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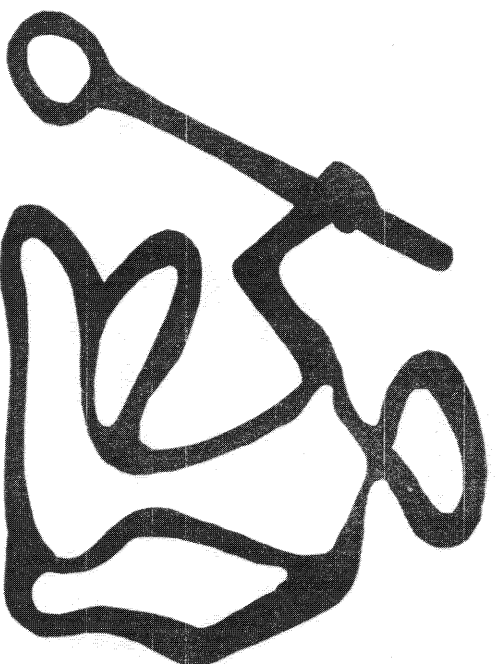
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**MATAKOMMA**

**CONSULTANTS**

**Construction of a 3.3 km potable water  
bulk supply pipeline and 600KI  
reservoir in Lekurung, LebowaKgomo**

Cultural Heritage Assessment



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It is further recommended that during construction in the areas where sites were discovered, an archaeologist be appointed to conduct a watching brief to identify and mitigate possible find not found during the survey or mitigated before the the start of the project.

If any archaeological sites are recovered they will necessitate further investigation and research in the case of possible development in their vicinity.

Further recommendations made in section 8 of the report must be addressed to facilitate responsible management of the heritage resources in the study area.

## 1. Introduction

Matakoma Consultants was contracted by Teurlings Environmental cc. to conduct a Heritage Assessment for inclusion in the environmental scoping study for the proposed construction of a 3.3 km potable water bulk supply pipeline and 600Kl reservoir in Lekurung, Lebowakgomo

The aim of the study is to identify all heritage sites, document and assess their importance within local, provincial and national context. From this we aim to assist the developer in managing the discovered heritage resource in a responsible manner to protect, preserve and develop them within the framework provided by the National Heritage Resources Act of 1999 (Act 25 of 1999).

The report outlines the approach and methodology utilised before and during the survey, which includes in **Phase 1**: Archival research, information collection from various sources, public consultations and aerial photography; **Phase 2**: Physical surveying of the area on foot and vehicle; and **Phase 3**: Reporting the outcome of the study.

During the survey sites of cultural significance were identified. These sites were recorded by means of photos, GPS location and description. Possible impacts were identified and mitigation measures are proposed in the following report.

This report must also be submitted to SAHRA's provincial office for scrutiny.

## **Aerial Photographical Survey**

Aerial photographs was utilised to identify possible sites on the study area. Experience has shown this to be a useful tool during surveys.

## **2.2 Physical Surveying**

Due to the nature of cultural remains, the majority which occur below surface, a physical walk through of the study area was conducted.

Aerial photographs and 1:50 000 maps of the area were consulted and literature of the area were studied before undertaking the survey. The purpose of this was to identify topographical areas of possible historic and pre-historic activity. The proposed development area was surveyed over a day, by means of vehicle and extensive surveys on foot by two field surveyors. All sites discovered both inside and bordering the proposed development area were plotted on 1:50 000 maps and their GPS co-ordinates noted. 35mm photographs on ISO 100 colour transparency film were taken at all site and site sketches made.

The Langa Ndebele left their area in the middle 1600's with a few stops along the way. Their first stop was close to Leydsdorp after moving through Swaziland. Following the Olifants River they migrated through Molep's Poort and settled in the area of Boyne, east of Pietersburg, where the Molepo chief now resides. After a short stay the Langa moved on to a hill called Thaba Tshweu a few kilometres southeast of Pietersburg.

The Langa later moved on to settle in the region of the present day Potgietersrus on the farms Makapansgat 39 KS and Planknek 43 KS.

The Ndebele of Mizilikazi appeared in the early 1800's in the area and the Langa and Kekana suffered under Mizilikazi's hands. The capital moved after the departure of Mizilikazi to Fothane Hill (Moordkoppie) under the chief Selaki. After some time Mankopane became chief between 1835 and 1836.

#### 4. Working with legislation.

It is very important that cultural resources be evaluated according to the National Heritage Recourse Act. In accordance with the act we have found the following:

- These sites are classified as important based on evaluation of the National Heritage Recourses Act 1999 (Act No 25 of 1999) section 3 (3). (Refer to **Section 9** of this document for assessment)
- This site should be managed through using the National Heritage Recourses Act 1999 (Act No 25 of 1999) sections 4, 5 and 6 and sections 39-47.
- Please refer to Section 9 for Management Guidelines.

