

Archaetnos Culture & Cultural Resource Consultants BK 98 09854/23

A REPORT ON A CULTURAL HERITAGE IMPACT ASSESSMENT FOR A PROPOSED NEW TSF PIPELINE AT THE TWO RIVERS PLATINUM MINE. **CLOSE TO STEELPOORT, LIMPOPO PROVINCE**

For:

GCS PO Box 2597 Rivonia 2128

GCS Project no.: 13-588

REPORT: AE01354V

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EXECUTIVE SUMMARY

Archaetnos cc was requested by GCS to conduct a cultural heritage impact assessment for a proposed new TSF pipeline at the Two Rivers Platinum Mine. This is close to Steelpoort in the Limpopo Province. The pipeline is associated with the proposed building of the new Tailings Storage Facility (TSF) for which a Heritage Impact Assessment Report was done in October 2012.

A survey of the available literature was undertaken in order to obtain background information regarding the area. This was followed by the field survey which was conducted according to generally accepted HIA practices, aimed at locating all possible objects, sites and features of cultural significance in the area of the proposed development.

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

During the survey no sites of cultural heritage significance was located in the area to be developed. A few stone tools were however found. The development may therefore continue.

It should be noted however that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a distinct possibility. Care should therefore be taken when the development commences that if any of these are discovered, a qualified archaeologist be called in to investigate.

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1. INTRODUCTION

Archaetnos cc was requested by GCS to conduct a cultural heritage impact assessment for a proposed new TSF pipeline at the Two Rivers Platinum Mine. This is to the south-west of the town of Steelpoort in the Limpopo Province (Figure 1-4).

The pipeline is associated with the proposed building of the new Tailings Storage Facility (TSF) for which a Heritage Impact Assessment Report was done in October 2012. The planned pipeline runs from the proposed TSF on portion 2 of the farm De Grooteboom 373 KT via the Dwars River Mine to the Two Rivers Mine.

The client indicated the area where the proposed development is to take place. The field survey was confined to this area. It is a linear route of 7 km in length.



Figure 1 Location of the site and the town of Steelpoort in the Limpopo Province. North reference is to the top of the map.

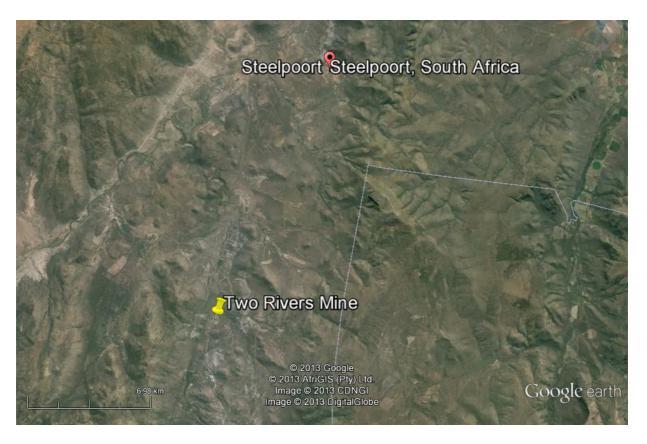


Figure 2 Location of the Two Rivers Mine in relation to Steelpoort. North reference is to the top.

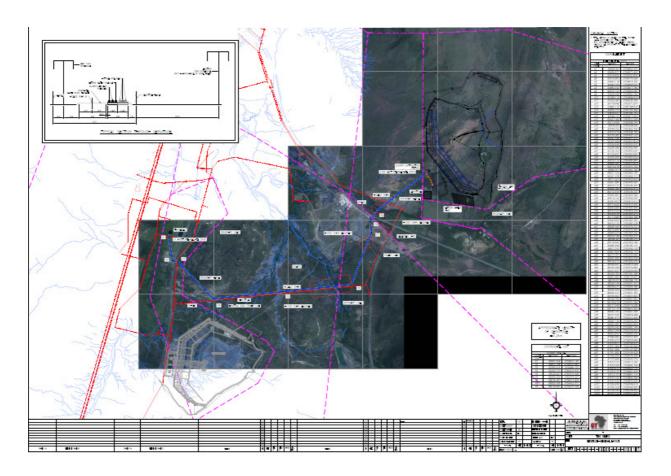


Figure 3 Proposed development layout.

