



Archaetnos Culture & Cultural
Resource Consultants
BK 98 09854/23

**A REPORT ON A CULTURAL HERITAGE IMPACT ASSESSMENT FOR A
PROPOSED MINING RIGHT APPLICATION AT THE OVERLOOKED COLLIERY,
BETWEEN BETHAL AND HENDRINA, MPUMALANGA PROVINCE**

For:

CABANGA CONCEPTS

REPORT NO.: AE01322V

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March 2013

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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.

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SUMMARY

Archaetnos cc was requested by Cabanga Concepts to conduct a cultural heritage impact assessment for a mining right application for the Overlooked Colliery. This is on the farm Halfgewonnen190 IS, between Bethal and Hendrina in the Mpumalanga Province.

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 two sites of cultural heritage significance were located. These are discussed in the report and mitigation measures are proposed. After implementation of these, the proposed development may 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 further that if any of these are discovered, a qualified archaeologist be called in to investigate.

It is also important to take cognizance that it is the client's responsibility to do the submission of this report via the SAHRIS System on the SAHRA website. No work on site may commence before receiving the necessary comments from SAHRA.

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1. INTRODUCTION

Archaetnos cc was requested by Cabanga Concepts to conduct a cultural heritage impact assessment for a mining right application for the Overlooked Colliery. The application would include NEMA authorization and IWULA. This is on the farm Halfgewonnen190 IS, between Bethal and Hendrina in the Mpumalanga Province (Figure 1-5).

