

**PHASE ONE HERITAGE IMPACT ASSESSMENT
OF THE PROPOSED KWACELE AND
SURROUNDS BULK SEWER INFRASTRUCTURE,
ETHEKWENI METRO MUNICIPALITY.**



ACTIVE HERITAGE cc.

**Frans Prins
MA (Archaeology)
P.O. Box 947
Howick
3290**

feprins@gmail.com
activeheritage@gmail.com
www.activeheritage.webs.com
Fax: 086 7636380

15 December 2013

TABLE OF CONTENTS

1	BACKGROUND INFORMATION ON THE PROJECT	1
2	BACKGROUND INFORMATION OF THE SURVEY	3
2.1	Methodology	3
2.2	Restrictions encountered during the survey	4
2.2.1	<i>Visibility</i>	4
2.2.2	<i>Disturbance</i>	4
2.3	Details of equipment used in the survey.....	4
3	DESCRIPTION OF SITES AND MATERIAL OBSERVED	4
3.1	Locational data	4
3.2	Description of the general area surveyed.....	4
4	STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)	6
4.1	Field Rating.....	6
5	RECOMMENDATIONS	7
6	MAPS AND FIGURES	9
7	REFERENCES	13

LIST OF TABLES

Table 1.	Background information.....	1
Table 2.	Heritage sites located during the ground survey.....	5
Table 3.	Field rating and recommended grading of sites (SAHRA 2005)	8

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 heritage survey of the proposed KwaCele and surrounds Bulk Sewer Infrastructure, eThekweni Metro-Municipality identified three heritage sites. These sites include three Grave Sites that are situated on the western section of the footprint. A second phase heritage impact assessment will be required should the developer decide to apply for mitigation. A second phase heritage impact assessment will include the application of a permit from Amafa and the possible exhumation of relevant graves. 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 Jeffares & Green (PTY)
Type of development:	The project entails the design and construction of bulk sewer lines as well as CAB connectors in the KwaCele, Mngcweni, Panakeni, Diphini, Madwaleni, Mpuma, and Cliffdale School Station settlements (Figs 1, 2 & 3). As far as possible, sewer lines will be buried underground. The sewer system should preferably function using gravity, with minimal use of pump stations; as a result the sewer lines will to a large extent run adjacent to watercourses, and in some instances river crossings will be required.
Rezoning or subdivision:	Rezoning
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 footprint is located in the greater Cato Ridge area approximately 30km to the west of the Durban CBD. It is situated within the eThekweni Metro Municipality. District Municipality (Fig 1). The footprint entails two areas namely the KwaCele area to the immediate north of Inchanga and the Cliffdale Station area to the south of Inchanga (Fig 2).

BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA

The greater Cato Ridge area is relatively well covered by archaeological surveys conducted by members of the then Natal Museum in the 1960's and 1970's. The available evidence, as captured in the KwaZulu-Natal Museum heritage site inventories, indicates that the area contains mostly Early Stone Age material, i.e. eighteen sites. Most of these sites are situated close to water in open air context. Seven sites contain material indicative of the transition between Early Stone Age and Middle Stone Age period. One Later Stone Age site is known from the area and one Later Iron Age Site. However, a large number of Early Iron Age sites, i.e. twenty, have been located by members of the then Natal Museum in the adjacent Mngeni Valley. Various buildings and farmsteads belonging to the Victorian and Edwardian periods occur in the area. Some of the old trading store buildings and churches in the larger Cato Ridge area are also older than 60 years. Perhaps the most significant heritage feature in the near vicinity of the footprint is the Inchanga Railway Station and associated railways tracks that was built in the 1890's. This feature has been upgraded and it is presently a popular tourism venue. These would also be protected by heritage legislation.

