

**HERITAGE SURVEY OF THE PROPOSED  
WILLOWFOUNTAIN ROAD UPGRADE**

**FOR AFZELIA ENVIRONMENTAL CONSULTANTS CC**

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## INTRODUCTION

Umlando cc was contracted by Afzelia Environmental Consultants cc to undertake a heritage assessment of the proposed upgrade of the existing Willowfountain road upgrade, near Pietermaritzburg, KZN. The upgrade will occur of the remaining 3.4km into the valley head along the Willowfountain stream bank - a section known as Route 11B to the intersection with the R4A. These locations are illustrated in figures 1 – 3.

The impacts on the area will be:

- The upgrading of approximately 3.4km of gravel road to a 7m wide asphalt top surface
- General stormwater improvements, where necessary:
- Construction of stormwater pipes
- Concrete open channels
- Upgrading of two existing stream culvert crossings, including clearing and grubbing in the stream for culvert crossing base; and around banks for working area
- Gabion retaining wall structures for soil and bank stabilisation
- Decreasing the severity of two corners by extending the turning plane
- Correction of vertical and horizontal road alignments where necessary
- Road signage and markings at intersections
- Possible Borrow pits

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FIG. 1: GENERAL LOCATION OF THE PROPOSED

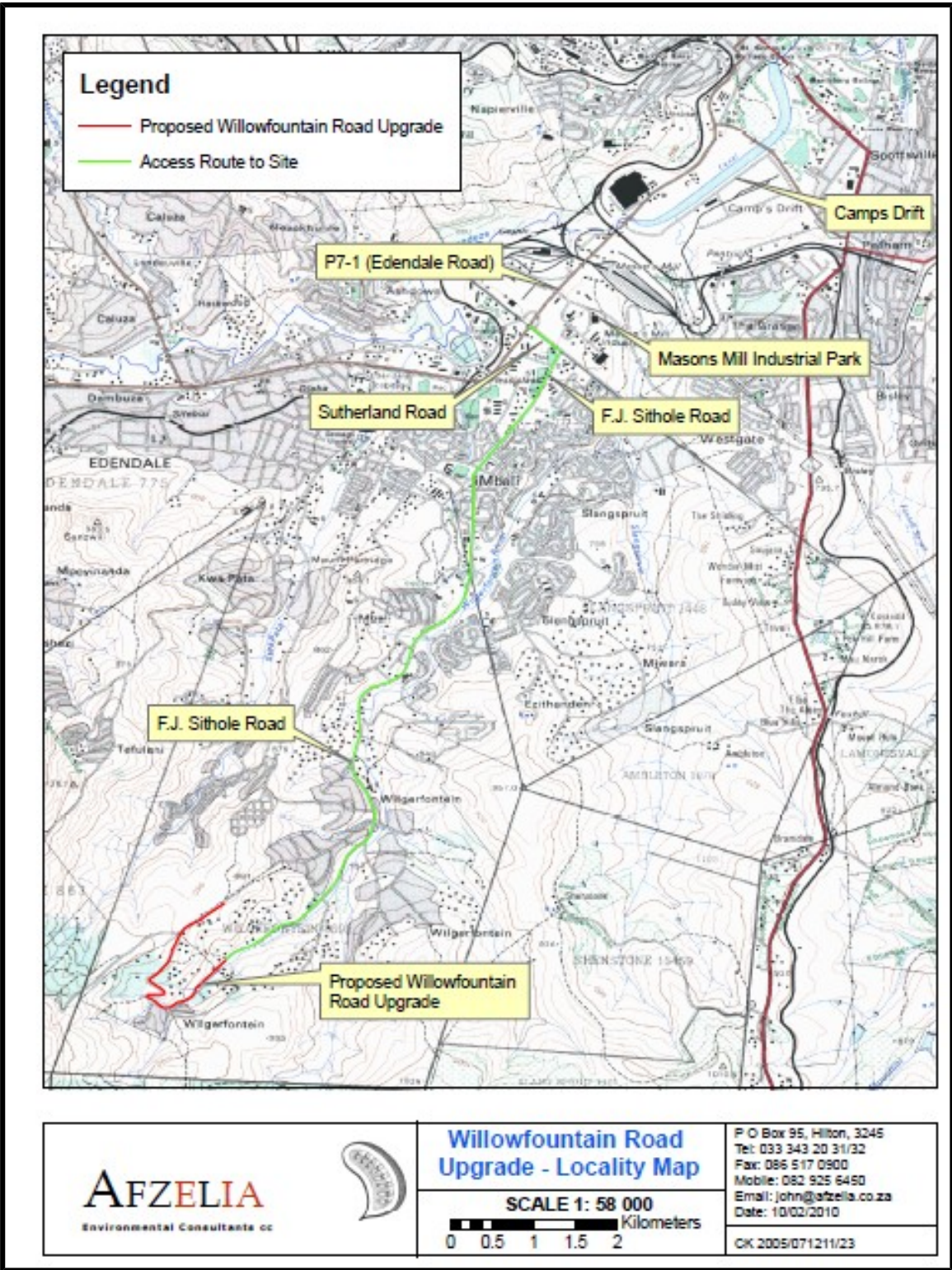


FIG. 2: PROPOSED LOCATION OF THE ROAD UPGRADE

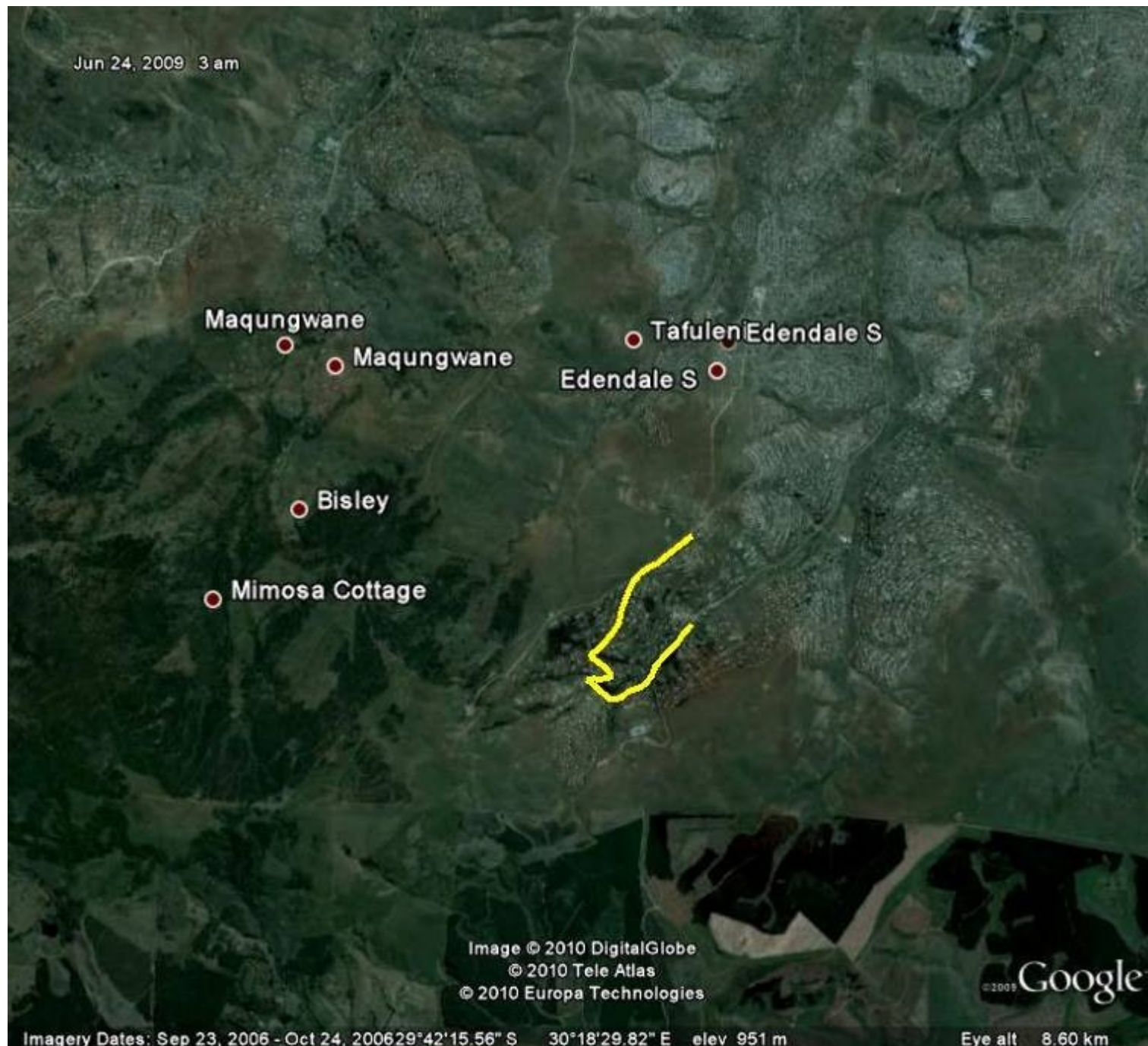


FIG. 3: CLOSE-UP OF THE PROPOSED LOCATION OF THE ROAD UPGRADE



## METHOD

The method for Heritage assessment consists of several steps.

