

# Archaetnos Culture & Cultural Resource Consultants BK 98 09854/23

# A REPORT ON A PHASE 1 HERITAGE IMPACT ASSESSMENT (HIA) FOR THE PROPOSED DERDEPOORT PARK X 24, X 25 AND X 28 TO THE NORTH OF PRETORIA, GAUTENG PROVINCE

For:

Landscape Dynamics PO Box 947 Groenkloof 0027

REPORT: AE01206V

By:

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# **SUMMARY**

Archaetnos cc was appointed by Landscape Dynamics to conduct a heritage impact assessment relating to cultural heritage resources for the proposed development called Derdepoort Park X 24, X 25 and X 28. This is situated to the north of Pretoria in the Gauteng Province.

The fieldwork undertaken revealed no sites of cultural heritage significance. The area is largely disturbed by past human activities such as agriculture, light industries and residential development.

The proposed development may therefore continue and this report is seen as ample mitigation in this regard. However one should always bear in mind that archaeological may be unearthed during construction activities. In such a case an archaeologist should immediately be called in to investigate.

# **CONTENTS**

Page
SUMMARY3
CONTENTS4
1. INTRODUCTION5
2. TERMS OF REFERENCE
3. CONDITIONS AND ASSUMPTIONS6
4. LEGAL REQUIREMENTS6
5. METHODOLOGY9
6. DESCRIPTION OF THE AREA10
7. DISCUSSION15
8. CONCLUSIONS AND RECOMMENDATIONS17
9. REFERENCES
APPENDIX A20
APPENDIX B21
APPENDIX C22
APPENDIX D23
APPENDIX E

#### 1. INTRODUCTION

Archaetnos cc was appointed by Landscape Dynamics to conduct a cultural heritage impact assessment (HIA) relating to cultural heritage resources for the proposed development called Derdepoort Park X 24, X 25 and X 28. This is situated to the north of Pretoria in the Gauteng Province.

The development consists of the following:

- Derdepoort Park X24: Portion 1 of Holding 31 Pumulani Agricultural Holdings Extension 1, approximately 1.7028 hectares in extent; Portion 2 of Holding 29 Pumulani Agricultural Holdings Extension 1, approximately 1.0028 hectares in extent; Portion 3 of Holding 29 Pumulani Agricultural Holdings Extension 1, approximately 1.0713 hectares in extent; Remaining Extent of Holding 29 Pumulani Agricultural Holdings Extension 1, approximately 1.0562 hectares in extent; Portion 2 (a portion of Portion 1) of Holding 30 Pumulani Agricultural Holdings Extension 1, approximately 1.0001 hectares in extent; Portion 1 of Holding 30 Pumulani Agricultural Holdings Extension 1, approximately 2.0630 hectares in extent; and Portion 410 (a portion of Portion 307) of the farm Derdepoort 326 JR, approximately 1.0151 hectares in extent.
- Derdepoort Park X25: Holding 33 Pumulani Agricultural Holdings Extension 1, approximately 4.1115 hectares in extent.
- Derdepoort Park X28: Remaining Extent of Holding 31 Pumulani Agricultural Holdings Extension 1, approximately 2.3783 hectares in extent.

The client indicated the area where the proposed development is to take place, and the survey was confined to this area.

#### 2. TERMS OF REFERENCE

The Terms of Reference for the survey were to:

- 1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property (see Appendix A).
- 2. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value (see Appendix B).
- 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.
- 5. Recommend suitable mitigation measures should there be any sites of significance that might be impacted upon by the proposed development.
- 6. Review applicable legislative requirements.

# 3. CONDITIONS & ASSUMPTIONS

The following conditions and assumptions have a direct bearing on the survey and the resulting report:

- 1. Cultural Resources are all non-physical and physical man-made occurrences, as well as natural occurrences associated with human activity (Appendix A). These include all sites, structure and artifacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development. Graves and cemeteries are included in this.
- 2. The significance of the sites, structures and artifacts is determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. The various aspects are not mutually exclusive, and the evaluation of any site is done with reference to any number of these aspects.
- 3. Cultural significance is site-specific and relates to the content and context of the site. Sites regarded as having low cultural significance have already been recorded in full and require no further mitigation. Sites with medium cultural significance may or may not require mitigation depending on other factors such as the significance of impact on the site. Sites with a high cultural significance require further mitigation (see Appendix C).
- 4. The latitude and longitude of any archaeological or historical site or feature, is to be treated as sensitive information by the developer and should not be disclosed to members of the public.
- 5. All recommendations are made with full cognizance of the relevant legislation.
- 6. It has to be mentioned that it is almost impossible to locate all the cultural resources in a given area, as it will be very time consuming. Developers should however note that the report should make it clear how to handle any other finds that might occur.

