



Archaetnos Culture & Cultural  
Resource Consultants  
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**A REPORT ON A CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE  
PROPOSED UPGRADE OF EXISTING WATER SUPPLY INFRASTRUCTURE AT  
NOUPOORT, NORTHERN CAPE PROVINCE**

For:

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**REPORT NO.: AE01442V**

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## **SUBMISSION OF REPORT**

**Please note that the South African Heritage Resources Agency (SAHRA) or one of its subsidiary bodies needs to comment on this report.**

**It is the client's responsibility to do the submission via the SAHRIS System on the SAHRA website.**

**Clients are advised not to proceed with any action before receiving the necessary comments from SAHRA.**

## **DISCLAIMER**

**Although all possible care is taken to identify all sites of cultural importance during the survey of study areas, the nature of archaeological and historical sites are as such that it always is possible that hidden or subterranean sites could be overlooked during the study. Archaetnos and its personnel will not be held liable for such oversights or for costs incurred as a result thereof.**

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## EXECUTIVE SUMMARY

Archaetnos cc was requested by WSP Environmental (Pty) Ltd to conduct a cultural heritage impact assessment for the upgrade of existing water supply infrastructure at the town of Noupoort. This falls under jurisdiction of the Umsobomvu Municipality in the Northern Cape Province.

The project involves the upgrading of the existing Noupoort bulk water supply network and installing fibre optic communication network as part of the required maintenance to the water supply network. The proposed upgrade will include the construction of approximately 20 km of various sizes of uPVC pipelines, valve chambers, fibre optic sleeves, draw boxes, pump stations, boreholes and refurbishment of two collection reservoirs.

The basic Terms of Reference for the survey were to:

1. Identify objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) along the pipe line routes;
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. Recommend suitable mitigation measures to minimize possible negative impacts on the cultural resources by the proposed development; and
5. Review applicable legislative requirements.

Cultural Resources are all non-physical and physical man-made occurrences, as well as natural occurrences associated with human activity. 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.

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.

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.

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

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; and
- i. Objects, structures and sites of scientific or technological value.

A survey of literature was undertaken in order to obtain background information regarding the area. This was followed by a field survey conducted according to generally accepted HIA practices, 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), while photographs were also taken where needed. If applicable, people from local communities are interviewed in order to obtain information relating to the surveyed area.

The evaluation of heritage sites is done by giving a field rating of each 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.

Four sections of lines were surveyed. These are called Central, South-east, South-west and Northern sections. The general environmental characteristics of the different proposed routes are more or less the same.

In general the topography of the area is reasonably flat. The exception however is a small mountain to the southwest of the town, where a few existing water reservoirs are situated. The Noupoot Spruit and some of its tributaries also run through the surveyed area resulting in a drop in relief close thereto.

The vegetation in the surveyed area mostly consists of low grass and shrubs, with many patches of soil in-between. In most cases the under footing is reasonably open with a few areas where it is more dense. Accordingly the archaeological visibility was quite good. Signs of disturbance of the environment were clear in most of the surveyed areas. This included current agricultural fields and old fields. The different proposed routes however mostly follow existing roads, railway tracks and pipe lines and therefore are planned in existing disturbed areas. The latter includes the roads inside of the town as a large section of the proposed routes runs through the town.

The survey of the indicated area was completed successfully. Only one site of cultural heritage importance was identified. This is the remains of a very large graveyard containing at least 1200 graves. Although there are no no-go areas, the area where the grave yard was identified is extremely sensitive and should be handled in accordance with this report.

Due to the sensitivity of this issue, graves are always regarded as having a **high** cultural significance. These graves are of a local significance and are therefore given a field rating of Grade IIIB. It may therefore be mitigated.

There are two options when dealing with graves. The first would be to fence it in and write a management plan for the preservation thereof. This option will come into play if there is no direct impact on the graves.

The second option is to have the graves exhumed and the bodies reburied. This option is preferred when graves cannot be avoided by the development. In order for exhumation to be allowed by SAHRA, an additional motivation would be needed.

However, in this case it would be possible to move the pipeline to an adjacent road. These were also surveyed and have no heritage significance.

The following is recommended:

- The pipeline should be moved to any one of the roads running parallel and adjacent to the one in which it is currently planned. The client indicated that this would indeed be possible.
- Should this not be possible, option 1 is recommended.
- It also needs to be stated that the site is not in a good condition and this needs to be rectified. Erecting a fence around it only is a first step in this process.
- A conservation management plan for the sustainable preservation and management of the grave yard should be drafted by a heritage expert and implemented by the municipality.
- After implementation of the proposed mitigation measures, 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.

