DESKTOP CULTURAL HERITAGE IMPACT ASSESSMENT OF THE PROPOSED HLOMENDLINI ROAD UPGRADE NEAR MANDINI, ILEMBE DISTRICT MUNICIPALITY

ACTIVE HERITAGE cc.

For: Kinvig & Associates

Frans Prins
MA (Archaeology)

Sian Hall
Hons (Anthropology)

P.O. Box 947
Howick
3290

activeheritage@gmail.com
Fax: 086 7636380

25 February 2016

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ABBREVIATIONS AND ACRONYMS

EIA	Early Iron Age
ESA	Early Stone Age
HISTORIC PERIOD	Since the arrival of the white settlers - c. AD 1820 in this part of the country
IRON AGE	Early Iron Age AD 200 - AD 1000 Late Iron Age AD 1000 - AD 1830
LIA	Late Iron Age
LSA	Late Stone Age
MSA	Middle Stone Age
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998 and associated regulations (2006).
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999) and associated regulations (2000)
SAHRA	South African Heritage Resources Agency
STONE AGE	Early Stone Age 2 000 000 - 250 000 BP Middle Stone Age 250 000 - 25 000 BP Late Stone Age 30 000 - until c. AD 200

EXECUTIVE SUMMARY

A desktop cultural heritage survey of the proposed Hlomendlini Road Upgrade, near Mandini in the Tugela Valley, identified no heritage sites within the proposed development footprint. There is no known archaeological reason why the proposed road upgrade may not proceed as planned.

Attention is drawn to the South African Heritage Resources Act, 1999 (Act No. 25 of 1999) and the KwaZulu-Natal Heritage Act (Act no 4 of 2008) which, requires that operations that expose archaeological or historical remains should cease immediately, pending evaluation by the provincial heritage agency.

1 BACKGROUND INFORMATION ON THE PROJECT

Table 1. Background information

Consultant:	Frans Prins (Active Heritage cc) for Kinvig & Associates
Type of development:	The upgrade of a road at Hlomendlini. The key points associated with this project is that only the water crossing point triggers a BA, the road is an existing gravel road with servitude rights and the impacts associated will be maintenance to the existing crossing point, earthworks either side of the road and some cut and fill to reduce the road slope, and installation of head walls, gabions, reno-mattresses for stormwater infrastructure entering the watercourse / drainage line.
Rezoning or subdivision:	NA
Terms of reference	To carry out a Heritage Impact Assessment
Legislative requirements:	The Heritage Impact Assessment was carried out in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and following the requirements of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) and the KwaZulu-Natal Heritage Act, 1997 (Act No. 4 of 2008)

1.1. Details of the area surveyed:

The proposed Hlomendlini Road is situated in the Tugela River Valley approximately 4km to the south west (as the crow flies) of Mandini (Figs 1 & 2). The GPS coordinates for the Site is given as:

Start: 29º 11’ 08.10” S 31º 22’ 59.57” E.

End: 29° 11’ 15.88” S 31° 23’ 07.29” E.

The project area consists of peri-urban housing developments. The land use surrounding the site is flanked by disturbed Valley Bushveld vegetation.

2 BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA

The archaeological history of the Province of KwaZulu-Natal (KZN) dates back to about 2 million years and possibly older, which marks the beginning of the Stone Age. The Stone Age in KZN was extensively researched by Professor Oliver Davies formerly of the Natal Museum. The Stone Age period has been divided into three periods namely: Early Stone Age (ESA) dating between 2 million years ago to about 200 000 years ago, Middle Stone Age (MSA) dating between 200 000 years ago to about 30 000 years ago, and the Later Stone Age (LSA) which dates from 30 000 to about 2 000 years ago. The Stone Age period ends around approximately 2 000 years ago when Bantu speaking farmers from the north arrived in southern Africa. The Iron Age is also divided into three periods, namely: Early Iron Age (EIA) dating between AD 200 and AD 900, Middle Iron Age (MIA) dating between AD 900 and AD 1300, Late Iron Age (LIA) dating between AD 1 300 and 1 820.

