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## DESKTOP HIA REPORT FOR THE BANDELIERKOP PRA LOCATED ON VARIOUS FARMS IN THE VHEMBE DISTRICT OF THE LIMPOPO PROVINCE

For:

**Red Kite Environmental Consulting** 

#### REPORT: APAC019/33

by:

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#### SUMMARY

APelser Archaeological Consulting (APAC) was appointed by Red Kite Environmental Consulting to undertake a Heritage Desktop Study for the Bandelierkop Prospecting Rights Application (PRA1). The study area is located on various farms in the Vhembe District of the Limpopo Province. The area is situated between the towns of Bandelierkop and Makhado (Louis Trichardt).

Background research indicates that there are a number of cultural heritage (archaeological and historical) sites and features in the larger geographical area within which the study area falls. There are no known sites in the specific study area, but there could be potentially a number of cultural heritage (archaeological and/or historical) sites, features and material located here. A field assessment will have to be undertaken in due course to establish the possible impacts of the PRA (through Boreholes) on these potential resources. This report discusses the results of the background research and provides recommendations at the end.

# CONTENTS

1.	INTRODUCTION	5
2.	TERMS OF REFERENCE	5
3.	LEGISLATIVE REQUIREMENTS	5
4.	METHODOLOGY	8
5.	DESCRIPTION OF THE AREA	9
6.	DISCUSSION	11
7.	CONCLUSIONS AND RECOMMENDATIONS	13
8.	REFERENCES	15
APP	ENDIX A: DEFINITION OF TERMS:	16
APP	ENDIX B: DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE	17
APP	ENDIX C: SIGNIFICANCE AND FIELD RATING:	18
APP	ENDIX D: PROTECTION OF HERITAGE RESOURCES:	19
APP	ENDIX E: HERITAGE IMPACT ASSESSMENT PHASES	20

## 1. INTRODUCTION

APelser Archaeological Consulting (APAC) was appointed by Red Kite Environmental Consulting to undertake a Heritage Desktop Study for the Bandelierkop Prospecting Rights Application (PRA1). The study area is located on various farms in the Vhembe District of the Limpopo Province. The area is situated between the towns of Bandelierkop and Makhado (Louis Trichardt).

Background research indicates that there are a number of cultural heritage (archaeological and historical) sites and features in the larger geographical area within which the study area falls. There are no known sites in the specific study area, but there could be potentially a number of cultural heritage (archaeological and/or historical) sites, features and material located here. A field assessment will have to be undertaken in due course to establish the possible impacts of the PRA (through Boreholes) on these potential resources.

The client indicated the location and the boundaries of the study area and the desktop research focused on this and the larger geographical area within which it is located.

## 2. TERMS OF REFERENCE

The Terms of Reference for the study was to:

- 1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the portion of land that will be impacted upon by the proposed development;
- 2. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;
- 3. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;
- 4. Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources; and
- 5. Review applicable legislative requirements.

# A Physical Field Assessment was not undertaken as yet, and this will have to be done at a later stage.

## 3. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act, 1999 (Act No. 25 of 1999) and the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

## 3.1. The National Heritage Resources Act

According to the above-mentioned act the following is protected as cultural heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The National Estate includes the following:

- a. Places, buildings, structures and equipment of cultural significance
- b. Places to which oral traditions are attached or which are associated with living heritage
- c. Historical settlements and townscapes
- d. Landscapes and features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Sites of Archaeological and palaeontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, palaeontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment (AIA) only looks at archaeological resources. An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m<sup>2</sup> or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m<sup>2</sup>
- e. Any other category provided for in the regulations of the South African Heritage Resources Agency (SAHRA) or a provincial heritage authority

## <u>Structures</u>

Section 34 (1) of the mentioned act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

Alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

#### Archaeology, palaeontology and meteorites

Section 35(4) of this act deals with archaeology, palaeontology and meteorites. The act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial)

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the SAHRA. In order to demolish such a site or structure, a destruction permit from the SAHRA will also be needed.

## <u>Human remains</u>

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- b. destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- c. bring onto or use at a burial ground or grave referred to in paragraph (a) or
  (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations** (**Ordinance no. 12 of 1980**) (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated to) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act, 1983 (Act No. 65 of 1983 as amended)**.

# **3.2.** The National Environmental Management Act

This act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

## 4. METHODOLOGY

# 4.1. Survey of literature

A survey of available literature was undertaken in order to place the development area in an archaeological and historical context. The sources utilized in this regard are indicated in the bibliography.

## 4.2. Field survey

The field assessment section of the study is conducted according to generally accepted HIA practices and aimed at locating all possible objects, sites and features of heritage significance in the area of the proposed development. The location/position of all sites, features and objects is determined by means of a Global Positioning System (GPS) where possible, while detail photographs are also taken where needed. **No Field Survey has been undertaken yet.** 

## 4.3. Oral histories

People from local communities are sometimes interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography.