## EVALUATION

### Significance

The significance rating scale is as follows:

**VERY HIGH:** Of the highest order possible within the bounds of impacts, which could occur.

In the case of negative impacts, there would be no possible mitigation and/or remedial activity of offset the impact at the spatial or time scale for which it was predicted. In the case of positive impacts, there is no real alternative to achieving the benefit.

**HIGH:** Impacts of a substantial order. In the case of negative impacts, mitigation and/or remedial activity would be feasible but difficult, expensive, time-consuming or some combination of these.

In the case of positive impacts, other means of achieving this benefit would be feasible, but these would be more difficult, expensive, time-consuming or some combination of these.

**MODERATE:** Impact would be real but not substantial within the bounds of those, which could occur. In the case of negative impacts, mitigation and/or remedial activity would be both feasible and fairly easily possible. In the case of positive impacts, other means of achieving these benefits would be about equal, cost and effort.

**LOW:** Impact would be of low order and with little effect. In the case of negative impacts, mitigation and/or remedial activity would be either easily achieved or little would be required, or both. In case of positive impacts, alternative means of achieving this benefit would likely be easier, cheaper, more effective, less time-consuming, or some combination of these.

**VERY LOW:** Impact would be negligible. In the case of negative impacts, almost no mitigation and/or remedial activity would be needed, and any minor steps which might be needed would be easy, cheap and simple. In the case of positive impacts,

## 6. Sites of Archaeological Significance

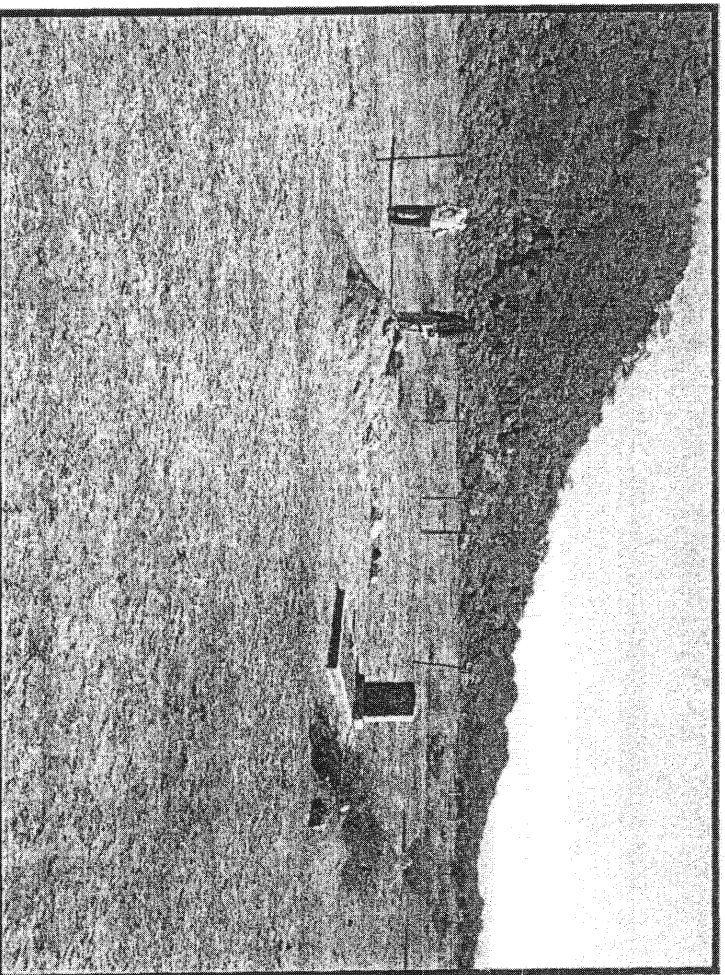
### 6.1. LEK001

Co-ordinates: 24°21'32.9" S

29°37'28.1" E

#### 6.1.1. *The identification and mapping of all heritage resources in the affected area.*

This area is a small-enclosed graveyard with 4 graves in it. The graves are those of the Sebake family. Whilst doing the survey Simon Sebake was visiting the graves. He indicated that these were the graves of his family and that they had lived in the area for as long as he could remember. Simon Sebake also pointed out where his family's old homestead use to be and 3 hut floor remains were found.



6.1.6. *Plans for mitigation of any adverse effects during and after the completion of the proposed development.*

**Refer to section 9.**

## 6.2. LEK 002

Co-ordinates: 24°21'32.4" S

29°37'27.5" E

6.2.1. *The identification and mapping of all heritage resources in the affected area.*

The hut floor remains pointed out by Simon Sebake as he explained that his family had lived here since before his birth in 1935. They hence moved to the formal line settlement pattern of Bogaleng on the other side of the koppie. The various remains that were found measured 4m x 4m with an entrance that seems to be to the south. This site extends approximately 100m to the south of the marked GPS reading given above.

6.2.3. An assessment of the impact of the development on such heritage resources and an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development.