2.1 Stone Age

2.1.1 Early Stone Age (ESA)

The ESA is considered as the beginning of the stone tool technology. It dates back to over 2 million years ago until 200 000 years ago. This period is characterised by Oldowan and Acheulean industries. The Oldowan Industry, dating to approximately between over 2 million years and 1.7 million years predates the later Acheulean. The Oldowan Industry consists of very simple, crudely made core tools from which flakes are struck a couple of times. To date, there is no consensus amongst archaeologists as to which hominid species manufactured these artefacts. The Acheulean Industry lasted from about 1.7 million years until 200 thousand years ago. Acheulean tools were more specialized tools than those of the earlier industry. They were shaped intentionally to carry out specific tasks such as hacking and bashing to remove limbs from animals and marrow from bone. These duties were performed using the large sharp pointed artefacts known as handaxes. Cleavers, with their sharp, flat cutting edges were used to carry out more heavy duty butchering activities (Esterhuysen, 2007). The ESA technology lasted for a very long time, from early to middle Pleistocene and thus seems to have been sufficient to meet the needs of early hominids and their ancestors. Although not identified on the footprint, ESA tools occurrence have been reported in other sites in KZN. Apart

from stone artefacts, the ESA sites in this Province have produced very little as regards other archaeological remains. This has made it difficult to make inferences pointing to economical dynamics of the ESA people in this part of the world. The diet of ESA peoples has therefore had to be reconstructed on the basis of evidence from elsewhere that it comprised primarily of animal and plant foods (Mazel 1989; Mitchell 2003).

2.1.2 Middle Stone Age (MSA)

The MSA dates to between 200 000 and 30 000 years ago, coinciding with the emergence of modern humans. The MSA technology is therefore believed to have been manufactured by fully modern humans known as *Homo sapiens* who emerged around 250 000 years ago. While some of the sites belonging to this time period occur in similar contexts as those of ESA, most of the MSA sites are located in rock shelters.

Palaeoenvironmental data suggest that the distribution of MSA sites in the high lying Drakensberg and surrounding areas was influenced by the climate conditions, specifically the amount and duration of snow (Carter, 1976). In general, the MSA stone tools are smaller than those of the ESA. Although some MSA tools are made from prepared cores, the majority of MSA flakes are rather irregular and are probably waste material from knapping exercises. A variety of MSA tools include blades, flakes, scrapers and pointed tools that may have been hafted onto shafts or handles and used as spearheads. Between 70 000 and 60 000 years ago new tool types appear known as segments and trapezoids. These tool types are referred to as backed tools from the method of preparation. Residue analyses on the backed tools from South African MSA sites including those in KZN indicate that these tools were certainly used as spear heads and perhaps even arrow points (Wadley, 2007). A few sites with impressive MSA deposits have been excavated in KZN. Perhaps the best known ones are Sibudu Cave and Umhlatuzana Cave to the south of the study area, and Border Cave to the north of the study area. All these sites provided impressive evidence for fine resolution data and detailed stratigraphy (Wadley & Jacobs, 2006).

2.1.3 Late Stone Age (LSA)

Compared to the earlier MSA and ESA, more is known about the LSA which dates from around 30 000 to 2 000 (possibly later) years ago. This is because LSA sites are more recent than ESA and MSA sites and therefore achieve better preservation of a greater variety of organic archaeological material. The Later Stone Age is usually associated with the San (Bushmen) or their direct ancestors. The tools during this period were even

smaller and more diverse than those of the preceding Middle Stone Age period. LSA tool technology is observed to display rapid stylistic change compared to the slower pace in the MSA. The rapidity is more evident during the last 10 000 years. The LSA tool sequence includes informal small blade tradition from about 22 000 – 12 000 years ago, a scraper and adze-rich industry between 12 000 – 8 000 years ago, a backed tool and small scraper industry between 8 000 – 4 000 years and ending with a variable set of other industries thereafter (Wadley, 2007). Adzes are thought to be wood working tools and may have also been used to make digging sticks and handles for tools. Scrapers are tools that are thought to have been used to prepare hides for clothing and manufacture of other leather items. Backed tools may have been used for cutting as well as tips for arrows. It was also during Later Stone Age times that the bow and arrow was introduced into southern Africa – perhaps around 20 000 years ago. Because of the bow and arrow and the use of traps and snares, Later Stone Age people were far more efficient in exploiting their natural environment than Middle Stone Age people. Up until 2 000 years ago Later Stone Age people dominated the southern African landscape.

