

# **Archaeological Survey of the Golokodo River Trunk Sewer**

**For GAEA Projects**

**By**

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**6 May 2002**



## **Introduction**

GAEA Projects approached the ICRM to undertake an archaeological survey on behalf of EtheKwini Water Services (EWS). The line is part of a sewer pipeline upgrade and runs along the Golokodo River to the confluence of the Umbogintwini River. The pipeline is mostly located with 50 m of the riverbank, however it does cross over several flood plains. Three archaeological sites were recorded on these floodplains. A permit for the partial destruction of these is required. The permit is available from KwaZulu-Natal Heritage.

The Terms of Reference for this contract are to:

- undertake an archaeological survey of the affected area
- assess sites in terms of their significance; and,
- suggest appropriate mitigation for these sites in a written report.

## **Methodology**

The route of the proposed pipeline was mapped on 1:50 000 and 1:5 000 maps by the engineering company. The former map gives the general route alignments, while the latter details the changes along the route. During the course of the survey the 1:5 000 map was used as a reference point for the pipeline route. All archaeological sites, sensitive areas and unsurveyed areas were placed on both maps.

All sites have been 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 or extensively sampled. The sites that are extensively sampled have high research potential, yet poor preservation of features.

### **Defining significance**

Archaeological sites vary according to significance and several different criteria relate to each type of site. However, several criteria 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, 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.

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. These test-pit excavations may require further excavations if the site is of significance. 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.

### **THE SITES**

The sites and their assessments are summarised in Table 1.

#### **GOL1**

This site is located near the upper part of the pipeline between MH 67B\_1 and MH 67D. The site consists of a scatter of pottery sherds, grinding stones over a large area. A piece of daga and pottery from various pots, and a Late Stone Age stone tool was also observed. There is probably an archaeological deposit at the site.

The site may date either to the Early Iron Age or the Late Iron Age. If the site dates to the Early Iron Age, then there is a possibility that subsurface features still exist.

Significance: The site is of low-medium significance.

Mitigation: More archaeological material may exist in the deposit. I suggest that an archaeologist be on site while this part of the pipeline is excavated. The archaeologist should retrieve material from the excavations and/or be able to stop the excavations if significant features or artefacts are observed.

#### **GOL2**

This site is located halfway up a hill in the vicinity of MH65\_1 and MH60. The site consists of Middle Stone Age artefacts scattered across the hill. These artefacts are in a secondary context.

Significance: The site is of low archaeological significance.

Mitigation: No further mitigation is required.

### **GOL3**

This site is located on a broad flood plain between the markers MH58\_4 and MH57. Parts of the site have been eroded by the river when it was in flood, and by a small sand borrow pit.

The site has three phases of occupation.

1. Middle Stone Age deposit consisting of flakes, blades and cores. The stone tools were made on dolerite and quartzite.
2. Late Stone Age deposit consisting of flakes, cores and an adze.
3. Iron Age smelting area consisting of slag, iron-ore, at least five furnaces (and fragments) hammer stones and pottery. This occupation of the site is in a primary context and further *in situ* remains are likely to occur. The scatter of slag and iron ore is extensive, and suggests various stages of iron smelting.

The site may date to the Early or late Iron Age. No decorated sherds were observed on the surface, and thus a relative date cannot be assumed. However, there is a tendency for Late Iron Age smelting areas to have double rows of furnaces - as is the case on this site.

**Significance:** The site is of medium archaeological significance. No other iron smelting sites have been located in this river valley (nor general area). Several features are well preserved suggesting that other subsurface featured will occur.

**Mitigation:** I suggest that parts of the pipeline be excavated to determine the full potential of the site. These test-pit excavations will cover the extent of the pipeline. Further excavations may be required if significant material is located.

### **Conclusion**

The archaeological survey of the Golokodo Trunk sewer was undertaken in April 2002. Three archaeological sites were recorded. Of these three sites, one site requires further mitigation in the form of test-pit excavations, and one site requires an archaeologist to be on site during the construction of the pipeline. The last site requires no further mitigation.

The developer (Ethekwini Water Services) is required to apply for a permit for the partial damage to these sites. This permit is available from KwaZulu-Natal Heritage.

**Table 1: Archaeological sites along the Golokodo Trunk Sewer**

	<b>GOL1</b>	<b>GOL2</b>	<b>GOL3</b>
Significance	Low-medium	Low	Medium
Mitigation Required	Yes	No	Yes
Type of mitigation	Archaeologist on site during construction	N/A	Test-pit excavations
Map reference	MH 67B_1 & MH 67D	MH65_1 and MH60	MH58_4 and MH57