the eastern wall, and is 3m in diameter. There are three more circular structures on the floodplains below the koppie. Two structures are 3m in diameter and one is 7m in diameter, and they are probably livestock pens. Two possible graves are associated with this settlement. Two sherds with a red burnish and one fragment of a European ceramic plate were observed between the structures.

GW2

The site consists of seven stone-walled enclosures ranging from 2m to 5m in diameter. These structures are in various stages of preservation and only the lowest parts of the wall remain. This site is approximately 200m from the proposed road and is therefore unlikely to be affected.

KFN1

There are two settlements at this site and they may or may not be related to each other. The main settlement is a group of approximately 30 dry-stone-wall circles of various sizes. Some structures have primary and secondary walling, while others only have primary walling. The tall grasses made it difficult to assess the location of all structures.

The second settlement appears to be younger than the main settlement. It is rectangular and constructed in the wattle and daub fashion. Several modern artefacts are in association with this site.

KFN2

There are approximately four dry stone wall structures, covered by tall grass, near the base of the hill. They appear to be livestock pens and range from 5m to 10m in diameter. One of the larger livestock pens appears to have the entrance facing upslope indicating that this site dates to the pre-1820 Late Iron Age. There is a livestock pen located at the summit of this hill.

KFN3

The site consists of approximately 15 circular and rectangular dry stone wall structures. Some structures have adjoining enclosures. There is a rectangular stone livestock pen to the north of this site. Cultural deposit probably exist within some of these walls.

KFN4

The site consists of two enclosures, each with an adjoining enclosure, in close proximity to each other. A cultural deposit may exist.

SUS1

There are two stone-walled rectangular structures, 12m x 5m and 5m x 3m, halfway up the hill, and approximately 50m west of the cemetery (see discussion for details).

SUS2

This site is the remains of an old European farmhouse settlement. It appears to be older than fifty years.

UV1

The site is a rectangular house approximately 30m x 5m. The house has a row of five rooms with an additional two rooms attached to the southern side. A passageway occurs between these two rooms and the main house. Four graves were observed to the west of this structure. A rectangular, 10m x 5m, structure exists 10m east of the house. There are two 'rooms' in this structure. This structure appears to be more recent than the main house. There is one possible grave 30m southeast from this structure.

The main house was constructed with sun-dried bricks from local sand/clay sources (fig. 4). There are six alternating layers of red and white plaster on the walls. The smaller structure appears to have been constructed in the wattle and daub fashion and several branches still exist within the structural remains.

Several artefacts were observed in the vicinity of the house. These artefacts included pottery sherds, metal objects, glass and tin. These finds indicate that the house was recently occupied. The manager and/or labourers of the farm should be able to date the settlement.

VBK1

This site is located on the top of a sandstone ridge behind the farmhouse Vaalbank. The site consists of a primary enclosure with two adjoining secondary enclosures. The primary enclosure is 15m in diameter, while the secondary enclosures are each 4m in diameter. The walls are 1.5m thick. There are two adjoining circular stone structures 20m southeast off the primary enclosure. These structures are 4m in diameter. Fragments of a pot with a red burnish were observed. The rim of the pot had an external emphasis and a rounded lip.

WG5

The site consists of five raised circular features with a total diameter of 50m. The walls of the huts no longer exist, however, the hut floors are clearly outlined. Two houses have one stone stele each. Each hut floor has a cultural deposit and one hut has a large ash feature. Both European and Sotho ceramics were observed in the vicinity of the house. The European ceramic was white, while the Sotho ceramics had a black burnish.

Stone Walling

These sites are not related to settlements, but are isolated features on the landscape.

SGK1

There is a long stone wall that is part of an old farm boundary running through parts of the farm. The wall extends from the top of the left hand side of the hill to the right hand side of the hill. The proposed road will affect this feature and mitigation may be required.

SVK1

This site is approximately 30m east of the graves belonging to the Wessels family. It is a dip for domestic animals and according to Mr Du Plessis, it is over fifty years old. The site is surrounded by dry stone walling with two entrances or exits (Fig. 5). The dip itself is in a key-hole shape and appears to have been cut out of the sandstone bedrock.

UV2

This site is a large dry stone wall livestock pen. It is 20m x 20m x 1.5m, and the walling is 1m thick. There is a 10m long adjoining wall on the south-eastern side of the livestock pen. The site is probably of European design.

UV3

This feature is a long stone wall running from the top of Tandjesberg mountain and through most of the farm Uitvlugt. It is possibly an old farm boundary marker.

Gardens

The site SPF1 is a grove of oak trees in the shape of a Union Jack planted by Sir Percy Fitzpatrick between 1910 and 1920. These trees were planted in order to make a socio-political statement and I therefore consider them as a cultural resource.

ARCHAEOLOGICAL SIGNIFICANCE

Archaeological sites are non-renewable resources and the principal source of information about South Africa's precolonial past. Further, sites dating to the colonial and more recent periods comprise important material evidence that augments historical records. Not all archaeological sites are equal, however. Rather, they vary in significance according to their uniqueness, size, preservation and data content. Generally, significant sites are those that have the greatest potential to contribute to our understanding of human history. Since a principal aim cultural resource management is to salvage research potential, the definition of archaeological significance is critical.