The first step forms part of the desktop assessment. Here we would consult the databases. These databases contain most of the known heritage sites in KwaZulu-Natal, and known memorials and other protected sites, battlefields and cemeteries in southern Africa. We also consult with an historical architect, palaeontologist, and an historian where necessary.

The survey results will define the significance of each recorded site, as well as a management plan.

All sites are grouped according to low, medium and high significance for the purpose of this report. Sites of low significance have no diagnostic artefacts or features. Sites of medium significance have diagnostic artefacts or features and these sites tend to be sampled. Sampling includes the collection of artefacts for future analysis. All diagnostic pottery, such as rims, lips and decorated sherds are sampled, while bone, stone and shell are mostly noted. Sampling usually occurs on most sites. Sites of high significance are excavated and/or extensively sampled. Those sites that are extensively sampled have high research potential, yet poor preservation of features.

### **Defining significance**

Heritage sites vary according to significance and several different criteria relate to each type of site. However, there are several criteria that allow for a general significance rating of archaeological sites.

These criteria are:

**1. State of preservation of:**

- 1.1. Organic remains:
  - 1.1.1. Faunal
  - 1.1.2. Botanical
- 1.2. Rock art
- 1.3. Walling
- 1.4. Presence of a cultural deposit
- 1.5. Features:
  - 1.5.1. Ash Features
  - 1.5.2. Graves
  - 1.5.3. Middens
  - 1.5.4. Cattle byres
  - 1.5.5. Bedding and ash complexes

**2. Spatial arrangements:**

- 2.1. Internal housing arrangements
- 2.2. Intra-site settlement patterns
- 2.3. Inter-site settlement patterns

**3. Features of the site:**

- 3.1. Are there any unusual, unique or rare artefacts or images at the site?
- 3.2. Is it a type site?
- 3.3. Does the site have a very good example of a specific time period, feature, or artefact?

**4. Research:**

- 4.1. Providing information on current research projects
- 4.2. Salvaging information for potential future research projects

**5. Inter- and intra-site variability**

- 5.1. Can this particular site yield information regarding intra-site variability, i.e. spatial relationships between various features and artefacts?



5.2. Can this particular site yield information about a community's social relationships within itself, or between other communities?

**6. Archaeological Experience:**

6.1. The personal experience and expertise of the CRM practitioner should not be ignored. Experience can indicate sites that have potentially significant aspects, but need to be tested prior to any conclusions.

**7. Educational:**

7.1. Does the site have the potential to be used as an educational instrument?

7.2. Does the site have the potential to become a tourist attraction?

7.3. The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.

**8. Other Heritage Significance:**

8.1. Palaeontological sites

8.2. Historical buildings

8.3. Battlefields and general Anglo-Zulu and Anglo-Boer sites

8.4. Graves and/or community cemeteries

8.5. Living Heritage Sites

8.6. Cultural Landscapes, that includes old trees, hills, mountains, rivers, etc related to cultural or historical experiences.

The more a site can fulfill the above criteria, the more significant it becomes. Test-pit excavations are used to test the full potential of an archaeological deposit. This occurs in Phase 2. These test-pit excavations may require further excavations if the site is of significance (Phase 3). Sites may also be mapped and/or have artefacts sampled as a form of mitigation. Sampling normally occurs when the artefacts may be good examples of their type, but are not in a primary archaeological context. Mapping records the spatial relationship between features and artefacts.

## RESULTS

No heritage sites were observed in the study area. This is a likely scenario, as the direct impact will not extend much further than the existing road (by 2m in width). The extent of the impact will also occur on semi-steep slopes where heritage sites would not occur. Fig. 4 illustrates one of these areas.

The survey did not incorporate possible borrow pits as these locations were not available at the time of the survey.

There is an extensive cemetery near the upper northern part of the road upgrade (see fig. 3). The road upgrade does not affect these graves, but the development should take note that there are several graves alongside the current road. Large construction equipment may damage these graves if they drive off the road.

**FIG. 4: CURRENT CONDITION OF THE PROPOSED ROAD UPGRADE**



## MANAGEMENT PLAN

No management plan is needed for the specific development. If a borrow pit is used then it may require a heritage survey.

## CONCLUSION

A heritage survey was undertaken for the proposed road upgrade near Willowfountain. No heritage sites were observed in the study area, although a cemetery was observed along the access road.

