

Archaetnos Culture & Cultural Resource Consultants

BK 98 09854/23

A REPORT ON A HERITAGE IMPACT ASSESSMENT RELATED TO A PROPOSED FILLING STATION ON PORTION 19 OF THE FARM ELYSIUM 15582 ET, UMDONI LOCAL MUNICIPALITY, KWAZULU-NATAL PROVINCE

For:

MGTD ENVIRONMENTAL E-MAIL: Thobile Duma - mgtdcc@gmail.com

REPORT NO.: AE0242V

By:

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&
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18 November 2020

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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 is 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.

Should it be necessary to visit a site again as a result of the above mentioned, an additional appointment is required.

Reasonable editing of the report will be done upon request by the client if received within 60 days of the report date. However, editing will only be done once, and clients are therefore requested to send all possible changes in one request. Any format changes or changes requested due to insufficient or faulty information provided to Archaetnos on appointment, will only be done by additional appointment.

Any changes to the scope of a project will require an additional appointment.

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EXECUTIVE SUMMARY

Purpose:

Archaetnos cc was requested by MGTD Environmental to conduct a cultural heritage impact assessment (HIA) for a proposed development of a fuel station on Portion 19 of the farm Elysium 15582 ET. This is in the Umdoni Local Municipality, KwaZulu-Natal Province.

Methodology:

The methodology for the study includes a survey of literature and a field survey. The latter was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural significance in the area of proposed development.

If required, the location/position of any site was determined by means of a Global Positioning System (GPS), 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. Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage.

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.

Public consultation:

General public consultation was done by Archaetnos. No comments were received.

Findings:

The survey of the indicated area was completed successfully. No visible archaeological evidence was found.

The following is recommended:

- This report is seen as sufficient mitigation and the proposed development may therefore continue.
- It should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a distinct possibility. It is possible that some sites may only become known later on. Operating controls and monitoring should therefore be aimed at the possible unearthing of such features. 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.

In this regard the following 'Chance find Procedure' should be followed:

- Upon finding any archaeological or historical material all work at the affected area must cease.
- The area should be demarcated in order to prevent any further work there until an investigation has been completed.
- An archaeologist should be contacted immediately to provide advice on the matter.
- Should it be a minor issue, the archaeologist will decide on future action. Depending on the nature of the find, it may include a site visit.
- SAHRA's APM Unit may also be notified.
- If needed the necessary permit will be applied for with SAHRA. This will be done in conjunction with the appointed archaeologist.
- The removal of such archaeological material will be done by the archaeologist in lieu of the approval given by SAHRA, including any conditions stipulated by the latter.
- Work on site will only continue after the archaeologist/ SAHRA has agreed to such a matter.

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/AMAFA.

CURRICULUM VITAE Prof. Anton Carl van Vollenhoven

PERSONAL INFORMATION

• Born: 20 January 1966, Pretoria, RSA

Address: Archaetnos, PO Box 55, Groenkloof, 0027

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• Nationality: RSA

• E-mail: antonv@archaetnos.co.za

TERTIARY EDUCATION

- BA 1986, University of Pretoria
- BA (HONS) Archaeology 1988 (cum laude), University of Pretoria
- MA Archaeology 1992, University of Pretoria
- Post-Graduate Diploma in Museology 1993 (cum laude), University of Pretoria
- Diploma Tertiary Education 1993, University of Pretoria
- DPhil Archaeology 2001, University of Pretoria.
- MA Cultural History 1998 (cum laude), University of Stellenbosch
- Management Diploma 2007 (cum laude), Tshwane University of Technology
- DPhil History 2010, University of Stellenbosch

EMPLOYMENT HISTORY

- 1988-1991: Fort Klapperkop Military Museum Researcher
- 1991-1999: National Cultural History Museum. Work as Archaeologist, as well as Curator/Manager of Pioneer Museum (1994-1997)
- 1999-2002: City Council of Pretoria. Work as Curator: Fort Klapperkop Heritage Site and Acting Deputy Manager Museums and Heritage.
- 2002-2007: City of Tshwane Metropolitan Municipality. Work as Deputy Manager Museums and Heritage.
- August 2007 present Managing Director for Archaetnos Archaeologists.
- 1988-2003: Part-time lecturer in Archaeology at the University of Pretoria and a part-time lecturer on Cultural Resources Management in the Department of History at the University of Pretoria.
- 2014-2015: Part-time lecturer for the Honours degree in Museum Sciences in the Department of History and Heritage Studies at the University of Pretoria
- Since 2015: Extraordinary Professor of History at the Mahikeng campus of the Northwest University

