

# **CULTURAL HERITAGE IMPACT ASSESSMENT OF THE MATSHEKETSHENI 20MVA 132/88kV SUBSTATION AND ASSOCIATED POWERLINES**



**ACTIVE HERITAGE cc.**

**For: Ludloko Developments**

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**17 MARCH 2014**

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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 cultural heritage survey of the proposed Matsheketsheni 20MVA 132/88kV Substation and associated powerlines near Newcastle identified no heritage sites on the footprint. There is no archaeological reason 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 archaeological or historical remains, including other potential grave sites, 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) for Ludloko Developments
Type of development:	<p>Eskom Distribution has identified the need to establish a new substation they want to call Matsheketshehi substation in Osizweni outside New Castle in the Amajuba District Municipality. The planned Matsheketshehi substation will strengthen power supply in the whole of Osizweni and its surrounding areas. The network from which Osizweni and the surrounding areas get electricity supply is currently overloaded and experiences severe voltage regulation problems. In the near future higher loads of new connections have to be made in an around Osizweni. The network responsible for electricity supply in and around Osizweni does not have any spare capacity to supply any new connections. This then necessitates the establishment of an additional substation to be known as Matsheketshehi.</p> <p>Eskom is, therefore, proposing to establish an additional substation of approximately 100m x 100m (10 000m<sup>2</sup>) in extent. The construction of a new Matsheketshehi 132/88kV 20MVA substation and power lines will be able to de-load the substations at Vlaklaagte and Blaauwbosch and therefore improve the quality of electricity supply in the whole area of New Castle. The scope of works include the establishment of the proposed 20MVA 132/88kV substation with an access road, new control room, and yard fence in the form of steel palisade The substation is planned occupy a space of about 100m x 100m. It also includes the construction of about 300m of 88kV Wolf line from Parklands Vlaklaagte 132kV power line to the proposed Matsheketshehi Substation</p>
Rezoning or subdivision:	n.a
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 study area is situated at Osizweni along the main road within the New Castle Local Municipality (Fig 1). The GPS coordinates for the proposed substation alternatives and the powerline tower is given below:

#### Matsheketshehi coordinates

Option	South	East
Powerline tower	27°45'21.42"	30° 7'53.72"
2	27°45'21.66"	30° 8'5.72"
1	27°45'24.32"	30° 7'45.16"

The study area is on the edge of the residential area next to a water reservoir. The study area comprises mainly of a residential houses an open area, secondary roads and a steel structure power line. The residential area and the surrounding open area is flat with no erosion or threat of erosion.

### BACKGROUND TO ARCHAEOLOGICAL HISTORY OF AREA

The greater Newcastle area has never been systematically surveyed for archaeological heritage sites. Only five sites are recorded in the data base of the KwaZulu-Natal Museum. These include two rock art sites with later Stone Age material and three Later Iron Age sites with characteristic stone walling. Oliver Davies, a pioneer archaeologist, has also recorded Middle Stone Age sites to the south of Newcastle. None of these sites occur in the close 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 Newcastle 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, most of these farms were abandoned in the 1840's when Natal became a British colony only to be reoccupied again by British immigrants.

Newcastle started off life as Post Halt Two on the journey between Durban (then Port Natal) and the Zuid-Afrikaansche Republiek and Johannesburg. The city was strategically placed in 1854 by the Surveyor General of the Natal Colony, Dr PC Sutherland. The city was later known as the Waterfall River Township because of the Ncandu River. In 1864, the town of Newcastle was founded on the site, becoming the fourth settlement to be established in Natal after Durban, Weenen and Pietermaritzburg. Newcastle was named after the British Colonial Secretary, the Duke of Newcastle. In 1876 the Fort Amiel was built to ward off a possible Zulu attack (Derwent 2006). In 1873 Newcastle became a separate electoral division. To commemorate Queen Victoria's Diamond (60th) Jubilee a sandstone construction of a town hall started in 1897, being completed two years later. The town was used as a depot by the British during both the First and Second Boer War. Newcastle functioned as a major transport junction and popular stopover for wagons and post chaises during the late 19th century. British preparation work for the Pretoria Convention of 1881 was done at Newcastle. In 1890, the first train arrived in Newcastle and in 1891, Newcastle was declared a borough. The discovery of coal brought a new era of prosperity and several ambitious building projects were planned.

## **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 potential heritage site reports covering the area. Aerial photographs covering the study area has been scrutinised. In addition, the available archaeological literature covering the greater Newcastle 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: Newcastle Local Municipality

Towns: Newcastle, Osizweni

### **3.2 Description of the general area surveyed**

Although the area is potentially rich in Iron Age sites no heritage sites or features were observed on the footprint. The consultant walked all the proposed substation and



associated powerline routes and surveyed the area on either side of the corridors but no heritage sites were observed (Figs 3-4). Particular care was taken to record grave sites in the near vicinity of existing human settlements but none occur closer than 50m from the proposed substation and powerlines.

### 3.3 Heritage sites identified

No heritage sites or features were observed on the footprint.

## 4 STATEMENT OF SIGNIFICANCE (HERITAGE VALUE)

### 4.1 Field Rating

Not applicable as no heritage sites were identified on the footprint

**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 the Matsheketshehi Substation and associated powerlines may proceed from a heritage point of view as no sites or features are in danger of being destroyed or altered. Both alternative location points contain no heritage sites or features. However, it should be pointed out that the KwaZulu-Natal Heritage Act requires that operations exposing archaeological and historical residues including potential grave sites 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 Newcastle.**



**Figure 2. Google aerial photograph showing the location of the proposed substations and associated powerline routes.**



**Figure 3. Photograph showing the existing water tower adjacent to the proposed powerline route. No heritage sites occur on the footprint.**



**Figure 4. The location for the alternative substation and powerline (Site 2). No heritage sites were observed**

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