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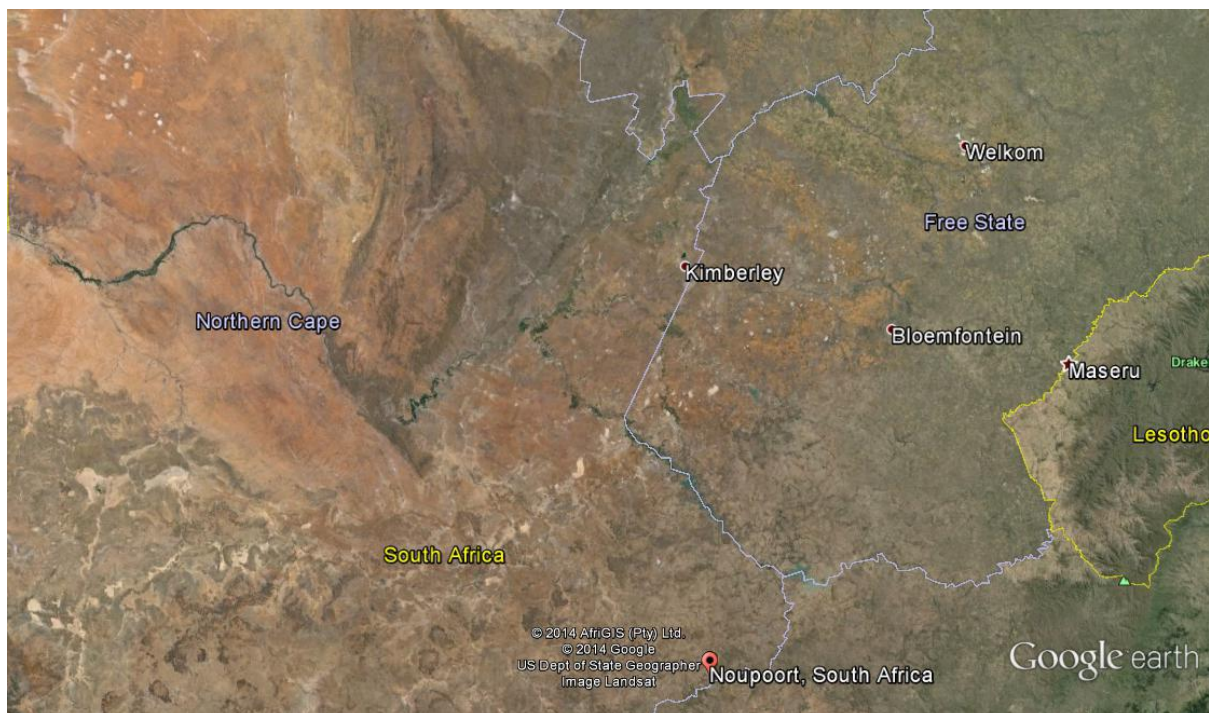
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## 1. INTRODUCTION AND BACKGROUND

Archaetnos cc was requested by WSP Environmental (Pty) Ltd to conduct a cultural heritage impact assessment for the upgrade of existing water supply infrastructure at the town of Noupoot. This falls under jurisdiction of the Umsobomvu Municipality in the Northern Cape Province (Figure 1-3).