OTHER

- Has published 35 peer-reviewed and 43 popular articles.
- Hs written 11 books/book contributions/conference proceedings.
- Has been the author and co-author of over 973 unpublished reports on cultural resources surveys and archaeological work.
- Has delivered more than 75 papers and lectures at national and international conferences.
- Member of SAHRA Council for 2003 2006.
- Member of the South African Academy for Science and Art.
- Member of Association for South African Professional Archaeologists.

- Member of the South African Society for Cultural History (Chairperson 2006-2008; 2012-2014; 2018-2020).
- Has been editor for the SA Journal of Cultural History 2002-2004.
- Editorial member of various scientific journals.
- Member of the Provincial Heritage Resources Agency, Gauteng's Council.
- Member of Provincial Heritage Resources Agency, Gauteng's HIA adjudication committee (Chairperson 2012-2020).

A list of reports can be viewed on www.archaetnos.co.za.

DECLARATION OF INDEPENDENCE

I, Anton Carl van Vollenhoven from Archaetnos, hereby declare that I am an independent specialist within the field of heritage management.

Date: 18 November 2020

Signed:

LIST OF ACRONYMS:

AIA - Archaeological Impact Assessment

CMP - Cultural Management Plan

EAP - Environmental Assessment Practitioner

EIA - Environmental Impact Assessment

HIA - Heritage Impact Assessment

PIA - Palaeontological Impact Assessment

SAHRA -South African Heritage Resources Agency

CONTENTS

Pag	e
EXECUTIVE SUMMARY	5
1. INTRODUCTION 8	}
2. TERMS OF REFERENCE10)
3. LEGISLATIVE REQUIREMENTS10)
4. METHODOLOGY14	Ļ
5. CONDITIONS AND ASSUMPTIONS17	,
6. DESCRIPTION OF THE PHYSICAL ENVIRONMENT17	,
7. RESULTS OF PUBLIC CONSULTATION AND STAKEHOLDER ENGAGEMENT22	<u>}</u>
8. HISTORICAL CONTEXT25	;
9. SITES IDENTIFIED DURING THE SURVEY28	}
10. CONCLUSIONS AND RECOMMENDATIONS28	}
11.REFERENCES29)
APPENDIX A – DEFENITION OF TERMS	3

1. INTRODUCTION

Archaetnos cc was requested by MGTD Environmental to conduct a cultural heritage impact assessment (HIA) for a proposed development of a fuel station on Portion 19 of the farm Elysium 15582 ET. This is in the Umdoni Local Municipality, KwaZulu-Natal Province (Figure 1-4).

The heritage study forms part of an Environmental Impact Assessment. The Client indicated the area to be surveyed. This was done on foot in October 2020.



FIGURE 1: LOCATION OF UMDONI IN THE KWAZULU-NATAL PROVINCE.

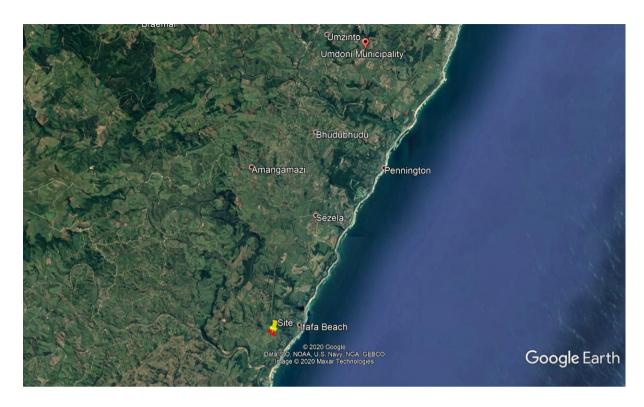


FIGURE 2: LOCATION OF THE STUDY AREA IN UMDONI.



FIGURE 3: DETAILED VIEW OF THE SITE.