**Impact Evaluation**

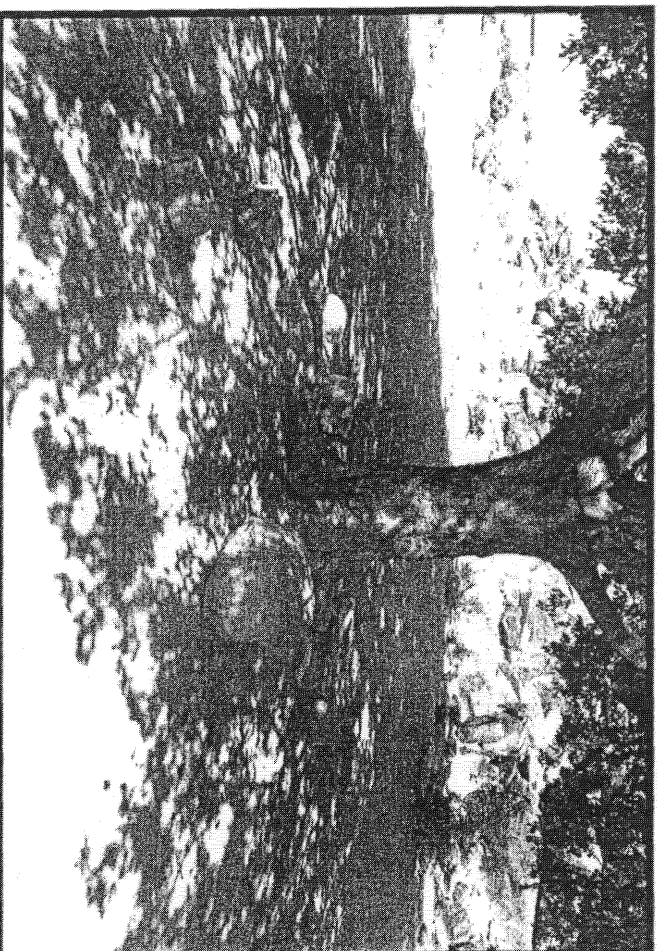
Significance	Certainty	Duration	Mitigation
Moderate Negative	Possible	Short: 0-5 years	D

6.2.4. The results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources.

Public participation process was done by Teurlings Environmental. No feedback received on this site.

6.2.5. If heritage resources will be affected by the proposed development, the consideration of alternatives.  
Refer to Section 9

6.2.6. Plans for mitigation of any adverse effects during and after the completion of the proposed development.  
Refer to Section 9.



6.3.2. An assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 3(3) of the National Heritage Recourses Act 1999 (Act No 25 of 1999).

### Significance

This site is classified as important based on evaluation of the National Heritage Recourses Act 1999 (Act No 25 of 1999)

- Section 3(3)(a) – its importance in the community, or pattern of South Africa's history.
- Section 3(3)(d) – its importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.
- Section 3(3)(g) – its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

6.3.3. An assessment of the impact of the development on such heritage recourses and an evaluation of the impact of the development on heritage