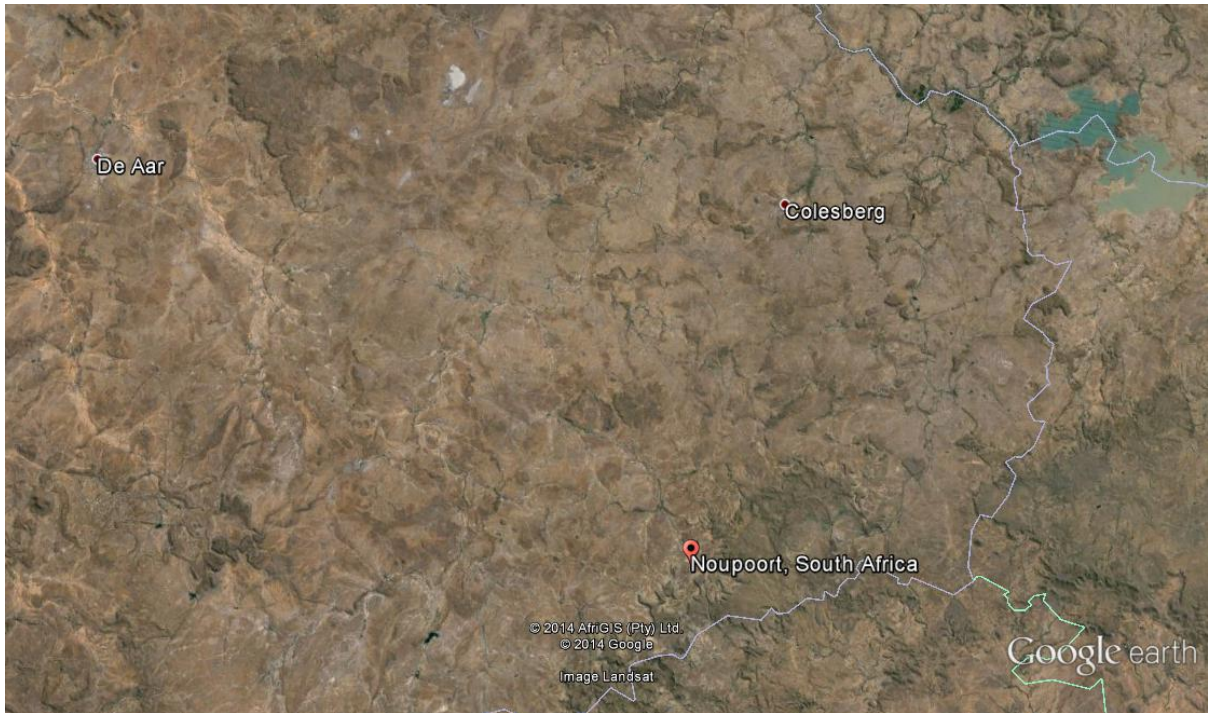
The project involves the upgrading of the existing Noupoot bulk water supply network and installing fibre optic communication network as part of the required maintenance to the water supply network. The proposed upgrade will include the construction of approximately 20 km of various sizes of uPVC pipelines, valve chambers, fibre optic sleeves, draw boxes, pump stations, boreholes and refurbishment of two collection reservoirs.

The client indicated the area to be surveyed. The field survey was confined to these routes.