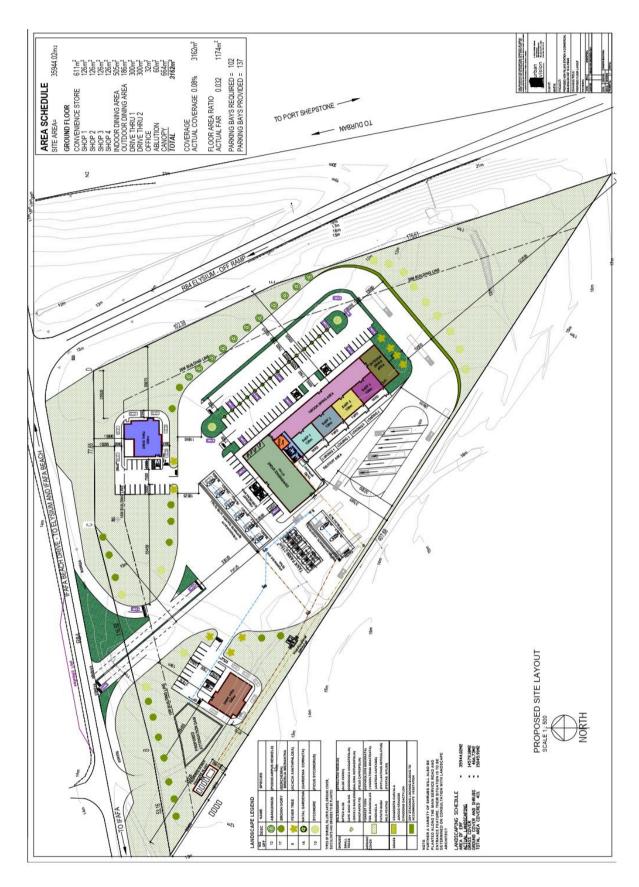


FIGURE 4: SITE LAYOUT.

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. Document the found cultural heritage sites according to best practice standards for heritage related studies.
- 3. Study background information on the area to be developed.
- 4. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value (see Appendix B).
- 5. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions.
- 6. Recommend suitable mitigation measures to minimize possible negative impacts on the cultural resources by the proposed development.
- 7. Review applicable legislative requirements.

3. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two acts. The first of these are the National Heritage Resources Act (Act 25 of 1999) which deals with the cultural heritage of the Republic of South Africa. The second is the National Environmental Management Act (Act 107 of 1998) which inter alia deals with cultural heritage as part of the Environmental Impact Assessment process.

3.1 The National Heritage Resources Act

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

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites

- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The national estate (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. It contains different specialist reports, including, but not limited to, archaeology, built environment, palaentology, visual aspects etc.¹

An Archaeological Impact Assessment (AIA) only looks at archaeological resources. A Palaeontological Impact Assessment (PIA) is an assessment of palaeontological heritage. Palaeontology is a different field of study, and although also sometimes required by the South African Heritage Resources Agency (SAHRA) ² should be done by a professional palaeontologist.

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

⁻

¹ Please consult SAHRA to determine which of these studies are needed.

² Please consult SAHRA to determine whether a PIA is necessary.

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:

- 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;
- 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 **National Health Act** (**Act 61 of 2003**).

3.2 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 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.

3.3 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). Any 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 includes the possible maintenance of such sites in situ, or when not possible, 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, this 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 conducted. This entails that such communities should be granted access 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.

4. METHODOLOGY

4.1 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.

4.2 Reference to other specialist studies

On the existing SAHRA Database (SAHRIS) there are only one heritage reports done in the Umdoni area (SAHRIS database). The SAHRIS database is an internet-based tool, updated constantly. The information from this is discussed below.

On the Archaetnos database, no report was identified (Archaetnos database). The latter is a computer-based tool, updated constantly.

4.3 Public consultation and stakeholder engagement

Public consultation was done by Archaetnos (see below).

4.4 Physical 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)³, 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 5).

Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage. In this instance the area was found to be reasonably disturbed, due to the N2 highway on the east and sugarcane plantation to the west and southwest. The vegetation cover was mostly between medium high in height and with a dense footing. Both the horizontal and the vertical archaeological visibility were therefore influenced negatively. The area is relatively flat in northern part of the site with a steep incline to the east toward the N2 highway. The site is approximately 5 Ha in size and the survey took 2 hours to complete.

