# PHASE 1 HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED FURTHER EDUCATION TRAINING (FET) COLLEGE IN BALFOUR, MPUMALANGA PROVINCE.



# **SEPTEMBER 2013**

**Prepared For:** 

Thornhill Office Park

i repared i or.

94 Bekker Road



Masetloaka Scott Wilson (MSW) Engineers

Vorna Valley

Midrand

1685



# **ENVIRONMENTAL AND SOCIAL CONSULTANTS**

P.O. BOX 1673 SUNNINGHILL 2157 147 Bram Fischer Drive FERNDALE

Phone: (011) 781 1730 Fax: (011) 781 1731

2194 Email: info@nemai.co.za

Copyright Nemai Consulting 2013

# **EXECUTIVE SUMMARY**

Masetloaka Scott Wilson (MSW) Engineers, on behalf of the Department of Higher Education and Training (DHET) has appointed Nemai Consulting to conduct an Environmental Assessment for the proposed Further Education and Training (FET) Colleges. The proposed Balfour Campus is amongst other Colleges to be built in area of KwaZulu Natal and the Eastern Cape.

Part of the environmental assessment includes Phase 1 of Heritage Impact Assessment (HIA), which serves to identify any cultural heritage resources occurring on sites which may be impacted upon by the proposed construction. If any resources are found, mitigation measures and recommendations for the protection of such resources will be provided. The report will be submitted to the Provincial Heritage Resources Authority of Mpumalanga for comment as per the National Heritage Resources Act (Act No 25 of 1999).

No heritage resources were found within the proposed site. It is therefore recommended that based on the findings of the survey the construction may proceed.



# TABLE OF CONTENTS

EXECUTIVE SUMMARY	ii			
TABLE OF CONTENTS	iii			
TERMINOLOGY	iv			
VERIFICATION OF QUALIFICATIONS	V			
1. BACKGROUND INFORMATION of THE PROJECT	1			
TERMS OF REFERENCE (ToR)	1			
2. LOCATION AND DESCRIPTION OF THE STUDY AREA	2			
3. HISTORICAL BACKGROUND OF THE STUDY AREA	8			
3.1 Archaeological	8			
4. METHODOLOGY	9			
	10			
5. RESULTS AND DISCUSSION	_			
5.1 Site survey	10			
6. Discussion	10			
6.1 Potential for further findings	10			
7. LEVEL OF SIGNIFICANCE	11			
8. IMPACT ASSESSMENT	11			
8.1 Impacts	11			
8.2 Mitigation measures	11			
9. RECOMMENDATION AND CONCLUSION	12			
10. REFERENCES				
11. LEGISLATION	15			
11.1 Section 3 of NHRA 25 of 1999	15			
11.2 Section 38 of NHRA 25 of 1999	16			
List of Figures				
Figure 1: Locality Map of the study area.	3			
Figure 2: Locality Map of the study area.	4			
Figure 3: Aerial View of the study area.				
Figure 4: East view of site below the school.				
Figure 5: North east view below school.				
Figure 6: School next to the proposed site.  Figure 7: South view of the site.				



## **List Appendices**

1 Appope	dix A: List of legislation applicable to the site	
• •	GISLATION	19
IS LE	GISLATION	19
13.1	Section 3 of NHRA 25 of 1999	20
13.2	Section 38 of NHRA 25 of 1999	22

# **TERMINOLOGY**

BP **Before Present** EIA **Early Iron Age** MIA Middle Iron Age LIA **Late Iron Age Early Stone Age ESA Further Education Training** FET **Middle Stone Age** MSA LSA **Late Stone Age South African National Resources Agency** SAHRA **National Heritage Resources Act NHRA SAPS South African Police Services** years ago ya



# **VERIFICATION OF QUALIFICATIONS**

Verification	Name	Qualification	Professional Registration
Author	Ms Makhosazana	BSc (Hons)	Member of Association of
	Mngomezulu	Archaeology	South African Professional
		BSc (Hons)	Archaeologists
		Physical	Member of Cultural
		Anthropology	Resources Management



# 1. BACKGROUND INFORMATION OF THE PROJECT

Masetloaka Scott Wilson (MSW) Engineers, on behalf of the Department of Higher Education and Training (DHET) has appointed Nemai Consulting to conduct an Environmental Assessment for the proposed Further Education and Training (FET) Colleges. The proposed Balfour Campus is amongst other Colleges to be built in area of KwaZulu Natal and the Eastern Cape.