**Figure 1 Location of the town of Noupoot in the Northern Cape Province.  
North reference is to the top.**





**Figure 2 Location of Noupoot in relation to other town in the proximity. North reference is to the top.**

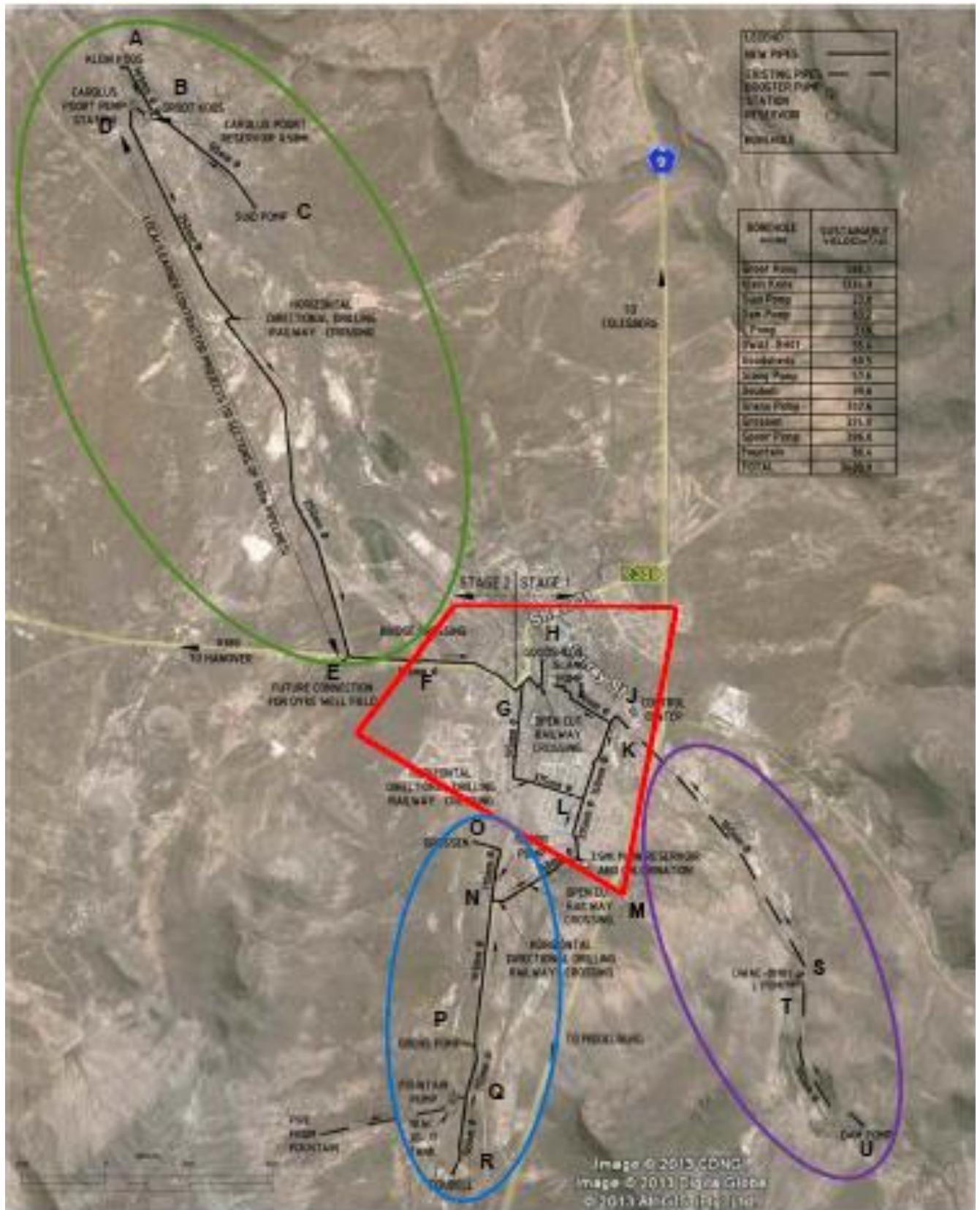


Figure 3 Map indicating the proposed upgrade layout.

## **2. TERMS OF REFERENCE**

The Terms of Reference for the survey were to:

1. Identify objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located along the indicated routes 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; and
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; and
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 there were certain areas where the vegetation cover was reasonably dense which had a negative effect on 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 No. 25 of 1999) and the National Environmental Management Act (Act No. 107 of 1998).

##### **4.1 The National Heritage Resources Act (Act No. 25 of 1999)**

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; and
- i. Objects, structures and sites of 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; and
- 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;
- 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>; and
- 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;
- b. 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



- e. recovery of metals or archaeological and paleontological material or objects, or use such equipment for the recovery of meteorites; and
- 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; and
- f. Human remains.

In terms of Section 36(3) of the National Heritage Resources Act (Act No. 25 of 1999), 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.

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 No. 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 No. 65 of 1983 as amended)**.

#### **4.2 The National Environmental Management Act (Act No. 107 of 1998)**

This act (Act No. 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 (2012)**

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.

It is best practice to engage into consultation with affected communities. 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 sometimes 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)<sup>1</sup>, while photographs were also taken where needed. The survey was undertaken by doing a physical survey via off-road vehicle and on foot and covered as much as possible of the area to be studied (Figure 4). Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage. The length of the proposed routes in total are approximately 20 km and the survey took seven hours to complete.

### **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.

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<sup>1</sup> A Garmin Oregon 550 with an accuracy factor of a few meters.





**Figure 4 GPS track of the surveyed area.**

### **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 AREA**

The general environmental characteristics of the different proposed routes are more or less the same. In general the topography of the area is reasonably flat. The exception however is a small mountain to the southwest of the town, where a few existing water reservoirs are situated. The Noupoort Spruit and some of its tributaries also run through the surveyed area resulting in a drop in relief close thereto. The river runs from the north-west of the town, passing through it and then further in a south-easterly direction.

The vegetation in the surveyed area mostly consists of low grass and shrubs, with many patches of soil in-between. In most cases the under footing is reasonably open with a few areas where it is more dense. Accordingly the archaeological visibility was quite good. Signs of disturbance of the environment were clear in most of the surveyed areas. This included current agricultural fields and old fields. The different proposed routes however mostly follow existing roads, railway tracks and pipe lines and therefore are planned in existing disturbed areas. The latter includes the roads inside of the town as a large section of the proposed routes runs through the town.

