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**6 May 2013**

# **CULTURAL HERITAGE RESOURCES IMPACT ASSESSMENT FOR THE UPGRADE OF DRINKING WATER WORKS AT CAROLINA MPUMALANGA PROVINCE**

## **A. INFORMATION ON PROJECT**

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**Date: 6 May 2013**

## **B. EXECUTIVE SUMMARY**

The project to upgrade the Carolina Water Works has two components. Firstly there is the upgrade of the water purification plant as well as a near outlet from the dam. The area has been altered by earthmoving machinery during the original construction work which would have destroyed any possible heritage sites. During the inspection no important cultural heritage resources were found.

The second component is the building of a new water reservoir in town. This area has also been altered in the past during construction. No important cultural heritage resources were found.

There is no objection to the development of the two sites from a cultural heritage resources point of view.

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## **D. BACKGROUND INFORMATION ON PROJECT:**

### **(a) Whether the report is part of a scoping report/EIA/HIA or not**

*Report is part of a scoping/EIA report*

### **(b) Type of development (e.g. low cost housing project, mining etc).**

*The upgrading / refurbishment of the existing bulk storage infrastructure which forms part of the greater Carolina Water Supply Scheme and involves the upgrade of the Carolina water treatment works from 3.5 to 6ML/d including the construction of sludge dams, construction of a 4ML concrete reservoir in Carolina and construction of new operational building, new filters, clarifiers, electrical work, etc.*

### **(c) Whether re-zoning and/or subdivision of land is involved.**

*No*

### **(d) Developer and consultant and owner and name and contact details;**

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### **(e) Legislative requirements of Act 25 of 1999.**

PROTECTED SITES IN TERMS OF THE NATIONAL HERITAGE RESOURCES ACT,  
ACT NO. 25 OF 1999

The following are the most important sites and objects protected by the National Heritage Act:

- Structures or parts of structures older than 60 years.
- Archaeological sites and objects.
- Paleontological sites.
- Meteorites.
- Ship wrecks.
- Burial grounds.
- Graves of victims of conflict.
- Public monuments and memorials.
- Structures, places and objects protected through the publication of notices in the Gazette and Provincial Gazette.
- Any other places or objects, which are considered to be of interest or of historical or cultural significance.
- Geological sites of scientific or cultural importance.
- Sites of significance relating to the history of slavery in South Africa.
- Objects to which oral traditions are attached.
- Sites of cultural significance or other value to a community or pattern of South African history

### **Description of the Property of Affected Environment**

#### **Details of area surveyed:**

- Full location Data for Province, Magisterial District/Local Authority and property (e.g. farm/erf) name and number etc.;

*The upgrading / refurbishment of the existing bulk storage infrastructure which forms part of the greater Carolina Water Supply Scheme and involves the upgrade of the Carolina water treatment works from 3.5 to 6ML/d including the construction of sludge dams, construction of a 4ML concrete reservoir in Carolina and construction of new operational building, new filters, clarifiers, electrical work, etc.*

Province: Mpumalanga Province

Local Authority: Albert Luthuli Municipality, Municipal Manager, Private Bag X 719 Carolina 1185.

List of Farm names: Goedehoop 45IT

## **E. BACKGROUND TO THE ARCHAEOLOGY AND HISTORY OF THE AREA.**

The town of Carolina lies near the eastern escarpment on the Highveld in the so-called Karoo Sequence with its rich coal fields. The Karoo rocks also well known for their fossils of reptiles and dinosaurs and later the first mammals (De Wit, M. 2003 pp 27 – 38)

As far as the Stone Age is concerned very little work has been done in the Highveld region. At Maleoskop on the farm Rietkloof good examples of Early Stone Age artefacts have been found. The Middle Stone Age is also not well represented except for the findings at Bushman Rock shelter on the farm Klipfontein near Ohrigstad (Esterhuysen A. & Smith J. 2007. pp 41 – 47).

Two Late Stone Age sites were excavated on the farm Honingklip near Badplaas in the Carolina district, by G. Korsman (Korsman G. 1994 pp 14 – 21). Pistorius, JCC. (March 2013) did a heritage impact assessment on the proposed Lusthof Colliery near Carolina but found no archaeological remains

In contrast to the Stone Age the Iron Age is well represented on the escarpment of Mpumalanga. No Early Iron Age sites occur near Carolina but the Late Iron Age is well represented by stone circle sites stretching from Carolina and Badplaas to Lydenburg and Ohrigstad. These sites differ greatly in size from single and extended family settlements to very large settlements exceeding a kilometre in diameter (Esterhuysen A. & Smith J. 2007 99 49 – 64). Küsel U.S. recorded several sites near Machadodorp in 2011 (Küsel U.S. 2011 a – b) – see photograph.



