Mhlatuze Pipeline

INTRODUCTION

Lombard and Associates approached the Institute for Cultural Resource Management to undertake an archaeological survey of the new realigned Mhlatuze Pipeline. The original survey was undertaken in August 2001. In this initial alignment nine archaeological sites were recorded, of which five required further mitigation. Subsequently, the route was realigned and the February survey recorded four new sites, and revisited one site. The new survey will affect ten sites in total, of which two would require further mitigation. These sites should not deter any development provided that mitigation is undertaken.

METHODOLOGY

Once the route had been finalised, the Natal Museum archaeology database was consulted for known archaeological sites. A foot survey was then undertaken along the pipeline route.

Each scatter of artefacts is usually regarded as a site. All sites are grouped according to low, medium and high significance. Sites of low significance have no diagnostic artefacts. 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 medium significance may also have test-pit excavations. Sites of high significance are excavated and/or extensively sampled. The sites that are extensively sampled have high research potential, yet poor preservation of features. Some sites may be of such high significance that no impact should occur.

Significance is generally determined by several factors. Each site is also assessed in terms of other sites in the specific region and to the broader regional context.

Defining significance

Archaeological sites vary according to significance and different criteria relate to each type of site. However, there are several criteria that allow for a general significance assessment 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. Presence of a cultural deposit
   - 1.3. Features:
     - 1.3.1. Ash Features
     - 1.3.2. Graves
     - 1.3.3. Middens
     - 1.3.4. Cattle pens
     - 1.3.5. Houses/Structures
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 at the site?
   - 3.2. Is it a type-site?
   - 3.3. Does the site have a 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/or 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. The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.
   - 7.2. Educational value is in terms of display at a Heritage institution or local site museum.

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 high 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.

ARCHAEOLOGICAL SITES

Four new archaeological sites were recorded during the course of the new alignment. The assessment and management plan for each site is summarised in Table 1.

GAS

This site is a general artefact scatter of pottery sherds and stone tools.

IHM1

IHM8

Mitigation: The pipeline route ahs moved further north, or downslope of the site. However, artefacts were still located at this lower end. The pipeline thus probably touches the outer perimeters of the site.

IHM9

This site is located between Hawkstone Estate and Thornlands, neat the electricity pylon no. 157. The site is an ephemeral scatter of pottery sherds dating to the Late Iron Age or Historical Period.

Significance: The site is of low archaeological significance.

Mitigation: No further mitigation is required.

IHM10

This site is located near Main Road 224 on a hill closest to the Matikulu River. The site consists of an ephemeral scatter of pottery sherds dating to the Late Iron Age or Historical Period.

Significance: The site is of low archaeological significance.

Mitigation: No further mitigation is required.

IHM11

The site is located on the top of a hill near the Main Road 224. The site consists of an ephemeral scatter of pottery sherds dating to the Late Iron Age or Historical Period.

Significance: The site is of low archaeological significance.

Mitigation: No further mitigation is required.

IHM12

The site is located near. The site is a scatter of

Significance: The site is of low archaeological significance.

Mitigation: No further mitigation is required.

Discussion and Conclusion

The realigned route has missed most of the significant archaeological sites; however, two sites will still be affected. These two will require some form of further mitigation as they are of medium significance. The sites have potential archaeological deposit and may provide information as yet unrecorded in this region.

I suggest that a two-phased approach be taken for both sites. The first phase is referred to as test-pit excavations. These excavations determine the full potential of the site over a

limited time period, by restricting the excavations to a few small squares. At the end of this first phase, the excavations will either be complete, or need to continue (Phase 2). If well preserved remains and features are located, then the latter will need to occur. Phase 2 excavations tend to occur over a longer time period, and over a wider, or longer, area.

Since the pipeline will restrict site disturbance to a well defined area. The archaeological excavations should only occur in those areas where the pipeline will be placed. In order to undertake Phase 1, the exact location of the pipeline will need to be physically marked on the ground. Given the nature of the time-frames related to this type of development, I suggest that the archaeological test-pit excavations occur timeously before earthmoving begins.

The client will need to apply to KwaZulu-Natal Heritage for a damage permit for these two sites. This permit is separate to the excavation permit required by the archaeologist.