Stone Age sites of all the main periods and cultural traditions occur in the greater Cato Ridge. Most of these occur in open air contexts as exposed by donga and sheet erosion. The occurrence of Early Stone Age tools in the near vicinity of permanent water resources, such as the Mngeni River, is typical of this tradition. These tools were most probably made by early hominins such as *Homo erectus* or *Homo ergaster*. Based on typological criteria they most probably date back to between 300 000 and 1.7 million years ago. The presence of the first anatomically modern people (i.e. *Homo sapiens sapiens*) in the area is indicated by the presence of a few Middle Stone Age blades and flakes. These most probably dates back to between 40 000 and 200 000 years ago. The later Stone Age flakes identified in the area are associated with the San (Bushmen) and their direct ancestors. These most probably dates back to between 200 and 20 000 years ago. Interestingly, some rock art sites associated with the San do occur in the greater Cato Ridge area. However, none of the known Stone Age sites, including the rock art sites, occur on the footprint.

The San were the owners of the land for almost 30 000 years but the local demography started to change soon after 2000 years ago when the first Bantu-

speaking farmers crossed the Limpopo River and arrived in South Africa. By 1500 years ago these early Bantu-speaking farmers also settled adjacent to the Mngeni River. Due to the fact that these first farmers introduced metal technology to southern Africa they are designated as the Early Iron Age in archaeological literature. Their distinct ceramic pottery is classified to styles known as “Msuluzi” (AD 500-700), Ndondondwane (AD 700-800) and Ntshekane (AD 800-900). Most of the Early Iron Age sites in the greater Ixopo area belong to these traditions (Maggs 1989:31; Huffman 2007:325-462). These sites characteristically occur on alluvial or colluvial soil adjacent to large rivers below the 1000m contour. The Early Iron Age farmers originally came from western Africa and brought with them an elaborate initiation complex and a value system centred on the central significance of cattle.

Later Iron Age sites also occur in this area. These were Bantu-speaking agropastoralists who arrived in southern Africa after 1000 year ago via East Africa. Later Iron Age communities in KwaZulu-Natal were the direct ancestors of the Zulu people (Huffman 2007). The larger Mngeni Valley area was inhabited by various Nguni-speaking groups such as the Dlanyawo, Nyavu and Njilo, in the beginning of the 19th century (Bryant 1965; Wright 1988). With the exception of the Nyavu who remained fiercely independent most of these communities were incorporated into the Zulu Kingdom of Shaka in the 1820’s. After the Anglo-Zulu war of 1879 and the Bambatha Rebellion of 1911 almost all the African people in the study area adopted a Zulu ethnic identity.

The greater KwaCele area developed as a township in the 1970’s to serve local African labour. As such very few of the structures in the township are older than 60 years and have little heritage value. The area has seen political violence during the turbulent years of the 1980’s; however, the Liberation Struggle associated with this particular area is still under researched (Bonin 2001).

2 BACKGROUND INFORMATION OF THE SURVEY

2.1 Methodology

A desktop study was conducted of the archaeological databases housed in the KwaZulu-Natal Museum. The SAHRIS website was consulted for previous heritage surveys and heritage site data covering the project area. In addition, the available archaeological and heritage literature covering the greater Cato Ridge area was also consulted.

A ground survey, following standard and accepted archaeological procedures, was conducted. Particular attention was focused on the areas adjacent to existing water courses as outlined in the project brief.

2.2 Restrictions encountered during the survey

2.2.1 Visibility

Visibility was good.

2.2.2 Disturbance

No disturbance of any potential heritage features was noted.

2.3 Details of equipment used in the survey

GPS: Garmin Etrek

Digital cameras: Canon Powershot A460

All readings were taken using the GPS. Accuracy was to a level of 5 m.

3 DESCRIPTION OF SITES AND MATERIAL OBSERVED

3.1 Locational data

Province: KwaZulu-Natal

Municipality: eThekweni Metro-Municipality

Towns: Cato Ridge, Durban

3.2 Description of the general area surveyed

KwaCele is situated on a ridge to the immediate north-east of Cato Ridge. The general area is characterized by shallow slopes with steeper slopes towards the east. The project area is dominated by secondary grassland, that includes unpalatable Ngogoni grass, as well as exotic trees such as *Morus sp* and *Eucalyptus sp*. Indigenous Valley Bushveld vegetation occurs in the steep valleys on either side of the ridge where KwaCele is situated. Informal maize and vegetable gardens occurs adjacent to the numerous homesteads that are scattered in this area. Human habitation includes both traditional Zulu-style homesteads as well as more western-style houses in the peri-urban areas.

