

**PHASE ONE HERITAGE IMPACT ASSESSMENT
OF A PROPOSED EARTH WALL DAM ON THE
FARM TIJGERKRANTZ 175 GT IN THE DUNDEE
AREA, KWAZULU-NATAL.**



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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 first phase heritage survey of the proposed construction of an earth wall dam on the farm Tijgerkrantz 175 GT (Shawe Dam) near Dundee identified a small scatter of Middle Stone Age Tools in an erosion gully. However these tools are fractured, out of context and most were probably washed down from the hills more than 2km to the north of the footprint. Similar and more impressive sites occur in various locales in the greater Dundee area. The few tools observed in the study area have been rated as having low significance and no mitigation is necessary. Apart from these tools no archaeological sites or other heritage features were noted in the study area. There is no reason, from a heritage perspective, why the proposed development may not proceed as planned. However, 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 additional 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 P & N Enviro
Type of development:	The construction of an earth wall dam on the farm Tijgerkrantz 175 GT in the Dundee Area, KZN. The Dam wall is over 10 m high and the dam will cover an area of over 10 ha. (Figs 1 & 2).
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 project area is located approximately 40km to the north east of Dundee (Figs 1 & 2). It is situated within the Amajuba District Municipality. The coordinates of the project area are: 28° 1' 15.76" S 30° 28' 37.16" E. The footprint is situated on a commercial farm and comprises a small stream flanked by disturbed grasslands. Large portions of

the adjacent stream banks have been eroded and an erosion gully occurs on the footprint. The proposed development includes the construction of an earth dam wall of approximately 10m high. The proposed dam will cover an area of approximately 10 hectares.

BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA

The greater Dundee area has been sporadically surveyed for archaeological sites in the last thirty years. These were mostly recorded by staff of the Talana Museum, archaeologists attached to the then Natal Museum and by cultural resource specialists. Early Stone Age, Middle Stone Age, Later Stone age and Later Iron Age sites have been recorded in the greater Dundee area. In addition, rock art have also been recorded in the region although more systematic surveys are needed. None of the known sites occur in the immediate vicinity of the project area.

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. Around 800 years ago, if not earlier, Bantu-speaking farmers also settled in the greater Dundee area. Although some of the sites constructed by these African farmers consisted of stone walling not all of them were made from stone. Sites located elsewhere in the KwaZulu-Natal Midlands show that many settlements just consisted of wattle and daub structures. These Later Iron Age sites were most probably inhabited by Nguni-speaking groups such as the amaBhele and others (Bryant 1965). However, by 1820 the original African farmers were dispersed from this area due to the expansionistic policies of the Zulu Kingdom of King Shaka. African refugee groups and individuals were given permission to settle in the area by the British colonial authorities after 1845 where most of them became farm labourers. After the Anglo-Zulu war of 1879 and the Bambatha Rebellion of 1911 many of the African people in the study area adopted a Zulu ethnic identity.

European settlement of the area started soon after 1838 when the first Voortrekker settlers marked out large farms in the area. However, many of these farms were abandoned in the 1840's when Natal became a British colony only to be reoccupied again by British immigrants. The greater Dundee area is intimately associated with various Battle Sites of the Voortrekker era (ca. 1836), the Anglo-Zulu War (ca.1879) and the Anglo-Boer War (ca. 1899-1901). Well-known battle sites in the greater Dundee area

includes Talana, Ncome/Blood River, Isandlwana, Rorke's Drift and Elandsplaagte. All these sites are protected by provincial heritage legislation (Derwent 2006) however, none occur in the immediate environs of the study area.

The presence of coal in the greater Dundee area was observed by many early travellers. The Voortrekkers, during their battles with the Zulus found coal in the beds of streams such as the Steenkoolspruit (coal stream) and in 1839 the British garrison commander in Durban, Captain Jervis, sent samples of coal to the Governor of the Cape. In their kitchens farmers burned coal obtained from surface outcrops on their lands and it was one of them, Peter Smith of Talana farm, who started sending wagonloads of coal to be marketed in Pietermaritzburg. This enterprise, in 1862, actually started the coal industry. In 1880 the first proper geological survey was made of the Natal coalfields, by which it was proved that workable deposits were found on the farms Dundee and Coalfields. By that time, Peter Smith had already marketed over 7000 tons of coal. With Dugald MacPhail and Charles Wilson as partners, he developed mining substantially, forming the Dundee Coal and estate Company. In 1882 he laid out a town on the farm Dundee to create a center for the coalfields. In 1902 this township finally became a municipality.

