# ARCHAEOLOGICAL SURVEY OF THE PROPOSED ALTON SEWER PIPE UPGRADE

FOR EXIGENT ENVIRONMENTAL

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#### INTRODUCTION

Umlando cc was contracted by Exigent Environmental to undertake a heritage survey of the area to be affected by the upgrading of the Alton Sewer Pipeline, Richards Bay.

The pipeline upgrade occurs in disturbed and non-disturbed areas between Alton and the R34 (fig.1). The disturbed areas are a result of industrial activity, while the undisturbed areas of small bushes and grasses. Other archaeological sited have been recorded within a 5 kilometre radius of the pipeline. These sites consist of Late Iron Age and Historical Period sites. There is thus reason to believe that sites could occur in proposed area of development.

No sites were recorded during the course of the survey along the pipeline deviation (fig. 2).

#### 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 from both Umlando and the Natal Museum. These databases contain most of the known heritage sites in KwaZulu-Natal. This database does; however, tend to be restricted to archaeological and palaeontological sites. Consulting with the relevant authorities will also cover known battlefields and historical sites. We also consult with an historical architect and an historian where necessary.

The initial archaeological survey (i.e. fieldwork) will consists of a foot survey where the selected route will be covered. The survey results will define the significance of each recorded site, as well as a management plan.

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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, especially pottery. Sites of medium significance have diagnostic artefacts and these are 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. We attempt to recover as many artefacts from these sites by means of systematic sampling, as opposed to sampling diagnostic artefacts only.

#### Defining significance

Archaeological 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. Historical buildings
- 8.2. Battlefields and general Anglo-Zulu and Anglo-Boer sites

- 8.3. Graves and/or community cemeteries
- 8.4. Living Heritage Sites
- 8.5. 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.

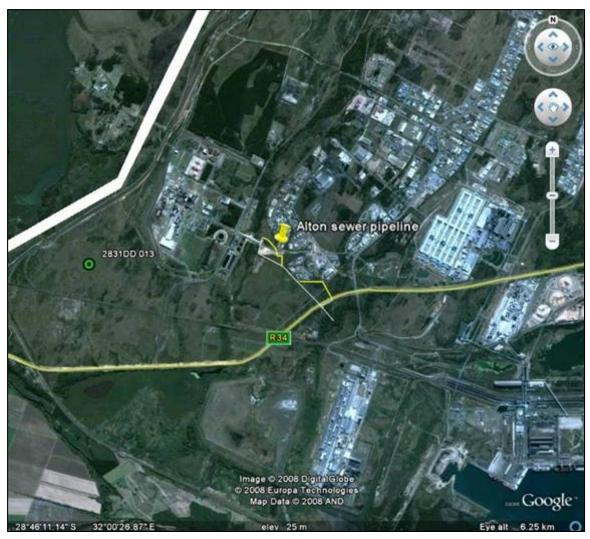
A Phase 2 may yield enough material so that further excavations are not required. However, if significant material occurs in the archaeological deposit then it is likely that a Phase 3 will be required.

#### RESULTS

No sites were recorded during the course of the survey. I extended the survey along the various foot tracks along the eastern part of the deviation, yet did not note any archaeological material.

#### CONCLUSION

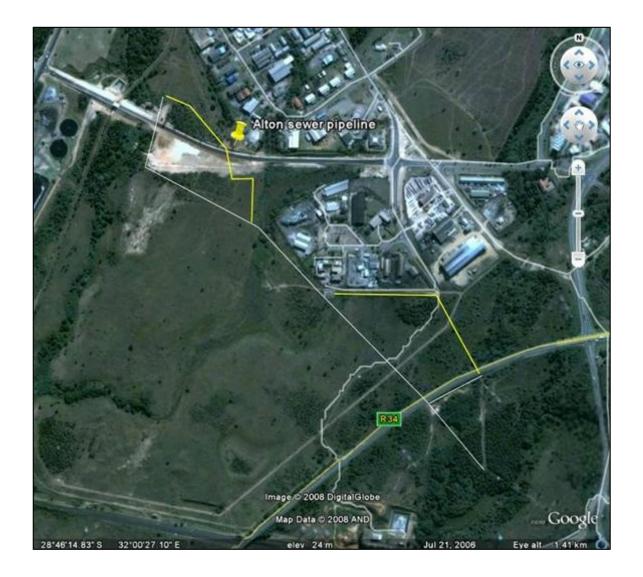
Umlando undertook the survey of the proposed Alton Sewer pipeline upgrade. No archaeological sites were recoded and no further mitigation is required.



## FIGURE 1: LOCATION OF THE PROPOSED AREA



# FIGURE 2: LOCATION OF THE PIPELINE





<sup>&</sup>lt;sup>1</sup> White line = existing sewer

Yellow line = proposed upgraded sewer