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PHASE 1 ARCHAEOLOGICAL AND CULTURAL HERITAGE IMPACT
ASSESSMENT SPECIALIST REPORT FOR THE PROPOSED NEW
THEMBALETHU SECONDARY SCHOOL ON THE ERF 6925 IN THE
GREATER KOKSTAD LOCAL MUNICIPALITY OF HARRY GWALA
DISTRICT MUNICIPALITY IN KWAZULU-NATAL PROVINCE.

August, 2021





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#### **DECLARATION**

#### **ABILITY TO CONDUCT THE PROJECT**

Munyadziwa Magoma is a professional archaeologist, having obtained his BA degree in Archaeology and Anthropology at University of South Africa (UNISA), an Honours degree at the University of Venda (UNIVEN), and a Master's degree at the University of Pretoria (UP). He is an accredited Cultural Resource Management (CRM) member of the Association for southern African Professional Archaeologists (ASAPA) and Amafa aKwaZulu-Natali. Munyadziwa is further affiliated to the South African Archaeological Society (SAAS), the Society of Africanist Archaeologists (SAfA), Historical Association of South Africa (HESA); Anthropology Southern Africa (ASnA); International Association for Impact Assessment (IAIAsa); International Council on Monuments and Sites (ICOMOS) and the International Council of Archaeozoology (ICAZ). He has more than fifteen years' experience in heritage management, having worked for different CRM organisations and government heritage authorities. As a CRM specialist, Munyadziwa has completed well over 3000 Archaeological Impact Assessments (AIA) for developmental projects situated in several provinces of the Republic of South Africa. The AIAs projects he has been involved with are diverse, and include the establishment of major substation, upgrade and establishment of roads, establishment and extension of mines. In addition, he has also conducted Heritage Impact Assessments (HIAs) for the alteration to heritage buildings and the relocation of graves. His detailed CV is available on request.

Alvord Nhundu is a professional archaeologist. He completed his Bachelor of Science with Honours degree in archaeology with the University of the Witwatersrand (Wits) and Masters in Archaeology with the University of Pretoria (UP). His research interest lies in old and new world archaeology, palaeoenvironmental and climatology, archaeological theory, Later Stone Age, rock art, huntergatherers, hunter-gatherer interactions, several aspects of Southern African Iron Age and Indigenous archaeologies. Alvord is an accredited Cultural Resource Management (CRM) member of the Association of southern African Professional Archaeologists (ASAPA #338). He is also affiliated to Society of South Africanist Archaeologists (SAfA) and the International Council of Archaeozoology (ICAZ). He has been practising CRM for more than 7 years, and has completed over 100 Archaeological Impact Assessments (AIA) for developmental projects in the Limpopo, Mpumalanga, North-West, Eastern Cape, Free State and KwaZulu Natal provinces of South Africa. The projects include establishment and upgrade of power substations, road construction, and establishment and expansion of mines. He has also conducted the relocation of graves. His detailed CV is available on request.

Nokusho Ngobeni is a qualified senior archaeologist, obtained a BA Honours degree at the University of Pretoria (UP) and a Master's of Science by Course Work and Research in Archaeological Heritage Management at the University of the Witwatersrand (Wits). Nokusho has over four years of experience in Heritage Management, involving Heritage Research and Archival work and has worked as an archeology Field and Lab Technician at Wits. Moreover, she has undertaken Archaeological Heritage Impact Assessments and relocation of graves for a number of projects. She is a member of International Association for Impact Assessment (IAIAsa) and The South African Archaeological Society. See is also affiliated to Society of South Africanist Archaeologists (SAfA)

#### **INDEPENDENCE**

We declare that this report has been prepared independently of any influence as may be specified by all relevant departments, institutions and organisations. We act as the independent specialists in this application, and will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant. We declare that there are no circumstances that may compromise my objectivity in performing such work. I vow to

comply with all relevant Acts, Regulations and applicable Legislation. Furthermore, Vhubvo Consultancy Cc, which is a company we represent in this application, is an independent service provider and apart from fair remuneration for services rendered, it has no financial interest or vested interest in the proposed project.