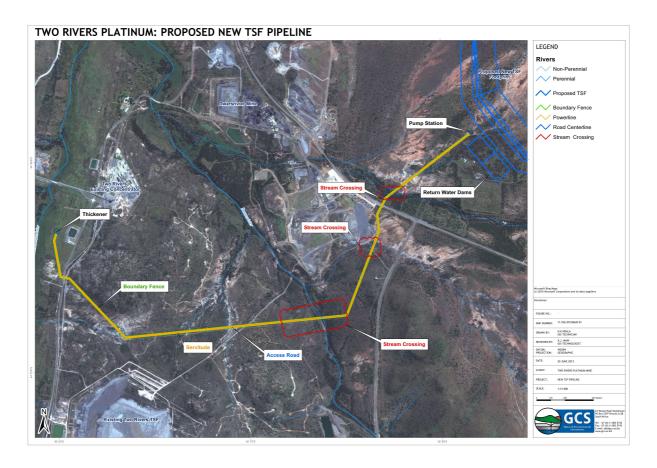


Figure 4 Detail of the pipeline route.

2. TERMS OF REFERENCE

The Terms of Reference for the survey were to:

- Identify objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the property (see Appendix A).
- 2. Study background information on the area to be developed.
- 3. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value (see Appendix B).
- 4. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
- 5. Recommend suitable mitigation measures to minimize possible negative impacts on the cultural resources 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:

- 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. In this case certain patches within the surveyed area were densely vegetated which affected archaeological visibility.

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 paleontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, paleontological, 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
- Any development or other activity that will change the character of a site and exceed 5 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- 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 paleontological site or any meteorite;
- destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological 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 paleontological material or object, or any meteorite; or
- d. Bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and paleontological 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;
- 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. THE INTERNATIONAL FINANCE CORPORATIONS' PERFORMANCE STANDARD FOR CULTURAL HERITAGE

This standard recognizes the importance of cultural heritage for current and future generations. It aims to ensure that clients protect cultural heritage in the course of their project activities.

This is done by clients abiding to the law and having heritage surveys done in order to identify and protect cultural heritage resources via field studies and the documentation of such resources. These need to be done by competent professionals (e.g. archaeologists and cultural historians). Possible chance finds, encountered during the project development, also needs to be managed by not disturbing it and by having it assessed by professionals.

Impacts on the cultural heritage should be minimized. This include the possible maintenance of such sites in situ, or when impossible, the restoration of the functionality of the cultural heritage in a different location. When cultural historical and archaeological artifacts and structures need to be removed is should be done by professionals and by abiding to the applicable legislation. The removal of cultural heritage resources may however only be considered if there are no technically or financially feasible alternatives. In considering the removal of cultural resources, it should be outweighed by the benefits of the overall project to the effected communities. Again professionals should carry out the work and adhere to the best available techniques.

Consultation with affected communities should be engaged in. This entails that access to such communities should be granted to their cultural heritage if this is applicable. Compensation for the loss of cultural heritage should only be given in extra-ordinary circumstances.

Critical cultural heritage may not be impacted on. Professionals should be used to advise on the assessment and protection thereof. Utilization of cultural heritage resources should always be done in consultation with the effected communities in order to be consistent with their customs and traditions and to come to agreements with relation to possible equitable sharing of benefits from commercialization.

6. METHODOLOGY

6.1 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.

6.2 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. One regularly looks a bit wider than the demarcated area, as the surrounding context needs to be taken into consideration.

