



Archaetnos Culture & Cultural
Resource Consultants
BK 98 09854/23

**A REPORT ON A CULTURAL HERITAGE IMPACT ASSESSMENT DONE FOR A
PROPOSED HOUSING DEVELOPMENT ON THE FARMS LEEUWFontein 427
JR AND NOOITGEDACHT 333 JR, CITY OF TSHWANE, GAUTENG PROVINCE**

For:

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REPORT NO.: AE01646V

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29 August 2016

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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. Access to certain areas is also sometimes limited. Archaetnos and its personnel will not be held liable for such oversights or for costs incurred as a result thereof. Any additional sites identified can be visited and assessed afterwards and the report amended, but only upon receiving an additional appointment.

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SUMMARY

Archaetnos cc was requested by Texture Environmental Services to conduct a cultural heritage impact assessment (HIA) for a proposed housing development on the farms Leeuwfontein 427 JR and Nooitgedacht 333 JR. This is in the City of Tshwane, Gauteng Province.

The field survey for the project 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), 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.

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 GPS. The information was added to the description in order to facilitate the identification of each locality.

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.

The surveyed area is almost completely disturbed, but along the Magaliesberg Mountain, towards the north, sections with natural vegetation still occurs. Five sites of cultural heritage significance were located.

Mitigation measures are proposed. Only after implementation of these, the development may continue.

It should nevertheless be noted that the subterranean presence of archaeological and/or historical sites, features or artefacts 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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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: Part-time lecturer for the Honours degree in Museum Sciences in the Department of History and Heritage Studies at the University of Pretoria
- 2015: Appointed as extraordinary professor in History at the Mafikeng Campus of the Northwest University

Other

- Published 75 articles in scientific and popular journals on archaeology and history.
- Author and co-author of over 580 unpublished reports on cultural resources surveys and archaeological work. A list of reports can be viewed on www.archaetnos.co.za
- Published a book on the Military Fortifications of Pretoria.
- Contributed to a book on Mapungubwe.
- Delivered more than 50 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.
- Accredited professional member of Association for South African Professional Archaeologists.
- Accredited professional member of the South African Society for Cultural History (Chairperson 2006-2008; 2012-2014).
- Has been editor for the SA Journal of Cultural History 2002-2004.
- Member of the Provincial Heritage Resources Agency, Gauteng's Council.

- Member of Provincial Heritage Resources Agency, Gauteng's HIA adjudication committee (Chairperson 2012-2015).

DECLARATION OF INDEPENDENCE

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

Signed:

A rectangular box containing a handwritten signature in black ink on a light-colored background. The signature is cursive and appears to read 'Anton Carl van Vollenhoven'.

Date: 29 August 2016

1. INTRODUCTION

Archaetnos cc was requested by Texture Environmental Services to conduct a cultural heritage impact assessment (HIA) for a proposed housing development on the farms Leeuwfontein 427 JR and Nooitgedacht 333 JR. This is in the City of Tshwane (Pretoria), Gauteng Province (Figure 1-5). The development is called the Leeuwfontein x 24 development.

The client indicated the area to be surveyed. The field survey was confined to this area and was done on foot and via off-road vehicle.



Figure 1: Location of Pretoria in the Gauteng Province. North reference is to the top.