However, shortly after 2 000 years ago the first Khoi herders and Bantu-speaking agro-pastoralists immigrated into southern Africa from the north. This led to major demographic changes in the population distribution of the subcontinent. San hunter-gatherers were either assimilated or moved off to more marginal environments such as the Kalahari Desert or some mountain ranges unsuitable for small-scale subsistence farming and herding. The San in the coastal areas of KZN were the first to have been displaced by incoming African agro-pastoralists. However, some independent groups continue to practice their hunter gatherer lifestyle in the foothills of the Drakensberg until the period of white colonialisation around the 1840's (Wright & Mazel, 2007). According to the KwaZulu- Natal Museum archaeological database Later Stone Age sites have been located in the Tugela River in the past but these are mostly restricted to surface scatters. Also dating to the LSA period is the impressive Rock Art found on cave walls and rock faces. Rock Art can be in the form of rock paintings or rock engravings. The province of KZN is renowned for the prolific San rock painting sites concentrated in the Drakensberg. Rock art sites do occur outside the Drakensberg including Zululand, however, these sites have not been afforded similar research attention as those sites occurring in the Drakensberg. However, there are no rock art sides found within the immediate vicinity of study area, which may be due to the lack of the suitable geology.

2.2 Iron Age

2.2.1 Early Iron Age (EIA)

Unlike the Stone Age people whose life styles were arguably egalitarian, Iron Age people led quite complex life styles. Their way of life of greater dependence on agriculture necessitated more sedentary settlements. They cultivated crops and kept domestic animals such as cattle, sheep, goats and dogs. Pottery production is also an important feature of Iron Age communities. Iron smelting was practised quite significantly by Iron Age society as they had to produce iron implements for agricultural use. However no smelting sites were discovered in the study area as it is the northern KZN that is rich in abandoned iron smelting sites (Maggs, 1989). Although Iron Age people occasionally hunted and gathered wild plants and shellfish, the bulk of their diet consisted of the crops they cultivated as well as the meat of the animals they kept. EIA villages were relatively large settlements strategically located in valleys beside rivers to take advantage of the fertile alluvial soils for growing crops (Maggs, 1989). The EIA sites in KZN date to around AD 500 to AD 900. Extensive research in the province of this period led to it being divided in the following time lines according to ceramic styles (Maggs, 1989; Huffman 2007):

- Msuluzi (AD 500);
- Ndondondwane (AD 700 – 800); and
- Ntshekane (AD 800 – 900).

The archaeological data base of the KwaZulu-Natal Museum indicates that ten Early Iron Age sites occur in the immediate vicinity of the study area. The well known and researched site of Ndondondwane (Van Schalkwyk et al 1997) occurs approximately 20km upstream from the project area. Other well-known Early Iron Age sites such as Mamba (Van Schalkwyk 1994a), and Woshi (Van Schalkwyk 1994b) occurs within 24km's from the project area on the banks of the Tugela River. The archaeological data base of the KwaZulu-Natal Museum indicates the location of an unnamed Early Iron Age Site approximately 2km to the north of the footprint (Fig 3).

2.2.2 Late Iron Age (LIA)

The LIA is not only distinguished from the EIA by greater regional diversity of pottery styles but is also marked by extensive stone wall settlements. However, in this part of the world, stone walls were not common as the Nguni people used thatch and wood to build their houses. This explains the failure to obtain sites from the aerial photograph investigation of the study area. Trade played a major role in the economy of LIA

societies. Goods were traded locally and over long distances. The main trade goods included metal, salt, grain, cattle and thatch. This led to the establishment of economically driven centres and the growth of trade wealth. Keeping of domestic animals, metal work and the cultivation of crops continued with a change in the organisation of economic activities. Evidence for this stems from the fact that iron smelting evidence was not found in almost every settlement (Maggs, 1989; Huffman 2007). According to the available data bases there are no Later Iron Age sites in the immediate environs of the footprint.