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 Dundee area was also consulted.

A ground survey, following standard and accepted archaeological procedures, was conducted.

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: Amajuba District Municipality

Towns: Dundee

3.2 Description of the general area surveyed

No formal archaeological or other heritage sites were located on the study area. However seven Middle Stone Age artefacts consisting of one point, two broken blades, an adze, and three flakes occurred in a donga adjacent to the small stream that will feed the proposed dam. The approximate GPS coordinates where the tools were found is 28°1' 12.56" S 30°28' 48.04 E (Fig 2). These artefacts were made from indurated shale and low quality chert. Most of them are extremely weathered and not situated in any archaeological context (Figs 3 & 4). They were most probably washed down from the hills approximately 2km to the north of the proposed dam site. There are various Middle Stone Age open air sites in the greater Dundee area and these contain better collections of artefacts than the few noticed in this study area. As such they are of little research and/or academic value.

4 STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)

4.1 Field Rating

The few Middle Stone Age tools observed are situated out of situ and not in any archaeological or stratigraphic context. There are better and more representable Middle Stone Age sites elsewhere in the greater Dundee area. This Middle Stone Age tool occurrence is therefore rated as Generally Protected C (Table 2) In other words it has low significance and no further recording is required before destruction.

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

5 RECOMMENDATIONS

The proposed construction of an earth wall dam on the farm Tijgerkrantz may proceed from a heritage perspective. There is no archaeological reason why the proposed development may not proceed as planned. However, should the construction activities expose any heritage sites or artefacts other than those reported in this document then all construction activities must cease immediately and the heritage consultant or Amafa contacted for further evaluation. It must 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.