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## **Executive Summary**

Vhubvo Consultancy Cc has been appointed by Consult Three Consultants on behalf of COEGA Development Corporation to conduct a Phase I Cultural Heritage Impact Assessment (HIA) Study for the proposed new Thembalethu Secondary School on Erf. 6925 in the Greater Kokstad Local Municipality of Harry Gwala District Municipality in KwaZulu-Natal Province. This assessment is a specialist component which will form part of the Environmental Management Programme, aimed at investigating the general heritage state of the area affected by the proposed development as well as determining if there is a need to conduct any further investigation from an archaeological perspective. To reach a defensible recommendation, both desktop study and field survey were conducted. The desktop study was undertaken through South African Heritage Resources Information System (SAHRIS) for previous Cultural Heritage Impact Assessments conducted in the region of the proposed development, and also for research that has been carried out in the wider area over recent years.

The field survey was conducted to validate any assumptions made during the desktop study. The history of Kokstad extends for thousands of years, from the Stone Age to the Historical era. The town itself is named after the Griqua Chief, Adam Kok III. According to records, Adam Kok III arrived in Mount Currie Mountain in 1863 from what is now the Province of the Free State. In September 1869, Adam Kok III founded Kokstad as the capital, and it was granted Municipal status on April 1892. A statue of Adam Kok III has been erected at a municipal building. Like other towns in South Africa, Kokstad was also affected by the gold mining rush of South Africa, and its emergence coincided with the dawn of the railway age in the subcontinent, and the Natal. From 1897 with the construction of Richmond railway line, a railway branch was constructed in Kokstad by 1924.

#### Methodology and Approach

The study method refers to the SAHRA Policy Guidelines for impact assessment, 2012. As part of this impact assessment; the following process were followed:

- Literature Review: To understand the background archaeology of the area, a background study was undertaken and relevant institutions were consulted. These studies entail review of archaeological and heritage impact assessment studies that have been conducted around the proposed area thorough SAHRIS. In addition, E-journal platforms such as J-stor, Google scholars and History Resource Centre were searched. The University of Pretoria's Library collection was also utilised;
- Social facilitation was undertaken from the 12<sup>th</sup> of August 2021. This involved conducting interviews with
  the local people on the possible availability of graves and heritage structures in the study area. Placards
  where also placed on public facilities like shops and libraries, and leaflets were distributed to the nearby
  communities.
- The field survey was conducted on 14th of August 2021 by archaeologists from Vhubvo.



• The final step involved the recording and documentation of relevant archaeological resources, as well as the assessment of resources in terms of the heritage impact assessment criteria and report writing, as well as mapping and constructive recommendations.

The applicable maps, tables and figures, are included as stipulated in the NHRA (no 25 of 1999), the National Environmental Management Act (NEMA) (no 107 of 1998) and the Minerals and Petroleum Resources Development Act [(MPRDA) 28 of 2002].

#### Impact statement

The desktop study has shown that the proposed site has no potential to yield any archaeological site or isolated tools. The survey conducted confirm that there is no evidence of any archaeological materials on the proposed site. Similarly, no information has been received from the resultant social facilitation. The site was found to be disturbed and chances of finding archaeological resources are very low.

The wider area of Kokstad is however known to contain Stone Age, Iron Age and historical sites. The Natal Museum database has a number of archaeological sites located around the town of Kokstad. These includes rock art sites documented by Roodt and Roodt (2013), and Iron Age sites (Huffman, 2007). The town of Kokstad is also strewn with sites of historical significance ranging monuments commemorating war times to historical churches and buildings.

#### **Restrictions and Assumptions**

Although no archaeological resources are expected, archaeological materials may be under the surface and therefore unidentifiable to the surveyor until they are exposed once development resume.