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

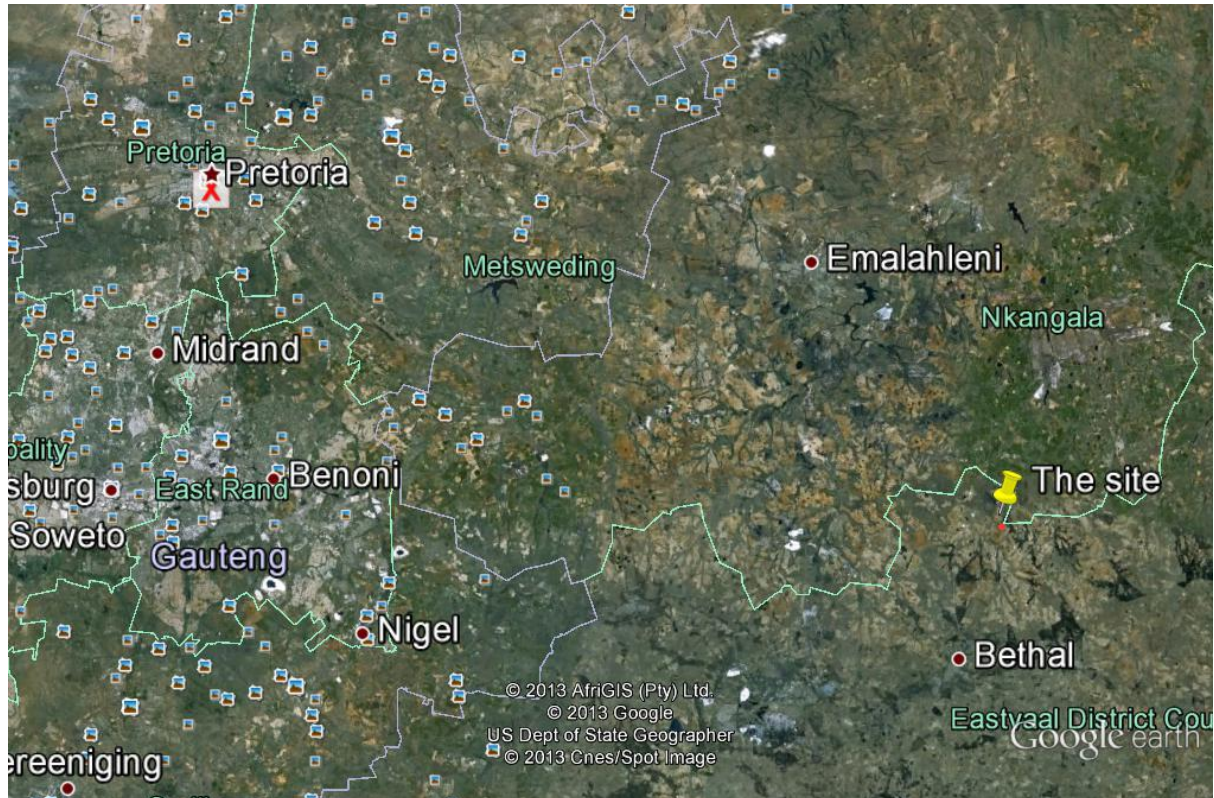


Figure 1 Location of the surveyed site in the Mpumalanga Province.



Figure 2 Location of the site in relation to Hendrina and Bethal.

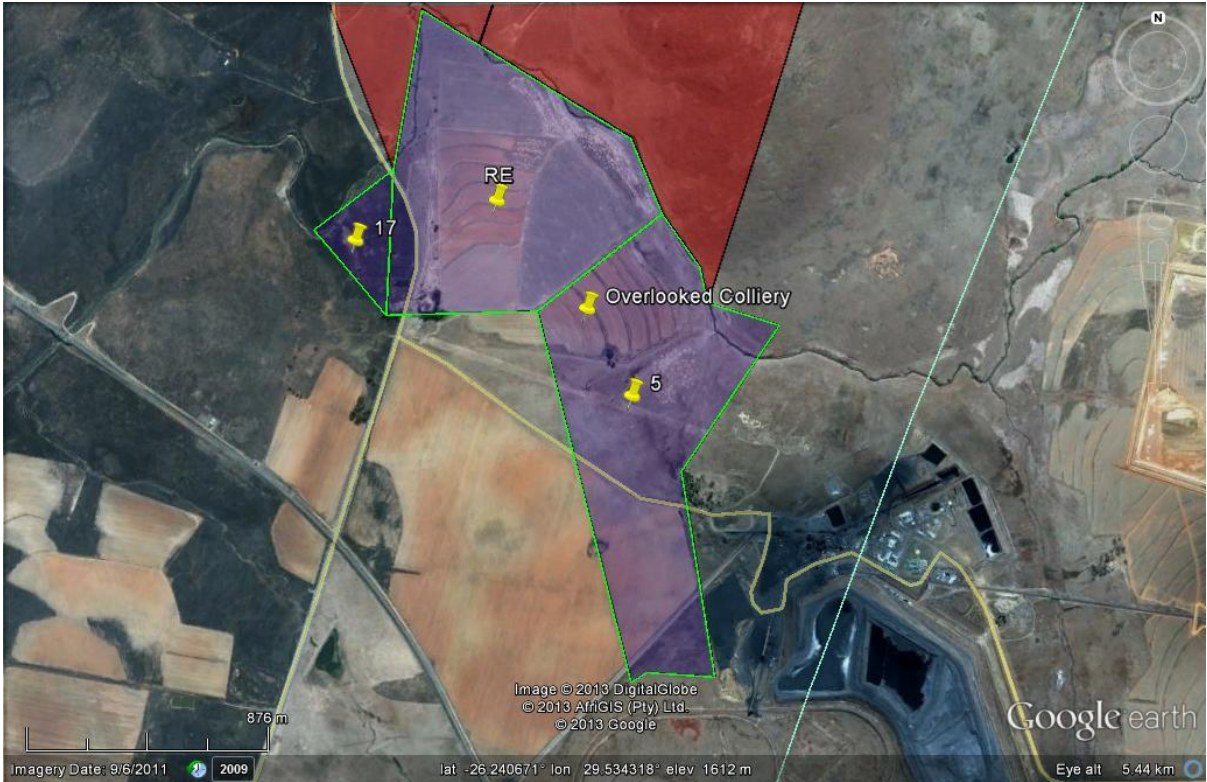


Figure 3 The mine boundary of the proposed Overlooked Colliery (in purple).