The four sections surveyed are called Central, South-east, South-west and Northern sections. Each of the four sections will now be discussed in brief in order to indicate the general environmental conditions.

Central section:

As the name suggests, this section runs through the streets of the town. It starts at the hill mentioned earlier and ends close to the railway line. It mainly follows existing roads except at the starting point (Figure 5-10).

Although there a number of nice houses and cottages along the route, these will not be impacted on as the work will be done in the roads or road reserves. The only site of high heritage significance identified is within this section and will be discussed later.



**Figure 5 Google image indicating the Central section.**



**Figure 6 Reservoir on the mountain, more or less where the Central section starts.**





**Figure 7 View of the town in the direction where the Central route will run.**



**Figure 8 Street along which the route will run.**



**Figure 9 View along one of the tar roads in town where the route will run.**



**Figure 10 Disturbed area along the railway track where the central route will end.**

South-eastern section:

This section starts on the north-eastern on the outskirts of the town on Sipo Street. It then runs mostly through an area with low vegetation towards the south-east where it crosses the N9 highway. It then runs to the southeast along the Noupoort Spruit where it ends at a dam on the northern bank of the spruit (Figure 11-14).

Along the spruit many erosion dongas were identified, but the route steers clear thereof. Nothing of heritage importance was identified on this section.





**Figure 11 Google image showing the South-eastern section.**



**Figure 12 General view of the surveyed area on the western side of the N9 highway.**



**Figure 13 General view of the surveyed area on the eastern side of the N9 highway.**





**Figure 14 View of the area close to the end of the south-eastern section.**

South-western section:

This section starts at the water reservoirs on the mountain to the south of the town. It then runs over an open field towards the south-west where it crossed the railway line. Hereafter it runs to the south along the railway line. The final section of the route deviates to the south-west towards a dam (Figure 15-19).

Apart from the first stretch of the route along the mountainside, this section is very flat. Again some erosion dongas were seen close to the river. The open field seems to have been disturbed in the past. Nothing of heritage importance was identified here.



**Figure 15 Google image showing the South-western section.**



**Figure 16 View of the start of the South-western section at the mountain.**





**Figure 17 View along the railway track.**



**Figure 18 Erosion dongas and a dam wall close to the end of the South-western section.**



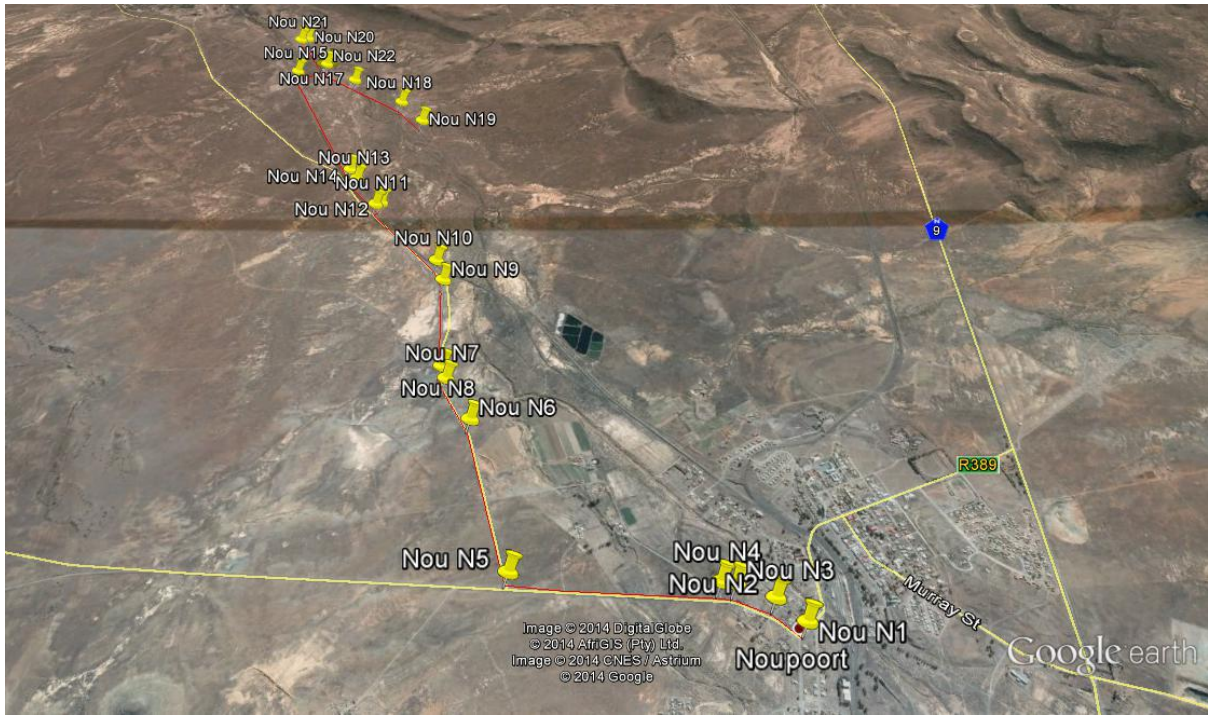
**Figure 19 General view of the area around the end of the route, including an existing borehole.**