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³ A Garmin Oregon 550 with an accuracy factor of a few meters.



FIGURE 5: GPS TRACK OF THE SURVEY. THE BLUE AREA INDICATES AN INACCEBLE WATERLOGGED AREA.

4.5 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.

4.6 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.

5. CONDITIONS AND 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, structures 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.
- 7. Large sections of the surveyed area have been disturbed by recent human interventions and therefore it is seen as low risk areas to reveal heritage sites.
- 8. The vegetation cover in certain areas was reasonably high and dense, which had a negative effect on archaeological visibility.

6. DESCRIPTION OF THE PHYSICAL ENVIRONMENT

The area that was surveyed is mostly disturbed, due to sugarcane plantations and the N2 highway next to the surveyed area. This includes water runoff from the plantation,

an open dirt plot and dirt roads as well as the highway infrastructure (Figure 6-9). Vegetation cover is mainly medium to high and is densely packed, consisting mostly of trees, shrubs and pioneer species. The latter of course is another indication of former disturbance. Closer to the highway the dense growth gives way to low and medium tall grasses (Figure 10-11).

The topography of the area is reasonably flat in the northern part and slopes up toward the sugarcane plantation in the west and southwest. There is a steep incline to the east that is associated with the N2 highway. The water runoff from the plantation has created a waterlogged area in the center of the surveyed site (Figure 12-13).

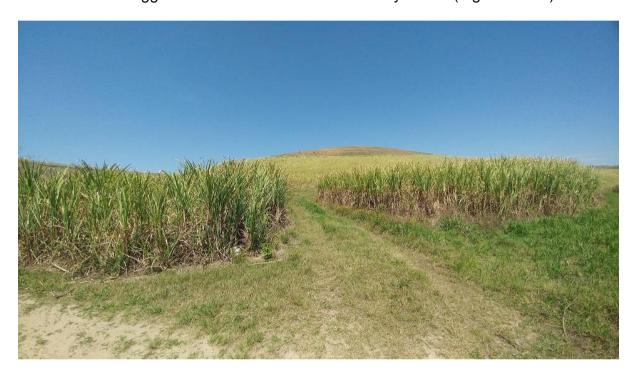


FIGURE 6: SUGARCANE PLANTATION SOUTHEAST OF THE SURVEYED AREA.



FIGURE 7: DIRT ROAD IN THE SURVEYED AREA.



FIGURE 8: OPEN PLOT IN THE SURVEYED AREA.



FIGURE 9: N2 HIGHWAY OFFRAMP EAST OF THE SURVEYED AREA.



FIGURE 10: GENERAL VIEW OF VEGETATION IN THE SURVEYED AREA.



FIGURE 11: NOTE THE DENSE VEGETATION COVER IN THE SURVEYED AREA.



FIGURE 12: WATER RUNOFF FROM THE SUGARCANE PLANTATION AT THE SURVEYED AREA.



FIGURE 13: WATERLOGGED AREA IN THE CENTER OF THE SURVEYED SITE.

7. RESULTS OF PUBLIC CONSULTATION AND STAKEHOLDER ENGAGEMENT

Both site and newspaper notices were utilised. A site notices was placed on site during the site visit (Figure 14-15). The newspaper notice (Figure 16) was done in The South Coast Sun on Friday 16 October 2020. The consultation period thus ended on 17 November 2020.

No comments were received.

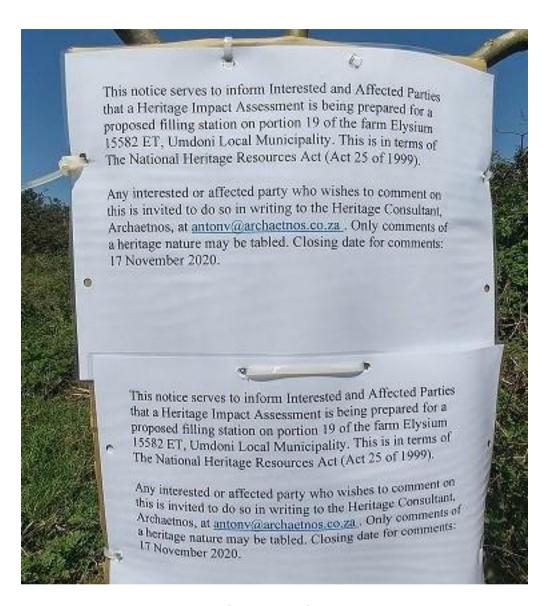


FIGURE 14: WORDING OF SITE NOTICE.