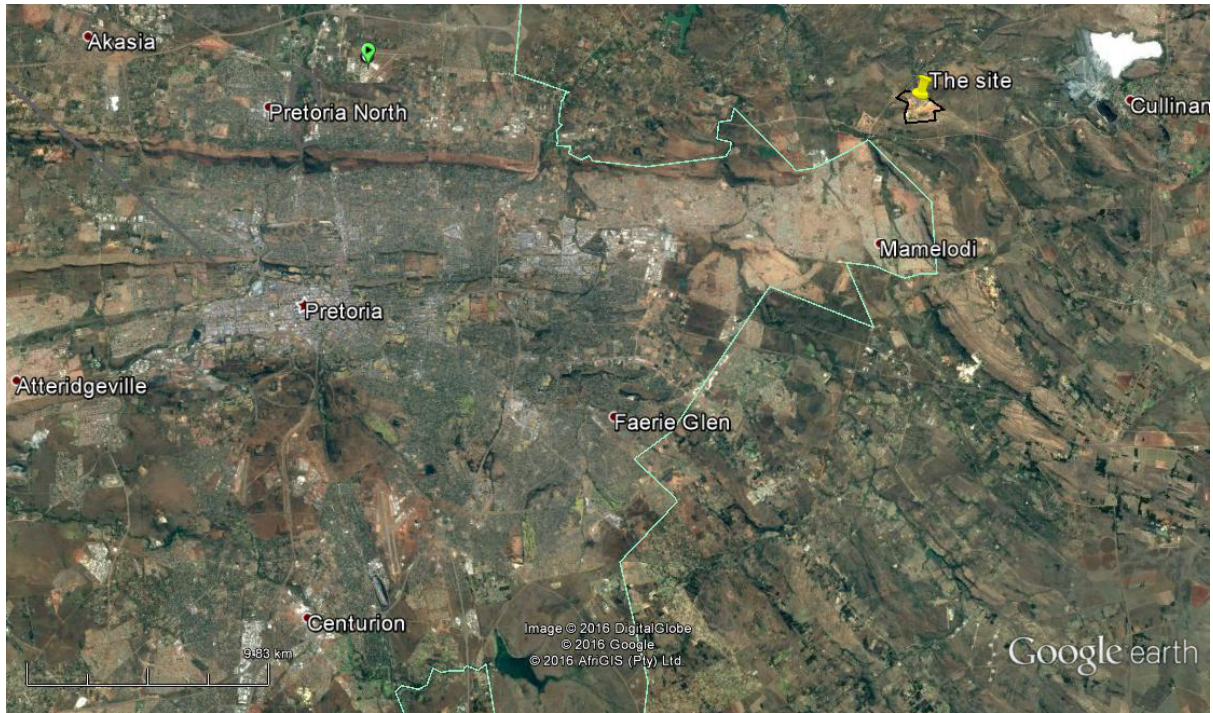


Figure 2: Location of the site in relation to the Pretoria. North reference is to the top.



Figure 3: Google Earth image indicating the property boundary.