The site is located in the Gert Sibande District Municipality of the Mpumalanga Province. The total area of the land that is usable for the school development is 30 Ha but the development footprint is only approximately 10 ha in size.

The objective of the study was to identify any cultural heritage resources occurring on sites which may be impacted upon by the proposed construction. If any resources are found, mitigation measures and recommendations for the protection of such resources will be provided. This report was prepared according to the National Heritage Resources Act 1999 (Act No. 25 of 1999) (Appendix A).

# **TERMS OF REFERENCE (ToR)**

The approach utilised for this report were:

- To undertake a Phase 1 HIA in accordance with the National Heritage Resources Act, 1999 (Act no. 25 of 1999);
- To identify and map all heritage resources in the area affected, as defined in Section 3 of the National Heritage Resources Act (Act No. 25 of 1999), including archaeological and palaeontological sites on or close (within 100m) of the proposed sites;
- To assess the significance of such resources in terms of the heritage assessment criteria as set out in the SAHRA regulations;
- To evaluate the impacts of the construction on heritage resources relative to the sustainable social and economic benefits to be derived from the construction;
- To provide mitigation measures to safeguard heritage resources; and



 To comply with specific requirements and guidelines of the Provincial Heritage Resources Authority – Mpumalanga.

# **LEGISLATIVE REQUIREMENTS**

- National Heritage Resources Act (Act No. 25 of 1999)
  - Section 3
  - o Section 38

## 2. LOCATION AND DESCRIPTION OF THE STUDY AREA

The site is located in the Gert Sibande District Municipality of the Mpumalanga Province. The proposed Balfour campus site is situated in the Balfour urban settlement on the eastern side of the R51 and north of the R23. A railway line crosses over the northeast section of the site. The proposed site is situated near the town of Balfour.



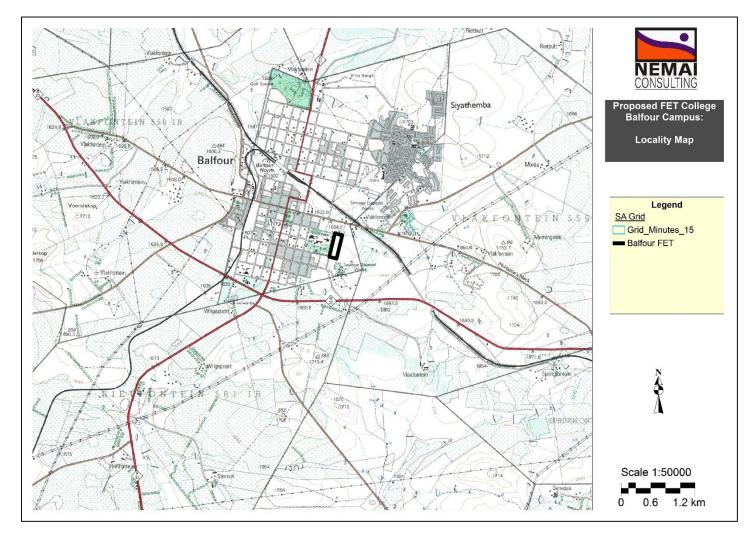


Figure 1: Locality Map of the study area.