2.3 Historic Period

Oral tradition is the basis of the evidence of historical events that took place before history could be recorded. This kind of evidence becomes even more reliable in cases where archaeology could be utilised to back up the oral records. Sources of evidence for socio political organization during the mid-eighteenth to early nineteenth century in the study area and the larger former Natal Province suggest that the people here existed in numerous small-scale political units of different sizes, population numbers and political structures (Wright & Hamilton, 1989). This period was largely characterised by rage and instability as political skirmishes broke due to the thirst for power and resources between chiefdoms. During the 2nd half of the eighteenth century, stronger chiefdoms and paramouncies emerged. However, these were not fully grown states as there was no proper formal central political body established. This changed in the 1780's when a shift towards a more centralized political state occurred. This shift was mainly characterized by population growth and geographical expansion of states. The most important and largest and strongest states at the time were the Mabhudu, Ndwandwe and Mthethwa. However, other smaller states, also established themselves in the greater Tugela Region. These included in the south the Qwabe, Bhaca, Mbo, Hlubi, Bhele, Ngwane and many others (Wright & Hamilton, 1989). The Zulu kingdom, established by King Shaka however remained the most powerful in the region in the early years of the 19th century. Shaka fought ruthlessly and often defeated his rivals and conquered their cattle, wives and even burnt their villages.

These wars are often referred to as Difaqane and this period was characterised by rage and blood shedding. Shaka was assassinated in 1828 at which time he had transformed the nature of the society in the Natal and Zululand regions. He was succeeded by Dingaan (Wright & Hamilton, 1989). Dutch farmers unhappy with the British rule in Cape Town decided to explore into the interior of the country, away from British rule. Some

groups remained in the Eastern Cape, others kept going and a few settled in the Orange Free State and the Transvaal. A great number, led by Piet Retief and Gerrit Maritz, crossed the Drakensberg into Natal.

Here they encountered the Zulus who lured them into a trap and brutally massacred many of them. This was only one of the many failures of the white settler expeditions in the frontier areas and when the shocking news reached the Cape, more groups were sent to the interior to revenge. A Voortrekker deputation was send to Port Natal to ask the English Settlement for assistance against the Zulus. In 1838 John Cane and Robert Biggar with 14 other English settlers, 30 Hottentots and over 3000 native levies went as an expeditionary force in support to the Voortrekkers Commandos of Uys and Potgieter. After crossing the Tugela River the Expeditionary force came across the Zulu military Kraal Ndondakusuka where they destroyed and burnt the huts, but the lack of full resistance soon indicated that this was a trap and as dawn appeared some 10,000 Zulu warriors arrived on the scene and fierce fighting ensued. The line of retreat across the river was cut off and the expeditionary force was surrounded. Thus on the 17th April 1838 ended the Battle of Tugela and only a few of the expeditionary force escaped from this battle, namely George Duffy, Joseph Brown, Robert Joyce, Dick King. Two or three Hottentots and a mere handful of the Natal levies. This battle took place approximately 5km to the north east of the footprint on the northern bank of the Tugela River (Fig 3).

More battles and skirmishes followed but the most notable was the Battle of Blood River/Ncome in 1838 where the Boers defeated the Zulus. This ended the Zulu threat to the white settlers and a permanent and formal settlement in Natal was established. However the Zulu kingdom remained independent for a couple of decades. The Republic of Natalia was annexed by the British in 1845 and in 1879 the Zulu kingdom was also invaded (Wright & Hamilton, 1989). The Anglo-Zulu War has been well recorded and an important occurrence took place at Keates Drift and Jamesons Drift, near the project area, when a few British soldiers attempted to cross the Tugela River after their defeat at the battle of Isandlwana. Although no sites pertaining to this period occur on the footprint, the surrounding landscape is still imbued with the meaning of this important period in the colonial history of KwaZulu-Natal. The famous Ultimatum Tree, that heralded the beginning of the Anglo-Zulu War in 1879, is situated less than 6km to the east of the footprint (Fig 2). Fort Pearson and Fort Tenedos are situated on opposite banks of the Tugela River approximately 5km to the east of the footprint (Fig 3). Both

these structures featured during the Anglo-Zulu War and together with the Ultimatum Tree have Provincial Heritage Rating (Derwent 2003).

3 BACKGROUND INFORMATION OF THE SURVEY

3.1 Methodology

- A desktop study was conducted of the archaeological and historical period databases housed in the KwaZulu-Natal Museum.
- The available archaeological and historical literature covering the greater Tugela River Valley area was also consulted.
- Aerial photographs covering the study area was scrutinized in order to locate potential Iron Age and Historical period structures.
- The SAHRIS website was consulted in order to establish if any previous heritage surveys had been conducted in the area.