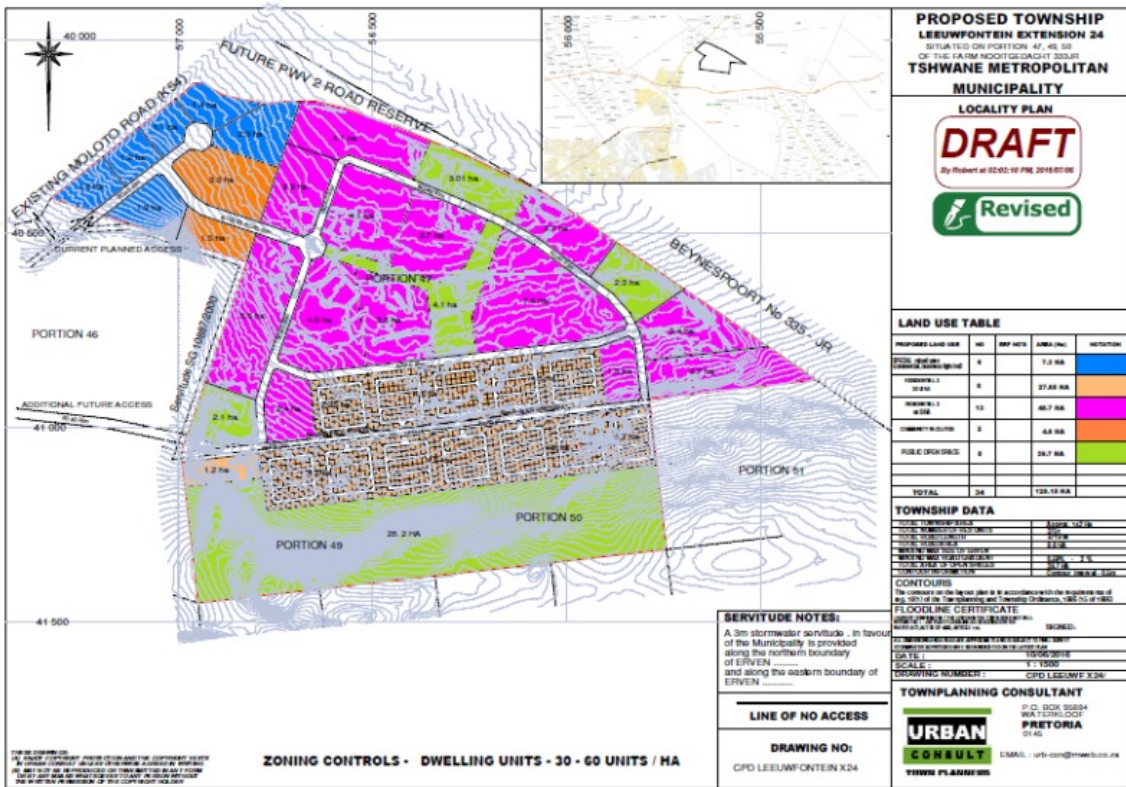


Figure 4: Layout plan.

