



Archaetnos Culture & Cultural
Resource Consultants
BK 98 09854/23

**A REPORT ON A CULTURAL HERITAGE IMPACT ASSESSMENT FOR THE
PROPOSED BADIRILE EXTENTION TOWNSHIP DEVELOPMENT, CLOSE TO
RANDBURG, GAUTENG PROVINCE**

For:

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REPORT NO.: AE01845V

By:

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26 September 2018

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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 to the relevant heritage authority.

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

DISCLAIMER

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EXECUTIVE SUMMARY

Archaetnos cc was requested by Texture Environmental Consultants to conduct a cultural heritage impact assessment (HIA) for the proposed Badirile Extension township. The proposed project is located on Portion 48 of the farm Brandvlei 261-IQ, Rand West Local Municipality, Gauteng Province (Figure 1-3).

The said property is located south of the Badirile township, an area north-west of Randfontein town. The roads have been developed up to the end of the Badirile township. Access to the Badirile township is obtained from the N14 that is running to the north of the township. The property is furthermore situated in close proximity and to the west of the Ventersdorp Road.

The township will constitute of approximately 568 erven to be zoned "Residential 1", one (1) erf to be used for public open space purposes, one (1) erf to be zoned "Business", two (2) erven zoned "Community Facility" and one (1) erf to be zoned "Institutional". The proposal includes the construction of associated infrastructure, including access road, civil services (water, sewer and stormwater reticulation) and electricity.

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. Coordinates 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.

During the survey four sites of cultural heritage significance were identified. Two of these are outside of the development and two, believed to be the same site, inside. Mitigation measures are proposed. After the implementation of these, the proposed development may continue.

The following is recommended:

- Site 1 (including site 3) – ruins of farm buildings has a negligible cultural significance. This means that the description in this 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.

- Graves are always regarded as having a high cultural significance. However the two sites identified (no. 2 and 4) are approximately 200 m from the development. 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 development activities.
- 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.
- Since the graves lies outside of the development footprint, but in close proximity, there may be a secondary impact. In fact, this is already visible as the sites seems to have been neglected for some time. The sites should be kept in *in situ*. It is therefore recommended that Option 1 be implemented. This means that a management plan for the sustainable utilisation and preservation of the site needs to be drafted.
- The development may only continue after receiving the necessary comments from the BGG Unit of SAHRA and the Provincial Heritage Resources Authority of Gauteng and implementing their decision.
- It should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a distinct possibility. It may only become known later on. Therefore, operating controls and monitoring should be introduced, 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.

It is also important to take cognizance that it is the client's responsibility to do the submission of this report to the relevant Heritage Resources Agency. No work on site may commence before receiving the necessary comments from them.

CONTENTS

	Page
SUMMARY	3
CONTENTS	5
CIRRICULUM VITAE OF SPECIALIST	6
DECLARATION OF INDEPENDENCE	7
LIST OF ACRONYMS	7
1. INTRODUCTION.....	8
2. TERMS OF REFERENCE.....	10
3. CONDITIONS AND ASSUMPTIONS	11
4. LEGISLATIVE REQUIREMENTS	11
5. THE INTERNATIONAL FINANCE CORPORATIONS' PERFORMANCE STANDARDS FOR CULTURAL HERITAGE..	15
6. METHODOLOGY	15
7. DESCRIPTION OF THE ENVIRONMENT	17
8. HISTORICAL CONTEXT.....	22
9. DISCUSSION OF SITES FOUND DURING THE SURVEY	24
10. PUBLIC CONSULTATION.....	30
11. CONCLUSIONS AND RECOMMENDATIONS.....	34
12. REFERENCES	36
APPENDIX A – DEFENITION OF TERMS.....	37
APPENDIX B – DEFINITION/ STATEMENT OF SIGNIFICANCE	38
APPENDIX C – SIGNIFICANCE AND FIELD RATING	39
APPENDIX D – PROTECTION OF HERITAGE RESOURCES	41
APPENDIX E – HERITAGE MANAGEMENT IMPACT ASSESSMENT PHASES	42

CURRICULUM VITAE
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- 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 Mafikeng campus of the Northwest University

OTHER

- Has published 79 articles in scientific and popular journals on archaeology and history.
- Has been the author and co-author of over 845 unpublished reports on cultural resources surveys and archaeological work.
- Has published books on the Military Fortifications of Pretoria and Heritage Guidelines.
- Contributed to a book on Mapungubwe.
- Has delivered more than 66 papers and lectures at national and international conferences.
- Member of SAHRA Council for 2003 – 2006.

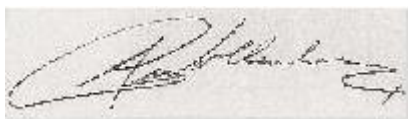
- Member of the South African Academy for Science and Art.
- Member of Association for South African Professional Archaeologists.
- Member of the South African Society for Cultural History (Chairperson 2006-2008; 2012-2014).
- Has been editor for the SA Journal of Cultural History 2002-2004.
- Member of the Provincial Heritage Resources Agency, Gauteng's Council.
- Member of Provincial Heritage Resources Agency, Gauteng's HIA adjudication committee (Chairperson 2012-2015).

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.