Graves

All graves are of high significance since they are sacred for the communities and persons with which they are associated. Furthermore, graves provide material evidence of peoples occupation and settlement of the land. Unless older than 50 years, graves are not protected by the National Monuments Act. However, they are protected by other legislation and common law requirements. Several of the graves recorded during the survey lie within the path of the new road. Its construction will have a high negative impact on these sites.

Mitigation: I strongly recommend that National Roads seeks legal advice on the correct way to deal with these graves, prior to their destruction. It is possible that National Roads may have to trace surviving relatives and fund the exhumation of affected graves and reburial of remains.

Monument (ARG1)

As a memorial to two individuals who died in an aeroplane accident, this monument functions as the symbolic equivalent of a grave. It is therefore of high significance. Depending upon the route option, the construction of the proposed road will have either a high negative impact or no impact.

Mitigation: The monument should be dismantled if it lies within the chosen road reserve and reconstructed to one side of the road.

Markers

The markers recorded in the study area are of medium significance. They demarcate old boundaries and are thus of historical and cartographic value. The construction of the proposed road will have a high negative impact on markers within the road reserve. Markers are protected by the National Monuments Act and a permit will be required for their destruction, though not for their removal from the path of the road.

Mitigation: The exact locations of markers should be mapped (possibly by the contractors) and this information should then be housed with the National Monuments Council and/or an appropriate museum.

Rock art

San rock art depicts the artists' beliefs regarding their society and religious system. Imagery thus tends to be unique, while there are elements of commonality between paintings. The rock art imagery from the three sites recorded in this survey has been discussed in detail in the previous section.

BD2

Most of the rock art at this site is well preserved. The set of paintings as a whole includes good examples of the imagery associated with San medicine men and women entering an altered state of consciousness, a key component of San ritual. Two human figures have rare, or possibly unique features, on their chests. The rock art at this site therefore

has both research and educational potential. This site is of high archaeological significance. The construction of the proposed road will have a high negative impact on the site.

Mitigation: The site and paintings should be comprehensively photographed and the paintings removed under the supervision of the Rock Art Department, National Museum, Bloemfontein. Paintings that may be damaged during the course of the removal should first be accurately traced.

KK1

The rock art at this site is unusual and there is considerable variety in the postures of the painted human figures. Many of the paintings are well preserved. The site is of high significance. Because the site is situated close to the road reserve, the construction of the proposed road is likely to have a medium negative impact, largely affecting the aesthetic quality of the site's environment.

Mitigation: No mitigation necessary.

KK2

This site has both rock art and a cultural deposit (the accumulated residue of human activity). The rock art appears faded, but this is due to a natural varnish covering it. Several paintings have unique attributes and are therefore of research interest. The site is of high significance. Because the site is situated close to the road reserve, the construction of the proposed road is likely to have a medium negative impact, largely affecting the aesthetic quality of the site's environment.

Mitigation: No mitigation necessary.

2829BC4

This painting is of faded eland torso and of low significance, being both a common motif and poorly preserved. I could not determine what impact the construction of the road will have on the site because access to the farm was denied.

Mitigation: No mitigation required, even if impact is high and negative.

Stone-built Settlements

ALP1

Graves on the site are of high significance. The houses are of low-to-medium significance. The construction of the road will have a high impact on the site.

Mitigation: All structural details need to be accurately mapped and photographed and small-scale test pit excavations may be undertaken.

BD1

Few sites of this kind have been recorded so far in the Harrismith District. The site is well preserved and has research potential. Two graves are also associated with the settlement. The site is of high significance and the impact on the site will be high.

Mitigation: All structural details need to be accurately mapped and photographed.

GW2

The walling at this site is not well preserved and the site is unlikely to have a well preserved cultural deposit due to poor preservation conditions. The site is of low significance. The construction of the road will have no impact on this site.

Mitigation: No mitigation necessary.

KFN1

A similar settlement near Bergville was recently proclaimed a national monument (cf. Maggs 1982) as a result of its exceptional qualities and KFN1 may date to the same period (1700-1800 AD). The walling at the site is generally well preserved and a cultural deposit may be present. KFN1 has the potential to provide additional information on local settlement patterns and for this reason is of research interest. The site is of high significance and the construction of the road will have a high negative impact.

Mitigation: All structural details need to be accurately mapped and photographed and small-scale test-pit excavations should be undertaken to determine further the extent of the cultural deposit. The site may require further excavation if the initial excavations yield valuable information.

KFN2.

The site may date to the Late Iron Age and may be associated with either KFN1 or KFN3. The site has is of low significance. The impact on the site will be high.

Mitigation: The site should be mapped in conjunction with the mitigation at KFN1 and KFN3.

KFN3

The settlement layout of KFN3 differs to that of KFN1, though it may be part of the same complex of settlements. Our knowledge of this type of settlement layout is derived from aerial photographs and it has not yet been researched in detail in KwaZulu-Natal. The site is therefore of research interest and of high significance. The construction of the road will have a high impact on this site.