6 MAPS AND FIGURES

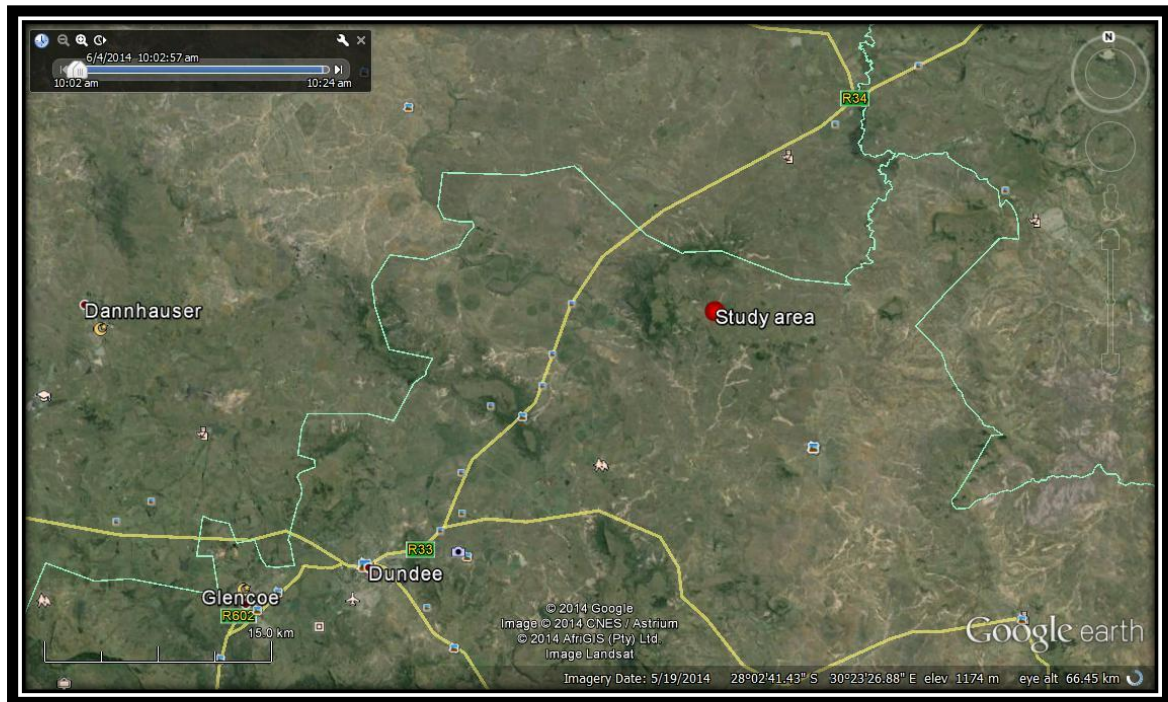


Figure 1. Google aerial photograph showing the location of the study area relative to the town of Dundee.

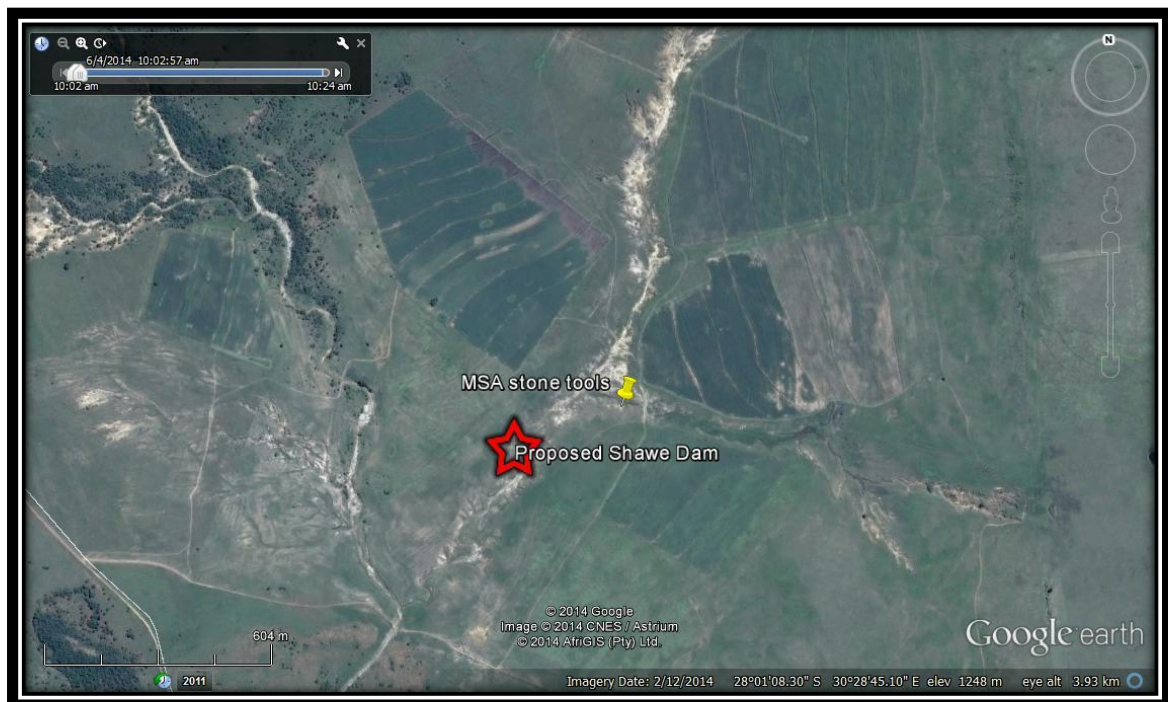


Figure 2. Google aerial photograph showing the location of the proposed Shawe Dam and Middle Stone Age tools in the study area.



Figure 3. *Location of the proposed Shawe Dam on the farm Tijgerkrantz near Dundee*



Figure 4. *Erosion donga adjacent to stream*



Figure 5. Flakes made form weathered chert.



Figure 6. Middle Stone Age flakes, blades and point. These artefacts are made from indurated shale

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

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*.