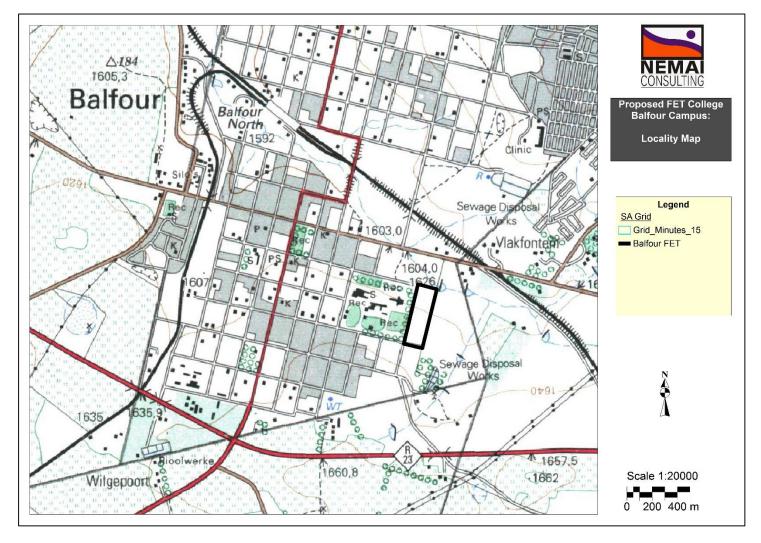


Figure 2: Locality Map of the study area.





Figure 3: Aerial View of the study area.





Figure 4: East view of site below the school.



Figure 5: North east view below school.





Figure 6: School next to the proposed site.



Figure 7: South view of the site.



# 3. HISTORICAL BACKGROUND OF THE STUDY AREA

The relevance of providing historical background on human history is to allow the reader to have a better understanding of what is meant by archaeological and cultural/historical features of the proposed area irrespective of whether or not such heritage resources are found.

#### 3.1 Archaeological

#### **Stone Age**

The Stone Age is a time period that dates between 2 million years ago (ya) to 2000 ya. Due to the vast character found within stone tools of this period, it was then divided into three phases; Early Stone Age (ESA), Middle Stone Age (MSA) and the Late Stone Age (LSA). ESA dates between 2 million ya and 2 00 000 Before Present (BP). Industries associated with this time period includes Oldowan, Acheulean and Fauresmith. ESA stone tools include hammer stones, flakes, cores, handaxses and cleavers (Pelser 2009). The more refined stone tools appeared during the MSA. MSA dates between 2 00 000 and 25 000 to 20 000 BP, this varies with location. Industries associated with this time period includes the Howieson's Poort. The stone tools which characterise this period include scrapers, blades, points and flake. Lastly is the LSA which dates between 25 000 and 20 000 to 2 000 BP. Stone tools of this period are characterised by their small size; this includes backed knives and borers (Pelser 2009).

#### Iron Age

According to Huffman (2007) Iron Age marks the early evidence of farming community in southern Africa. Animal husbandry, crop farming, pottery and metal working were introduced which in due time liberated hunter gatherers to change their way of life which is less mobile (Carruthers 1990). Due to vast technological discrepancies and settlement pattern within this period, it was divided into three. The Early Iron Age (EIA) dates to AD 200 – 900, Middle Iron Age (MIA) dates to AD 900 – 1300, and the Late Iron Age (LIA) dates to AD 1300 – 1840 (Huffman 2007).



# 4. METHODOLOGY

Background research of the study area was conducted prior to the site visit. The purpose of the research was to acquire information as to what to expect in the study area. A site visit was conducted on 04 September 2013. This was to identify heritage resources that may be impacted on due to the proposed construction.

Heritage resource means any place or object of cultural significance (NHRA No. 25 of 1999). National Heritage Resources Act 1999 (Act No. 25 of 1999) was utilised as a source of reference to identify what is known as a heritage resource.

The survey was conducted on foot in order to locate any heritage resources within the proposed sites. A Garmin Global Positioning System (GPS) was in place to record coordinates of any findings, and a digital camera to take photographs.



# 5. RESULTS AND DISCUSSION

#### 5.1 Site survey

#### **Archaeological**

No archaeological materials found within the proposed site.

#### Historical

There were no cultural or historical related sites/materials found within the study area.

# 6. DISCUSSION

Based on the survey there appears to be limited chances of finding any heritage resources. It is highly unlikely that there will be any heritage material findings within the proposed site due to the area being disturbed by gravel tracked created and probably when the current existing nearby school was constructed.