# 4. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

# 4.1 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 or scientific or technological value.

The national estate (see Appendix D) 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. 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 only looks at archaeological resources. The different phases during the HIA process are described in Appendix E. 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 SAHRA or a provincial heritage authority

# **Structures**

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 South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

#### **Human remains**

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 of 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.

Unidentified/unknown graves are also handled as older than 60 until proven otherwise.

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) before exhumation can take place. Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

# 4.2 The National Environmental Management Act

This act (Act 107 of 1998) 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.

#### 5. METHODOLOGY

# **5.1** Survey of literature

A survey of literature was undertaken in order to obtain background information regarding the area. Sources consulted in this regard are indicated in the bibliography.

#### **5.2** Field survey

The survey was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural significance in the area of proposed development. If required, the location/position of any site was determined by means of a Global Positioning System (GPS)<sup>1</sup>, while photographs were also taken where needed.

The survey was undertaken by a physical survey via vehicle and on foot.

<sup>&</sup>lt;sup>1</sup> A Garmin 550 Oregon, which have a fault factor of a few meters.

#### **5.3** Oral histories

People from local communities are 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.

#### **5.4** Documentation

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

# **5.5** Evaluation of Heritage sites

The evaluation of heritage sites is done by giving a field rating of each (see Appendix C) using the following criteria:

- The unique nature of a site
- The integrity of the archaeological deposit
- The wider historic, archaeological and geographic context of the site
- The location of the site in relation to other similar sites or features
- The depth of the archaeological deposit (when it can be determined or is known)
- The preservation condition of the site
- Uniqueness of the site and
- Potential to answer present research questions.

#### 6. DESCRIPTION OF THE AREA

The area of the planned development is described above being different portion on the farm Derdepoort 326 JR (Figure 1-2). The area has been disturbed by past human activities including ploughing resulting in old fields and pioneer vegetation. The latter is quite dense in certain areas, making archaeological visibility difficult (Figure 3-4). Current activities included housing, light industries, orchards and debushed areas (Figure 5-7).

The topography of the area is reasonably flat. No distinctive features are found within the landscape.

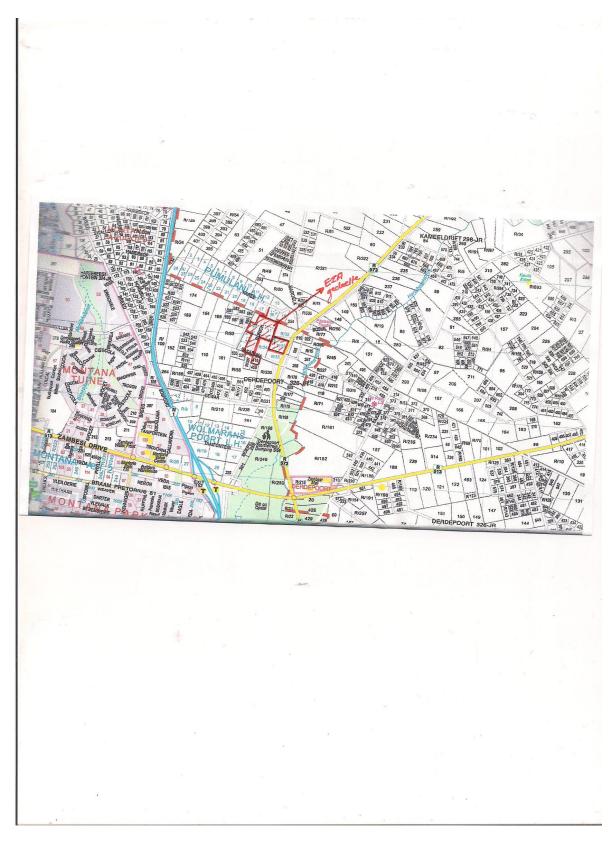


Figure 1 Location of the surveyed area.