Signed:



Date: 26 September 2018

LIST OF ACRONYMS:

AIA – Archaeological Impact Assessment
 AMP – Archaeology, Meteorites and Palaeontology Unit at SAHRA
 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

1. INTRODUCTION

Archaetnos cc was requested by Texture Environmental Consultants to conduct a cultural heritage impact assessment (HIA) for the proposed Badirile Extension township. The proposed project is located on Portion 48 of the farm Brandvlei 261-IQ, Rand West Local Municipality, Gauteng Province (Figure 1-3).

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The client indicated the areas to be surveyed and the survey was confined to these. It was done via foot.

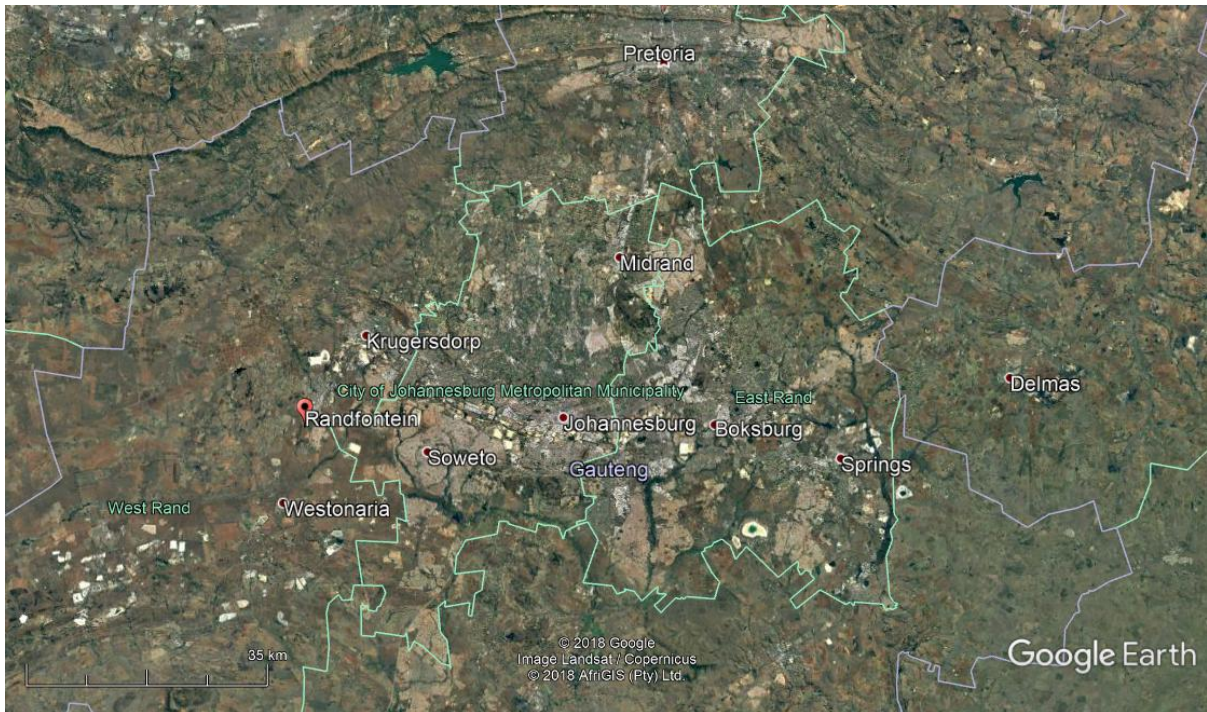


FIGURE 1: LOCATION OF RANDFONTEIN IN THE GAUTENG PROVINCE. NORTH REFERENCE IS TO THE TOP.

