

SAHRA CASE ID: 7733

## ***ARCHAEOLOGICAL IMPACT ASSESSMENT***

### **Proposed housing development on Erf 1612, Kakamas, Northern Cape**

Prepared for:

#### **ENVIROAFRICA**

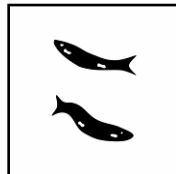
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2016**

## **Executive summary**

### *Introduction*

ACRM was commissioned by EnviroAfrica to conduct an Archaeological Impact Assessment (AIA) for a proposed housing development on Erf 1612 in Kakamas, in the Northern Cape.

Kakamas is situated about 80kms west of Upington.

The proposed development will comprise 37 residential erven and a 'wellness' centre, including internal streets and engineering services.

The extent of the proposed development site is 2.93ha.

The AIA forms part of a Basic Assessment process that is being conducted by EnviroAfrica cc.

### *Aim of the study*

The overall purpose of the AIA is to assess the sensitivity of archaeological resources in the affected area and to determine the potential impacts on such resources.

### *Results of the study*

A field assessment took place on 20 October, 2016 in which the following observations were made:

- The proposed development site is severely degraded
- One banded ironstone core/chunk and one weathered jasperlite flake was encountered during the study
- No graves or grave markers were found

### *Impact statement*

The proposed housing development will not impact on important archaeological resources.

### *Conclusion*

The proposed development site is not a threatened archaeological landscape.

Therefore, there are no objections to the authorization of the development.

*Recommendations*

The following recommendations are made:

1. No archaeological mitigation is required.
2. Should any unmarked human burials/remains or ostrich eggshell water flask caches be uncovered, or exposed during construction activities these must immediately be reported to the archaeologist (Jonathan Kaplan 082 321 0172), or the South African Heritage Resources Agency (Ms Natasha Higgitt 021 462 4502). Burials, etc. must not be removed or disturbed until inspected by the archaeologist

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## 1. INTRODUCTION

ACRM was appointed by EnviroAfrica, on behalf of DupNell Corporation (Pty) Ltd to conduct an Archaeological Impact Assessment (or AIA) for a proposed housing development on Erf 1612 in Kakamas (Kai Garib Municipality) in the Northern Cape (Figures 1 & 2).

Kakamas is situated about 80kms west of Upington, on the N14.

The proposed development comprises 37 residential erven and a 'wellness' centre, including internal streets and engineering services (Figure 3).

The extent of the proposed development site is 2.93ha.

The AIA forms part of a Basic Assessment process that is being conducted by EnviroAfrica cc.



Figure 1. Locality map.