Northern section:

This section starts in town and then run towards the west long a dirt road. It then turns to the north also following a dirt road. The next stretch follows the railway track. The last stretch then turns to the south-east to end at a borehole (Figure 20-25).

Again this section is reasonably flat. Only the last stretch crossed fields, but these are mostly old or currently being used for agriculture. Nothing of heritage importance was identified here.





**Figure 20**



**Figure 21 Section of road within the town, where the Northern section starts.**



**Figure 22** General view of the vegetation along the dirt road along the Northern section.



**Figure 23** Here the section runs along the railway track.





**Figure 24 Agricultural field along the Northern section.**



**Figure 25 The Northern section ends at another borehole.**

## **8. HISTORICAL CONTEXT**

Only one site of cultural heritage importance was identified along the proposed routes. In order to place this site within context as well as to understand possible finds that could be unearthed during construction activities, it is necessary to give a background regarding the different phases of human history in the area.

### **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; and
- Late Stone Age (LSA) 40 000 years ago – 1850 - A.D.

No Early or Middle Stone Age sites are known from this area (Mitchell 2002: 61, 73). The closest known Late Stone Age sites are found at Abbots Shelter, Jouberts Gif, Driekoppen, Blydefontein, Wilde Als Put, Voightspost, Rose Cottage and Grassridge, much further to the south and north of Noupoot (Mitchell 2002: 110, 127, 138, 228). It is however known that San and Khoi groups did roam around this vicinity (Mitchell 2002: 126, 230).

The lack of Stone Age sites closer to the surveyed area most likely is only an indication of a lack of research in the area and not of these not being present. No natural shelters were seen during the survey and it therefore is possible that these people did not stay here for long periods. Being close to a consistent water source would have lured animals to the area which would provide food for Stone Age people. The relative good vegetation in the surrounding area indicated that ample grazing may have been available, making it a prime spot for hunting in the past.

Therefore one may assume that Stone Age people probably would have moved through the area. One may therefore find small sites or occasional stone tools especially once the earth is being moved for construction activities.

### **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.; and
- 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.; and
- Late Iron Age (LIA) 1300 – 1840 A.D.

No Iron Age occurrences are known from this area. This indicates that Iron Age people probably did not settle here in the past, but may have utilized it for grazing purposes. Accordingly no such sites were identified during the survey.

### **8.3 Historical Age**

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. This era is sometimes called the Colonial era or the recent past.

Due to factors such as population growth and a decrease in mortality rates, more people inhabited the country during the recent historical past. Therefore and because less time has passed, much more cultural heritage resources from this era have been left on the landscape. It is important to note that all cultural resources older than 60 years are potentially regarded as part of the heritage and that detailed studies are needed in order to determine whether these indeed have cultural significance. Factors to be considered include aesthetic, scientific, cultural and religious value of such resources.

The first known visit by white people to the area was in 1777 when RJ Gordon reached the river and named it the Orange River. In 1803 the party of JW Jansens also reached the river (Schoeman 2003: 154). White farmers called Trekboere, started utilizing the grazing around the river since the 1800's (Venter n.d.: 3).

The Colesberg/ Phillipolis area (north-west of Noupoort) was already visited by early travelers as early as 1823 when the expedition of Cowan and Donovan passed here. This was followed by the parties of Bain and Biddulph in 1826 and that of Scoon and McLucie in 1827. In 1838 Ludwig Krebs also travelled through here (Bergh 1999: 12-13).

In 1881 the railway line from Port Elizabeth ended on the farm Carlton. With the diversion of the railway line to Colesberg in 1883/4 a station was built on part of the farm Hartebeeshoek of Mr. Barend Kruger. The station was named Naauwpoort after the adjacent farm. In 1963 the name was changed to Noupoort.