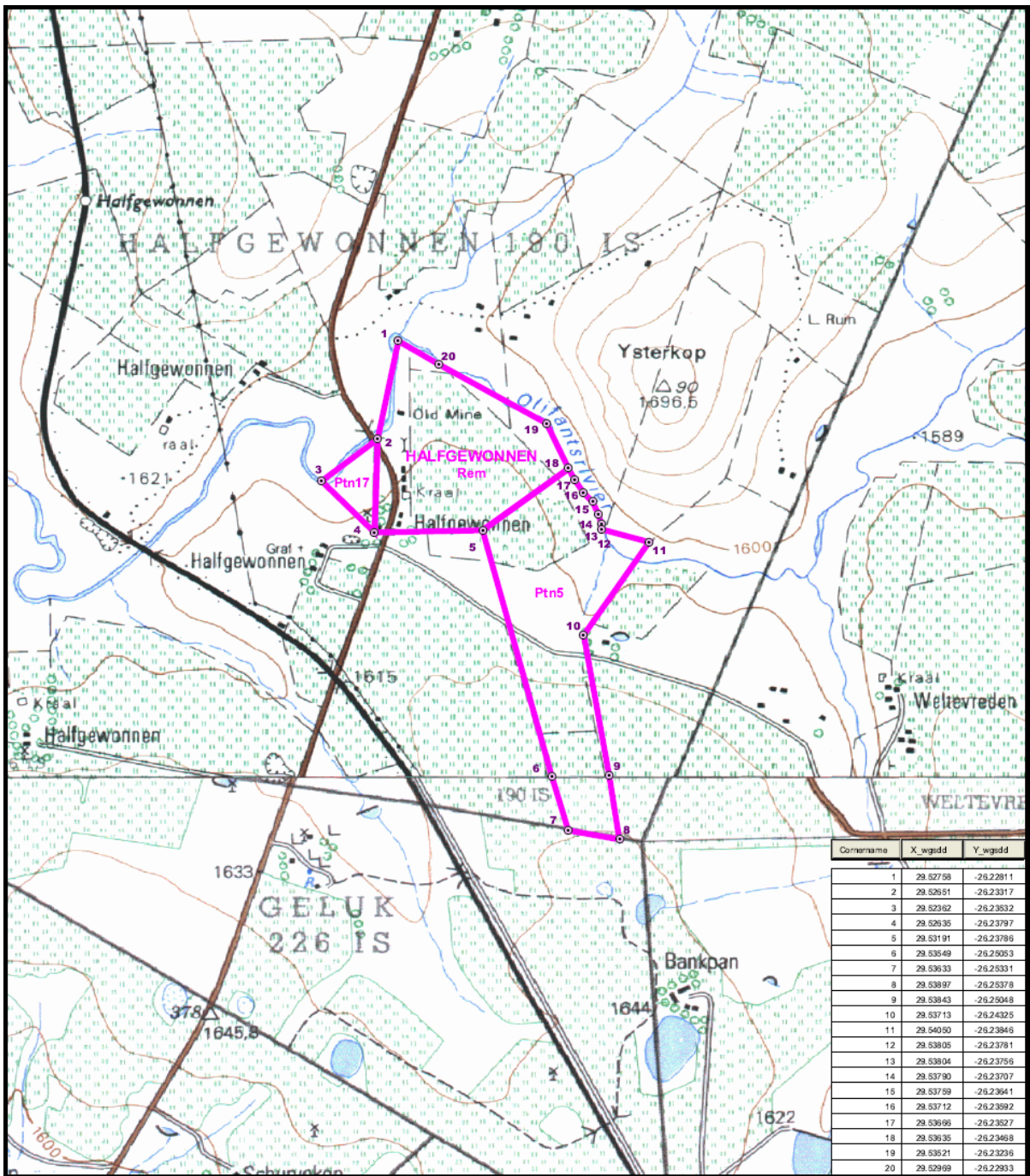


Figure 4 Location of the area that will be affected by the mining in purple.