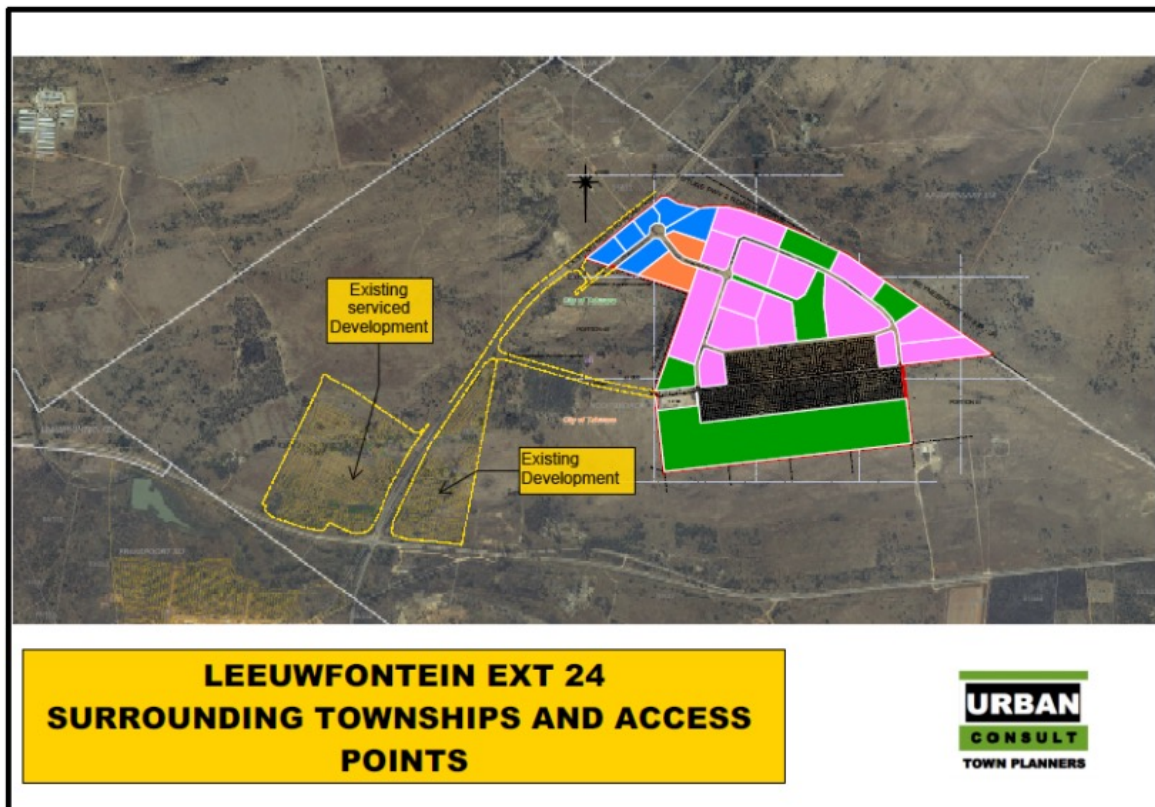


Figure 5: Layout plan including access detail.

2. TERMS OF REFERENCE

The Terms of Reference for the survey were to:

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

3. CONDITIONS & ASSUMPTIONS

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

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 artefacts 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 artefacts 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 dense which had a negative effect on archaeological visibility.
7. It also is impossible to know everything about a specific environment related to the history of a site. Although a background study is done to determine the baseline data of the area, it will always lack completeness.
8. As far as Gaps in Knowledge are concerned the biggest problem is that there is no comprehensive database with information of the history and archaeology of South Africa. The South African Heritage Resources Agency (SAHRA) has a system, called SAHRIS, where all heritage related reports are being stored. Although this does create some sort of a database it only contains information since 2012. Older information are however gradually been introduced to SAHRIS.
9. It is impossible to survey an entire area, especially with large developments. It would be extremely costly. Although the aim is to identify as much as possible, a heritage survey therefore always may not identify everything of heritage value in an area.

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 artefacts, 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. A Palaeontological Impact Assessment (PIA) only looks at the palaeontological heritage and may also sometimes be required. Developers should consult with SAHRA in this regard.

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.

All graves older than 60 years are called heritage graves and should be handled by an archaeologist. This includes archaeological graves, which are older than 100 years. Unidentified/unknown graves (which refers to date of death) are also handled as older than 60 until proven otherwise.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated) before exhumation can take place.

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

4.2 The National Environmental Management Act

This act (Act 107 of 1998) states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof be made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

5. THE INTERNATIONAL FINANCE CORPORATIONS' PERFORMANCE STANDARD FOR CULTURAL HERITAGE

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

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

Impacts on the cultural heritage should be minimized. This 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 artefacts 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 effected communities in order to be consistent with their customs and traditions and to come to agreements with relation to possible equitable sharing of benefits from commercialization.

6. METHODOLOGY

6.1 Survey of literature

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

6.2 Field survey

The survey was conducted according to generally accepted HIA practices and was aimed at locating all possible objects, sites and features of cultural significance in the area of proposed development. One regularly looks a bit wider than the demarcated area, as the surrounding context needs to be taken into consideration.

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

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

Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage. The survey was done during July 2016 when the vegetation cover was reasonably low due to the winter season. The size of the entire development area is 128 Ha and the study took 4 hours to complete.



Figure 6: GPS track of the surveyed area. North reference is to the top. The area of impact is the yellow area which was surveyed with more intensity as the remainder.

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 GPS. The information was added to the description in order to facilitate the identification of each locality.

6.5 Evaluation of Heritage sites

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

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

7. DESCRIPTION OF THE ENVIRONMENT

The surveyed area is almost completely disturbed by recent human interventions. This mostly consist of sand mining activities (Figure 7-10). Other signs of disturbance are roads, old fields (Figure 11), rehabilitated mining areas, buildings associated with the mine (offices etc.) and some farm buildings (Figure 12).

Accordingly the area is reasonably open with the vegetation dominated by pioneer species. The vegetation cover in the area consist of low to medium high grass (Figure 13-15). Accordingly both the vertical and horizontal archaeological visibility were reasonably good. The exception was the most northern section of the site, along the Magaliesberg Mountain where vegetation was natural and medium high, with clumps of trees being reasonably dense.