Noupoort also has a very rich Anglo-Boer War history. A hospital was placed here during the War as well as a blockhouse. British soldiers are also buried in the local cemetery.

One may therefore expect to find historical farm buildings, houses and other buildings, graves and objects linked to the first white farmers here as well as structures linked to the above mentioned activities. Some of these were indeed

identified, but are not in any way in danger by the planned development (Figure 26-28).



**Figure 26 British war graves in the Noupoort cemetery.**



**Figure 27 The former Anglican Church in Noupoort which now hosts a military museum.**



**Figure 28 British blockhouse from the Anglo-Boer War in Noupoort.**

## **9. DISCUSSION OF INDIVIDUAL SITES OF CULTURAL HERITAGE IMPORTANCE FOUND**

### **9.1 Site 1 – Grave yard**

This is the remains of a very large graveyard containing at least 1200 graves (Figure 29-32). Different types of grave dressing and headstones are found, being cement borders with headstones, heaps of soil, stone packed with or without headstones, granite borders and headstones and heaps of brick. A few are even fenced in.

All three of the categories of graves are present being those younger than 60 years, older than 60 years (called heritage graves) and those with an unknown date of death (to be handled as heritage graves). The site is not fenced in, but it seems a fence will be erected soon.

GPS: 31°11.693'S  
24°57.306'E

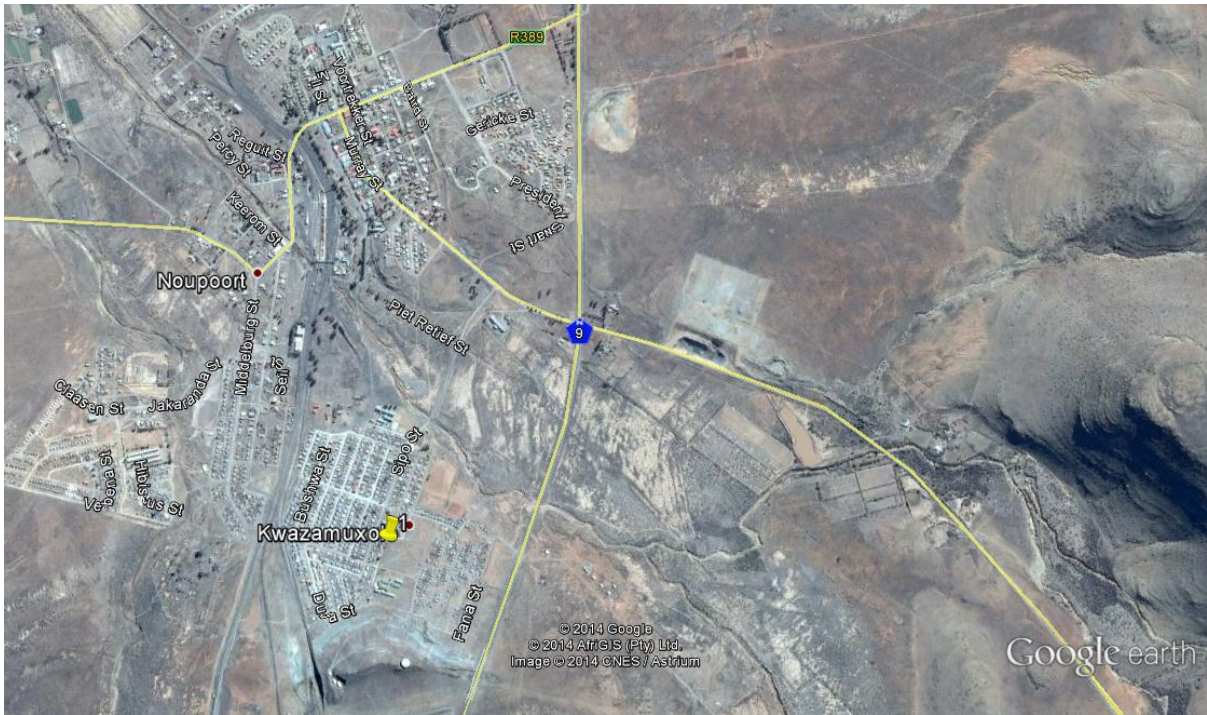


**Figure 29 Some of the graves at site no. 1. Note the many heaps of soil/ stone without any headstone.**



**Figure 30 Another view of the grave yard. Note the holes on the edge, most likely for erecting a fence.**





**Figure 31 Location of site no. 1.**



**Figure 32 Closer view of the grave yard which covers the entire L-shaped piece of land next to the yellow marker.**

Due to the sensitivity of this issue, graves are always regarded as having a **high** cultural significance. These graves are of a local significance and are therefore given a field rating of Grade IIIB. It may therefore be mitigated.