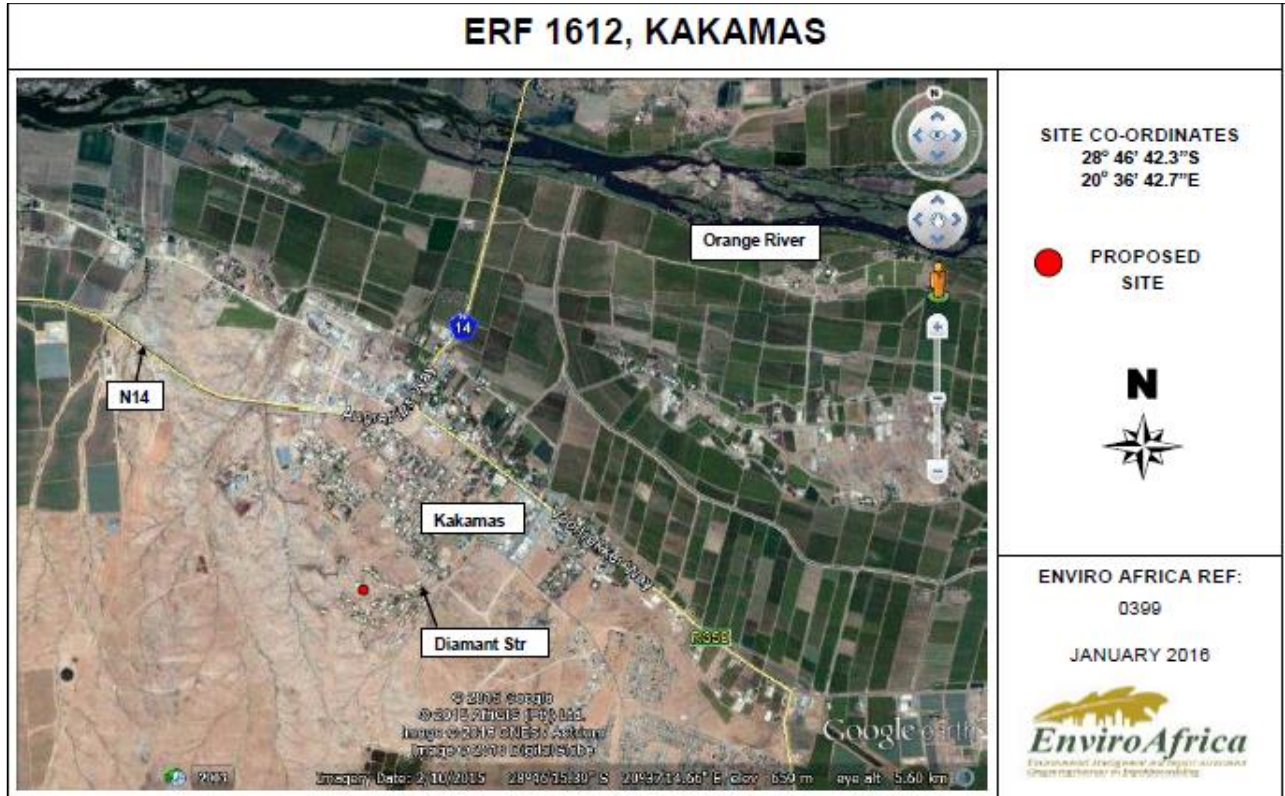


Figure 2. Google satellite map illustrating the location of the proposed development site (red polygon)