The topography of the area runs with a steep slope from north to south, but becomes more gradual the further it goed from the mountain. No natural drainage lines were identified.



Figure 7: General view of the surveyed area showing sand mining activities.



Figure 8: View of sand mining quarry. Note the Magaliesberg Mountain in the back.



Figure 9: Slimes dam used during sand washing activities.



Figure 10: Another view of sand mining activities within the surveyed area.



Figure 11: Old agricultural field within the surveyed area.



Figure 12: Fairly recent farm buildings in the surveyed area.



Figure 13: General view of vegetation cover in the surveyed area.



Figure 14: View of trees and medium high grass within the surveyed area.



Figure 15: View of dense vegetation in the surveyed area.

8. HISTORICAL CONTEXT

Five sites of cultural heritage significance were located in the surveyed area. In order to place this in context and to assist in understanding 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.

Many heritage surveys have been done in the greater Pretoria area. One was done on this specific property (SAHRA's SAHRIS database). The information from this survey is included here.

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.

It is important to note that some of the oldest humanoid fossils have been found close to Pretoria, namely at Kromdraai, Sterkfontein, Swartkrans, Gladysvale and Drimolen (in the Krugersdorp area). These hominids include *Australopithecus Africanus*, *Australopithecus Robustus* and *Homo Habilis* and can be as old as 3 million years. These early people were the first to make stone tools (Van Vollenhoven 2000: 146). It is important to mention this as one of the important Early Stone Age sites are situated just east of the Wonderboom Nature Reserve (Korsman & Meyer 1999: 93).

The Wonderboom site is a so-called Late Acheul site. This means it is the later phase of the Acheulian culture, which is an Early Stone Age culture. These stone tools were probably manufactured by the earliest hominids as indicated above.

Middle Stone Age material was identified some years ago on the western side of Voortrekkers Road across the Magaliesberg Mountain (Van Vollenhoven 2000: 150). A Late Stone Age site has been identified to the west of Wonderboompoort (Van Vollenhoven 2000: 151). This phase of the Stone Age is associated with the San people and many San sites are associated with rock art.

8.2 Iron Age

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

A few Early Iron Age sites are known in Gauteng of which the closest one to the study area is one at Derdepoort (Nienaber et al 1997: 15-22). Pottery from the EIA was also identified in the Fountains Valley (Van Schalkwyk & Moifatswane 1993: 8-9). Not many EIA sites are known making the identification of such sites very important to the scientific community. A Middle Iron Age site was identified to the west of Wonderboompoort (Küsel 1993: 13), but it was not dated yet.

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

8.3 Historical Age

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

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

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

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

and west. The Hwaduba stayed in the vicinity of the confluence between the Pienaars and Apies River. This group took over the culture and language of the Kgatla, a Tswana group (Bergh 1999: 108).

It is also said that Msi had a son called Tshwane. This has not been proved yet and neither has it been proved that he stayed at the Wonderboom. Louwrens (2006: 111-114, 123-124) and Van Vuuren (2006: 78-99) gives lengthy discussion on why they believe such a person never existed.

The largest group of Bantu speaking people in the Pretoria area is the Northern Sotho, but Southern Sotho's and Tswanas are also present. These groups have a typical building tradition consisting of large building complexes and round huts with conical roofs. At the beginning of the nineteenth century two Tswana groups, the Kwena and Kgatla stayed to the north and west of Pretoria in the vicinity of the Crocodile, Pienaars and Apies River (Bergh 1999: 106).

It seems as if all these groups fled from the area during the Difaquane when Mzilikazi came here in 1827. He killed the men, burned down their villages, confiscated the livestock and took the women to marry members of his impi (Van Vollenhoven 2000: 156). Mzilikazi had many villages in the area. Particular mention is made of him staying at the Wonderboom. The site was called Kungwini (Carruthers 1990: 245).