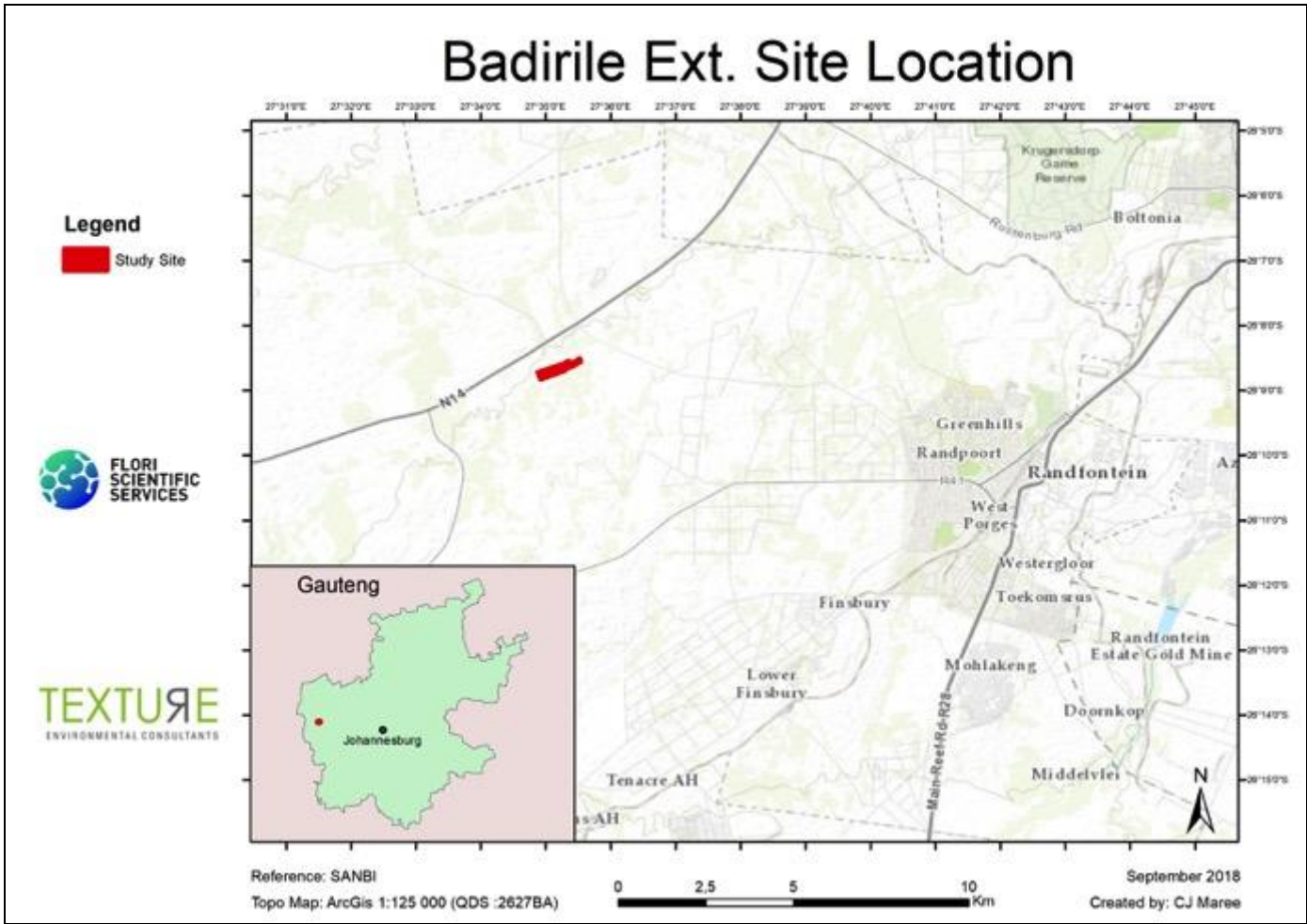


FIGURE 2: LOCATION MAP (TEXTURE ENVIRONMENTAL).



FIGURE 3: DETAILED VIEW OF THE SITE.

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. CONDITIONS & ASSUMPTIONS

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

1. Cultural Resources are all non-physical and physical man-made occurrences, as well as natural occurrences associated with human activity (Appendix A). These include all sites, structure and artifacts of importance, either individually or in groups, in the history, architecture and archaeology of human (cultural) development. Graves and cemeteries are included in this.
2. The significance of the sites, structures and artifacts is determined by means of their historical, social, aesthetic, technological and scientific value in relation to their uniqueness, condition of preservation and research potential. The various aspects are not mutually exclusive, and the evaluation of any site is done with reference to any number of these aspects.
3. Cultural significance is site-specific and relates to the content and context of the site. Sites regarded as having low cultural significance have already been recorded in full and require no further mitigation. Sites with medium cultural significance may or may not require mitigation depending on other factors such as the significance of impact on the site. Sites with a high cultural significance require further mitigation (see Appendix C).
4. The latitude and longitude of any archaeological or historical site or feature, is to be treated as sensitive information by the developer and should not be disclosed to members of the public.
5. All recommendations are made with full cognizance of the relevant legislation.
6. It must 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. In this particular case the vegetation cover was reasonably low which had a positive influence on coverage.

4. 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.

4.1 The National Heritage Resources Act

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

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The national estate (see Appendix D) includes the following:

- a. Places, buildings, structures and equipment of cultural significance
- b. Places to which oral traditions are attached or which are associated with living heritage
- c. Historical settlements and townscapes
- d. Landscapes and features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Archaeological and paleontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed 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 and can only be done by a professional archaeologist.

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)¹, 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

¹ Please consult SAHRA to determine whether a PIA is necessary.

- 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). To demolish such a site or structure, a destruction permit from SAHRA will also be needed.

Human remains

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- b. destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- c. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Unidentified/unknown graves are also handled as older than 60 until proven otherwise.

Human remains that are less than 60 years old are subject to provisions of the **National Health Act (Act 61 of 2003)** 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)**.

4.2 The National Environmental Management Act

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

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

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

This standard recognizes the importance of cultural heritage for current and future generations. It aims to ensure that clients protect cultural heritage in the course of their project activities. This is done by clients abiding to the law and having heritage surveys done to identify and protect cultural heritage resources via field studies and the documentation of such resources. These need to be done by competent professionals (e.g. archaeologists and cultural historians).

Possible chance finds, encountered during the project development, also need to be managed by not disturbing such finds and by having them assessed by professionals. Impacts on the cultural heritage should be minimized. This include the possible maintenance of such sites in situ, or when impossible, the restoration of the functionality of the cultural heritage in a different location.

When cultural historical and archaeological artifacts and structures need to be removed is should be done by professionals and by abiding to the applicable legislation. The removal of cultural heritage resources may however only be considered if there are no technically or financially feasible alternatives. In considering the removal of cultural resources, it should be outweighed by the benefits of the overall project to the effected communities. Again, professionals should carry out the work and adhere to the best available techniques.