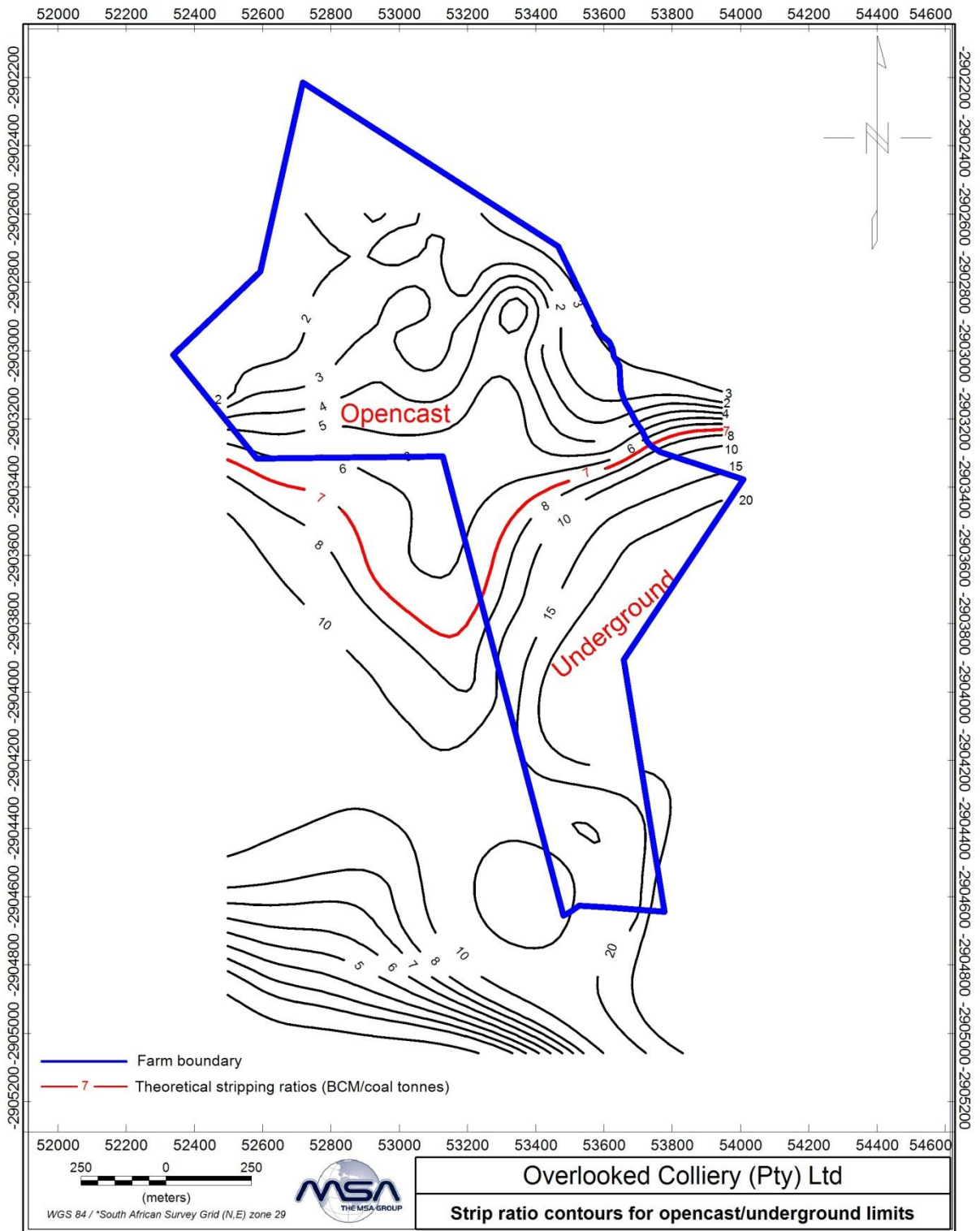


Figure 5 Proposed Mine layout.