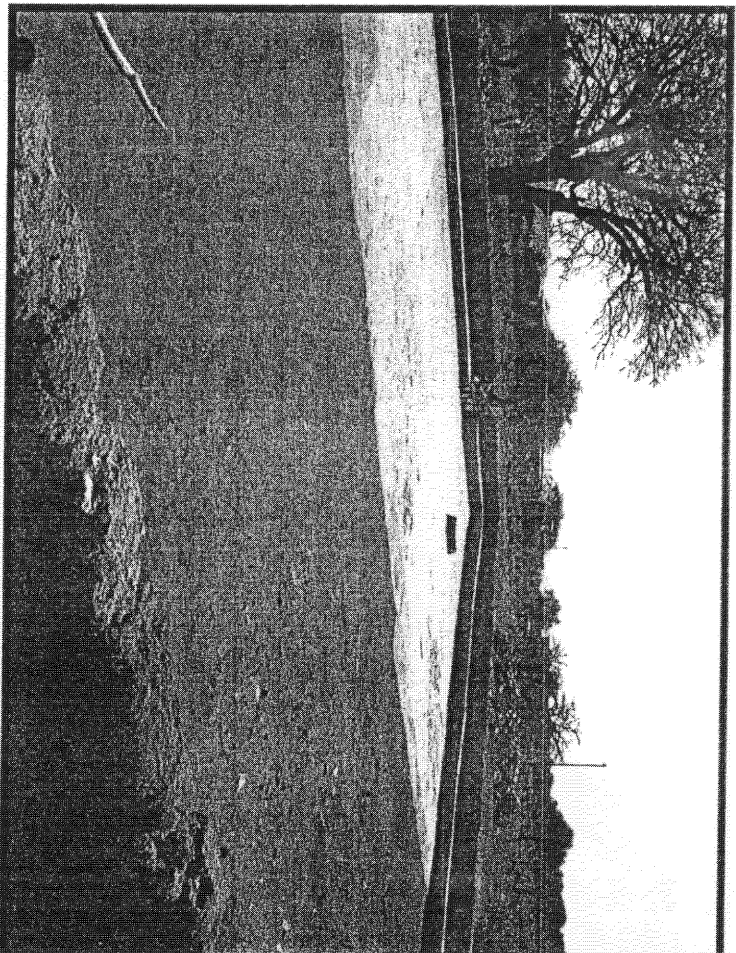
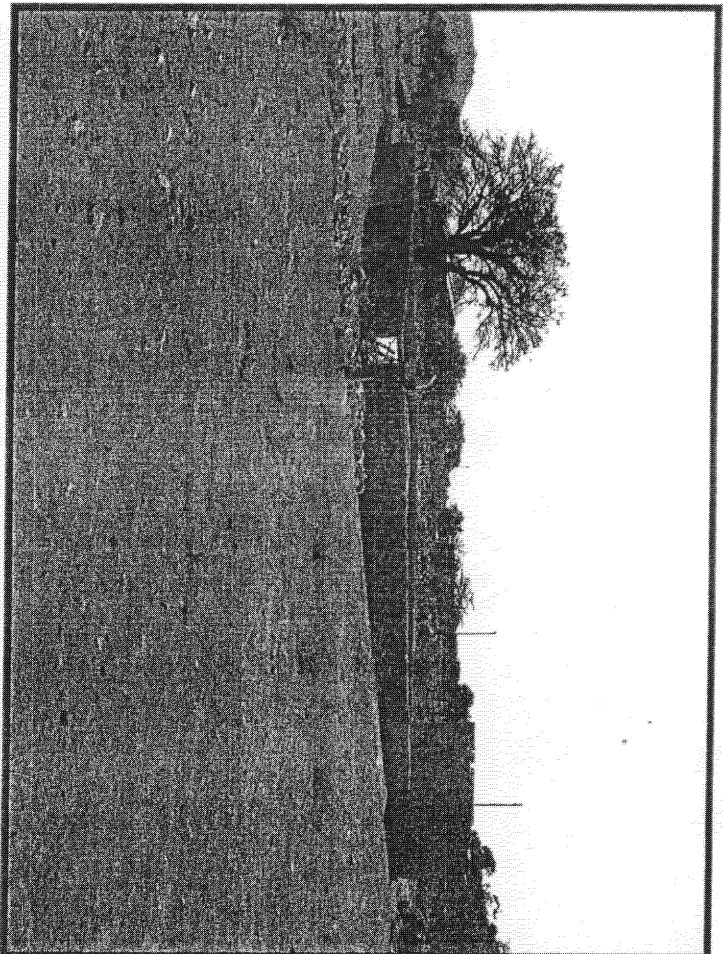
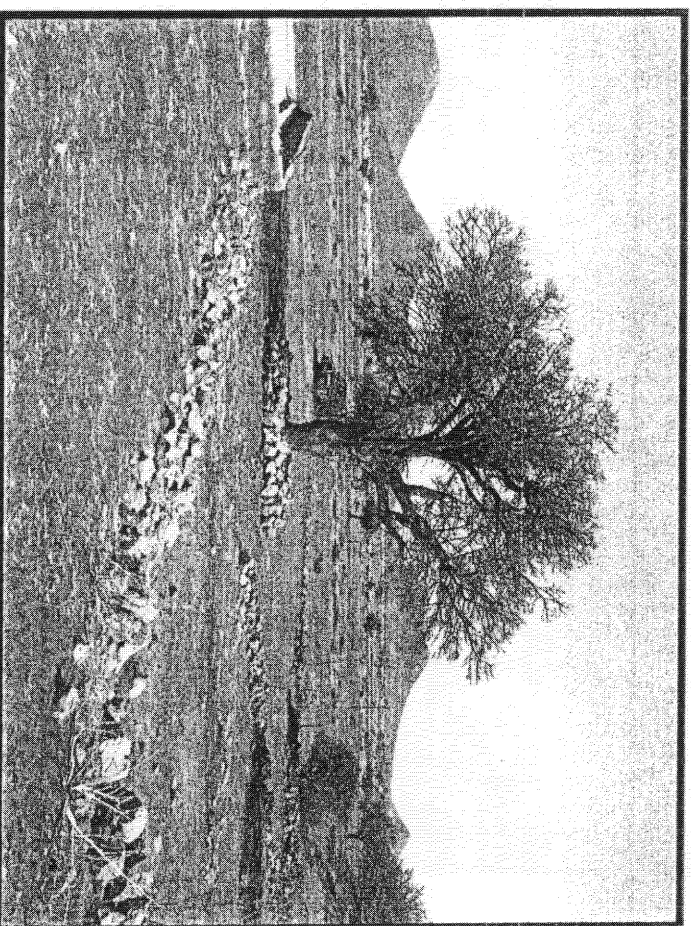
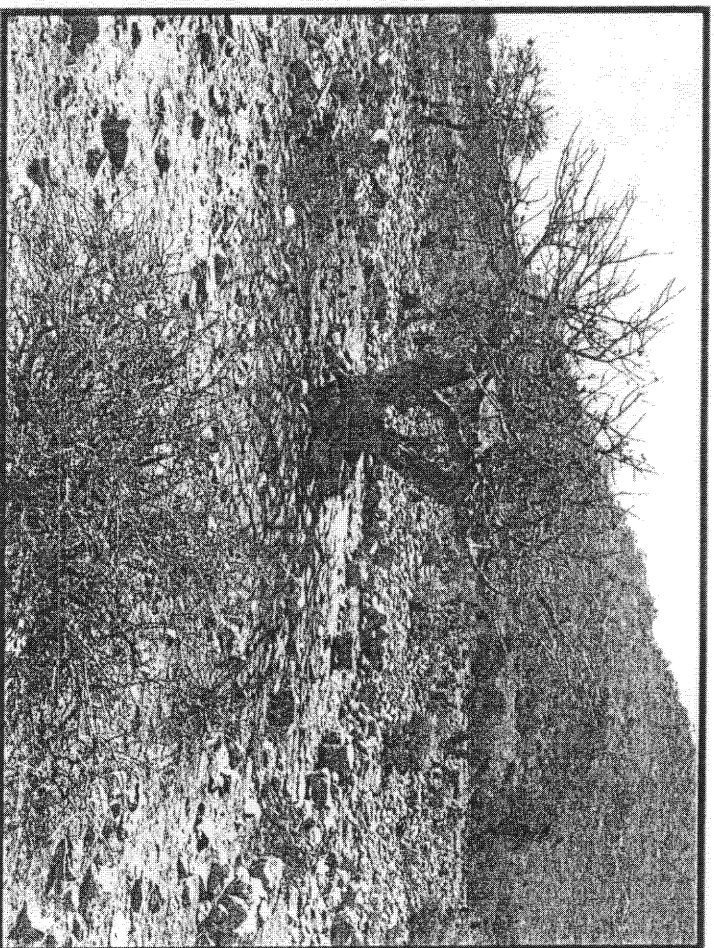