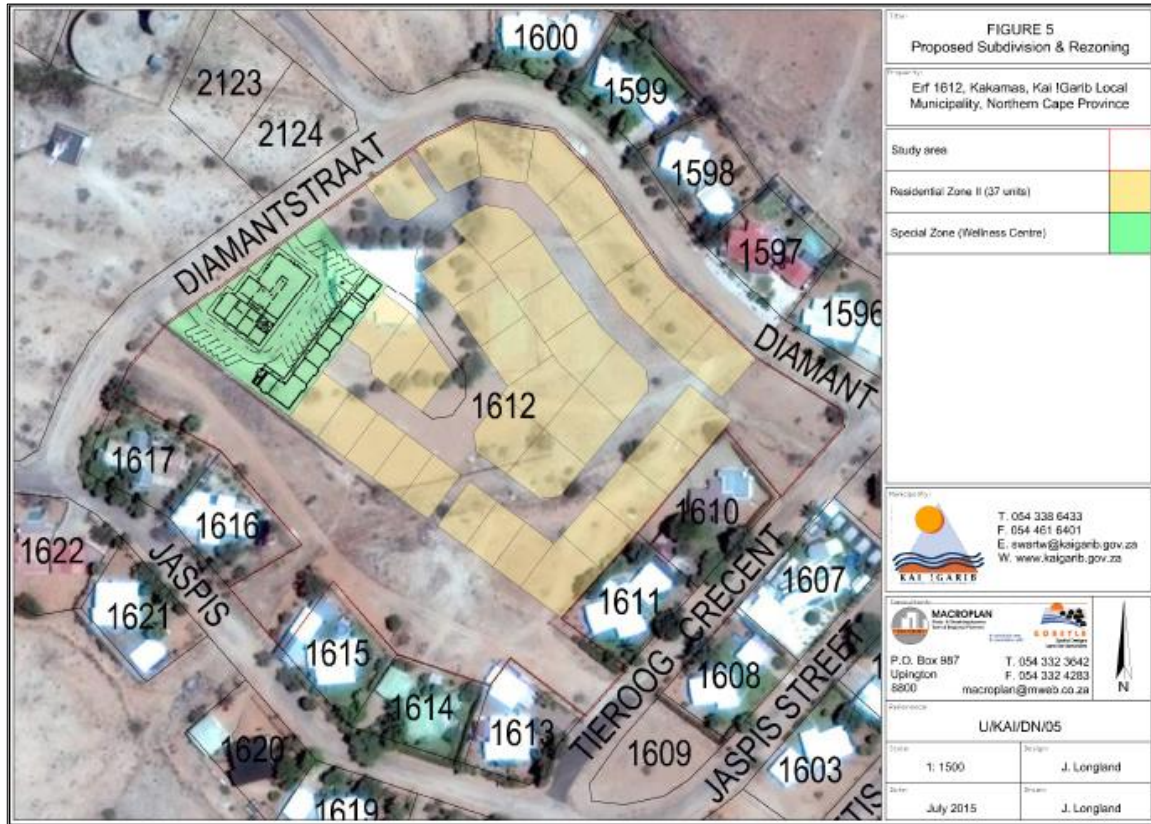


Figure 3. Erf 1612. Proposed site layout plan



## **2. HERITAGE LEGISLATION**

The National Heritage Resources Act (NHRA No. 25 of 1999) protects archaeological and palaeontological sites and materials, as well as graves/cemeteries, battlefield sites and buildings, structures and features over 60 years old. The South African Heritage Resources Agency (SAHRA) administers this legislation nationally, with Heritage Resources Agencies acting at provincial level. According to the Act (Sect. 35), it is an offence to destroy, damage, excavate, alter or remove from its original place, or collect, any archaeological, palaeontological and historical material or object, without a permit issued by the SAHRA or applicable Provincial Heritage Resources Agency, viz. Heritage Western Cape (HWC).

Notification of HWC is required for proposed developments exceeding certain dimensions (Sect. 38), upon which they will decide whether or not the development must be assessed for heritage impacts (an HIA) that may include an assessment of archaeological (a AIA) or palaeontological heritage (a PIA).

## **3. TERMS OF REFERENCE**

The terms of reference for the study were to:

- Determine whether there are likely to be any important archaeological resources that may potentially be impacted by the proposed development;
- Recommend any further mitigation action.

## **4. DESCRIPTION OF THE RECEIVING ENVIRONMENT**

Kakamas is located about 80kms south west of Upington on the N14.

The site for the proposed development is located inside the urban edge, in the south western part of Kakamas. The site is bound by Diamant Street, Jaspis Street and Tieroog Crescent (Figure 4).

The bulk of the site is vacant, with only the existing “waterwese saal” (currently utilized as a gym & fitness centre), which will be demolished to make way for the proposed wellness centre. A large concrete and gravel parking area and internal gravel roads are also located on the site (Figure 5-10). The site is severely degraded. Dumping of domestic waste, diggings and mounds of gravel are evident. A stormwater channel is visible adjacent the northern portion of the site. Several rows of Acacia shade trees have been planted. An informal timber wall runs through the centre of the proposed development site. There are no significant landscape features on the property. Surrounding land use comprises residential, small holdings, and vacant agricultural land. A concrete water tower and old diggings occur in the north west.



Figure 5. Erf 1612. View of the site facing northeast.



Figure 8. Erf 1612. View of the site facing north west



Figure 6. Erf 1612. View of the site facing northeast.



Figure 9. Erf 1612. View of the site facing west



Figure 7. Erf 1612. View of the site facing east.



Figure 10. Erf 1612. View of the site facing east.



## **5. STUDY APPROACH**

### **5.1 Method of survey**

The purpose of the study is to assess the sensitivity of archaeological resources in the affected area and to determine the potential impacts on such resources.

A survey track path was captured (refer to Figure 11) and the position of identified archaeological occurrences were fixed by a hand held GPS unit set on the map datum wgs 84.

A literature survey was carried out to assess the archaeological context surrounding the proposed development site.