The area has been disturbed in parts and evidence for excavations as well as small scale farming activities, in the form of small maize and vegetable gardens, occurs on the footprint. However, no heritage sites or artefacts have been disturbed by these activities. Although two archaeological sites have been recorded in the past as occurring to the immediate south of the study area none have been located on the actual footprint. The Inchanga Railway Station, a prominent heritage feature, also occurs to the immediate south of KwaCele and is not threatened by the proposed development. However, a large informal grave yard has been located on the western boundary of KwaCele (Fig 4). A large percentage of the graves appear to be younger than 60 years old and are therefore not strictly protected by heritage legislation. However, other legislations apply to these graves, such as the Human Tissues Act (Act No.65 of 1983 and as amended), the Removal of Graves and Dead Bodies Ordinance (Ord. No. 7 of 1925) and the Exhumations Ordinance (Ord. No. 12 of 1980).

A more detailed description of the context of this sites is presented in Table 2.

Table 2. Heritage sites located during the ground survey.

No	Heritage site category	Brief description	Significance (Table 3)	Mitigation	GPS Latitude and Longitude
1	Graveyard 1	A large area covering approximately 250m x 30m situated on the western side of KwaCele directly adjacent to the road (Fig 4). Almost 200 individual grave sites are scattered over this large area. Some are clumped together in groups of 6-8 graves whilst others are situated in single format. The majority of the graves are	Many of the graves in this graveyard appear to be older than 60 years. They are therefore protected by heritage legislation and are rated as of high significance locally (Table 3).	Strictly maintain a 50m buffer zone around the graveyard. No disturbance is allowed within the buffer zone. Should the developers decide to expand the bulk water network into this area then a second phase heritage impact assessment must be called for. This phase must be conducted by a grave relocation expert. A community consultation process	Start: S 29° 42' 25.54" E 29° 42' 10.97" End: S 29° 42' 10.97" E 30° 39' 48.78"

		unmarked and consist of soil and stone heaps of approximately 2m x 3m each (Fig 5).		will have to be initiated to arrange for potential grave exhumation and reburial (Appendix 1).	
2	Graveyard 2	A small informal graveyard consisting of 8 graves (Fig 4). They cover an area of approximately 10m x 12m. Most graves are unmarked and consists of soil and stone heaps arranged in two linear rows of 4 graves each (Fig 6).	These graves in this graveyard appear to be older than 60 years. They are therefore protected by heritage legislation and are rated as of high significance locally (Table 3).	Strictly maintain a 50m buffer zone around the graveyard. No disturbance is allowed within the buffer zone. Should the developers decide to expand the bulk water network into this area then a second phase heritage impact assessment must be called for. This phase must be conducted by a grave relocation expert. A community consultation process will have to be initiated to arrange for potential grave exhumation and reburial (Appendix 1).	S 29° 42' 01.02" E 30° 40' 05.48"

4 STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)

4.1 Field Rating

Both Grave Sites are rated as high significance locally (Table 3). Some of the individual graves appear to be older than 60 years. They are therefore protected by heritage legislation.

Table 3. 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

5 RECOMMENDATIONS

The proposed bulk sewerage network development may proceed but under the following conditions:

- A buffer zone of 50m must be strictly maintained around the two identified graveyards. No development or removal and alternation of items or features may take place within this buffer zone.
- Should development take place within 100m from the identified graveyards then it is proposed that the developers erect a fence with an entrance gate to the relevant graveyard. This process should take place in consultation with the local community.
- Should the developer wish to expand the bulk sewerage development network within the demarcated buffer zone then mitigation measures must be initiated under the auspices of the local heritage agency Amafa. This will include a second phase heritage impact assessment, the application for a permit, and the possible exhumation of certain graves (Appendix 1).

Apart from these concerns there is no archaeological reason why the proposed bulk sewerage network development expansion may not take place as planned. There are

no archaeological and heritage sites located along any of the existing water courses within the study area. According to the developer the proposed sewer lines will to a large extent run adjacent to watercourses. 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. It is also possible that community consultation, may indicate contemporary graves that were not visible during the initial heritage survey of the project area. These must also be evaluated during a second phase heritage impact assessment.