#### Survey findings and Discussions

The proposed area is disturbed by previous secondary activities, and preceding surrounding installation. As such, no land based archaeological or graves are expected. However, adjoining the proposed area, there is remnants of railway line. This site is approximately 100m south of the proposed area for development. The railway line form part of industrial archaeology, and thus protected by the National Heritage Resources Act (Act 25 of 1999) by virtue of age and historical value. There are also houses that are located within the proposed area, however, these are of low significance since they are less than 60 years, and do not possess any social or aesthetic value.

It should be borne in mind that none of these resources can be considered to be of such significance that can prevent the proposed development from proceeding. Therefore, the Archaeological and Cultural Heritage Impact Assessment for the proposed development of new Thembalethu Secondary School did not reveal any archaeological (Stone and Iron Ages) and historical material in the footprint of the study area.

#### **Recommendations and Discussions**

Investigation of past archaeological studies in the region, aerial photography and historical maps, coupled by a site visit revealed that the development is proposed on a land where no archaeological sites, burial grounds or isolated artefacts can be found. It is thus recommended that Amafa exempt the project from any further archaeological assessment studies, since the landscape is severely degraded for any archaeological site/and or artifact to be found. Recommendations are given from a heritage point of view and considering the nature of the proposed project and the cultural significance of the heritage resources in the vicinity of the proposed area. The following are the recommendations based on the above findings:

- A buffer zone of approximately 50m must be maintained between the proposed site and the railway line;
- No dumping of construction material should be allowed within this buffer zone; and
- Labor-intensive workers should be notified about this railway line, and its sensitivity.

The client is further reminded that the archaeological material often happens underground, as such should any archaeological material be unearthed accidentally during the course of construction, SAHRA should be alerted immediately and construction activities be stopped within a radius of at least 10m of such indicator. The area should then be demarcated by a danger tape. Accordingly, a professional archaeologist or an Amafa Officer should be contacted immediately. In the meantime, it is the responsibility of the Environmental Officer and the contractor to protect the site from publicity (i.e., media) until a mutual agreement is reached. It is mandatory to report any incident of human remains encountered to the South African Police Services, SAHRA staff member and professional archaeologist. Any attempt to cover up the suspected archaeological material or to collect any resources is illegal and punishable by law under Section 35(4) and 36(3) of the National Heritage Resources Act, Act 25 of 1999. The developer should induct field workers about archaeology, and steps that should be taken in the case of exposing archaeological materials.

#### Pre-construction education and awareness training

Prior to construction, contractors should be given training on how to identify and protect archaeological remains that may be discovered during the project. The pre-construction training should include some limited site recognition training for the types of archaeological sites that may occur in the construction areas. Below are some of the indicators of archaeological site that may be found during construction:

- ✓ Flaked stone tools, bone tools and loose pieces of flaked stone;
- ✓ Ash and charcoal;
- ✓ Bones and shell fragments;
- ✓ Artefacts (e.g., beads or hearths); and
- ✓ Packed stones which might be uncounted underground, and might indicate a grave or collapse stone walling.



#### Proposed New Thembalethu Secondary School

#### Conclusions

A thorough background study and survey of the proposed development was conducted and findings were recorded in line with SAHRA guidelines. Taking all the above information into account, it is recommended that the developer be allowed to proceed with planning and subsequent establishment of the school on condition that the above recommendations are adhered to.