### **5.2 Constraints and limitations**

There were no constraints associated with the study. Visibility was excellent.

### **5.3 Identification of potential risks**

There are no archaeological risks associated with the proposed development.

The site is severely degraded.

### **5.4 Heritage context**

Some archaeological work has been done in Kakamas. Later Stone Age (LSA) and Middle Stone Age (MSA) artefacts in banded ironstone and indurated shale were documented on the outskirts of the town, alongside the R359, during a survey for a water pipeline between Kakamas and Kenhardt (Kaplan 2008), while dispersed scatters of MSA implements in banded ironstone, quartzite and indurated shale were recorded during a study for a proposed solar energy farm west of the town's waste water treatment works (Kaplan 2012). A study for a proposed low cost housing development in the town did not encounter any archaeological heritage, but the site was already severely degraded and transformed (Kaplan 2013). Orton (2012) recorded low density scatters of LSA, MSA and ESA (Early Stone Age) tools in quartz, indurated shale and banded ironstone during a survey for a proposed solar energy farm near the Augrabies Falls National Park, about 20kms from Kakamas. Orton (2012) also describes a Stone Age sequence in the Augrabies Falls area where much of the information has been generated by excavations of open scatters containing stone tools, pottery and ostrich eggshell, as well as excavations of several small shelters near the falls and the town of Augrabies.

Orton (2012) also notes that many skeletons, most dating to the 18<sup>th</sup> and 19<sup>th</sup> Centuries were exhumed from the area between Augrabies and Upington in the late 1930s. Historical sites and remains (such as forts) relating to events such as the Anglo Boer War are also well preserved in the region, including the presence of war graves in Kakamas, Pofadder and Keimoes. Orton (2012) reports that the water related infrastructure in the Kakamas area was important for agricultural development and several water wheels and excavated tunnels and leiwaters/furrows in Kakamas have been declared Provincial Heritage Sites.

## 6. FINDINGS

One banded ironstone core/chunk (S28° 46.731' E20° 36.725') and one weathered jasperite flake (S28° 46.731' E20° 36.778') was recorded during the study (Figure 12).

The remains have been graded as having *low* (Grade 3C) archaeological significance.



Figure 11. Erf 1612 Kakamas. Track paths and waypoints of archaeological finds.



Figure 12. Chunk (813) & flake (814). Scale is in cm

## **7. IMPACT STATEMENT**

The AIA indicates that a proposed housing development on Erf 161 Kakamas will not have an impact of great significance on local archaeological heritage.

## **8. CONCLUSION**

The proposed development site is not a threatened archaeological landscape.

Therefore, there are no objections to the authorization of the proposed development.

## **9. RECOMMENDATIONS**

The following recommendations are made:

1. No archaeological mitigation is required.
2. Should any unmarked human burials/remains or ostrich eggshell water flask caches be uncovered, or exposed during construction activities, these must immediately be reported to the archaeologist (Jonathan Kaplan 082 321 0172), or the South African Heritage Resources Agency (Att: Ms Natasha Higgitt (021 462 4502). Burials must not be removed or disturbed until inspected by the archaeologist.

## **10. REFERENCES**

Kaplan, J. 2013. Archaeological Impact Assessment proposed low cost housing development in Kakamas, Northern Cape. Report prepared for EnviroAfrica. Agency for Cultural Resource Management.

Kaplan, J. 2012. Archaeological Impact Assessment the proposed Keren Energy Keimoes Solar Plant on Erf 1654, Keimoes. Report prepared for EnviroAfrica. Agency for Cultural Resource Management.

Kaplan, J. 2008. Phase 1 Archaeological Impact Assessment proposed construction of a water treatment plant and supply pipeline from Keimoes to Kenhardt, Western Cape Province. Report prepared for EnviroAfrica. Agency for Cultural Resource Management.

Orton, J. 2012. Heritage Impact Assessment for the proposed Augrabies Solar Energy Facility, Kenhardt Magisterial District, Northern Cape. Report prepared for Rosenthal Environmental. Archaeology Contracts Office, University of Cape Town.