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

After the Difaquane the Hwaduba moved to Khawadubeng (Witgatboom 62). By this time (approximately 1840) the Voortrekkers had moved into the greater Pretoria area and as a result Kgosi moved with his people to Sekhukhuniland (Van Warmelo 1944: 25-26).

The farms in and around Pretoria was laid out and settled by white farmers since 1839. By 1850 a large area around Pretoria, running as far as the Vaal River to the south, Mafikeng in the west, Thabazimbi in the north and Bronkhorstspuit in the west was occupied and owned by white farmers (Bergh 1999: 15). The first white people also came to the Pretoria area during this time (Coetzee 1992: 11). In 1839 JGS Bronkhorst settled on the farm Elandspoort. He was the first permanent white settler in the area (Van Vollenhoven 2005: 17-45). The town of Pretoria was established in 1855 (Bergh 1999: 17).

During the Anglo-Boer War (1899-1902), an important battle were fought around the surveyed area. After the occupation of Pretoria by the British on the 5th of June 1900, the Boer forces under General Louis Botha moved eastwards onto the Magaliesberg Mountains. Between 11 and 12 June 1900 the British and Boer forcec engaged in this area in a battle called the Battle of Diamond Hill Bergh (1999:52-53).

9. DISCUSSION OF SITES IDENTIFIED DURING THE SURVEY

As indicated, five sites of cultural importance were identified in the surveyed area. Two of these were identified during the survey while three others were identified from a previous report on the area. The latter were in a section of the area that was not surveyed since access could not be gained.

It seems as if the development will impact directly on three of these sites and indirectly on the other two. Therefore mitigation measures are proposed.

9.1 Historical/ Late Iron Age stone walling

GPS: 25.67705°S; 28.43484°E

The site consists of low circular stone packed walling and terraces. It seems as if walls have been robbed and accordingly the site is in a very poor state (Figure 16). No midden or cultural artefacts were identified.

It therefore has medium cultural significance and receives a field rating of General protection B (IV B). This means that the site should be recorded after which it may be demolished. Recording would consist of complete photographic recording and drawing a site plan.



Figure 16: Section of stone walling at site no. 1.

9.2 Grave yard

GPS: 25.67751°S; 28.43517°E

The site consists of at least 6 graves with stone dressings. No headstones are found (Figure 17). Therefore no surnames or dates of death could be identified. This means that the graves are unknown, which has to be handled similar to heritage graves (older than 60 years).

Graves always are regarded as having a high cultural significance and receives a field rating of Local Grade IIIB. It should be included in the heritage register, but may be mitigated.

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 development.

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 development 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 seem to be inside of the area of direct impact. However, since the development proposal is a preliminary one, it may still be possible to change it so that the impact is indirect. In such a case Option 1 is recommended. This includes the writing of a site preservation management plan and fencing in of the site. Access to descendants also should be granted. However, should it not be possible to change the layout, option 2 will have to be implemented.



Figure 17: Some of the graves at site no. 2.

9.3 Grave yard

GPS: 25.67663°S; 28.43859°E

The site consists of at least 5 graves with stone dressings. No headstones are found (Figure 18). Therefore no surnames or dates of death could be identified. This means that the graves are unknown, which has to be handled similar to heritage graves (older than 60 years).

Graves always are regarded as having a high cultural significance and receives a field rating of Local Grade IIIB. It should be included in the heritage register, but may be mitigated.



Figure 18: Some of the graves at site no. 3.

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 development.

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 development 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 seem to be inside of the area of direct impact. However, since the development proposal is a preliminary one, it may still be possible to change it so that the impact is indirect. In such a case Option 1 is recommended. This includes the writing of a site preservation management plan and fencing in of the site. Access to descendants also should be granted. However, should it not be possible to change the layout, option 2 will have to be implemented.