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

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

6. METHODOLOGY

6.1 Survey of literature

A survey of literature was undertaken 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)², while photographs were also taken where needed. The survey was undertaken by doing a physical survey on foot and with an off-road vehicle and covered as much as possible of the area to be studied (Figure 4).

Certain factors, such as accessibility, density of vegetation, etc. may however influence the coverage. The size of the surveyed area is approximately 18,9 Ha. The survey took 2 hours to complete.



FIGURE 4: GPS TRACK OF THE SURVEYED AREA. NORTH REFERENCE IS TO THE TOP.

6.3 Oral histories

People from local communities are interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography.

² A Garmin Oregon 550 with an accuracy factor of a few meters.

6.4 Documentation

All sites, objects, features and structures identified were documented according to the general minimum standards accepted by the archaeological profession. Coordinates of individual localities were determined by means of the Global Positioning System (GPS). The information was added to the description 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 area that was surveyed is almost entirely disturbed by recent human interventions. This includes a soccer field, contractors camp, illegal dumping and a house with outbuildings dating approximately to the 1970's (Figure 5-8). The area also is disturbed by former agricultural fields and earthworks (Figure 9-10).

Almost no natural vegetation exists and is mainly concentrated around a river on the eastern side of the property. Pioneer species such as grass and weeds dominate the vegetation. There is also regrowth from a wattle plantation and open patches in the area (Figure 11-12).

A river is found on the eastern edge of the surveyed area (Figure 14). The topography falls slightly from west to east towards the river.



FIGURE 5: SOCCER FIELD IN THE SURVEYED AREA.



FIGURE 6: CONTRACTORS CAMP ON THE EDGE OF THE SURVEYED AREA.



FIGURE 7: OPPEEN AREA AND INFORMAL; HOUSES ON THE NORTHERN EDGE OF THE SITE.



FIGURE 8: ONE OF THE BUILDINGS ON SITE – THESE ALL DATE TO MORE OR LES THE 1970'S.



FIGURE 9: OLD AGRICULTURAL FIELD IN THE STUDY AREA.



FIGURE 10: AREA SHOWING EARTH WORKS AND WEEDS.



FIGURE 11: REGROWTH OF WATTLES IN THE SURVEYED AREA.



FIGURE 12: GENERAL VIEW OF THE SURVEYED AREA.

8. HISTORICAL CONTEXT

One site of cultural heritage significance was located inside of the surveyed area with a second found nearby. Some background information is however given to place the surveyed area and the sites found in a historical context and to contextualize possible finds that could be unearthed during construction activities.

One previous heritage report was done on this farm (SAHRIS database). The information from this is integrated 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:

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.

ESA material was found at Aasvoëlkop some kilometers away to the west of the surveyed area. Artifacts from the MSA were identified at Melvillekoppies, Linksfield and Primrose which lies even further to the east and south of the surveyed area. LSA material was also found at Melvillekoppies (Bergh 1999: 4). Rock engravings associated with the LSA were also found more than 50 km to the south in the vicinity of Vereeniging (Bergh 1999: 5).

No natural shelters were seen during the survey and as a result of the disturbance, it is not possible to determine if the vegetation may have presented good grazing. This would have made it a prime spot for hunting in the past.

8.2 Iron Age

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts (Coertze & Coertze 1996: 346). In South Africa it can be divided in two separate phases according to Van der Ryst & Meyer (1999: 96-98), namely:

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

Huffman (2007: xiii) however indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D.
Middle Iron Age (MIA) 900 – 1300 A.D.
Late Iron Age (LIA) 1300 – 1840 A.D.

Previous research indicates that one of the few Early Iron Age sites that have been properly researched, are situated at Broederstroom (Bergh 1999: 6). The site is dated to 350 AD and apart from hut remains indications of iron smelting was also found (Van der Ryst & Meyer 1999: 98).

Late Iron Age sites have been identified to the south of the surveyed area (Bergh 1999: 7), but these are more than 10 km away. However no Iron Age occurrences were identified during the survey. Again the disturbance makes it impossible to determine whether the area would have been suitable for Iron Age occupation. However, the presence of water may have contributed to people settling in the surveyed area during the Iron Age. However, no sites were found during this survey.

8.3 Historical Age

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. This era is sometimes called the Colonial era or the recent past.

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

During the Difaquane ca. 1872, the Ndebele of Mzilikazi moved through the area (Bergh 1999: 11). They however did not settle here.

The first white people in this area were the party of the traveler William Cornwallis Harris in 1836 (Bergh 1999: 13). White farmers only settled here from 1839 and 1840. The first farms in the vicinity of Roodepoort, Krugersdorp, Randfontein and Johannesburg were already measured out in 1839/40 (Bergh 1999: 15). This means that it is one of the first areas where white farmers settled.

In 1857 the area formed part of the district of Pretoria as few other towns were established (Bergh 1999: 17). The town of Johannesburg was only established in 1886, the town and district of Krugersdorp 1894 and Roodepoort between 1887 and 1899 (Bergh 1999: 21, 147). The Witwatersrand became a district in 1902 and Krugersdorp only became an independent district in 1909 (Bergh 1999: 22-23).