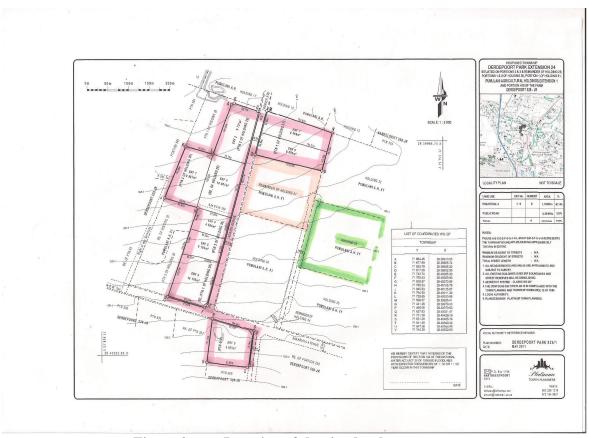


Figure 2 Location of the site development.



Figure 3 View of X 24 area with pioneer plant species.



Figure 4 View of X 25 area with pioneer plant species.



Figure 5 General view of the surveyed area at X 24.



Figure 6 Debushing at X 28.



Figure 7 Orchard at X 28.

#### 7. DISCUSSION

During the survey no sites of cultural heritage significance was located in the area to be developed. A GPS co-ordinate taken at the site is: 25°40.135'S; 28°17.377'E.

However, there always is a possibility that sites may become known later and that those need to be dealt with in accordance with the legislation discussed above. For this reason and in order to enable the reader to better understand possible archaeological and cultural features that may be unearthed during construction activities, it is necessary to give a background regarding the different phases of human history.

# 7.1 Stone Age

The Stone Age is the period in human history when lithic material was mainly used to produce tools (Coertze & Coertze 1996: 293). In South Africa the Stone Age can be divided in three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. The division for the Stone Age according to Korsman & Meyer (1999: 93-94) is as follows:

Early Stone Age (ESA) 2 million – 150 000 years ago Middle Stone Age (MSA) 150 000 – 30 000 years ago Late Stone Age (LSA) 40 000 years ago – 1850 - A.D.

One of the important Early Stone Age sites in southern Africa is situated to the west of the surveyed area, close to the Wonderboom Nature Reserve (Korsman & Meyer 1999: 93). The Wonderboom site is a so-called Late Acheul site. This means it is the later phase of the Acheulian culture, which is an Early Stone Age culture. Similar tools were also found on other parts of the Magaliesberg (Van Vollenhoven 2006: 183). It is therefore quite possible that these people would have also utilised other gateways through the mountain, such as Derdepoort.

Middle Stone Age material as well as a Late Stone Age site were identified some years ago on the Magaliesberg Mountain (Van Vollenhoven 2000: 150-151). This last phase of the Stone Age is associated with the San people.

No Stone Age sites, features or artifacts were found during the survey. Such features may however be covered by topsoil and the developer therefore needs to be on the lookout once work on site commence.

# 7.2 Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce artifacts (Coertze & Coertze 1996: 346). In South Africa it can be divided in three separate phases according to Huffman (2007: xiii) namely:

Early Iron Age (EIA) 250 – 900 A.D. Middle Iron Age (MIA) 900 – 1300 A.D. Late Iron Age (LIA) 1300 – 1840 A.D. Only a few Early Iron Age sites are known in Gauteng of which the closest one to the development is the one called the Derdepoort site (Nienaber et al 1997: 15-22). The site is located to the eastern side of the poort, thus very close but to the west of the area to be developed. One would therefore expect that these people moved around in the greater area in order to hunt and watch over their cattle. Not many EIA sites are known making the identification of such sites very important to the scientific community. Such finds may be unearthed during development activities.

A Middle Iron Age site was identified to the west of Wonderboompoort (Küsel 1993: 13), but it was not dated yet. Again this would suggest that Iron Age people also utilized the Magaliesberg.