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 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, and 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:

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. 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 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 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
- 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 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;
- 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

- 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 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 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 mitigation thereof proposed.

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 need to be managed by not disturbing it and by having it assessed by professionals.

Impacts on the cultural heritage should be minimized. This includes 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 it 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 affected 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 affected 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 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 6). Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage. The size of the area that was surveyed is approximately 163 Ha and the survey took three 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.

6.5 Evaluation of Heritage sites

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

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.



Figure 6 GPS track of the surveyed area². North reference is to the top.

7. DESCRIPTION OF THE AREA

The proposed Overlooked Colliery is located on the farm Halfgewonnen 190 IS. The environment of the mine area shows different conditions. Most of the land seems to consist of natural vegetation which is currently used for grazing. However even this grassland seems to have been disturbed to a certain extent. The vegetation cover is quite high making archaeological visibility problematic. Certain areas of the farm are disturbed by agriculture. This includes the growing of maize and the cutting of grass for fodder (Figure 7-10).

² Unfortunately the batteries of the GPS instrument became flat from all-day use and it took some time to recharge. As a result the total area covered is not indicated by the track.

The topography of the area shows a gradual fall to the north and east where the Olifants River is situated. The area consists of rolling hills. The Olifants River drains the area in an easterly direction.



Figure 7 View of a portion of the farm being used to make fodder.



Figure 8 General view of the surveyed area.



Figure 9 Maize crops in the surveyed area.



Figure 10 Another view of the surveyed area.

8. HISTORICAL CONTEXT

Two sites of cultural heritage significance were located in the surveyed area. In order to place this within context and 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
Late Stone Age (LSA) 40 000 years ago – 1850 - A.D.

The geographical area around the towns of Hendrina and Bethal is not known as an area containing prehistoric sites dating to the Stone Age. For instance no such sites are indicated on maps contained in a historical atlas of this area (Bergh 1999: 4-5). However this may only be since no research has actually been done in this area. The closest known Stone Age occurrences are a Late Stone Age site at the town of Ermelo and rock art sites in the Chrissiesmeer area (Bergh 1999: 4-5).

However, no natural shelters were seen during the survey and therefore it is possible that these people did not stay here for long periods. The good vegetation in the surrounding area and the Olifants River indicated that ample grazing and water 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.

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.

Also no sites from the Early Iron Age have been identified in the area (Bergh 1999: 6). Again it needs to be stated that this may only be a result of the lack of research done in this part of the country.

In contrast to the mentioned periods in time, it is known that Late Iron Age sites are found in a large area around the towns of Bethal and Standerton. It includes at least 585 such sites. At none of these indications of metal working has been found (Bergh 1999: 6-7), meaning that it would mostly consist of stone walled living complexes. It is also known that the early trade routes did not run through this area (Bergh 1999: 9).

However, during the survey no such sites were identified. The good grazing in the broader environment however would have provided a good environment for Iron Age people although building material would have been reasonably scarce. One would therefore expect that Iron Age people may have utilized the area. The white settlers moved into this environment later on for the same reason.

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.

At the beginning of the 19th century the Phuthing, a South Sotho group, stayed in the vicinity of modern day Bethal. During the Difaquane they fled to the south (Bergh 1999: 10-11; 109). In 1829 the traveller Robert Scoon passed through an area to the north of Bethal (Bergh 1999: 13). The first white farmers only settled here during the late 1850's. By the 1890's this area was inhabited by many white farmers (Bergh 1999: 18-20). The town of Bethal was established in 1880 and it became an independent district in 1898 (Bergh 1999: 20-21).