FIGURE 15: SITE NOTICE ON SITE.

HIA Notice ELYSIUM

This notice serves to inform Interested and Affected Parties that a Heritage Impact Assessment is being prepared for a proposed filling station on portion 19 of the farm Elysium 15582 ET, Umdoni Local Municipality.

This is in terms of The National Heritage Resources Act (Act 25 of 1999).

Any interested or affected party who wishes to comment on this is invited to do so in writing to the Heritage Consultant, Archaetnos at antonv@archaetnos.co.za.

Only comments of a heritage nature may be tabled.

Closing date for comments: 17 November 2020.

FIGURE 16: NEWSPAPER NOTICE.

8. HISTORICAL CONTEXT

No sites of cultural heritage significance were located in the surveyed area. However, the surveyed area needs to be placed in context and it would also assist in understanding possible finds that could be unearthed during construction activities. Therefore, it is necessary to give a background regarding the different phases of human history in the area.

Only one heritage report had been written in the Umdoni region before (SAHRIS). Information from this is indicated below.

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:

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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.
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This geographical area is not well-known as one containing many prehistoric sites. This, however, definitely indicates a lack of research in the area. A few sites including different Stone Age sites are known. During previous surveys much further towards the north-west of the study area, Archaetnos has also found such sites. These are to be found in the vicinity of Newcastle and Dannhauser, mostly dating to the Middle Stone Age (Archaetnos Database).

A MSA site is known from Umhlatuzana (Mitchell 2002: 73). Stone Age sites and rock art, are also known from the Drakensberg (Phillipson 1985: 77). The mountain however is quite some distance from the site. The latter is mostly associated with the San people of the LSA. Known LSA sites relatively close to Ixopo include Shongweni, Borchers Shelter, Strathalan and Umhlatuzana (Mitchell 2002: 127, 162). The SAHRIS database indicates that shell middens, including human skeletal remains and LSA tools (Smithfield and Sango) were identified along the beach front in Umdoni.

The environment definitely is suitable for Stone Age people. There is ample water and grazing for the wild life they would have hunted. Although no caves or rock shelters were identified, there most likely are such features in the surrounding mountains.

It is therefore very likely that Stone Age people did utilize and settled in the area. No such sites were however identified 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 artefacts (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:

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

Both Early and Late Iron Age sites are known from the Kwazulu-Natal (Zululand) area. These are associated with the predecessors of the current Zulu people in the area. During the Late Iron Age (LIA), people stayed in extensive stonewalled settlements, but these are more likely to be found at the foot of the mountain and not on the plains where the survey has been conducted. Such sites were identified in northern KwaZulu-Natal, during previous studies in the area (Archaetnos Database).

EIA sites are known from the coastal, northern and central regions of this province (Phillipson 1985 174; Mitchell 2002: 260' 296). LIA sites are found in abundance in KwaZulu-Natal (Mitchell 2002: 346).

Iron Age people therefore more than likely settled close to the study area. The good grazing in the area would have provided a good environment for Iron Age people although building material seem to be reasonably scarce. One would therefore expect that Iron Age people may have utilized the area. This is the same reason why white settlers moved into this environment later on.

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.

After 1800, the small tribes in Zululand were unified by Chaka (Bergh & Bergh 1984: 14). During the Difaqane (1820's – 1830's), the Ndebele of Mzilikazi migrated from the north-eastern parts of Kwazulu-Natal to the north and most likely passed close to the study area. On this journey they conquered other groups and caused widespread chaos (Bergh 1999:11).