Figure 2.3: Map of the study area

Figure 2.4: Map of the study area



6.4.2 *An assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 3(3) of the National Heritage Recourses Act 1999 (Act No 25 of 1999).*

### Significance

This site is classified as important based on evaluation of the National Heritage Recourses Act 1999 (Act No 25 of 1999)

- Section 3(3)(a) – its importance in the community, or pattern of South Africa's history.
- Section 3(3)(d) – its importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.
- Section 3(3)(g) - its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

6.4.3 *An assessment of the impact of the development on such heritage resources and an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development.*

### Impact Evaluation

Significance	Certainty	Duration	Mitigation
High	Probable	Short: 0-5 years	C

6.4.4 *The results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources.*

Public participation process was done by Teurlings Environmental. Refer to Section 9 for more detail.

- Section 3(3)(a) – its importance in the community, or pattern of South Africa's history.
- Section 3(3)(d) – its importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.
- Section 3(3)(g) - its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

6.5.3 *An assessment of the impact of the development on such heritage resources and an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development.*

#### **Impact Evaluation**

<b>Significance</b>	<b>Certainty</b>	<b>Duration</b>	<b>Mitigation</b>
High negative	Definite	Short: 0-5 years	C

6.5.4 *The results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources.*

Public participation process was done by Teurlings Environmental. From the social consultation process, the community indicated that the site of the proposed reservoir used to be where bachelors lived. They further raised the possibility that babies less than six months old could be buried there. This might have been under the veranda (stoep) area of in a clay pot somewhere on the stand.

6.5.5 *If heritage resources will be affected by the proposed development, the consideration of alternatives.*

These burials must be relocated in consultation with the community and as stated with Site 1, further work should be done to initiate a grave relocation process for the graves. This is however a different process with its own set of authorisations and public consultations

## 7. Assumptions and Limitations

Due to the nature of cultural remains that occur, in most cases, below surface, the possibility remains that some cultural remains may not have been discovered during the survey. Although Matakoma Consultants surveyed the area as thorough as possible, it is incumbent upon the developer to inform the relevant heritage agency should further cultural remains be unearthed or laid open during the process of development.

- a) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects, meteorites and rare geological specimens;
- b) visual art objects;
- c) military objects;
- d) numismatic objects;
- e) objects of cultural and historical significance;
- f) objects to which oral traditions are attached and which are associated with living heritage;
- g) objects of scientific or technological interest;
- h) books, records, documents, photographic positives and negatives, graphic material, film or video or sound recordings, excluding those that are public records as defined in section 1 (xiv) of the National Archives of South Africa Act, 1996 ( Act No. 43 of 1996), or in a provincial law pertaining to records or archives; and
- i) any other prescribed category.