Officially it is known that gold was first discovered on the nearby farm Paardekraal in 1852, but apparently the first gold on the Witwatersrand was already found in 1834 by Karel Kruger (Liebenberg 1999: 315; Von Ketelhodt 2007: 3). The discovery of gold was followed by a gold rush of foreign gold diggers and prospectors who settled in tents and corrugated iron buildings around the Witwatersrand reef (Pistorius 2007: 20).

One may therefore expect to find remains of the mining developments through more than a hundred years in the surveyed area. Of particular note is the possibility of finding unknown graves that might be concealed under mine dumps. Examples of such were found at Paardekraal and Crown Mines during the last ten years (Archaetnos database). One historical building and two grave yards were identified during previous surveys on the farm Brandvlei (Van der Walt & Fourie 2005).

Two of these are grave yards (sites 2 and 4), both close to, but north of the development. The third is a farm house (site 3), inside of the current development. The latter has been demolished since 2005 or the GPS coordinated of the 2005 report is inaccurate as ruins were found (site 1), but approximately 70 m from the 2005 coordinates.

9. DISCUSSION OF SITES FOUND DURING THE SURVEY

9.1 Sites 1 (including site 3) – house remains

The ruined remains of a farm yard, including a house and outbuildings were identified (Figure 3). It is believed to be the same as site no 2627BA-MHC003 from the 2005 report. At that stage the house was still in a fairly good condition (Figure 14). The remains consist of building rubble with a circular cement platform being the only recognizable feature.



FIGURE 13: REMAINS AT SITE NUMBER 1.



FIGURE 14: PHOTOGRAPH TAKEN OF THE HOUSE IN 2005 (COURTESY OF VAN DER WALT & FOURIE).

GPS co-ordinates:

Site 1 - 26°08'30.02"S; 27°35'10.8"E

Site 3 - 26° 8'37.79"S;27°35'21.37"E

Cultural significance Table

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	N
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	N	-
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	N	-
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	N
Its importance in exhibiting particular aesthetic	N	-

characteristics valued by a community cultural group		
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	N
Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa	N	-
Sites of significance relating to the history of slavery in South Africa	N	-
Reasoned assessment of significance using appropriate indicators outlined above:		1 – Negligible

Integrity scale:

- 1 – Bad state of preservation, but no contextual information
- 2 – Bad state of preservation and includes contextual information
- 3 – Reasonable state of preservation, but no contextual information
- 4 – Reasonable state of preservation and includes contextual information
- 5 – Good state of preservation, but no contextual information
- 6 - Good state of preservation and includes contextual information
- 7 – Excellent state of preservation, but no contextual information
- 8 – Excellent state of preservation and includes contextual information

Field-rating = Cultural significance x Integrity

$$= 1 \text{ (Negligible)} \times 1$$

$$= 1$$

The site has a field rating of Local Grade IIIC. It means that the description in this 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.

9.2 Sites 2 and 4 – graves

Both these sites are approximately 200 m north and outside of the development. There are also houses in-between the site to be developed and the graves. It is discussed here to serve as complete record of the area.

Cultural significance Table: Sites 2 and 4

A place is considered to be part of the national estate if it has cultural significance because of -	Applicable or not	Rating: 1 - Negligible/ 2 -Low/ 3 - Low-Medium/ 4 - Medium/ 5 - Medium-High/ 6 - High/ 7 - Very High
Its importance in the community or pattern of South Africa's history	Y	H
Its possession of uncommon, rare, or endangered aspects of South Africa's natural or cultural history	N	-
Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Y	H
Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Y	H
Its importance in exhibiting particular aesthetic characteristics valued by a community cultural group	N	-
Its importance in demonstrating a high degree of creative or technical achievement at a particular period	N	-
Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Y	H
Its strong or special association with the life or work of a person, group or organization of importance in the history of South Africa	Y	H
Sites of significance relating to the history of slavery in South Africa	N	-
Reasoned assessment of significance using appropriate indicators outlined above:	6 – High	

Integrity scale:

- 1 – Bad state of preservation, but no contextual information
- 2 – Bad state of preservation and includes contextual information
- 3 – Reasonable state of preservation, but no contextual information

- 4 – Reasonable state of preservation and includes contextual information
- 5 – Good state of preservation, but no contextual information
- 6 - Good state of preservation and includes contextual information
- 7 – Excellent state of preservation, but no contextual information
- 8 – Excellent state of preservation and includes contextual information

Field-rating = Cultural significance x Integrity

= 6 (High) x 4

= 24

Site 2 (Site number in 2005 report: 2627BA-MHC002):

GPS: 26°08'30.02"S; 27°35'10.8"E

The site consists of a formal fenced cemetery which used to be cleaned regularly (see 2005 report). This however is not the case anymore. The cemetery consists of approximately 60 graves (Figure 15).

A central part of the cemetery consists of stone packed graves dating from 1860 to 1900. The oldest grave dates to 1868 with the youngest grave dating to 2000. The main gate of the cemetery bears the dates of 1860 to 1964. A memorial stone in the cemetery indicates the cemetery to be the Maade Family Cemetery (Figure 16). Inscriptions on the tombstones indicate only two Maade burials with Van den Berg, Oostehuisen and Oostehuizen being the majority of the surnames in the cemetery. Some of these probably are from the first white pioneer settlers in the area.



FIGURE 15: SOME OF THE GRAVES AT SITE NO. 2 (COURTESY OF VAN DER WALT & FOURIE 2005).