During the Anglo Boer War the Highveld areas saw much action consisting of various skirmishes between Boer and Brit (Bergh 1999: 51, 54). It includes skirmishes on the farms Oshoek (4 December 1901), Trigaardsfontein (10 December 1901), Witbank (11 January 1902) and Nelspan (26 January 1902). It however is not possible to indicate how close these came to the project area.

One may therefore expect to find farm buildings, structures and objects in the area. Many graveyards from this period in time have also been identified in surrounding areas during past surveys (Archaetnos database).

9. DISCUSSION OF SITES FOUND DURING THE SURVEY

Two sites of cultural heritage importance were identified. Both date to the Historical Age. As indicated there always is a possibility that some sites may have been missed. In such a case it should be handled in accordance with the recommendations in this report.

9.1 Site 1 – graves

This is a site containing at least 21 graves (Figure 11). Many different types of grave dressing are found – stones and cement. Some of the graves have cement headstones.

Only one surname was identified, being Mahlangu. The dates of death identified vary between 1949 and 1983. Therefore all three of the categories of graves were identified, exists being those older than 60 years (heritage graves), those without a date of death (called unknown graves) and those younger than 60 years. Unknown graves are handled similarly to heritage graves.

GPS: 26°14.510'S
29°32.113'E

Graves are always regarded as having a **high** cultural significance. The field rating thereof is Local Grade III B. It should be included in the heritage register, but may be mitigated.



Figure 11 Some of the graves at site no. 1.

Two possibilities exist. The first option would be to fence the graves in and have a management plan drafted for the sustainable preservation thereof. This should be written by a heritage expert. This usually is done when the graves are in no danger of being damaged, but where there will be a secondary impact due to the activities of the mine.

The second option is to exhume the mortal remains and then to have it relocated. This usually is done when the graves are in the area to be directly affected by the mining activities. For this a specific procedure should be followed which includes social consultation. For graves younger than 60 years only an undertaker is needed. For those older than 60 years and unknown graves an undertaker and archaeologist is needed. Permits should be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

The graves are in the area where underground mining is proposed. This means that the graves will most likely not be directly impacted on and therefore option 1 is recommended. However the mine needs to ensure that impact is limited, for instance should the ground cave in the graves will be threatened and then option 2 would have to be implemented.

9.2 Site 2 – historical farm yard

This is a historical farm yard consisting of at least four important buildings (Figure 12-15). These are two houses, a wagon house and another building which was apparently used as a post office (Personal communication: Alexander Adams).



Figure 12 One of the houses at site no. 2.



Figure 13 The other house, across the road from the first, at site no. 2.



Figure 14 Building that apparently used to be an old post office at site no. 2.



Figure 15 The wagon house at site no. 2.

GPS: 26°14.265'S
29°31.627'E

The site is regarded as having a **medium** cultural significance. The field rating thereof is Local Grade III B. It should be included in the heritage register, but may be mitigated if needed. The buildings are very common for the Highveld area, but these ones still are in quite a good state and forms a representative unit of a farm yard from the early 20th century.

It is recommended that the buildings not be demolished, but rather be used as offices or something similar. Should it be necessary to make changes to these buildings, a permit would be needed from the Provincial Heritage Resources Agency (PHRA) of Mpumalanga. If there is no other option that to demolish the buildings, it may be allowed (the site is within the area earmarked for opencast mining. A permit for this should be obtained from The Mpumalanga PHRA. This can however only be allowed after proper documentation of the site which would entail making line drawings thereof and doing a detailed photographic documentation.

10. CONCLUSION AND RECOMMENDATIONS

As indicated, two sites of cultural importance were identified during the survey (Figure 16). The survey of the indicated area was completed successfully.



Figure 16 Location of the two sites identified during the survey.