#### 6.1 Potential for further findings

It is not possible, based on the surface survey, that further unearthed graves may be discovered during the construction process.

If this does occur, construction in the area where the material is found should cease immediately and the finds should be reported to the relevant heritage authority and the services of a qualified heritage consultant should be obtained to assess the significance of the finds. The consultant should advise on suitable measures to be taken to address the finds that could include:

- a. further excavation and investigation by relevant specialist
- b. no further excavation and continuance of work
- c. avoidance of site and sanitisation of site from work area



# 7. LEVEL OF SIGNIFICANCE

The level of significance of the site and the cultural resources varies between social, historical, spiritual, scientific and aesthetic value.

Social value embraces the qualities for which a place has become a focus of spiritual, political, national, or other cultural sentiments to a majority or minority group. This may be because the site is accessible and well known, rather than particularly well preserved or scientifically important (SAHRA Regulations); for instance community halls and parks. There appears not to be social value attached to the study area. The study area has no social value.

The proposed site also appeared not have historical significance. There was also no physical evidence of religious activities such as well-used areas where people worship; white-washed stones that designate areas of worship, *etc*.

Scientific value refers to research purposes. The study area has no scientific value.

Aesthetic value refers to the unique beauty of the site. No aesthetic value identified on the study area.

#### 8. IMPACT ASSESSMENT

#### 8.1 Impacts

This section of the report is to identify the impact(s) that the construction may have on the heritage resources found.

The proposed development has no impacts from a heritage point of view.

#### 8.2 Mitigation measures

 All staff involved in the construction phase should be advised to report any heritage resources found.



- For any chance finds, all work will cease in the area affected and the Contractor will immediately inform the Project Manager. A registered heritage specialist must be called to site for inspection.
- The Provincial Heritage Resources Authority-Mpumalanga must be informed about the finding. Such heritage resources will have to be recorded and removed by a qualified heritage practitioner/archaeologist or incorporated into the project.
- Permits to be obtained from the Provincial Heritage Resources Authority-Mpumalanga if heritage resources are to be impacted upon.
- Under no circumstances may any heritage material be destroyed or removed from site.
- Should any remains be found on site that is potentially human remains, the South African Police Service should also be contacted.

# 9. RECOMMENDATION AND CONCLUSION

This report must be submitted to the Provincial Heritage Resources Authority-Mpumalanga for comment as per the National Heritage Resources Act (Act No. 25 of 1999).

In conclusion, the construction may proceed from a heritage perspective. However, if any other heritage related resources are found within the proposed area during the construction phase, mitigation measures as recommended above must be taken.



# 10. REFERENCES

Carruthers, V 1990. The Magaliesberg. Southern Book Publishers. Johannesburg.

Huffman, T. N 2007. Handbook to the Iron Age. The archaeology of Pre-Colonial farming societies in southern Africa. University of KwaZulu Natal Press. South Africa.

National Heritage Resources Act 25 0f 1999

Pelser, A. 2009. Travelling through Time: Archaeology and the Vredefort Dome. In: Reimold, U. & Gibson, R. (eds) Meteorite Impact! The Danger from Space and South Africa's Mega-Impact, the Vredefort Structure (Third Edition): 164-178. Johannesburg: Springer.

<u>www.sahra.org.za</u>. Site management plan: Guidelines for the development of plans for the management of heritage sites or places.



APPENDIX A - LIST OF LEGISLATION APPLICABLE TO THE SITE



#### 11. LEGISLATION

#### National Heritage Resources Act 25 of 1999

#### 11.1 Section 3 of NHRA 25 of 1999

According to **Section 3** under **National Estate** of the National Heritage Act 25 of 1999 the heritage resources in South Africa includes the following:

- "(1) For the purposes of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.
- (2) Without limiting the generality of subsection (1), the national estate may include –
- (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 natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and paleontological sites;
- (g) graves and burial grounds, including-
- (i) ancestral graves;
- (ii) royal graves and graves of traditional leaders;
- (iii) graves of victims of conflict;
- (iv) graves of individuals designated by the Minister by notice in the Gazette;
- (v) historical graves and cemeteries; and
- (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- (h) sites of significance relating to the history of slavery in South Africa;
- (i) movable objects, including:
- (i) objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
- (ii) objects to which oral traditions are attached or which are associated with living heritage;
- (iii) ethnographic art and objects;
- (iv) military objects;
- (v) objects of decorative or fine art;
- (vi) objects of scientific or technological interest; and
- (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).