FIGURE 16: THE MEMORIAL IN THE CEMETERY (COURTESY OF VAN DER WALT & FOURIE 2005).

Site 4 (Site number in 2005 report: 2627BA-MHC001):

GPS: 26° 8'30.18"S; 27°35'8.48"E



FIGURE 17: SOME OF THE GRAVES AT SITE NO. 4 (COURTESY OF VAN DER WALT & FOURIE 2005).

The site consists of an informal cemetery of approximately 140 graves (Figure 17). Inscriptions on the few formal headstones indicate an age range between 1952 and fairly recent for the graves in the cemetery. It probably is still in use.

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

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 development activities.

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.

The graves lie outside of the development footprint, but its close proximity means that there may be a secondary impact. In fact, this is already visible as the sites seems to have been neglected for some time. The sites should be kept in *in situ*. It is therefore recommended that Option 1 be implemented.

10. PUBLIC CONSULTATION

The application forms part of a Basic Assessment process. Public consultation (Figure 18-21) is handled by the Environmental Impact Assessment Practitioner. Both site and newspaper notices were used.



FIGURE 18: ONE OF THE SITE NOTICES.



FIGURE 19: WORDING OF THE SITE NOTICE.

Legals

legals@citizen.co.za

of 2013) and Clause 22 of the Tokwe Town Planning Scheme, 2015, for Special Consent to use the property, which is situated in a "Residential 1" zone, also for the purpose of "Place of Instruction" (swimming school) uses as defined in the Tokwe Town Planning Scheme, 2015, with special conditions. OWNER : Jonkershoekweg 41 Belegings CC (2002/037353 /23) APPLICANT : N.J. Blignaut (I.D. 681211 5030 08 4) and/or Welwyn Town and Regional Planning CC (Reg. Nr 1996/059292/3) ADDRESS : Wilge Park Office Park, Corner of Govan Mbeki- and Piet Uys Street, Potchefstroom, 2531 and/or P.O. Box 20508, Noordbrug, 2522 TEL. NR. : 082 562 5590. ACTING MUNICIPAL MANAGER: CYRIL PHILLIP HENRY. Notice Number: 114/2018. LB018614