Travelers and missionaries also came to the area. By 1824, people like FG Farewell, JS King, Henry Fynn, John Cane, Henry Ogle, Alexander Biggar, WH Davis, and

Thomas Halstead have settled in Port Natal. It was, however, only during the 1830's when the Voortrekkers moved in that white people started colonizing the area to a large extent (Venter 1985: 25-27). During the Anglo-Zulu War and the Anglo-Boer War (1899-1902) many battles were also fought in the vicinity of the study area (Bergh 1999: 51; Pretorius 1985: 14).

One site of note in the Umdoni area is the St Anne's Convent and cemetery (SAHRIS database). This is however approximately 18 km north of the study area.

9. SITES IDENTIFIED DURING THE SURVEY

No sites were identified.

10. CONCLUSION AND RECOMMENDATIONS

The survey of the study area was completed successfully. No site was identified.

The following is recommended:

- This report is seen as sufficient mitigation and the proposed development may therefore continue.
- It should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a distinct possibility. It is possible that some sites may only become known later on. Operating controls and monitoring should therefore be aimed at the possible unearthing of such features. 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.

In this regard the following 'Chance find Procedure' should be followed:

- Upon finding any archaeological or historical material all work at the affected area must cease.
- The area should be demarcated in order to prevent any further work there until an investigation has been completed.
- An archaeologist should be contacted immediately to provide advice on the matter.
- Should it be a minor issue, the archaeologist will decide on future action. Depending on the nature of the find, it may include a site visit.
- SAHRA's APM Unit may also be notified.
- If needed the necessary permit will be applied for with SAHRA. This will be done in conjunction with the appointed archaeologist.
- The removal of such archaeological material will be done by the archaeologist in lieu of the approval given by SAHRA, including any conditions stipulated by

- the latter.
- Work on site will only continue after the archaeologist/ SAHRA has agreed to such a matter.

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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, landuse, function, design or technique) in the environment of the nation,

province region or locality.

APPENDIX C

SIGNIFICANCE AND FIELD RATING:

Cultural significance:

- Negligible The site has no heritage significance, although it may be older than 60 years.
- Low A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings. A site with minimal importance which is decreased by its bad state of decay.
- Low-Medium A site of lesser importance, which is increased by a good state of preservation and contextual importance (e.g. a specific community).
- 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.
- Medium-High A site that has high importance due to its age or uniqueness, but which decreases due to its bad state of decay.
- High Any site, structure or feature regarded as important because of its age or uniqueness. Also, any important object found within a specific context.
- Very High A site of exceptional importance due to its age, uniqueness and good state of preservation.

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: The site should be managed as part of the national estate, should be nominated as Grad I site, should be maintained in situ with a protected buffer zone and a CMP must be recommended. Score above 50.

Provincial Grade II significance: The site should be managed as part of the provincial estate, should be nominated as Grade II site, should be maintained in situ with a protected buffer zone and a CMP must be recommended. Score between 41 and 50.

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Local Grade IIIA: The site should be included in the heritage register and not be mitigated (high significance), should be maintained in situ with a protected buffer zone and a CMP must be recommended. Score between 31 and 40.

Local Grade IIIB: The site should be included in the heritage register and may be mitigated (high/ medium significance). Mitigation is subject to a permit application lodged with the relevant heritage authority. Score between 6 and 30.

Local Grade IIIC: The description in the phase 1 heritage report is seen as sufficient recording (low significance) and it may be granted destruction at the discretion of the relevant heritage authority without a formal permit application, subjected to the granting of Environmental Authorisation. Score below 5.

APPENDIX D

PROTECTION OF HERITAGE RESOURCES:

Formal protection:

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

Protected areas - an area surrounding a heritage site

Provisional protection – for a maximum period of two years

Heritage registers – listing grades II and III

Heritage areas – areas with more than one heritage site included

Heritage objects – e.g. archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

General protection:

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

APPENDIX E

HERITAGE IMPACT ASSESSMENT PHASES

- 1. Pre-assessment or scoping phase establishment of the scope of the project and terms of reference.
- 2. Baseline assessment establishment of a broad framework of the potential heritage of an area.
- 3. Phase I impact assessment identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
- 4. Letter of recommendation for exemption if there is no likelihood that any sites will be impacted.
- 5. Phase II mitigation or rescue planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
- 6. Phase III management plan for rare cases where sites are so important that development cannot be allowed.