Typical Late Iron Age stonewalled sites of the escarpment

By the mid 1850`s white farmers started to settle in the upper regions of the Komati River, because of the abundance of fresh water. By 1880 two brothers Tom and Charles Everaerd settled on the farm Bonnefoi and farmed with horses. Their farm soon became a stopover for transport wagons. After the discovery of gold at Barberton the ox wagon traffic through the area increased drastically.

On 26 August 1882 a meeting by some twenty farmers was held to establish a town in the area. Cornelius Johannes Coetzee donated his farm Steynsdraai for the establishment of a town on condition that the town is named Carolina after his first wife Magdalena Carolina Coetzee. After a number of unsuccessful applications to have the town proclaimed permission eventually was given in 1885 and published officially on 16 June 1886 (Bornman H. 1986 pp 18 – 20).

The town prospered because of the traffic to and from the Barberton Goldfields.

In 1893 Carolina became an independent magisterial district. With the declaration of the Anglo Boer War the Carolina Commando had to protect the Swaziland boarder, but was later send to Natal. They returned to Carolina to protect the town against the British forces in 1900. The British soon concord the town and plundered most houses. The N.G. Churches benches were used as firewood. After the war the town had to be rebuilt (Bornman H. 1986 pp 25 – 29). See: Anglo Boer War Memorial in front of the old N.G. Church).



Anglo Boer War memorial with old N.G. church in the background

Today the town mainly serves its inhabitants and the farming community surrounding the town. Coal mining is becoming a major industry in the district. The town has a large number of 1930/40/50`s houses and buildings – see photographs.



Sandstone magistrates offices built 1930`s



New sandstone N.G. Church  
designed by Hendrik  
Vermooten and inaugurated  
1951



Good example of a 1930/40  
residential house

In the rural farming area there are also good examples of farm settlements and houses – see photograph.



Example of 1930's farmhouse  
near the Boesmanspruit.



## **F. DESCRIPTION OF PROPERTY OR AFFECTED ENVIRONMENT**

### **(a) Detail of area surveyed**

- (i) Location Province: Mpumalanga Province
- (ii) Location maps: 1/50 000 Carolina 2630 AA
- (iii) Site map: attached

### **(b) Description of methodology**

- (i) How the area was searched

The area was walked on foot and photographed.

- (ii) Restrictions to the study area

None

- (iii) Data acquired

G.P.S. readings were taken. Photographs were taken of the area as well as a nearby old farm settlement.

The project consists of two sites. The first site is south of Carolina at the water purification works. This site lies in Highveld grassland with some exotic trees planted some twenty years ago. The site was walked on foot together with the manager of the water purification site.

The second site lies on the eastern rim of the town where the main water storage facilities are. Both sites have been substantially altered by construction. The sites were recorded and photographed.

## **G. DESCRIPTION OF SITES IDENTIFIED AND MAPPED**

### **Water purification site**

This site has two areas which will be developed. The first area is near the dam wall S26° 05' 49.84" & E30° 05' 24.19" where a new outlet for the water needed for the purification plant will be constructed – see photographs.



The new outlet will be constructed at the dam wall.



Excavations for the new outlet

The area affected will be very small and has already been excavated (10 X 20 m). No cultural heritage resources were found at or near the site.

The second site at the water purification is at S26° 05' 39.18" & E30° 05' 21.97" see photograph.



Site for new purification section

This whole area has also been altered in the past when the original construction of the plant took place some thirty years ago. The site consists of purification dams, storage facilities and pumps – see photograph.



Present purification plant

**Main water storage facility (S26° 04' 30.0" & E30° 03' 48.21")**

The site is situated east of the town centre. This site consists of a water tower and reservoirs. The site has been altered during construction in the past. No archaeological or other cultural heritage resources are present on or near the site – see photograph



Site of the new reservoir at the water storage facility

## **H. DESCRIPTION OF THE ARTEFACTS, FAUNA, BOTANICAL OR OTHER FINDS AND FEATURES**

None

## **I. CLEAR DESCRIPTION OF BURIAL GROUNDS AND GRAVES**

None

## **J. FIELD RATING**

None – no heritage sites were found on the sites investigated

## **K. STATEMENT OF SIGNIFICANCE**

None – no heritage sites or graves were found on the sites investigated.

## **L. RECOMMENDATIONS**

There are no objections to the proposed development on both sites from a cultural heritage resources point of view as no cultural heritage resources were found during the survey.

## **M. CONCLUSION**

Both the sites surveyed have been extensively altered during the original construction phase. No important cultural heritage resources or graves were found on or near the sites. The sites are also not sixty years old.

## **N. BIBLIOGRAPHY**

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## **O. APPENDIX**

- Maps pages 14 - 17