If it is necessary to refer to any of the above-mentioned objects, the National Heritage Act (Act 25 of 1999 Sections 31-38) are included in Appendix 2.

Under the new National Heritage Resources Act (Act No. 25 of 1999), provisions are made that deal with, and offer protection, to all historic and pre-historic cultural remains, including graves and human remains.

Graves younger than 60 years fall under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the National Department of Health and the relevant Provincial Department of Health and must be submitted for final approval to the Office of the relevant Provincial Premier. This function is usually delegated to the Provincial MEC for Local Government and Planning, or in some cases the MEC for Housing and Welfare. Authorisation for exhumation and reinterment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. In order

## 9. Assessment and recommendations

### **LEK001**

The cemetery and two unmarked graves must be left as is. This would entail a slight deviation from the route if it were found that the route would directly impact on the cemetery. The cemetery must be surveyed to be included on the route drawings to ascertain the proximity of the pipeline to the graves and cemetery. It however seems possible to deviate the pipeline a few meters to fit between the road and cemetery.

In the event that it is found that a deviation of the pipeline is impossible, further work should be done to initiate a grave relocation process for the graves and cemetery. This is however a different process with its own set of authorisations and public consultations. Matakoma Consultants can assist in the completion and management of such a process.

### **LEK002**

No mitigation work will be needed on this old homestead as the pipeline route will not impact on the site. It must be noted that no construction site offices must be placed in this area.

### **LEK003**

The large tree some 50 meters south east of the cemetery is being used as a church site and as such must be left intact. In the case of the pipeline passing in close proximity to the site consultations with the community must be done to agree on a method of impacting as little as possible on this site. Under no circumstances must this tree be damaged or removed.

The tree must also be surveyed to make it possible to place it to scale on the pipeline route drawings.

A heritage resources management plan outline is provided for managing the resources during construction of the pipeline. This includes basic training for construction staff on possible finds, action steps for mitigation measures, surface collections, excavations and communication routes to follow in the case of a discovery.

Refer to **Appendix 4** for an outline of the proposed archaeological watching brief that is recommended for this project.

The definition of an archaeological watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposit may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive.

This definition does not cover chance observations, which should lead to an appropriate archaeological project being designed and implemented, nor do they apply to monitoring for preservation of remains *in situ*.

The purpose of a watching brief is:

- To allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works
- To provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard.
- A watching brief is not intended to reduce the requirement for excavation or preservation of known or inferred deposits, and it is intended to guide, not replace, any requirement for contingent excavation or preservation of possible deposits.

## **10. List of prepares**

- Wouter Fourie, BA (Hon) Archaeology
- Melissa Ramsden, BA (Hon) Archaeology

## **11. Personal Communications**

The public participation process was completed by Teurlings Environmental.

**Standard and Guidance for Archaeological Desk-Based Assessment.** 1994.

International Council of Monuments & Site Documents. **Conventions, Charters and Guidelines.** 2002.

**Documents on Cultural Heritage Protection.** 2002.

International Council of Monuments & Site Documents. **Guidelines to the Burra Charter: Conservation Policy.** 1985.