4 DESCRIPTION OF SITES AND MATERIAL OBSERVED

4.1 Locational data

Province: KwaZulu-Natal
Town: Mandini
Municipality: ILembe District Municipality

4.2 Description of the general area surveyed

The Tugela Valley contains many archaeological sites of various periods and cultural-traditions. It has been relatively well researched and surveyed by archaeologists associated with the KwaZulu-Natal Museum, and the Ondini Museum, as well as by heritage consultants engaged in cultural resource management (CRM). Twelve archaeological sites are known in the near vicinity of the project area. These include four Early Stone Age, two Middle Stone Age, eight Later Stone Age, three Early Iron Age and one Later Iron Age site. With the exception of one Early Iron Age Site none of these, are situated closer than 4km from the project area and the proposed development do not threaten any of these known sites. One Early Iron Age is situated adjacent to the Tugela River approximately 2km to the north of the footprint. However, this site is also not

threatened by the proposed development. No archaeological sites occur on the actual footprint.

Some historical era sites do occur in the near environs of the study area. These include the Battle Site of Tugela (1838), Fort Pearson and Fort Terenos both associated with the Anglo-Zulu War of 1879, and the famous Ultimatum Tree that heralded the beginning of this War (Fig 3). All these sites are situated more than 2km to the east of the footprint. They are not threatened by the proposed road upgrade at Hlomendlini.

Modern graves do occur in association with some of the Zulu homesteads on route to the study area. However, none of them occur closer than 1.5 km from the footprint. They are therefore not threatened by the proposed development.

5 STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)

As there are no heritage sites on the footprint there are no heritage values ascribed.

5.1 Field Rating

Not applicable.

Table 2. Field rating and recommended grading of sites (SAHRA 2005)

Level	Details	Action
National (Grade I)	The site is considered to be of National Significance	Nominated to be declared by SAHRA
Provincial (Grade II)	This site is considered to be of Provincial significance	Nominated to be declared by Provincial Heritage Authority
Local Grade IIIA	This site is considered to be of HIGH significance locally	The site should be retained as a heritage site
Local Grade IIIB	This site is considered to be of HIGH significance locally	The site should be mitigated, and part retained as a heritage site
Generally Protected A	High to medium significance	Mitigation necessary before destruction
Generally Protected B	Medium significance	The site needs to be recorded before destruction
Generally Protected C	Low significance	No further recording is required before destruction

6 RECOMMENDATIONS

The desktop study indicates that the proposed development at the footprint may proceed in terms of heritage values. There is no archaeological reason why the proposed development may not proceed as originally planned. It should, however, be pointed out that the KwaZulu-Natal Heritage Act requires that operations exposing archaeological and historical residues should cease immediately pending an evaluation by the heritage authorities.

7 RISK PREVENTATIVE MEASURES ASSOCIATED WITH CONSTRUCTION

The Tugela valley is very rich in heritage sites and archaeological artefacts. There is a high probability that any excavation process may unearth artefacts and/or other heritage structures. All construction activities must cease immediately and the local heritage agency contacted should any artefacts be exposed. Grave sites are also protected by heritage legislation and their disturbance or alternation is punishable by law (Appendix 1).