## 4.4. Documentation

All sites, objects, features and structures identified are documented according to a general set of minimum standards. Co-ordinates of individual localities are determined by means of the Global Positioning System (GPS). The information is added to the description in order to facilitate the identification of each locality.

## 5. DESCRIPTION OF THE AREA

The Bandelierkop PRA1 study area is located on various farms in the Vhembe District of the Limpopo Province. It is situated between Bandelierkop & Makhado (Louis Trichardt). The following farms on farm portions are applicable:

- 1. Grutz 308LS Portion 1 & the Remaining Extent of Portion 0
- 2 Annaskraal 341LS Portion 1, Portion 2 & the Remaining Extent of the farm
- 3. Onlust 339LS Portion 0
- 4 Leeuwdrift 342LS Portion 0
- 5. Waerkum 302LS Portion 0
- 6. Welbedacht 346LS Portion 0
- 7. Vergenoeg 347LS Portion 0
- 8. Arras 1222LS Portion 0
- 9. Welkomthuis 343LS Portion 0

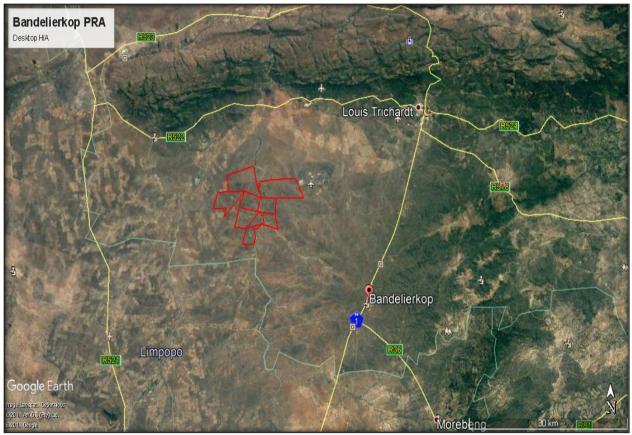


Figure 1: General location of study area in red polygon (Google Earth 2019).

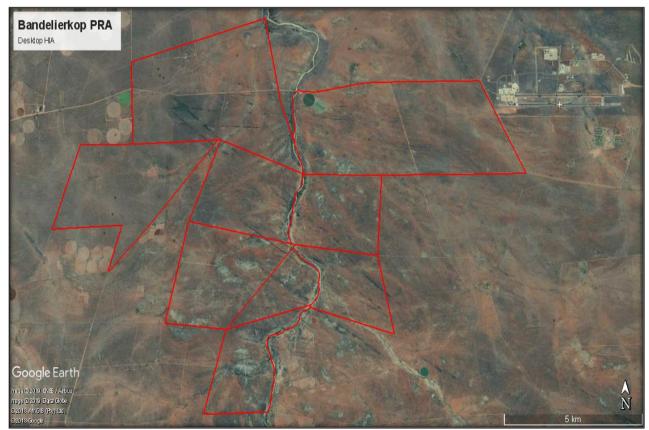


Figure 2: Closer view of study area (Google Earth 2019).

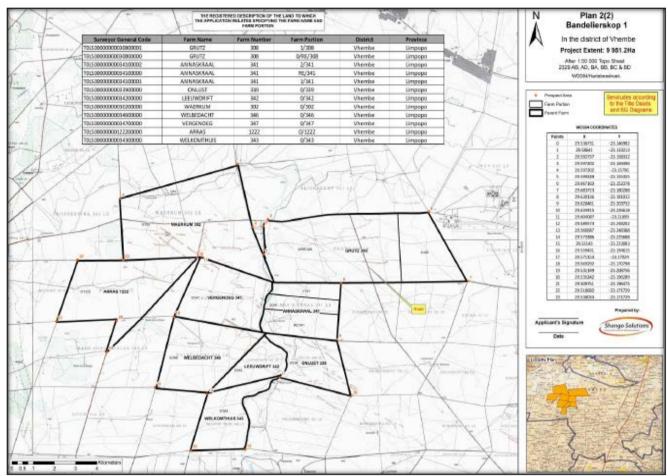


Figure 3: Location Map/Plan for the Bandelierkop PRA (courtesy Red Kite Environmental).

# 6. DISCUSSION

The Stone Age is the period in human history when lithic (stone) material was mainly used to produce tools. In South Africa the Stone Age can basically be divided into three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. A basic sequence for the South African Stone Age (Lombard et.al 2012) is as follows:

Earlier Stone Age (ESA) up to 2 million – more than 200 000 years ago Middle Stone Age (MSA) less than 300 000 – 20 000 years ago Later Stone Age (LSA) 40 000 years ago – 2000 years ago

It should also be noted that these dates are not a neat fit because of variability and overlapping ages between sites (Lombard et.al 2012: 125).

