



Archaetnos Culture & Cultural
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**A REPORT ON A HERITAGE IMPACT ASSESSMENT FOR THE
PROPOSED DEVELOPMENT OF WATERVAL PORTION 8 IN
RUSTENBURG, NORTH WEST PROVINCE**

For:

K2M TECHNOLOGIES

On behalf of

Centro Developers cc

REPORT: AE804

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SUMMARY

Archaetnos cc was requested by K2M Technologies on behalf of Centro Developers cc to conduct a heritage impact assessment (HIA). This is for a proposed residential development on Waterval portion 8 in Rustenburg, North West Province.

The fieldwork undertaken revealed various structures of some cultural significance. These vary from low to high in significance. Mitigation measures will therefore have to be implemented in certain cases.

Recommendations in this regard are given in the report. However the proposed development can continue.

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1. INTRODUCTION

Archaetnos cc was requested by K2M Technologies on behalf of Centro Developers cc to conduct a heritage impact assessment (HIA). This is for a proposed residential development on Waterval portion 8 in Rustenburg, North West Province.

The client indicated the area where the proposed development is to take place, and the survey was conducted in this area. However one always needs to look a bit wider in order to ascertain that secondary impact of any development is minimized. Cultural features identified in these areas are included in this report.

2. TERMS OF REFERENCE

The Terms of Reference for the survey were to:

1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property (see Appendix A).
2. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value (see Appendix B).
3. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
4. Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources.
5. Recommend suitable mitigation measure should there be any sites of significance that might be impacted upon by the proposed development.
6. Review applicable legislative requirements.

3. CONDITIONS & ASSUMPTIONS

The following conditions and assumptions have a direct bearing on the survey and the resulting report:

1. Cultural Resources are all non-physical and physical man-made occurrences, as well as natural occurrences associated with human activity. These include all sites, structure and artifacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development. Graves and cemeteries are included in this.
2. The significance of the sites, structures and artifacts is determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. The various aspects are not mutually exclusive, and the evaluation of any site is done with reference to any number of these aspects.

3. Cultural significance is site-specific and relates to the content and context of the site. Sites regarded as having low cultural significance have already been recorded in full and require no further mitigation. Sites with medium cultural significance may or may not require mitigation depending on other factors such as the significance of impact on the site. Sites with a high cultural significance require further mitigation (see appendix B).
4. The latitude and longitude of any archaeological or historical site or feature, is to be treated as sensitive information by the developer and should not be disclosed to members of the public.
5. All recommendations are made with full cognizance of the relevant legislation.
6. It has to be mentioned that it is almost impossible to locate all the cultural resources in a given area, as it will be very time consuming. In this case the grass cover was very dense making visibility extremely difficult. The developers should however note that the report should make it clear how to handle any other finds that might occur once the work on site commences.

4. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

4.1 The National Heritage Resources Act

According to the above-mentioned law the following is protected as cultural heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

Archaeology, palaeontology and meteorites

Section 35(4) of this act states that no person may, without a permit issued by the responsible heritage resources authority:

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;

- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency.

Human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position of otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- b. destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- c. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

Unidentified/unknown graves are also handled as older than 60 until proven otherwise.

4.2 The National Environmental Management Act

This act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

5. METHODOLOGY

5.1 Field survey

The survey was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural significance in the area of proposed development. If required, the location/position of any site was determined by means of a Global Positioning System (GPS), while photographs were also taken where needed.

The survey was undertaken on foot.

5.2 Documentation

All sites, objects features and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Co-ordinates of individual localities were determined by means of the Global Positioning System (GPS). The information was added to the description in order to facilitate the identification of each locality.

6. DESCRIPTION OF THE AREA

The proposed development area is located on portion 8 of the Waterval small holdings in Rustenburg, North West Province. The area of development is located on the northwestern corner of Third Avenue and Line Road. Third Avenue forms the southern boundary line to the property and Line Avenue the eastern boundary. The type of development is residential for a security complex.

It is clear that the area have been disturbed in the past, mainly by agricultural activities (Figure 1-2). Currently no cultivation is taking place and the area has been overgrown with long grass and pioneer plant species. It is therefore possible that any historical and archaeological features may have been demolished during these farming activities.

The topography of the area is relatively flat. A stream forms the western boundary of the area. This aspect may have drawn people to settle there in the past. The Magaliesberg Mountain is only a few kilometers to the south, which is relatively close and one would therefore expect signs of settlement here as the mountain would have provided suitable shelter for people. The floodplain would however have provided good grazing for livestock.

It is therefore expected that the chance of finding anything of archaeological and heritage importance is very slim.

7. DISCUSSION

The fieldwork undertaken revealed eleven (11) features of cultural origin. All of these will be impacted upon by the development. Mitigation measures will be indicated below.