8 MAPS AND FIGURES

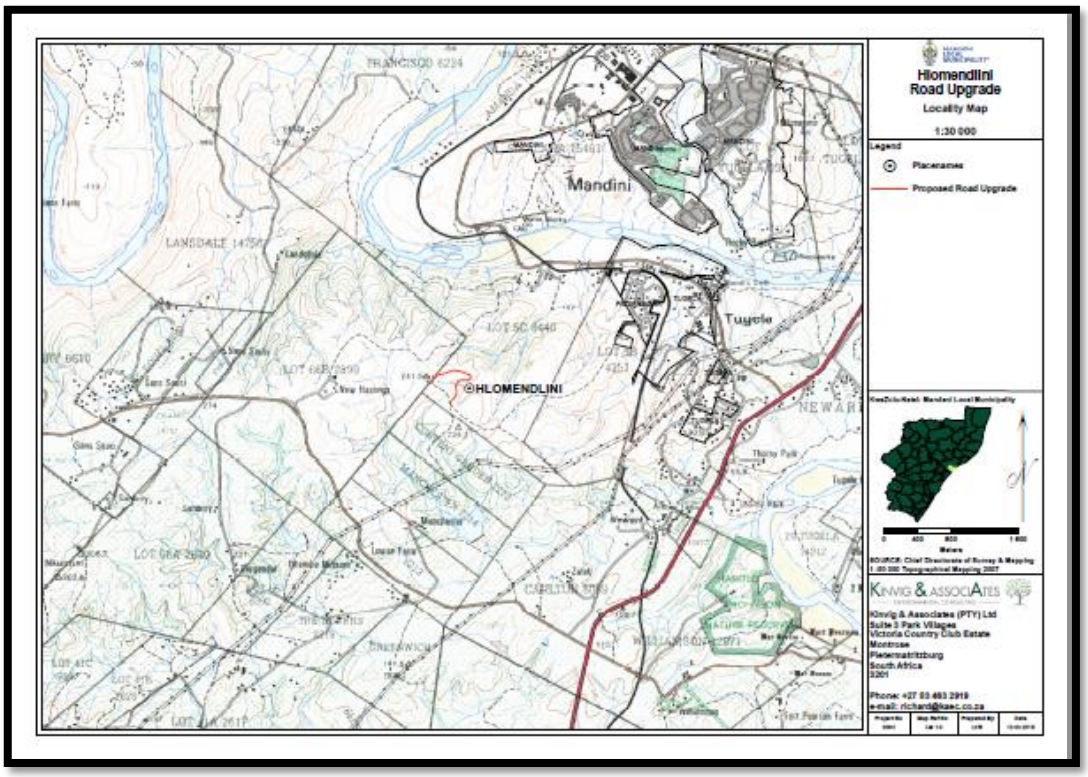

Figure 1. Topographical map showing the locality of the project area at Hlomendlini.

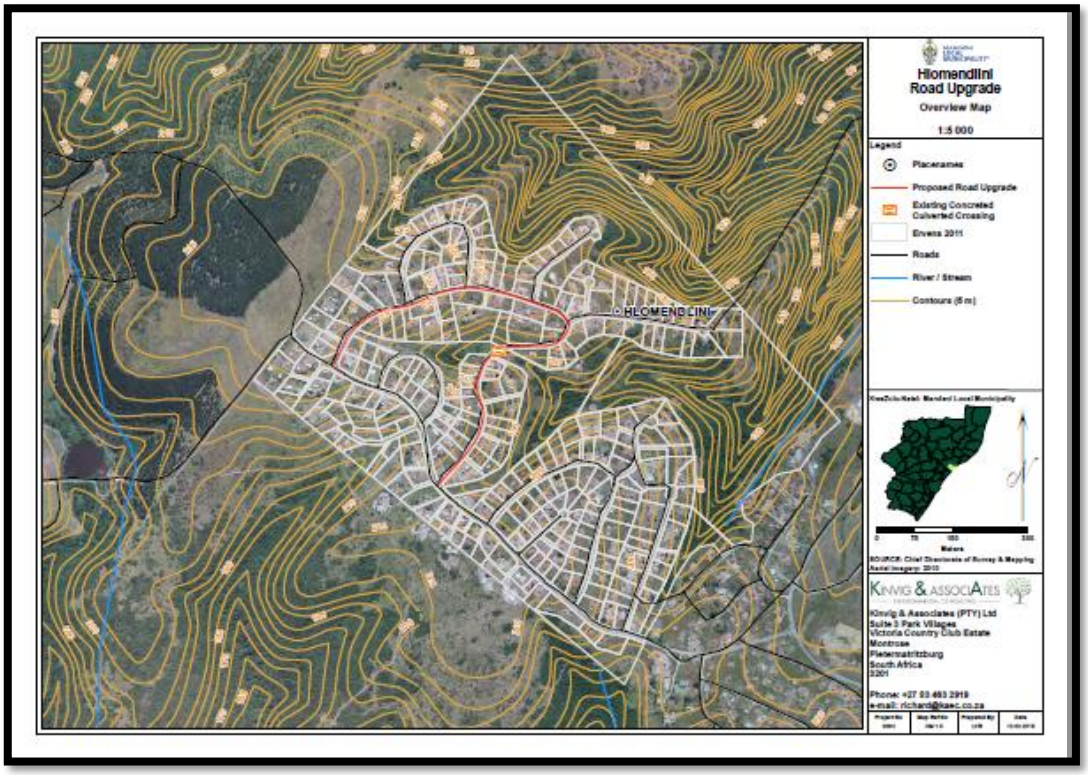

Figure 2. Map showing the proposed road upgrade at Hlomendlini.