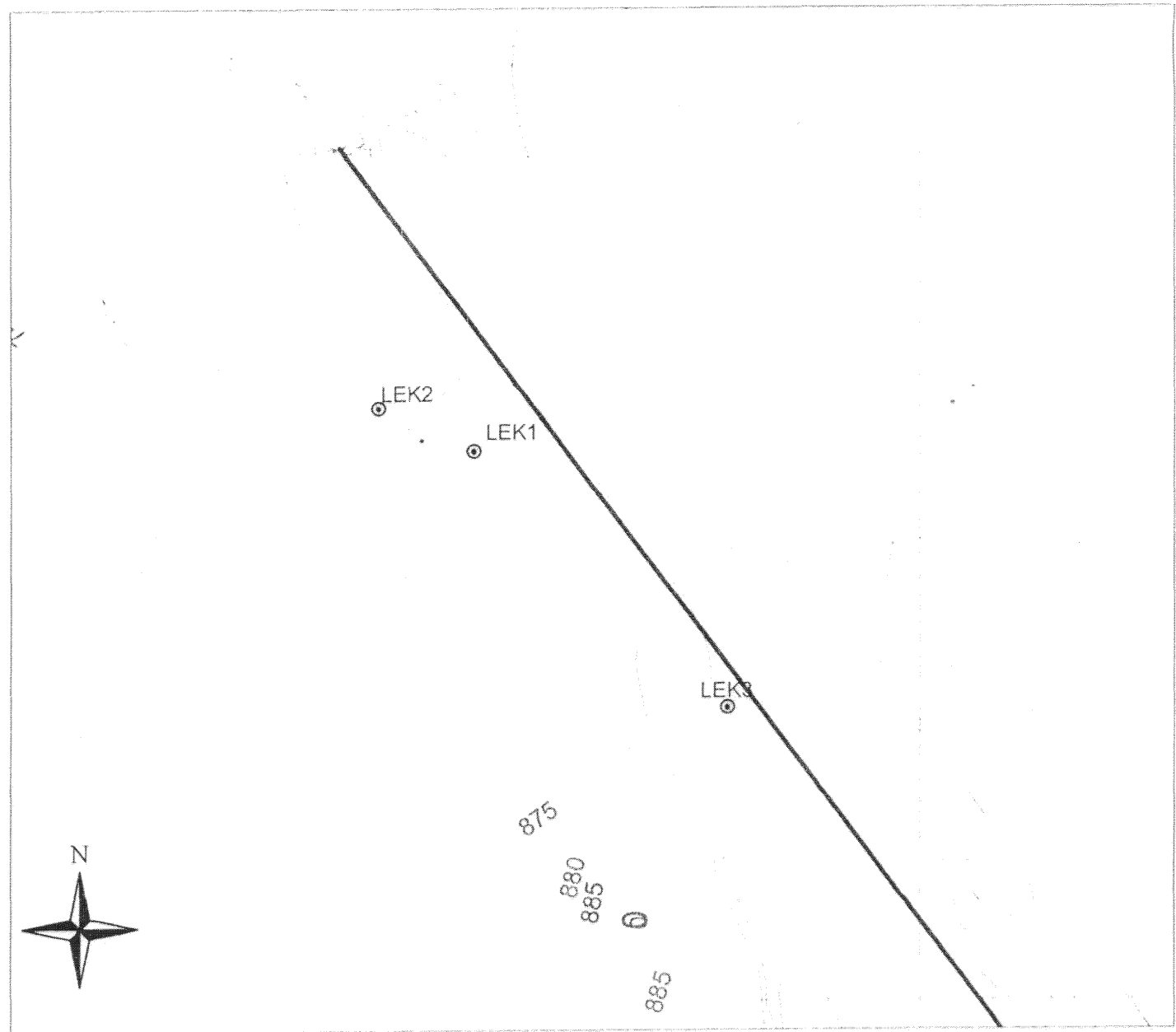
International Council of Monuments & Site Documents. **Guidelines to the Burra Charter: Cultural Significance.** 1984.

Australian Historic Themes. **A Framework for use in Heritage Assessment and Management.** Australian Heritage Commission. 2001.

# Legend

- Pipeline route
- ⊙ Sites

kurung Bulk Water Supply Route  
Heritage Sites



Matakoma Consultants

**APPENDIX 2**  
**LEGISLATION**

(5) SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection (3) (b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority-

- (a) made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and
- (b) reached agreements with such communities and individuals regarding the future of such grave or burial ground.

(6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority-

- (a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and
- (b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.

(7) (a) SAHRA must, over a period of five years from the commencement of this Act, submit to the Minister for his or her approval lists of graves and burial grounds of persons connected with the liberation struggle and who died in exile or as a result of the action of State security forces or agents provocateur and which, after a process of public consultation, it believes should be included among those protected under this section.

(b) The Minister must publish such lists as he or she approves in the Gazette.

- (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
- (d) the re-zoning of a site exceeding 10 000m<sup>2</sup> in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,

must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

(2) The responsible heritage resources authority must, within 14 days of receipt of a notification in terms of subsection (1)-

- (a) if there is reason to believe that heritage resources will be affected by such development, notify the person who intends to undertake the development to submit an impact assessment report. Such report must be compiled at the cost of the person proposing the development, by a person or persons approved by the responsible heritage resources authority with relevant qualifications and experience and professional standing in heritage resources management; or
- (b) notify the person concerned that this section does not apply.

(3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2) (a): Provided that the following must be included:

- (a) The identification and mapping of all heritage resources in the area affected;
- (b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6 (2) or prescribed under section 7;

(5) A provincial heritage resources authority shall not make any decision under subsection (4) with respect to any development which impacts on a heritage resource protected at national level unless it has consulted SAHRA.

(6) The applicant may appeal against the decision of the provincial heritage resources authority to the MEC, who-

(a) must consider the views of both parties; and

(b) may at his or her discretion-

(i) appoint a committee to undertake an independent review of the impact assessment report and the decision of the responsible heritage authority; and

(ii) consult SAHRA; and

(c) must uphold, amend or overturn such decision.

(7) The provisions of this section do not apply to a development described in subsection (1) affecting any heritage resource formally protected by SAHRA unless the authority concerned decides otherwise.

(8) The provisions of this section do not apply to a development as described in subsection (1) if an evaluation of the impact of such development on heritage resources is required in terms of the Environment Conservation Act, 1989 (Act 73 of 1989), or the integrated environmental management guidelines issued by the Department of Environment Affairs and Tourism, or the Minerals Act, 1991 (Act 50 of 1991), or any other legislation: Provided that the consenting authority must ensure that the evaluation fulfils the requirements of the relevant heritage resources authority in terms of subsection (3), and any comments and recommendations of the relevant heritage resources authority with regard to such development have been taken into account prior to the granting of the consent.