The following is recommended:

- Graves are always regarded as having a **high** cultural significance, but may be mitigated.
- Two possibilities therefore exist for site 1. The first option would be to fence the graves in and have a management plan drafted for the sustainable preservation thereof. This should be written by a heritage expert. This is recommended since the graves are in the area where underground mining will be done.
- However the mine should ensure that no direct impact is experienced (e.g. caving in of the soil). Should any danger be posed to the graves, option 2 will have to be taken. This is to exhume the mortal remains and then to have it relocated. For this a specific procedure should be followed which includes social consultation. For graves younger than 60 years only an undertaker is needed. For those older than 60 years and unknown graves an undertaker and archaeologist is needed. Permits should be obtained from the Burial Grounds and Graves unit of SAHRA. This procedure is quite lengthy and involves social consultation.

- Site 2 (farm yard) is regarded as having a **medium** cultural significance and may also be mitigated if needed.
- However due to the relatively good condition thereof and the function of one of the buildings as being a possible historical post office, it is recommended that the buildings not be demolished, but rather be used as offices or something similar. Should it be necessary to make changes to these buildings, a permit would be needed from the Provincial Heritage Resources Agency of Mpumalanga.
- On the other hand it should be said that if there is no other option that to demolish the buildings, it may be allowed since the site is within the area earmarked for opencast mining. A permit for this should be obtained from The Mpumalanga PHRA. This can however only be allowed after proper documentation of the site which would entail making line drawings thereof and doing a detailed photographic documentation.
- After implementation of the mitigation measures 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.

11. REFERENCES

- Adams, Mr. Alexander. 2013.03.15. Personal communication. Mine surveyor, Halfgewonnen Colliery. Archaetnos database.
- Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.
- Coertze, P.J. & Coertze, R.D. 1996. **Verklarende vakwoordeboek vir Antropologie en Argeologie.** Pretoria: R.D. Coertze.
- Huffman, T.N. 2007. **Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa.** Scottsville: University of KwaZulu-Natal Press.
- International Finance Corporation. 2012. **Overview of performance standards on Environmental and Social Sustainability. Performance Standard 8, Cultural Heritage.** World Bank Group.
- Knudson, S.J. 1978. **Culture in retrospect.** Chicago: Rand McNally College Publishing Company.
- Korsman, S.A. & Meyer, A. 1999. Die Steentydperk en rotskuns. Bergh, J.S. (red.). **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.
- Republic of South Africa. 1980. Ordinance on Excavations (**Ordinance no. 12 of 1980**). **The Government Printer: Pretoria.**
- Republic of South Africa. 1983. **Human Tissue Act** (Act 65 of 1983). The Government Printer: Pretoria.
- Republic of South Africa. 1999. **National Heritage Resources Act** (No 25 of 1999). Pretoria: the Government Printer.
- Republic of South Africa. 1998. **National Environmental Management Act** (no 107 of 1998). Pretoria: The Government Printer.
- Van der Ryst, M.M. & Meyer, A. 1999. Die Ystertydperk. Bergh, J.S. (red.). **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.

APPENDIX A

DEFINITION OF TERMS:

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

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

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

APPENDIX B

DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE:

- Historic value: Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.
- Aesthetic value: Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.
- Scientific value: Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period
- Social value: Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.
- Rarity: Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.
- Representivity: Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

APPENDIX C

SIGNIFICANCE AND FIELD RATING:

Cultural significance:

- Low A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- Medium Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.
- High Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

Heritage significance:

- Grade I Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate
- Grade III Other heritage resources of local importance and therefore worthy of conservation

Field ratings:

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

APPENDIX D

PROTECTION OF HERITAGE RESOURCES:

Formal protection:

National heritage sites and Provincial heritage sites – grade I and II

Protected areas - an area surrounding a heritage site

Provisional protection – for a maximum period of two years

Heritage registers – listing grades II and III

Heritage areas – areas with more than one heritage site included

Heritage objects – e.g. archaeological, paleontological, 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, paleontology 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.