Much more information is available regarding the Late Iron Age. Bergh (1999: 7) indicates that 125 sites are known in the Pretoria area, but this is under-estimation. According to Delius (1983: 12) and Horn (1996: 23) LIA people moved into the Pretoria area since 1600 A.D. A number of LIA sites have been identified on the Magaliesberg Mountain. Three of these are to the west of Wonderboompoort (Van Schalkwyk et al 1994: 9-10) and four are between Wonderboompoort and Derdepoort (Naudé & Van Vollenhoven 1992: 35-37; Mason 1962: 397). Therefore the people from the LIA also seem to have utilized this area.

No Iron Age sites and features were identified during the survey, but the area was probably utilized by them. However, the management and workers should nevertheless always be on the lookout for Iron Age features and artifacts, such as stone walling and pottery.

# 7.3 Historical Age

The Historical Age started with the first historical sources which can be used to learn more about people of the past. In South Africa it can be divided into two phases. The first includes oral histories as well as the recorded oral histories of past societies. The latter were usually written by people who contact with such a community for a short time. This is followed by the second phase which includes the moving into the area of people that were able to read and write (Van Vollenhoven 2006: 189).

Early travelers have moved through the area that later became known as Pretoria as early as 1829. This was when the first white people visited the area, namely Robert Schoon and William McLuckie. During the same year the well-known missionary Dr. Robert Moffat also visited the area (Rasmussen 1978: 69). In October 1829 the missionary James Archbell and the trader David Hume traveled through this part of the country (Changuion 1999: 119).

The first Bantu language speakers in the area were the so-called Transvaal Ndebele, specifically the southern group. Their history goes back to Chief Msi (Musi) and the genealogy of the Manala (Mahbena) clan, the Ndzundza (Mapoch) clan, the Mathombeni (Kekana) clan and the Hwanda clan (Horn 1996: 23).

Chief Msi lived in the Pretoria area somewhere between 1600 and 1700 A.D. His sons divided the tribe in three groups, namely the Hwaduba, Manala and Ndzundza (Horn 1996: 23).

The largest group of Bantu speaking people in the Pretoria area is the Northern Sotho, but Southern Sotho's and Tswanas are also present. These groups have a typical building tradition consisting of large building complexes and round huts with conical roofs (Bergh 1999: 106).

It seems as if all these groups fled from the area during the Difaquane when Mzilikazi came here in 1827. He killed the men, burned down their villages, confiscated the livestock and took the women to marry members of his impi (Van Vollenhoven 2000: 156).

The missionary Jean-Pierre Pellissier even visited Mzilikazi in March 1932. In June/ July of that year he was attacked by the impi of Dingane, the Zulu chief. As a result he left the area during that year (Bergh 1999: 112). This left an area described as being deserted by the missionary Robert Moffat. Sotho groups however started moving back into the area after Mzilikazi left (Junod 1955: 68).

The first white people also came to the Pretoria area during this time (Coetzee 1992: 11). During the Anglo Boer War (1899-1902) the British erected a blockhouse at Derdepoort. This was after they took over the city form the Boers on 5 June 1900. The blockhouse was a typical circular Rice pattern structure made from corrugated iron. It had a dry wall made of stones around it and some other fortification walls to the east thereof. The blockhouse was erected on the eastern side of Baviaanspoort Road (Van Vollenhoven & Van den Bos 1997: 135).

#### 8. CONCLUSIONS AND RECOMMENDATIONS

It is concluded that the assessment of the area was conducted successfully. In the surveyed area no sites of cultural significance have been found.

The final recommendations are as follows:

- The report is seen as ample mitigation and the development may therefore proceed.
- The subterranean presence of archaeological and/or historical sites, features or artifacts are always a distinct possibility. Therefore care should be taken when development work commences that if any artifacts are uncovered, a qualified archaeologist be called in to investigate.

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### 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.

Aestetic 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

#### **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:**

- National Grade I significance should be managed as part of the national estate - Provincial Grade II significance should be managed as part of the provincial estate - Local Grade IIIA should be included in the heritage register and not be mitigated (high significance) should be included in the heritage register and may be - Local Grade IIIB mitigated (high/ medium significance) site should be mitigated before destruction (high/ - General protection A (IV A) medium significance) site should be recorded before destruction (medium - General protection B (IV B) significance) phase 1 is seen as sufficient recording and it may be - General protection C (IV C) 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.