There are two options when dealing with graves. The first would be to fence it in and write a management plan for the preservation thereof. This option will come into play if there is no direct impact on the graves. It should be kept in mind that there always is a secondary impact on graves since families may not have access thereto due to operational issues.

The second option is to have the graves exhumed and the bodies reburied. This option is preferred when graves cannot be avoided by the development. In order for exhumation to be allowed by SAHRA, an additional motivation would be needed. Before exhumation can be done a process of social consultation is needed in order to find the associated families and obtain permission from them. For graves younger than 60 years only an undertaker is involved in the process, but for those older than 60 years or with an unknown date of death, an undertaker and archaeologist should be involved. Unknown graves are handled similarly to heritage graves.

In this case the graves should not be in any danger from the planned development. Therefore no direct impact is foreseen. However, an indirect impact may be expected due to construction activities. It also needs to be stated that the site is not in a good condition and this needs to be rectified. Erecting a fence around it only is a first step in this process. Option 1 is thus recommended. It means that the site should be left in situ. It should then be fenced in and a conservation management plan for the sustainable preservation and management thereof should be drafted and implemented.

## **10. IMPACT ASSESSMENT**

(See Impact Assessment Table)

### **Site 1 – grave yard**

Without mitigation:

$$\begin{aligned}\text{Consequence} &= (\text{Severity} + \text{Duration} + \text{Extent})/3 \\ &= (2 + 2 + 1)/3 \\ &= 5/3 \\ &= 1.6\end{aligned}$$

$$\begin{aligned}\text{Likelihood} &= (\text{Frequency} + \text{Probability})/2 \\ &= (5 + 3)/2 \\ &= 8/2 \\ &= 4\end{aligned}$$

$$\begin{aligned}\text{Environmental significance} &= \text{Consequence} \times \text{Likelihood} \\ &= 1.6 \times 4 \\ &= 6.4 - \text{Low to medium environmental significance}\end{aligned}$$

With mitigation:

$$\begin{aligned}\text{Consequence} &= (\text{Severity} + \text{Duration} + \text{Extent})/3 \\ &= (1 + 1 + 1)/3 \\ &= 3/3 \\ &= 1\end{aligned}$$

$$\begin{aligned}\text{Likelihood} &= (\text{Frequency} + \text{Probability})/2 \\ &= (1 + 1)/2 \\ &= 2/2 \\ &= 1\end{aligned}$$

$$\begin{aligned}\text{Environmental significance} &= \text{Consequence} \times \text{Likelihood} \\ &= 1 \times 1 \\ &= 1 - \text{Low environmental significance}\end{aligned}$$

## 11. CONCLUSION AND RECOMMENDATIONS

The survey of the indicated area was completed successfully. Only one site of cultural heritage importance was identified. Although there are no no-go areas, the area where the grave yard was identified is extremely sensitive and should be handled in accordance with this report.

The following is recommended:

- The grave yard should be preserved. Due to the sensitivity of this issue, graves are always regarded as having a **high** cultural significance. These graves are of a local significance and are therefore given a field rating of Grade IIIB.
- There are two options when dealing with graves. The first would be to fence it in and write a management plan for the preservation thereof. The second option is to have the graves exhumed and the bodies reburied. Both these options are not recommended.
- In this case there is a third option, namely to move the pipeline to an adjacent road. These were also surveyed and show nothing of heritage significance. It is therefore recommended. The client already indicated that this would indeed be possible.
- In the unlikely event of the latter not being possible, option 1 is recommended.
- It however still needs to be stated that the site is not in a good condition and this needs to be rectified. Erecting a fence around it only is a first step in this process.

- After implementation of the proposed mitigation measures, 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.

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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.
- 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:

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).
Local Grade IIIB	Should be included in the heritage register and may be mitigated (high/ medium significance).
General protection A (IV A)	Site should be mitigated before destruction (high/ medium significance).
General protection B (IV B)	Site should be recorded before destruction (medium significance).
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:**

#### **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; and

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; and

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

**APPENDIX F**

**IMPACT ASSESSMENT TABLE**

See attached Xcel document.