- (3)Without limiting the generality of subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of –
- (a) its importance in the community, or pattern of South Africa's history;
- (b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- (i) sites of significance relating to the history of slavery in South Africa".

#### 11.2 Section 38 of NHRA 25 of 1999

According to **Section 38** under **Heritage resources management** of the National Heritage Act 25 of 1999 the heritage resources in South Africa should be managed in the following:

- "(1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as—
- (a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50 m in length;
- (c) any development or other activity which will change the character of a site—
- (i) exceeding 5 000 m2 in extent; or
- (ii) involving three or more existing erven or subdivisions thereof; or
- (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
- (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
- (d) the re-zoning of a site exceeding 10 000 m2 in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such



- a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.
- (2) The responsible heritage resources authority must, within 14 days of receipt of a notification in terms of subsection (1)—
- (a) if there is reason to believe that heritage resources will be affected by such development, notify the person who intends to undertake the development to submit an impact assessment report. Such report must be compiled at the cost of the person proposing the development, by a person or persons approved by the responsible heritage resources authority with relevant qualifications and experience and professional standing in heritage resources management; or
- (b) notify the person concerned that this section does not apply.
- (3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following must be included:
- (a) The identification and mapping of all heritage resources in the area affected;
- (b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7;
- (c) an assessment of the impact of the development on such heritage resources;
- (d) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
- (e) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
- (f) if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
- (g) plans for mitigation of any adverse effects during and after the completion of the proposed development.
- (4) The report must be considered timeously by the responsible heritage resources authority which must, after consultation with the person proposing the development, decide—
- (a) whether or not the development may proceed;
- (b) any limitations or conditions to be applied to the development;
- (c) what general protections in terms of this Act apply, and what formal protections may be applied, to such heritage resources;
- (d) whether compensatory action is required in respect of any heritage resources damaged or destroyed as a result of the development; and
- (e) whether the appointment of specialists is required as a condition of approval of the proposal.
- (5) A provincial heritage resources authority shall not make any decision under subsection
- (4) with respect to any development which impacts on a heritage resource protected at national level unless it has consulted SAHRA.



- (6) The applicant may appeal against the decision of the provincial heritage resources authority to the MEC, who—
- (a) must consider the views of both parties; and
- (b) may at his or her discretion—
- (i) appoint a committee to undertake an independent review of the impact assessment report and the decision of the responsible heritage authority; and
- (ii) consult SAHRA; and
- (c) must uphold, amend or overturn such decision.
- (7) The provisions of this section do not apply to a development described in subsection
- (1) affecting any heritage resource formally protected by SAHRA unless the authority concerned decides otherwise.
- (8) The provisions of this section do not apply to a development as described in subsection (1) if an evaluation of the impact of such development on heritage resources is required in terms of the Environment Conservation Act, 1989 (Act No. 73 of 1989), or the integrated environmental management guidelines issued by the Department of Environment Affairs and Tourism, or the Minerals Act, 1991 (Act No. 50 of 1991), or any other legislation: Provided that the consenting authority must ensure that the evaluation fulfils the requirements of the relevant heritage resources authority in terms of subsection (3), and any comments and recommendations of the relevant heritage resources authority with regard to such development have been taken into account prior to the granting of the consent.
- (9) The provincial heritage resources authority, with the approval of the MEC, may, by notice in the *Provincial Gazette*, exempt from the requirements of this section any place specified in the notice.
- (10) Any person who has complied with the decision of a provincial heritage resources authority in subsection (4) or of the MEC in terms of subsection (6) or other requirements referred to in subsection (8), must be exempted from compliance with all other protections in terms of this Part, but any existing heritage agreements made in terms of section 42 must continue to apply.