6 MAPS AND FIGURES

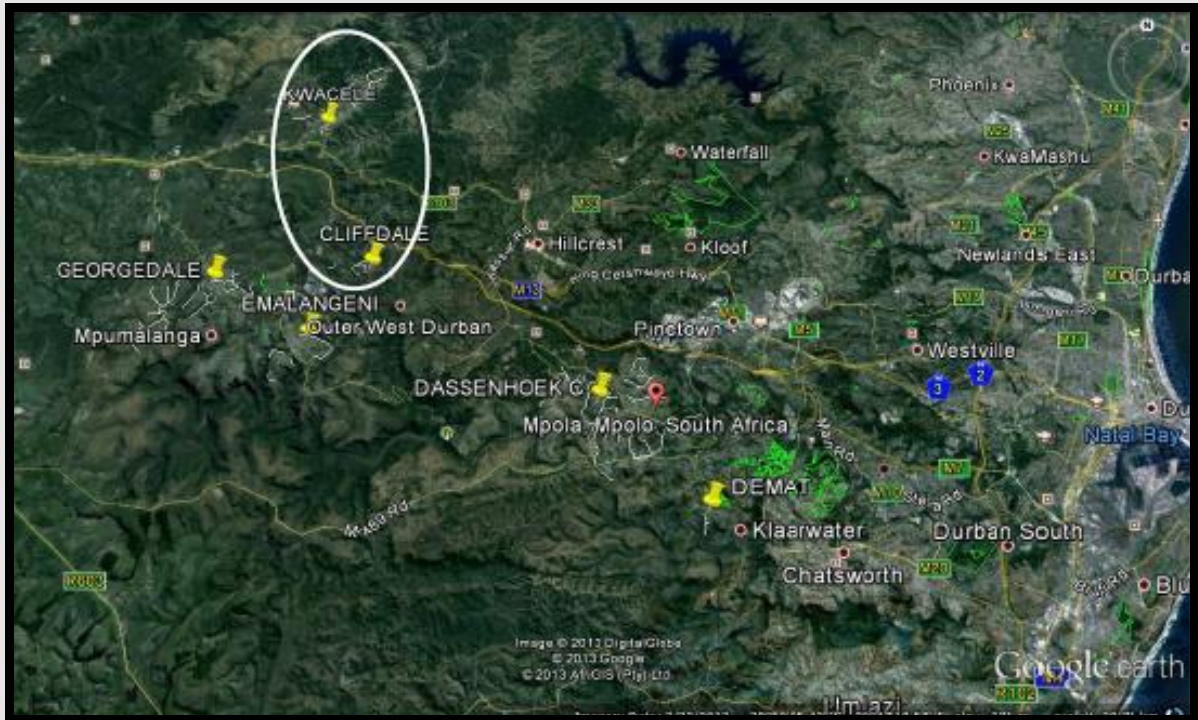


Figure 1. Google aerial photograph showing the location of KwaCele and surrounds, eThekweni Metro-municipality (Source: Iliso).