If required, the location/position of any site was determined by means of a Global Positioning System (GPS)¹, while photographs were also taken where needed. The

¹ A Garmin Oregon 550 with an accuracy factor of a few meters.

survey was undertaken by a physical survey via off-road vehicle and on foot (Figure 5). Nine hours were spent in the field.



Figure 5 GPS track of the surveyed area. North reference is to the top.

6.3 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.

6.4 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.

6.5 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.

7. DESCRIPTION OF THE ENVIRONMENT

The proposed linear development area that was investigated shows different environmental characteristics. In certain areas the vegetation is very original with few signs of disturbance, whereas other areas show high degrees of disturbance by past human interventions.

At the starting point on the farm Grooteboom, the vegetation cover mostly is undisturbed and very dense making archaeological visibility difficult (Figure 6) However, there are certain patches that shows definite signs of disturbance (Figure 7) as well as large erosion dongas.

On the property of the Dwars River Mine certain areas are extremely disturbed mostly as a result of old fields (Figure 8). The vegetation cover here however is reasonably dense as it has been rehabilitated over time. Part of the pipeline route here also runs along an existing Waste Rock Dump, therefore a completely disturbed environment (Figure 9). The route here also runs across the foothill of a hill where the environment seems undisturbed (Figure 10). However the vegetation cover is extremely dense which has a negative effect on archaeological visibility. A large portion of the route also runs along existing power lines (Figure 11). It also crosses a rocky ridge where the vegetation cover is minimal, making archaeological visibility good (Figure 12).

On the property of the Two Rivers Mine the route is completely disturbed as a result of old fields (Figure 13). The vegetation cover is low resulting in a good archaeological visibility.

The surveyed area is drained by various non-perennial streams as well as a few perennial ones. These streams mostly are the cause of the mentioned erosion dongas and one can therefore assume that it carries a lot of water, although infrequently.

Two hills with their foothills dominate the area. The one is situated to the north-west and the other to the south-east. It includes the foothills and lower slopes, but the proposed pipeline route more or less runs in the saddles and valleys in between.



Figure 6 General view of the surveyed area at the starting point.



Figure 7 General view of the surveyed area showing disturbance.



Figure 8 Area on the property of the Dwars River Mine showing rehabilitated old fields.



Figure 9 The Waste Rock Dump at the Dwars River Mine.



Figure 10 One of the areas with a seemingly undisturbed environment where the proposed pipeline route will cross.



Figure 11 The proposed route here follows the fence and power lines.



Figure 12 Rocky ridge where the pipeline will cross.



Figure 13 Disturbed area where the pipeline will end at the Two Rivers Mine.

8. HISTORICAL CONTEXT

No sites of cultural heritage significance were located in the surveyed area. Three Middle Stone Age tools and one Iron Age potsherd were however found during the

2012 survey (see Van Vollenhoven 2012). Some Middle Stone age artefacts were also identified, out of context during the current survey on the farm De Grooteboom. In order to enable the reader to understand these, the history of the broader geographical area as well as possible finds that could be unearthed during construction activities, it is necessary to give a background regarding the different phases of human history.

8.1 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.

No Stone Age sites are indicated in a historical atlas of this area. However one needs to take note that this may only indicate a lack of research in the area. The closest Stone Age sites indicated in the atlas is Middle and Late Stone Age sites close to Ohrigstad (Bergh 1999: 5). Stone Age material was however found during various surveys in and around Steelpoort. This includes rock paintings at the Two Rivers Mine (Archaetnos database). During a survey done on neighboring farms, some Middle Stone Age material was also recorded (Stegmann & Roodt (2012a & 2012b).

The environment definitely would be supportive to Stone Age activities. The nearby mountain gives natural shelter and material to make stone tools from. The streams would lure animals to the area and these people would therefore have hunted here. It however needs to be mentioned that the natural rock includes calcrete and other soft stones, meaning that that there is very limited resources from which to make stone tools. This would most likely be limited to the mountain tops. One should therefore be on the lookout for stone tools during construction work on the site.