80 GENERAL

Badinle Extension Township NOTICE OF AN ENVIRONMENTAL IMPACT ASSESSMENT PROCESS APPLICATION FOR ENVIRONMENTAL AUTHORISATION: Application for authorisation for the following project is submitted to the Gauteng Department of Agriculture and Rural Development (GDARD), in terms of the National Environmental Management Act 107 of 1998, and the 2014 Environmental Impact Assessment Regulations as amended. Project Name: Badinle Extension Township. Project Applicant: Rand West City Local Municipality. Listed Activities for a Basic Assessment Process: Listing Activities 1, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 1.17, 1.18, 1.19, 1.20, 1.21, 1.22, 1.23, 1.24, 1.25, 1.26, 1.27, 1.28, 1.29, 1.30, 1.31, 1.32, 1.33, 1.34, 1.35, 1.36, 1.37, 1.38, 1.39, 1.40, 1.41, 1.42, 1.43, 1.44, 1.45, 1.46, 1.47, 1.48, 1.49, 1.50, 1.51, 1.52, 1.53, 1.54, 1.55, 1.56, 1.57, 1.58, 1.59, 1.60, 1.61, 1.62, 1.63, 1.64, 1.65, 1.66, 1.67, 1.68, 1.69, 1.70, 1.71, 1.72, 1.73, 1.74, 1.75, 1.76, 1.77, 1.78, 1.79, 1.80, 1.81, 1.82, 1.83, 1.84, 1.85, 1.86, 1.87, 1.88, 1.89, 1.90, 1.91, 1.92, 1.93, 1.94, 1.95, 1.96, 1.97, 1.98, 1.99, 2.00, 2.01, 2.02, 2.03, 2.04, 2.05, 2.06, 2.07, 2.08, 2.09, 2.10, 2.11, 2.12, 2.13, 2.14, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23, 2.24, 2.25, 2.26, 2.27, 2.28, 2.29, 2.30, 2.31, 2.32, 2.33, 2.34, 2.35, 2.36, 2.37, 2.38, 2.39, 2.40, 2.41, 2.42, 2.43, 2.44, 2.45, 2.46, 2.47, 2.48, 2.49, 2.50, 2.51, 2.52, 2.53, 2.54, 2.55, 2.56, 2.57, 2.58, 2.59, 2.60, 2.61, 2.62, 2.63, 2.64, 2.65, 2.66, 2.67, 2.68, 2.69, 2.70, 2.71, 2.72, 2.73, 2.74, 2.75, 2.76, 2.77, 2.78, 2.79, 2.80, 2.81, 2.82, 2.83, 2.84, 2.85, 2.86, 2.87, 2.88, 2.89, 2.90, 2.91, 2.92, 2.93, 2.94, 2.95, 2.96, 2.97, 2.98, 2.99, 3.00, 3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07, 3.08, 3.09, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18, 3.19, 3.20, 3.21, 3.22, 3.23, 3.24, 3.25, 3.26, 3.27, 3.28, 3.29, 3.30, 3.31, 3.32, 3.33, 3.34, 3.35, 3.36, 3.37, 3.38, 3.39, 3.40, 3.41, 3.42, 3.43, 3.44, 3.45, 3.46, 3.47, 3.48, 3.49, 3.50, 3.51, 3.52, 3.53, 3.54, 3.55, 3.56, 3.57, 3.58, 3.59, 3.60, 3.61, 3.62, 3.63, 3.64, 3.65, 3.66, 3.67, 3.68, 3.69, 3.70, 3.71, 3.72, 3.73, 3.74, 3.75, 3.76, 3.77, 3.78, 3.79, 3.80, 3.81, 3.82, 3.83, 3.84, 3.85, 3.86, 3.87, 3.88, 3.89, 3.90, 3.91, 3.92, 3.93, 3.94, 3.95, 3.96, 3.97, 3.98, 3.99, 4.00, 4.01, 4.02, 4.03, 4.04, 4.05, 4.06, 4.07, 4.08, 4.09, 4.10, 4.11, 4.12, 4.13, 4.14, 4.15, 4.16, 4.17, 4.18, 4.19, 4.20, 4.21, 4.22, 4.23, 4.24, 4.25, 4.26, 4.27, 4.28, 4.29, 4.30, 4.31, 4.32, 4.33, 4.34, 4.35, 4.36, 4.37, 4.38, 4.39, 4.40, 4.41, 4.42, 4.43, 4.44, 4.45, 4.46, 4.47, 4.48, 4.49, 4.50, 4.51, 4.52, 4.53, 4.54, 4.55, 4.56, 4.57, 4.58, 4.59, 4.60, 4.61, 4.62, 4.63, 4.64, 4.65, 4.66, 4.67, 4.68, 4.69, 4.70, 4.71, 4.72, 4.73, 4.74, 4.75, 4.76, 4.77, 4.78, 4.79, 4.80, 4.81, 4.82, 4.83, 4.84, 4.85, 4.86, 4.87, 4.88, 4.89, 4.90, 4.91, 4.92, 4.93, 4.94, 4.95, 4.96, 4.97, 4.98, 4.99, 5.00, 5.01, 5.02, 5.03, 5.04, 5.05, 5.06, 5.07, 5.08, 5.09, 5.10, 5.11, 5.12, 5.13, 5.14, 5.15, 5.16, 5.17, 5.18, 5.19, 5.20, 5.21, 5.22, 5.23, 5.24, 5.25, 5.26, 5.27, 5.28, 5.29, 5.30, 5.31, 5.32, 5.33, 5.34, 5.35, 5.36, 5.37, 5.38, 5.39, 5.40, 5.41, 5.42, 5.43, 5.44, 5.45, 5.46, 5.47, 5.48, 5.49, 5.50, 5.51, 5.52, 5.53, 5.54, 5.55, 5.56, 5.57, 5.58, 5.59, 5.60, 5.61, 5.62, 5.63, 5.64, 5.65, 5.66, 5.67, 5.68, 5.69, 5.70, 5.71, 5.72, 5.73, 5.74, 5.75, 5.76, 5.77, 5.78, 5.79, 5.80, 5.81, 5.82, 5.83, 5.84, 5.85, 5.86, 5.87, 5.88, 5.89, 5.90, 5.91, 5.92, 5.93, 5.94, 5.95, 5.96, 5.97, 5.98, 5.99, 6.00, 6.01, 6.02, 6.03, 6.04, 6.05, 6.06, 6.07, 6.08, 6.09, 6.10, 6.11, 6.12, 6.13, 6.14, 6.15, 6.16, 6.17, 6.18, 6.19, 6.20, 6.21, 6.22, 6.23, 6.24, 6.25, 6.26, 6.27, 6.28, 6.29, 6.30, 6.31, 6.32, 6.33, 6.34, 6.35, 6.36, 6.37, 6.38, 6.39, 6.40, 6.41, 6.42, 6.43, 6.44, 6.45, 6.46, 6.47, 6.48, 6.49, 6.50, 6.51, 6.52, 6.53, 6.54, 6.55, 6.56, 6.57, 6.58, 6.59, 6.60, 6.61, 6.62, 6.63, 6.64, 6.65, 6.66, 6.67, 6.68, 6.69, 6.70, 6.71, 6.72, 6.73, 6.74, 6.75, 6.76, 6.77, 6.78, 6.79, 6.80, 6.81, 6.82, 6.83, 6.84, 6.85, 6.86, 6.87, 6.88, 6.89, 6.90, 6.91, 6.92, 6.93, 6.94, 6.95, 6.96, 6.97, 6.98, 6.99, 7.00, 7.01, 7.02, 7.03, 7.04, 7.05, 7.06, 7.07, 7.08, 7.09, 7.10, 7.11, 7.12, 7.13, 7.14, 7.15, 7.16, 7.17, 7.18, 7.19, 7.20, 7.21, 7.22, 7.23, 7.24, 7.25, 7.26, 7.27, 7.28, 7.29, 7.30, 7.31, 7.32, 7.33, 7.34, 7.35, 7.36, 7.37, 7.38, 7.39, 7.40, 7.41, 7.42, 7.43, 7.44, 7.45, 7.46, 7.47, 7.48, 7.49, 7.50, 7.51, 7.52, 7.53, 7.54, 7.55, 7.56, 7.57, 7.58, 7.59, 7.60, 7.61, 7.62, 7.63, 7.64, 7.65, 7.66, 7.67, 7.68, 7.69, 7.70, 7.71, 7.72, 7.73, 7.74, 7.75, 7.76, 7.77, 7.78, 7.79, 7.80, 7.81, 7.82, 7.83, 7.84, 7.85, 7.86, 7.87, 7.88, 7.89, 7.90, 7.91, 7.92, 7.93, 7.94, 7.95, 7.96, 7.97, 7.98, 7.99, 8.00, 8.01, 8.02, 8.03, 8.04, 8.05, 8.06, 8.07, 8.08, 8.09, 8.10, 8.11, 8.12, 8.13, 8.14, 8.15, 8.16, 8.17, 8.18, 8.19, 8.20, 8.21, 8.22, 8.23, 8.24, 8.25, 8.26, 8.27, 8.28, 8.29, 8.30, 8.31, 8.32, 8.33, 8.34, 8.35, 8.36, 8.37, 8.38, 8.39, 8.40, 8.41, 8.42, 8.43, 8.44, 8.45, 8.46, 8.47, 8.48, 8.49, 8.50, 8.51, 8.52, 8.53, 8.54, 8.55, 8.56, 8.57, 8.58, 8.59, 8.60, 8.61, 8.62, 8.63, 8.64, 8.65, 8.66, 8.67, 8.68, 8.69, 8.70, 8.71, 8.72, 8.73, 8.74, 8.75, 8.76, 8.77, 8.78, 8.79, 8.80, 8.81, 8.82, 8.83, 8.84, 8.85, 8.86, 8.87, 8.88, 8.89, 8.90, 8.91, 8.92, 8.93, 8.94, 8.95, 8.96, 8.97, 8.98, 8.99, 9.00, 9.01, 9.02, 9.03, 9.04, 9.05, 9.06, 9.07, 9.08, 9.09, 9.10, 9.11, 9.12, 9.13, 9.14, 9.15, 9.16, 9.17, 9.18, 9.19, 9.20, 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**Badirle Extension Township
NOTICE OF AN
ENVIRONMENTAL IMPACT
ASSESSMENT PROCESS
APPLICATION FOR
ENVIRONMENTAL
AUTHORISATION** Application for authorisation for the following project is submitted to the Gauteng Department of Agriculture and Rural Development (GDARD), in terms of the National Environmental Management Act 107 of 1998, and the 2014 Environmental Impact Assessment Regulations as amended Project Name: Badirle Extension Township; Project Applicant: Rand West City Local Municipality Listed Activities for a Basic Assessment Process: Listing Notice 1 Activities 9,10,19,27,28; Listing Notice 3 Activities 1,4,12,14. Project Description: This EIA application is for the construction of a proposed township on approximately 18,9 hectares that will constitute of approximately 568 erven to be zoned "Residential 1" one (1) erf to be used for public open space purposes, one (1) erf to be zoned "Business" two (2) erven zoned "Community Facility" and one (1) erf to be zoned "Institutional". The proposal includes the construction of associated infrastructure, including access road, civil services (water, sewer and stormwater reticulation) and electricity. Project Locality: The proposed project is located on Portion 48 of the farm Brandvlei 261-JQ, Rand West Local Municipality, Gauteng Province. To ensure that you are identified as an interested and/or an affected party, please submit your name, contact information and interest in, or objection to, the project to the environmental consultant by 18/10/2018: Texture Environmental (Mientjie Coetzee); PO Box 36593, MENLOPARK, Pretoria, 0102; Tel 083 253 2246 & Fax 086 689 1515; E-mail Address: mientjie@peopletexture.co.za
LB018768