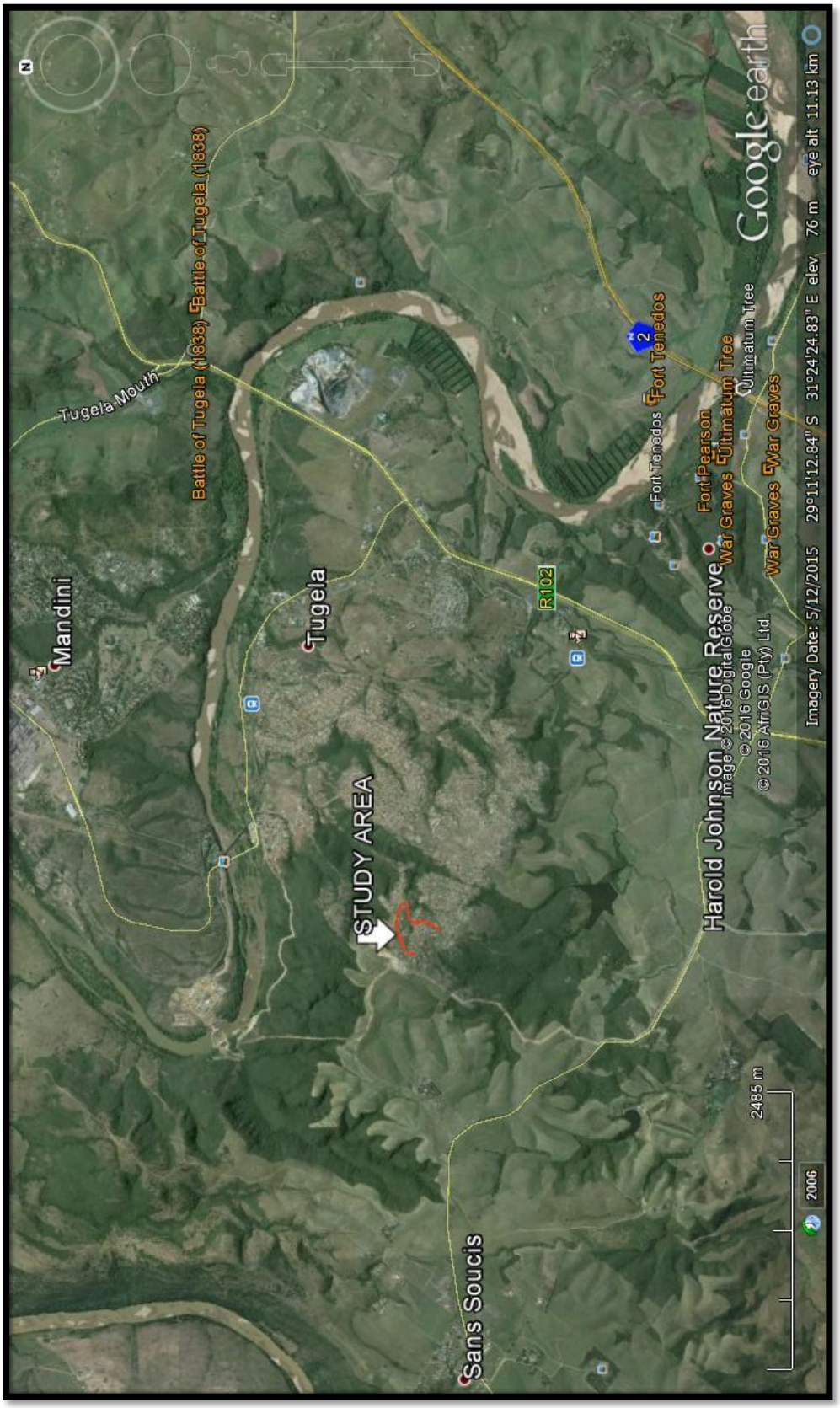

Figure 2. Google aerial photograph showing the location of heritage sites in the environs of the greater Mandini area

9 REFERENCES

Carter, P.L. 1976. 'The Effect of Climatic Change on Settlement in Eastern Lesotho during the Middle and Later Stone Age.' World Archaeology, 8, 198 – 206.
Esterhuysen, A., 2007. The Earlier Stone Age. In Bonner, P., Esterhuysen, A., Jenkins, T. (eds.): *A Search for Origins: Science, History and South Africa's 'Cradle of Humankind'.* Johannesburg: Wits University Press. Pg 110 -121.