9.4 Historical military stone walling

GPS: 25.67879°S; 28.43456°E

This is a stone wall which had a military origin, dating to the Anglo-Boer War (1899-1902). It can be linked to the Battle of Diamond Hill and is a defensive fortification wall (Figure 19). A survey done in 2007 also identified the site as well as .303 ammunition from this period (Van Druten 2007: 74). Van Vollenhoven (1995 & 2010) has described various such cartridges and fortifications.



Figure 19: Military stone walling at site no. 4.

The site is regarded as having a high cultural significance. It receives a field rating of Local Grade IIIA. It should be included in the heritage register and may not be mitigated.

There will be no direct impact from the development on the site, but since residential units will be erected nearby there will definitely be an indirect impact. Therefore the site needs to be protected. A cultural management plan should be drafted and implemented to preserve and protect the site. The plan should also include measures for the sustainable utilization of the structure (e.g. walking trails and information panels). The body corporate of the new development will have to assume responsibility for the implementation of the plan in the future. Such a plan should be drafted by a heritage expert and should be completed before the development may commence.

9.5 Historical military stone walling

GPS: 25.67749°S; 28.43372°E

This is a low stone wall which had a military origin, dating to the Anglo-Boer War (1899-1902). It can be linked to the Battle of Diamond Hill and is a defensive fortification wall (Figure 20).



Figure 20: Military stone walling at site no. 5.

The site is regarded as having a high cultural significance. It receives a field rating of Local Grade IIIA. It should be included in the heritage register and may not be mitigated.

There will be no direct impact from the development on the site, but since residential units will be erected nearby there will definitely be an indirect impact. Therefore the site needs to be protected. A cultural management plan should be drafted and

implemented to preserve and protect the site. The plan should also include measures for the sustainable utilization of the structure (e.g. walking trails and information panels). The body corporate of the new development will have to assume responsibility for the implementation of the plan in the future. Such a plan should be drafted by a heritage expert and should be completed before the development may commence.

10. CONCLUSION AND RECOMMENDATIONS

The survey of the indicated area was completed successfully. Five sites of heritage significance were identified (Figure 21).



Figure 21: Location of the five sites identified.

The following is recommended:

- Site no. 1 (Historical/ Late Iron Age stone walling) has medium cultural significance. The site should be recorded after which it may be demolished. Recording would consist of complete photographic recording and drawing a site plan. However, note that demolition should only be permitted if the site is directly impacted on, which seem to be the case here.
- Graves always are regarded as having a high cultural significance and receives a field rating of Local Grade IIIB. It should be included in the heritage register, but may be mitigated.
- 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 development.

- 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 development 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 seem to be inside of the area of direct impact. However, since the development proposal is a preliminary one, it may still be possible to change it so that the impact is indirect. In such a case Option 1 is recommended. This includes the writing of a site preservation management plan and fencing in of the site. Access to descendants also should be granted.
- However, should it not be possible to change the layout, option 2 will have to be implemented. This needs to be done via the processes described in the report.
- Sites no. 4 & 5 are historical military stone walling (fortifications) dating to the Anglo-Boer War (1899-1902) and linked to the Battle of Diamond Hill. Both sites are regarded as having a high cultural significance. It may not be mitigated and must be preserved.
- Although there will be no direct impact from the development on the sites, residential units will be erected nearby which will definitely create an indirect impact since the sites will be easily accessible. Therefore the sites needs to be protected.
- A cultural management plan should be drafted and implemented to preserve and protect the sites. The plan should also include measures for the sustainable utilization of the structure (e.g. walking trails and information panels). The body corporate of the new development will have to assume responsibility for the implementation of the plan in the future.
- Such a plan should be drafted by a heritage expert and should be completed before the development may commence.
- Only after implementation of the above indicated mitigatory measures, the proposed development may continue.
- It should also be noted that the subterranean presence of archaeological and/or historical sites, features or artefacts 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 artefacts, 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: Artefact (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 having 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, 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.