Before discussing these sites in detail a background regarding the different phases of human history is needed. This will enable the reader to better understand the sites found during the survey.

7.1 Stone Age

The Stone Age is the period in human history when lithic material was mainly used to produce tools (Coertze & Coertze 1996: 293). In South Africa the Stone Age can be divided in three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. The division for the Stone Age according to Korsman & Meyer (1999: 93-94) is as follows:

Early Stone Age (ESA) 2 million – 150 000 years ago
Middle Stone Age (MSA) 150 000 – 30 000 years ago
Late Stone Age (LSA) 40 000 years ago – 1850 - A.D.

No Stone Age material was found during the survey. This probably is due to the extremely dense vegetation. It is known that Stone Age people were present in the area between Brits and Rustenburg (Bergh 1999: 4-5).

7.2 Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce artifacts (Coertze & Coertze 1996: 346). In South Africa it can be divided in two separate phases according to Van der Ryst & Meyer (1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D.
Late Iron Age (LIA) 1000 – 1850 A.D.

The surveyed area falls within a band stretching roughly from Brits in the east to Zeerust in the west where many Iron Age sites have been discovered previously (Bergh 1999: 7). The Rustenburg area is well known for Iron Age mining activities (Bergh 1999: 8-9). The Fokeng, Po, Kwena and Taung, who are Tswana speaking people, inhabited the area since early times (Bergh 1999: 10).

7.3 Historical Age

The historical age started when the first people that were able to read and write moved into the area. Early travelers have moved through Northwest and may have moved through the area during the early 1800's. The travelers Robert Moffat and James Archbell visited the area between Brits and Rustenburg during 1829. David Hume visited the area in 1830, followed by WC Harris in 1836 and David Livingstone in 1847 (Bergh 1999: 12-13).

After this the Missionaries came into the area. The area between Pretoria and Zeerust, including Rustenburg was inhabited by white farmers between 1839 and 1840 (Bergh 1999: 15). The farm Waterkloof was one of the first historical farms in the Magaliesberg district, which refers to modern day Rustenburg. JC Kronie requested that this farm be granted to him

on 18 December 1839 (Van Vollenhoven 2000: 197-198). The town and district of Rustenburg was proclaimed in 1851 (Bergh 1999: 17).

All features found during the survey date from the Historical Age. This indicates that the area was occupied during the historical period.

7.4 Discussion of sites identified during the survey

Feature 1

This feature was found in the northeastern part of the property. It is the same one as indicated on photograph 1 provided by the client. It is an old farm workers dwelling which might have had a different use previously (Figure 3).

The house is build of red bricks typical in use during the early to middle twentieth century. The building originally had wooden roof beams, but it was not possible whether these had been replaced. It was plastered with cement, but this could be a later addition to the structure.

No GPS measurement was taken as the feature is clearly marked on the map provided by the client.

The cultural significance thereof is medium as it probably is older than 60 years, but not very unique.

The feature will be directly impacted upon by the proposed development. This report is however seen as ample mitigation measures in this regard.

Feature 2

This feature was found to the south of feature 1. It is indicated on photographs 2 and 3 provided by the client. It is outbuildings, probably built as storage areas, but it seems as if it was never completed. The building is build of grayish colored bricks which are not very old.

No GPS measurement was taken as the feature is clearly marked on the map provided by the client and since its cultural significance is low.

The feature will be directly impacted upon by the proposed development. This report is however seen as ample mitigation measures in this regard.

Feature 3

This structure is the farm house which was found in the southeastern corner of the property. It is indicated next to number 4 on the aerial photograph supplied by the client. It seems as if the original building may be older than 60 years, but it has been changed many times resulting in the original being shadowed by the newer additions.

No GPS measurement was taken as the cultural significance of the structure is low.

The feature will be directly impacted upon by the proposed development. This report is however seen as ample mitigation measures in this regard.

Feature 4

This feature was found next to the farm house and is indicated on photograph 4 provided by the client. It is outbuildings and a metal container, probably used for storage.

No GPS measurement was taken as the feature is clearly marked on the map provided by the client and since its cultural significance is low.

The feature will be directly impacted upon by the proposed development. This report is however seen as ample mitigation measures in this regard.

Feature 5

This feature was found to the west of feature 1. It is indicated on photograph 5 provided by the client. It is an outbuilding, probably built as storage area or to keep some kind of technical equipment. The building is build of the same grayish colored bricks as feature 2, which are not very old.

No GPS measurement was taken as the feature is marked on the map provided by the client and since its cultural significance is low.

The feature will be directly impacted upon by the proposed development. This report is however seen as ample mitigation measures in this regard.

Feature 6

This feature was found to the south of feature 5. It is indicated on photograph 6 provided by the client. It is an outbuilding, probably used as dwelling for workers. It is build of red bricks typical in use during the early to middle twentieth century (Figure 4).