Mitigation: This site will require further archaeological investigation (in the form of limited excavation) to determine its full significance.

KFN4

Similar structures have been recorded elsewhere. The site is of low significance. The construction of the road will have a low impact on the site.

Mitigation: No mitigation necessary.

SUS1

There is little material preserved at this site and the structures are of low significance. The impact on this site is low.

Mitigation: No mitigation required for the walling.

SUS2

SUS2 (the farmhouse) is probably older than 50 years and therefore protected by the National Monuments Act's fifty year clause. The house is in an extremely poor condition and I am inclined to believe it is of low significance. However, the decision of its significance should be determined by the National Monuments Council. The construction of the road will have a high negative impact on this site.

Mitigation : To be assessed by the National Monuments Council. Note that a permit from the National Monuments Council will be required prior to destruction of the site.

UV1

This site is significant because of the associated burials, however it is probably not older than fifty years and does not qualify as a protected site. The buildings at this site are of low significance. The impact on this site may be high and negative, depending on the route option chosen.

Mitigation: No mitigation necessary for the house.

VBK1

No other sites similar to VBK1 were recorded in the study area. The site is of medium significance. The impact on the site is low.

Mitigation: No mitigation necessary unless the koppie on which the site is situated is used as quarry.

WG5

The remains of the hut floors at this site are well preserved and there is a large ash deposit beside one hut. The graves recorded nearby may be associated with this site. The site is of high significance because of the good preservation and associated graves. The likely impact on road construction this site is medium and negative.

Mitigation: If any aspect of this site is affected, through servitudes etc., all details of the site need to be accurately mapped and small-scale test pit excavations may be undertaken. The site may require further excavations if the test pit excavations yield valuable information.

Non-Settlement Stone Walling

SGK1

The site is of historical interest since it may form part of an old farm boundary. The walling itself, however, is of medium significance. The construction of the road will have a high negative impact on that section of the walling directly affected, but a low negative impact on the overall structure.

Mitigation: The area to be affected should be photographed and mapped.

SVK1

This site is the only example of a cattle dip cut into bedrock so far recorded in the Harrismith district, and may be unique. The site may also represent aspects of farming heritage not previously recorded. The site is of high significance. The impact on the site will be high.

Mitigation: Site should be mapped and photographed in detail.

UV2

This site is representative of several stone walled cattle pens in the area. It is of low significance. The impact on this site will be low-medium.

Mitigation: No mitigation necessary.

UV3

The site is of historical interest since it may form part of an old farm boundary. The walling itself, however, is of medium significance. The construction of the road will have a high negative impact on that section of the walling directly affected, but a low negative impact on the overall structure.

Mitigation: The area to be affected should be photographed and mapped.

Gardens

SPF1

This garden, comprising oak trees planted by Sir Percy Fitzpatrick in the form of the Union Jack, make a rather jingoistic socio-political statement and should be viewed in the context of the wider politics of the Free State and southern Africa and their relationship with Great Britain in the early twentieth century. The garden is an unusual historical resource, it has aesthetic value and the potential to be developed into a tourist attraction, though an aerial view suggests that it will require considerable work to return it to original condition. Moreover, there appears to be a

strong local interest in the site. The site is of high significance. The construction of the road will have a high negative impact.

Mitigation: I strongly recommend that the road is rerouted around the garden. Note that letters granting permission to route the road through the garden, dated 1975/6, do not constitute a permit to destroy this historical resource.

Palaeontological Sites

These sites should be assessed by a qualified palaeontologist and should presently be regarded as having high significance until further assessment has been made.

Mitigation: Pending reply from palaeontologists who have researched this area.

CONCLUSIONS

The archaeological survey of the proposed Tugela-Warden road recorded 28 sites. Of these sites, 23 are have medium to high significance and mitigation will be required prior to construction.

Three farms were not visited during the course of the survey, Strathmore, Maritz Drift and Welkom. The owner of Strathmore gave permission to enter his land so long as I spoke to the farm manager beforehand. On the last day of my survey, all access gates were locked and I could not enter the property. The only access was through the farm Welkom, however Mr van Niekerk denied me access to this farm, as well as Maritz Drift.

Strathmore has known palaeontological sites, and three outcrops or koppies that may be archaeologically significant. Maritz Drift has two potentially significant archaeological areas, while Welkom has one known archaeological site. These areas would need to be surveyed in the future to complete the archaeological survey.

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NEW GPS READINGS

KFN1	S28	26'	24"	E29	33'	23"
KFN2	S28	25'	46"	E29	33'	06"
KFN3	S28	24'	55"	E29	33'	03"
KFN4	S28	28'	06"	E29	33'	24"
KK1	S29	14'	28"	E29	24'	18"
KK2	S29	14'	29"	E29	23'	59"
SPF1	S27	59'	56"	E29	07'	15"
	(reading taken in centre of grove)					
AFG1	S28	14'	54"	E29	23'	26"