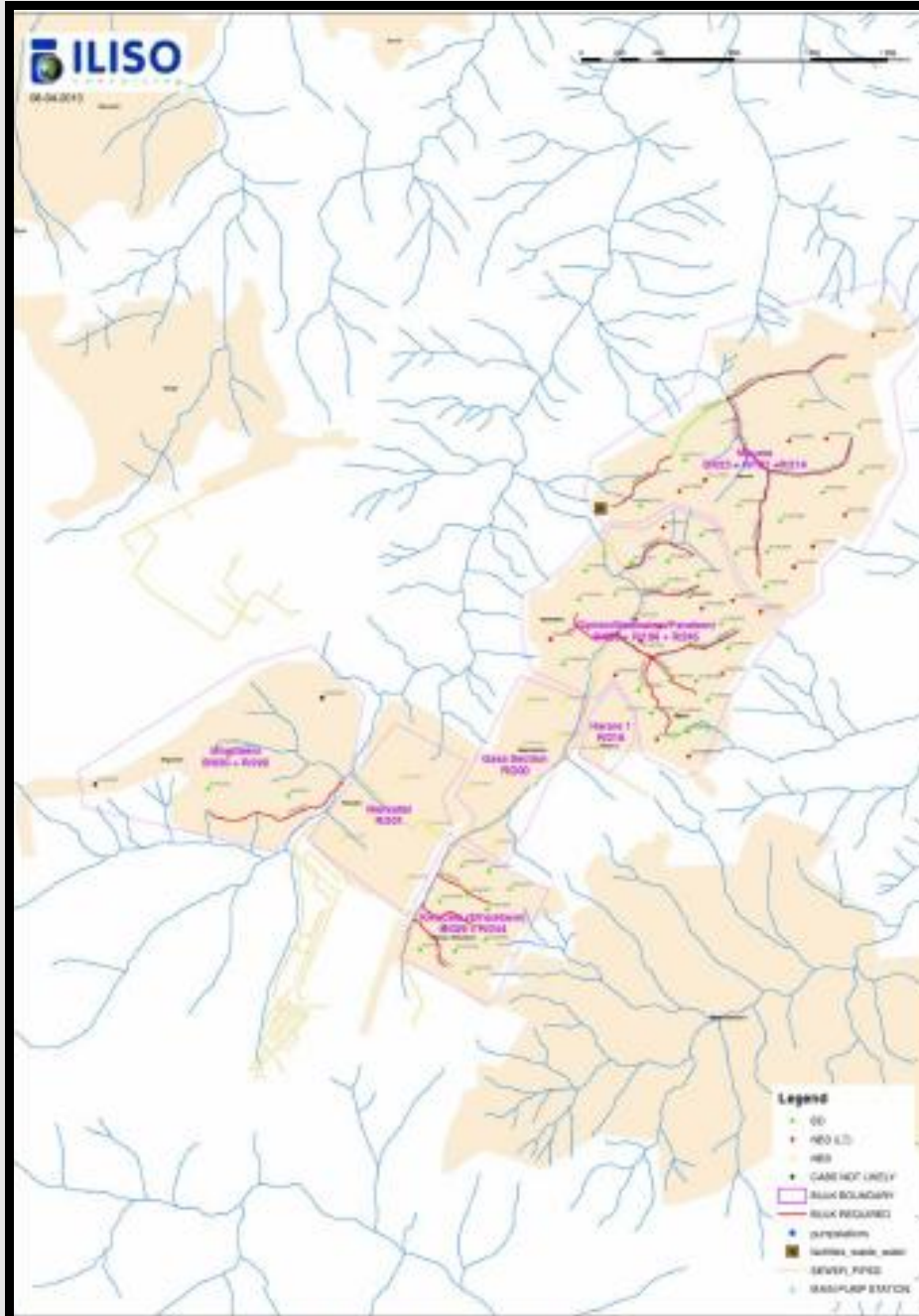


Figure 2. Map showing the project area (Source: Iliso)