The GPS measurement of the structure is 25°41'46"S and 27°15'33"E.

The cultural significance of the feature is medium due to it being older than 60 years, but it has not particular uniqueness.

The feature will be directly impacted upon by the proposed development. This report is however seen as ample mitigation measures in this regard.

Feature 7

This feature was found to the west of feature 1. It is indicated on photograph 7 provided by the client. It is a pump house and remains of the pump can still be seen inside. It is difficult to determine the age of the building. It is made from corrugated iron, which was already available during the 1890's. However this building most probably is not older than 60 years.

No GPS measurement was taken as the feature is marked on the map provided by the client and since its cultural significance is low.

The feature will be directly impacted upon by the proposed development. This report is however seen as ample mitigation measures in this regard.

Feature 8

This feature was found in the same vicinity as feature 7. It is indicated on photograph 8 provided by the client. It is an outbuilding, probably built as storage area or to keep some kind of technical equipment. The building is build of the same grayish colored bricks as feature 2, which are not very old.

No GPS measurement was taken as the feature is marked on the map provided by the client and since its cultural significance is low.

The feature will be directly impacted upon by the proposed development. This report is however seen as ample mitigation measures in this regard.

Feature 9

This feature was found to the north of feature 6. It is indicated on photograph 5 provided by the client. It is an outbuilding, probably built as storage area or to keep some kind of technical equipment. The building is build of gray cement bricks which are not very old.

No GPS measurement was taken as the feature is marked on the map provided by the client and since its cultural significance is low.

The feature will be directly impacted upon by the proposed development. This report is however seen as ample mitigation measures in this regard.

Feature 10

This feature was found on the northeastern corner of the area right next to Line Road. It is not indicated by the client. It is an irrigation outlet with a sluice (Figure 5-6). It is made from concrete and has a large metal handle to open the sluice.

The tap seems to be in working condition as it is locked with a chain. The water probably comes from the Olifansnek Dam. It is pumped through underground water pipes to the area. Where the water is distributed in different directions, this kind of furrow was built. Here one can see the water and on opening the sluice it is distributed further to the north as well as to the eastern side where it again runs away in underground pipes.

The GPS measurement for the feature is 25°41'48"S and 27°15'44"E.

The cultural significance of the feature is high as not many of these type of water systems are remaining any more.

The feature will be directly impacted upon by the proposed development. It should be preserved. However it is a definite safety hazard and will therefore have to be fenced off.

Feature 11

This feature was found on the northwestern corner of the area right next to Third Avenue. It is not indicated by the client. It is a secondary irrigation outlet (Figure 7). It is made from similar concrete as feature no 10

This irrigation furrow is linked to the one numbered feature 10. From the latter water is allowed to flow to feature 11 from where it is used to water areas to the north thereof, again through underground water pipes. Once the tap and sluice is closed at feature 10, feature 11 will run dry.

The GPS measurement for the feature is 25°41'39"S and 27°15'38"E.

The cultural significance of the feature is high as not many of these type of water systems are remaining any more.

The feature will be directly impacted upon by the proposed development. It should be preserved. However it is a definite safety hazard and will therefore have to be fenced off.

8. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it is clear that two features of real cultural historical significance were found within the area of proposed development. The development may continue, but these two features need special mitigation measures in order to be preserved.

The best way would be to fence it off and to perhaps put up a sign indicating it as a dangerous area. Another sign should be added explaining in short what this is and how the irrigation system worked.

All other feature may be demolished. For those older than 60 years a destruction permit from the South African Heritage Resources Agency (SAHRA) will be needed.

This report is seen as ample mitigation measures for features 1 through 9. The developer should however note that should any archaeological feature be unearthed during construction activities, an archaeologist should immediately be contacted to investigate the find. There is a high possibility of this happening since the extremely long grass and wet soil made it impossible to thoroughly scrutinize the whole area. This includes the possibility of finding graves which should also be dealt with by an archaeologist if the graves are of unknown age or older than 60 years.

9. REFERENCES

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argeologiese erfenishulpbronterreine in Suid-Afrika aan die hand van
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Appendix A

Definition of terms:

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

Structure: A permanent building found in isolation or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

Appendix B

Cultural significance:

- Low A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.

- Medium Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.

- High Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorised as of a high importance. Also any important object found within a specific context.

Appendix C

List of Figures:

1. General view of the area showing the extremely long grass.
2. General view of the area showing long grass and trees close to the river on the western boundary.
3. Feature 1, which probably is older than 60 years.
4. Feature 6 clearly showing red bricks possibly older than 60 years.
5. Sluice and tap of the main irrigation furrow.
6. Feature 10, the main irrigation furrow.
7. Secondary irrigation furrow, feature 11.