### APPENDIX 3

#### TABLE WITH SITE DESCRIPTION AND STATUS

## APPENDIX 4

### OUTLINE GUIDE FOR AN ARCHAEOLOGICAL WATCHING BRIEF

THE DATA IS NOT AVAILABLE

An archaeologist shall only undertake a watching brief, which is governed by a written and agreed specification or project design prepared in advance of work commencing.

The specification or project design must identify the objectives, scope, geographical area, and means of dissemination of the results of the watching brief, and incorporate a method statement and work programme. The specification or project design should conform to the brief/project outline if one has been set, and must in any case be approved in advance by the planning archaeologist or curator.

The specification or project design should contain, as a minimum, the following elements:

- Non-technical summary
- Site location (including map) and descriptions
- Context of the project
- Geological and topographical background
- Archaeological and historical background
- General and specific aims of fieldwork
- Reference to relevant legislation
- Field methodology
- Collection and disposal strategy for artefacts and ecofacts
- Arrangement for immediate conservation of artefacts
- Post-fieldwork methodology
- Report preparation (method)
- Publication and dissemination proposals

methodologies of the project. All equipment must be suitable for the purpose and in sound condition and comply with Health and Safety regulations and recommendations.

3.6 Sufficient and appropriate resources (staff, equipment, accommodation etc) must be used to enable the project to achieve its aims, the desired quality and timetable, and to comply with all statutory requirements. Any contingency elements must be clearly identified and justified. It is the role of the archaeologist undertaking the work to define appropriate staff levels.

3.7 Full and proper records (written, graphic, electronic and photographic as appropriate) should be made for all work, using pro forma record forms and sheets as applicable. Digital records created, as part of the project should comply with specified data standards. An archaeologist must ensure that digital information, paper and photographic records should be stored in a secure and appropriate environment, and be regularly copied or backed up, and copies stored in a separate location.

3.8 Artefact and environmental data collection and discard policies, strategies and techniques must be fit for the defined purpose, and understood by all staff and subcontractors

3.9 Health and Safety regulations and requirements cannot be ignored no matter how imperative the need to record archaeological information; hence Health and Safety will take priority over archaeological matters. All archaeologists undertaking fieldwork must do so under a defined Health and Safety Policy.

3.10 Archaeologists undertaking fieldwork must observe safe working practices; the Health and Safety arrangements must be agreed and understood by all relevant parties before work commences

3.11 Archaeologists must liaise closely with the principal contractor and comply with specified site rules. Archaeologists are advised to note the onerous responsibilities of the role of planning supervisor.

4.5 All reports should be written in a clear, concise and logical style; technical terms should be explained if the report is for a non-archaeological audience. Consideration should be given during the preparation of the report to the requirements of public inquiries and courts of law if appropriate.

4.6 Subject to any contractual requirements on confidentiality, copies of the report must be submitted to the appropriate Provincial Heritage Resources Agency (PHRA) within six months of completion of report.

4.7 As a minimum, a site summary or data structure report should be submitted to the appropriate PHRA.

## **5. MONITORING**

5.1 All work must be monitored by the archaeological contractor undertaking the project, and if appropriate by the PHRA, the Cultural Resources Management Section of the South African Association of Archaeologists (CRM Section of SA3), or their nominated representatives. The guidance below is directed in general at monitors from outside the organisation undertaking the work, but many of the points apply equally to internal monitors or managers.

5.2 A monitor should be suitably experienced and qualified, or have access to appropriate specialist advice.

5.3 Monitoring must be undertaken against the written specification and/or project design.

5.4 Monitors, where not representing the commissioning body, should bear in mind the need for flexibility, within the stated parameters, in contractual matters such as staff numbers, budgets or timetable.

5.5 All monitoring visits must be documented, and agreed by each party.

5.6 Non-compliance with the agreed specification or project design must be pointed out by the monitor to the archaeologist undertaking the work, and their client if appropriate, at the earliest opportunity.

the site description (including size, geology and topography, location), when the project was undertaken and by whom.

### **Aims and objectives**

These should reflect or reiterate the aims set out in the project design or specification.

### **Methodology**

The methods used, including the detail of any variation to the agreed project design or specification should be set out carefully, and explained as appropriate. These should be set out as a series of summary statements, organised clearly in relation to the methods used, and describing structural data, associated finds and/or environmental data recovered. Descriptive material should be clearly separated from interpretative statements. Technical terminology (including dating or period references) should be explained where necessary if the report is aimed at a largely non-archaeological audience. The results should be amplified where necessary by the use of drawings and photographs; and by supporting data contained in appendices (below).

### **Conclusions**

It is appropriate to include a section, which sums up and interprets the results and puts them into context (local, national or otherwise). Other elements should include a confidence rating on techniques used, or on limitations imposed by particular factors (eg weather or problems of access).

### **Archive location**

The final destination of the archive (records and finds) should be noted in the report.