Huffman, T. 2007. *Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa*. University of KwaZulu-Natal Press, Pietermaritzburg.

Maggs, T. 1989. The Iron Age farming communities. In Duminy. A. & Guest, B.(eds). *Natal and Zululand: From Earliest Times to 1910 – A New History*: 28 - 48. University of KwaZulu-Natal Press.

Mazel, A. 1989. The Stone Age peoples of Natal. In Duminy, A & Guest, B.(eds). *Natal and Zululand: From Earliest Times to 1910 – A New History*: 1 - 27. University of KwaZulu-Natal Press.

SAHRA, 2005. *Minimum Standards for the Archaeological and the Palaeontological Components of Impact Assessment Reports*, Draft version 1.4.

Van Schalkwyk, L. O. 1994a. Wosi: an Early Iron Age village in the Lower Thukela Basin, Natal. *Natal Museum Journal of Humanities* 6: 65-117.

Van Schalkwyk, L. O. 1994b. Mamba confluence; a preliminary report on an Early Iron Age industrial centre in the lower Thukela Basin, Natal. *Natal Museum Journal of Humanities 6:* 119-153

Van Schalkwyk, L. O. Greenfield, H. J. & Jongsma, T. L. 1997. Ndondondwane: preliminary report on the 1995 survey and excavations. *Southern African Field Archaeology* 6: 61-79

Wadley, L & Jacobs, Z. 2006. Sibudu Cave: background to the excavations, stratigraphy and dating. *Southern African Humanities*. 18 (1): 1-26.

Wadley. L., 2007. The Middle Stone Age and Later Stone Age. In Bonner, P., Esterhuysen, A., Jenkins, T. (eds.): *A Search for Origins: Science, History and South Africa's 'Cradle of Humankind'*. Johannesburg: Wits University Press. Pg 122 -135.

Wright, J. and Hamilton, C. 1989. Tradition and transformations – The Phongolo-Mzimkhulu region in the late eighteenth and early nineteenth centuries. In Duminy, A &

Guest, B.(eds). 1989 *Natal and Zululand: From Earliest Times to 1910 – A new history*: 49 – 82. University of KwaZulu-Natal Press.

APPENDIX 1

RELOCATION OF GRAVES

Burial grounds and graves are dealt with in Article 36 of the NHR Act, no 25 of 1999. Below follows a broad summary of how to deal with grave in the event of proposed development.

- If the graves are younger than 60 years, an undertaker can be contracted to deal with the exhumation and reburial. This will include public participation, organising cemeteries, coffins, etc. They need permits and have their own requirements that must be adhered to.
- If the graves are older than 60 years old or of undetermined age, an archaeologist must be in attendance to assist with the exhumation and documentation of the graves. This is a requirement by law.

Once it has been decided to relocate particular graves, the following steps should be taken:

- Notices of the intention to relocate the graves need to be put up at the burial site for a period of 60 days. This should contain information where communities and family members can contact the developer/archaeologist/public-relations officer/undertaker. All information pertaining to the identification of the graves needs to be documented for the application of a SAHRA permit. The notices need to be in at least 3 languages, English, and two other languages. This is a requirement by law.

- Notices of the intention needs to be placed in at least two local newspapers and have the same information as the above point. This is a requirement by law.

- Local radio stations can also be used to try contact family members. This is not required by law, but is helpful in trying to contact family members.

- During this time (60 days) a suitable cemetery needs to be identified close to the development area or otherwise one specified by the family of the deceased.

- An open day for family members should be arranged after the period of 60 days so that they can gather to discuss the way forward, and to sort out any problems. The developer needs to take the families requirements into account. This is a requirement by law.

- Once the 60 days has passed and all the information from the family members have been received, a permit can be requested from SAHRA. This is a requirement by law.

- Once the permit has been received, the graves may be exhumed and relocated.
- All headstones must be relocated with the graves as well as any items found in the grave.