No Stone Age sites (including rock art) are known to occur in the immediate study area. The closest known Stone Age sites are located at a site called Kalkbank south-west of the study area (Bergh 1999: 4), while known rock art (paintings) sites are located in the larger geographical area within which the study area is located (Bergh 1999: 5).

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts. In South Africa it can be divided in two separate phases (Bergh 1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) however indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D. Middle Iron Age (MIA) 900 – 1300 A.D. Late Iron Age (LIA) 1300 – 1840 A.D.

There are no known Iron Age sites (EIA or LIA) in the immediate study area, although a large number of EIA to LIA sites are known to exist in the larger geographical landscape in which the study area falls. This includes the sites of Klein Afrika & Happy Rest (EIA) located north & west of Louis Trichardt respectively, and the sites of Verulam, Verdun & Machemma (LIA) north of the study area (Bergh 1999: 6-7).

Tom Huffman's research work shows that Iron Age sites, features or material could possibly be found in the area. This could include the so-called Silver Leaves facies of the Urewe Tradition dating to between AD280 and AD450 (Huffman 2007: 123); Mzonjani facies of the same tradition dating to between AD450 and AD750 (p.127); Icon facies of Urewe dating to between AD1300 and AD1500 (p.183); the Happy Rest facies of the Kalundu Tradition dating to between AD500 & AD750 (p.219); the Malapati facies of Kalundu dating to between AD1300 (p.239); the Tavhatshena facies of Kalundu dating to between AD1450 & AD1600 (p.263); the Letaba facies of Kalundu dating to between AD1250 and finally the Mutamba facies of the same tradition dating to between AD1250 and AD1450 (Huffman 2007: 271).

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. The first European group to pass close by the area were that of Coenraad de Buys in 1821 and 1825, followed by groups of Voortrekkers after 1844 (Bergh 1999: 12-14). Schoemansdal (originally Zoutpansbergdorp) was established in 1848, and finally abandoned as a result of conflict with local groups in July 1867 (Bergh 1999: 131; 187). The town of Louis Trichardt was formally established in February 1899 (Bergh 1999: 147). During the Anglo-Boer war (1899-1902) there was a skirmish between British and Boer forces at Fort Edward near Louis Trichardt between 20 and 28 March 1902 (Bergh 1999: 54).

The Chief Surveyor General's Database (<u>www.csg.dla.gov.za</u>) was scrutinized for old maps of the various farms comprising the study area. From these maps (not reproduced in this report) it is shown that most of the farms were surveyed on behalf on the Government of the time between January and May 1908, while Waerkum was surveyed for Government in December 1905. Waerkum was originally granted to one H.J.Pieterse by Deed on the 23<sup>rd</sup> of

May 1871. Although the other maps does not indicate to whom they were originally granted it can be assumed that it would have been around the same time as well. The maps also indicate that in 1905 and 1908 the farms were in the Zoutpansberg District and either in the Wards of Mara or Klein Spelonken. The oldest map for the farm Gutz that could be found shows it was surveyed in November 1961, while 1955 maps for Annaskraal shows it was surveyed in March 1955. No map for the farm Arras could be obtained but the farm is shown on the 1908 maps of the other farms in the study area so it can be assumed that it was also surveyed on behalf of Government at the time.

No historical sites or features could be identified on any of these maps. However, it can be said that the possibility of farmsteads/homesteads being erected and present on these farm portions are likely, as would both formal and informal graveyards. The physical field survey that will have to be undertaken, will therefore aim at locating and documenting these possible cultural heritage resources in order to prevent or limit any impacts by the proposed Boreholes forming part of the PRA on them.

In terms of pre-historical (archaeological) sites, features or material it is very likely that the study area will contain some. Based on the desktop research this could be in the form of Stone Age sites and material (stone tools and possibly rock art), Early & Later Iron Age sites (stone-walling, cultural material such as pottery). A number of streams and river tributaries cross through the study area and the likelihood of archaeological sites, features and material existing here is fairly high.

It is therefore recommended that a Phase 1 Heritage Impact Assessment (HIA) for the Bandelierkop PRA be undertaken and that a physical field survey form part of this process. The results of both the Desktop Research and Physical Survey will then be presented in a Final Phase 1 HIA Report.

# 7. CONCLUSIONS AND RECOMMENDATIONS

In conclusion it is possible to say that the Desktop Study for the Bandelierkop Prospecting Rights Application (PRA) was concluded successfully. The study area is located on a number of farms in the Vhembe District of the Limpopo Province, between the towns of Bandelierkop and Makhado (Louis Trichardt).