FIGURE 21: DETAIL OF NEWSPAPER NOTICE.

11. CONCLUSION AND RECOMMENDATIONS

As indicated four sites of cultural heritage significance were identified. Two of these are outside of the development and two, actually believed to be the same site, inside (Figure 22-23). The survey of the indicated area was completed successfully.

The following is recommended:

- Site 1 (including site 3) – ruins of farm buildings has a negligible cultural significance. This means that the description in this 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.
- Graves are always regarded as having a high cultural significance. However the two sites identified (no. 2 and 4) are approximately 200 m from the development. 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 development activities.
- 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.
- Since the graves lies outside of the development footprint, but in close proximity, there may be a secondary impact. In fact, this is already visible as the sites seems to have been neglected for some time. The sites should be kept in *in situ*. It is therefore recommended that Option 1 be implemented. This means that a management plan for the sustainable utilisation and preservation of the site needs to be drafted.
- The development may only continue after receiving the necessary comments from the BGG Unit of SAHRA and the Provincial Heritage Resources Authority of Gauteng and implementing their decision.
- It should be noted that the subterranean presence of archaeological and/or historical sites, features or artifacts is always a distinct possibility. It may only become known later on. Therefore, operating controls and monitoring should

be introduced, 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.



FIGURE 22: LOCATION OF THE TWO SITES IDENTIFIED DURING THE SURVEY.



FIGURE 23: LOCATION OF THE FOUR SITES IN AND CLOSE TO THE DEVELOPMENT.

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APPENDIX A

DEFINITION OF TERMS:

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

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

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

APPENDIX B

DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE:

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

APPENDIX C

SIGNIFICANCE AND FIELD RATING:

Cultural significance:

- 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 40 and 50.

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 36 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 35.

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.