Three Middle Stone Age tools were indeed found in different locations during the survey. These were most likely washed down from the top. One of these (Figure 14) is a very fine example of a point which was also used as a scraper.



Figure 14 Middle Stone Age tool found during the survey.

8.2 Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts (Coertze & Coertze 1996: 346). In South Africa it can be divided in two separate phases according to Van der Ryst & Meyer (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.

The nearest Early Iron Age site to the surveyed area is the sites at Lydenburg and Klingbeil to the south-east of the surveyed area. A large number of Late Iron Age sites have previously been identified in an area roughly stretching between Lydenburg, Nelspruit and Badplaas (Bergh 1999: 6-7). Other sites have also been identified by Archaetnos during surveys in the area (Archaetnos database). Stegmann & Roodt (2012a) has also found Iron Age remains on nearby farms.

Therefore such sites may also be found higher up in the mountains. Such an indication was found in one of the erosion dongas where a single undecorated Iron

Age potshard was picked up. This was most likely washed down from the mountain. No site was however identified.

The environment of the surveyed area is suitable for Iron Age people. The mountain would give shelter and building material and the valley would provide grazing for livestock as well as water.

8.3 Historical Age

The Historical Age started with the first recorded oral histories in the area. It includes the in-migration of people that were able to read and write. It is also known that one of the early trade routes passed along the Steelpoort River (Bergh 1999: 9).

At the beginning of the 19th century the area was inhabited by the Koni, Tau, Pedi and Roka who are all of Sotho origin. During the Difaquane, in ca.1822, the Ndebele of Mzilikazi entered this area from the south. In 1825 a Zulu group under Zwide attacked the Ndebele here. As a result these other groups fled to the north. They returned later on (Bergh 1999: 10-11).

None of the early travellers who visited the old Transvaal visited this area. In 1836 the Voortrekker groups of Tregardt and Van Rensburg passed to the west of the Steelpoort River (Bergh 1999: 13-14). The land around Lydenburg, including the Steelpoort River Valley was traded from the Swazi in 1846 and the first white settlers then started farming here (Bergh 1999: 16, 130-132).

Historical structures, such as farm houses and infrastructure may therefore be found in the area. Such buildings have been identified on neighboring farms during past surveys (Archaetnos database). Stegmann & Roodt (2012a & 2012b) also have identified settlement remains in the vicinity. Signs of the earliest historical mining activities were also identified on adjacent farms (Archaetnos database; Stegmann & Roodt 2012a). Many graves from this period are also known from other nearby farms (Archaetnos database; Stegmann & Roodt 2012a & 2012b). During the 2012 survey, farm workers on De Grooteboom, who has been living there for eighteen years, indicated that they do not know of any graves on the surveyed area. Graves are known on the property of the Two Rivers Mine, but these are not close to the surveyed route (Archaetnos database).

9. DISCUSSION OF SITES FOUND DURING THE SURVEY

No sites of cultural importance were identified. Therefore no impact rating can be done.

10. KNOWLEDGE GAPS IDENTIFIED

No specific knowledge gaps were identified apart from what has already been indicated namely that very little information is available on the project area from official records.

11. CONCLUSION, MANAGEMENT PLAN & RECOMMENDATIONS

No sites of cultural importance were identified during the survey. The survey of the indicated area was completed successfully.

The following is recommended:

- The proposed development may continue.
- It should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a distinct possibility. Care should therefore be taken when development commences that if any of these are discovered, a qualified archaeologist be called in to investigate the occurrence.

12. REFERENCES

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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, landuse, 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:

	National Grade I significance Provincial Grade II significance	should be managed as part of the national estate should be managed as part of the provincial
	estate	should be managed as part of the provincial
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)
٧.	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.

Phase III management plan – for rare cases where sites are so important that development cannot be allowed.