Background research indicates that there are a number of cultural heritage (archaeological and historical) sites and features in the larger geographical area within which the study area falls. There are no known sites in the specific study area, but there could be potentially a number of cultural heritage (archaeological and/or historical) sites, features and material located here.

No historical sites or features were identified on any of the historical maps of the farms comprising the study area. However, it can be said that the possibility of farmsteads/homesteads being erected and present on these farm portions are likely, as would both formal and informal graveyards. In terms of pre-historical (archaeological) sites, features or material it is very likely that the study area will contain some. Based on the desktop research this could be in the form of Stone Age sites and material (stone tools and possibly rock art), Early & Later Iron Age sites (stone-walling, cultural material such as pottery). A number of streams and river tributaries cross through the study area and the likelihood of archaeological sites, features and material existing here is fairly high.

It is therefore recommended that a Phase 1 Heritage Impact Assessment (HIA) for the Bandelierkop PRA be undertaken and that a physical field survey form part of this process. The physical field survey will aim at locating and documenting these possible cultural heritage resources in order to prevent or limit any impacts by the proposed Boreholes forming part of the PRA on them. The results of both the Desktop Research and Physical Survey will then be presented in a Final Phase 1 HIA Report, and recommendations on possible mitigation measures forwarded.

#### 8. **REFERENCES**

General & Closer Views of Study Area Location: Google Earth 2019.

Location Map/Plan for the Bandelierkop PRA: Provided by Red Kit Environmental.

Bergh, J.S. (red.). 1999. Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies. Pretoria: J.L. van Schaik.

Huffman, T.N. 2007. Handbook to the Iron Age: **The Archaeology of Pre-Colonial Farming Societies in Southern Africa**. Scotsville: University of KwaZulu-Natal Press.

Knudson, S.J. 1978. **Culture in retrospect**. Chicago: Rand McNally College Publishing Company.

Lombard, M., L. Wadley, J. Deacon, S. Wurz, I. Parsons, M. Mohapi, J. Swart & P. Mitchell. 2012. South African and Lesotho Stone Age Sequence Updated (I). South African Archaeological Bulletin 67 (195): 120–144, 2012.

Republic of South Africa. 1999. **National Heritage Resources Act** (No 25 of 1999). Pretoria: the Government Printer.

Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.

Chief Surveyor General Database (<u>www.csg.dla.gov.za</u>)

#### **APPENDIX A: DEFINITION OF TERMS:**

**Site**: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

**Structure**: A permanent building found in isolation or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

**Object**: Artifact (cultural object).

(Also see Knudson 1978: 20).

#### **APPENDIX B: DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE**

**Historic value**: Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.

**Aesthetic value**: Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.

**Scientific value**: Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period

**Social value**: Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

**Rarity**: Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.

**Representivity**: Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

#### **APPENDIX C: SIGNIFICANCE AND FIELD RATING:**

#### **Cultural significance:**

- Low: A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.

- Medium: Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.

- High: Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

#### Heritage significance:

- Grade I: Heritage resources with exceptional qualities to the extent that they are of national significance

- Grade II: Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate

- Grade III: Other heritage resources of local importance and therefore worthy of conservation

#### Field ratings:

i. National Grade I significance: should be managed as part of the national estate

ii. Provincial Grade II significance: should be managed as part of the provincial estate

iii. Local Grade IIIA: should be included in the heritage register and not be mitigated (high significance)

iv. Local Grade IIIB: should be included in the heritage register and may be mitigated (high/ medium significance)

v. General protection A (IV A): site should be mitigated before destruction (high/medium significance)

vi. General protection B (IV B): site should be recorded before destruction (medium significance)

vii. General protection C (IV C): phase 1 is seen as sufficient recording and it may be demolished (low significance)

#### APPENDIX D: PROTECTION OF HERITAGE RESOURCES:

#### Formal protection:

National heritage sites and Provincial heritage sites – Grade I and II Protected areas - An area surrounding a heritage site Provisional protection – For a maximum period of two years Heritage registers – Listing Grades II and III Heritage areas – Areas with more than one heritage site included Heritage objects – e.g. Archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

#### **General protection:**

Objects protected by the laws of foreign states Structures – Older than 60 years Archaeology, palaeontology and meteorites Burial grounds and graves Public monuments and memorials

#### **APPENDIX E: HERITAGE IMPACT ASSESSMENT PHASES**

1. Pre-assessment or Scoping Phase – Establishment of the scope of the project and terms of reference.

2. Baseline Assessment – Establishment of a broad framework of the potential heritage of an area.

3. Phase I Impact Assessment – Identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.

4. Letter of recommendation for exemption – If there is no likelihood that any sites will be impacted.

5. Phase II Mitigation or Rescue – Planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.

6. Phase III Management Plan – For rare cases where sites are so important that development cannot be allowed.