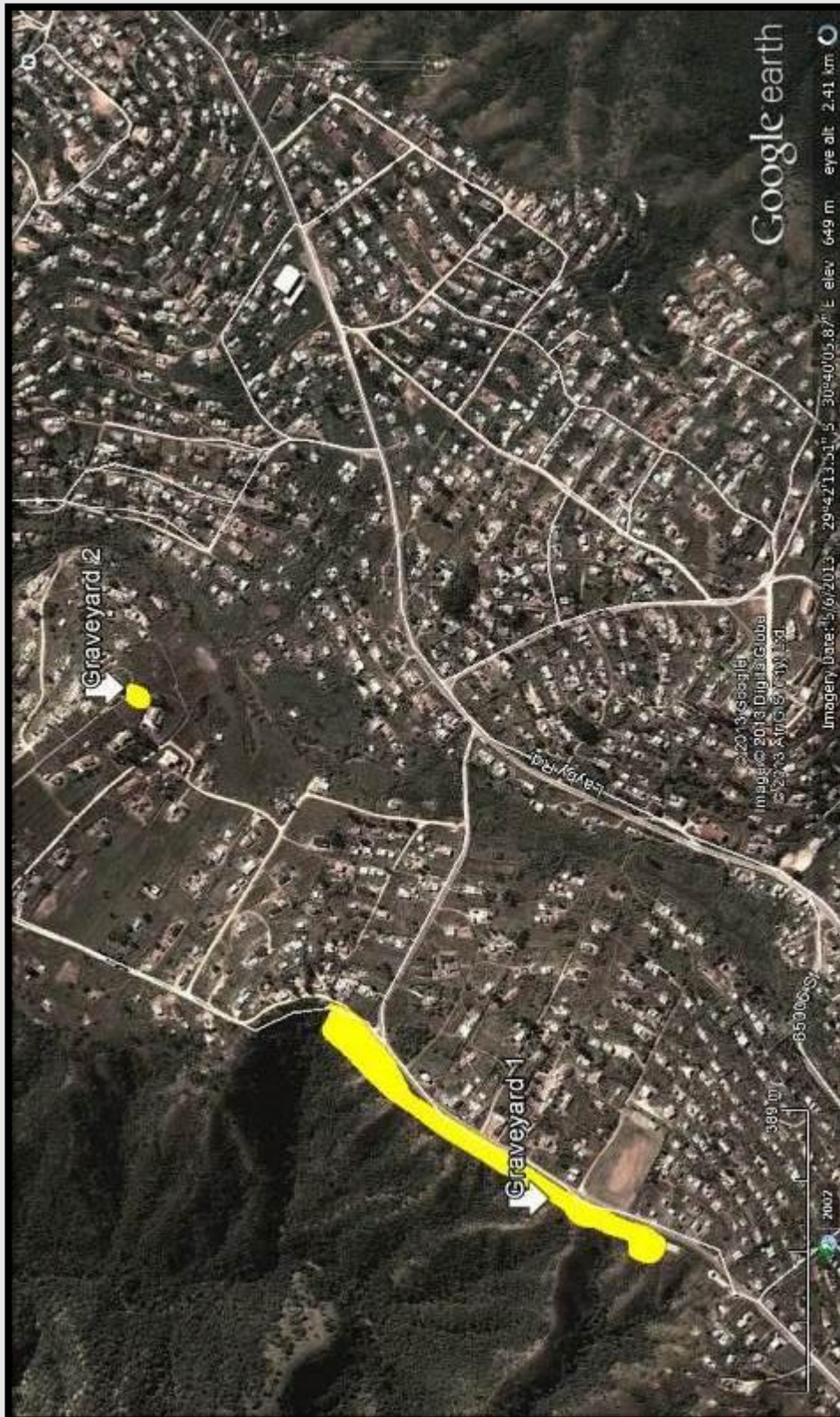


Figure 3. Distribution of heritage sites in the project area. The yellow polygons indicate areas utilised by local community members as informal graveyards.



Figure 4. Photograph of Graveyard 1. Most of the individual graves are unmarked.



Figure 5. Photograph of Graveyard 2.

7 REFERENCES

- Bryant, A. T. 1965. *Olden times in Zululand and Natal*. Cape Town: C. Struik.
- Derwent, S. 2006. *KwaZulu-Natal Heritage Sites: A Guide to Some Great Places*. David Phillips: Cape Town
- eThembeni. 2006. *Heritage Impact Assessment of the Western Aqueduct Greater Durban metro, KZN*. Unpublished report presented to Knight Piesold.
- Huffman, T. N. 2007. *Handbook to the Iron Age: The Archaeology of Pre-colonial Farming Societies in Southern Africa*. University of KwaZulu-Natal Press. Pietermaritzburg.
- Maggs, T. The Iron Age farming communities. In Duminy, A. and Guest, B. 1989. *Natal and Zululand: from Earliest Times to 1910. A New History*. Pg. 28-46. University of Natal Press. Pietermaritzburg.
- Mitchell, P. 2002. *The Archaeology of Southern Africa*. Cambridge University Press: Cambridge
- SAHRA, 2005. *Minimum Standards for the Archaeological and the Palaeontological Components of Impact Assessment Reports, Draft version 1.4*.

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 need 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