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## Acronyms and Abbreviations

AIA Archaeological Impact Assessment

Amafa Heritage KwaZulu Natali

HIA Heritage Impact Assessment

LIA Late Iron Age

MIA Middle Iron Age

EIA Early Iron Age

HMP Heritage Management Plan

LSA Late Stone Age

MSA Middle Stone Age

ESA Early Stone Age

NASA National Archives of South Africa

NHRA National Heritage Resources Act

RDP Reconstruction and Development Programme

SAHRA South African Heritage Resources Agency

## Glossary of Terms

The following terms used in this Archaeology are defined in the National Heritage Resources Act [NHRA], Act Nr. 25 of 1999, South African Heritage Resources Agency [SAHRA] Policies as well as the Australia ICOMOS Charter (Burra Charter):

**Archaeological Material:** remains resulting from human activities, which are in a state of disuse and are in, or on, land and which are older than 100 years, including artifacts, human and hominid remains, and artificial features and structures.

**Artefact:** Any movable object that has been used modified or manufactured by humans.

**Conservation:** All the processes of looking after a site/heritage place or landscape including maintenance, preservation, restoration, reconstruction and adaptation.

Cultural Heritage Resources: refers to physical cultural properties such as archaeological sites, palaeolontological sites, historic and prehistorical places, buildings, structures and material remains, cultural sites such as places of rituals, burial sites or graves and their associated materials, geological or natural features of cultural importance or scientific significance. This include intangible resources such religion practices, ritual ceremonies, oral histories, memories indigenous knowledge.

**Cultural landscape:** "the combined works of nature and man" and demonstrate "the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both internal and external".

Cultural Resources Management (CRM): the conservation of cultural heritage resources, management, and sustainable utilization and present for present and for the future generations

**Cultural Significance:** is the aesthetic, historical, scientific and social value for past, present and future generations.



#### Proposed New Thembalethu Secondary School

Chance Finds: means Archaeological artefacts, features, structures or historical cultural remains such as human burials that are found accidentally in context previously not identified during cultural heritage scoping, screening and assessment studies. Such finds are usually found during earth moving activities such as water pipeline trench excavations.

**Compatible use:** means a use, which respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance.

**Conservation** means all the processes of looking after a place so as to retain its cultural significance.

**Expansion:** means the modification, extension, alteration or upgrading of a facility, structure or infrastructure at which an activity takes place in such a manner that the capacity of the facility or the footprint of the activity is increased.

**Grave:** A place of interment (variably referred to as burial), including the contents, headstone or other marker of such a place, and any other structure on or associated with such place.

Heritage impact assessment (HIA): Refers to the process of identifying, predicting and assessing the potential positive and negative cultural, social, economic and biophysical impacts of any proposed project, plan, programme or policy which requires authorisation of permission by law and which may significantly affect the cultural and natural heritage resources. The HIA includes recommendations for appropriate mitigation measures for minimising or avoiding negative impacts, measures enhancing the positive aspects of the proposal and heritage management and monitoring measures.

**Historic Material:** remains resulting from human activities, which are younger than 100 years, but no longer in use, including artifacts, human remains and artificial features and structures.

**Impact:** the positive or negative effects on human well-being and / or on the environment.

*In situ* material: means material culture and surrounding deposits in their original location and context, for instance archaeological remains that have not been disturbed.



Interested and affected parties Individuals: communities or groups, other than the proponent or the authorities, whose interests may be positively or negatively affected by the proposal or activity and/ or who are concerned with a proposal or activity and its consequences.

**Interpretation:** means all the ways of presenting the cultural significance of a place.

Late Iron Age: this period is associated with the development of complex societies and state systems in southern Africa.

**Material culture** means buildings, structure, features, tools and other artefacts that constitute the remains from past societies.

**Mitigate:** The implementation of practical measures to reduce adverse impacts or enhance beneficial impacts of an action.

**Place:** means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.

**Protected area:** means those protected areas contemplated in section 9 of the NEMPAA and the core area of a biosphere reserve and shall include their buffers.

**Public participation process:** A process of involving the public in order to identify issues and concerns, and obtain feedback on options and impacts associated with a proposed project, programme or development. Public Participation Process in terms of NEMA refers to: a process in which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to specific matters.

**Setting:** means the area around a place, which may include the visual catchment.

**Significance:** can be differentiated into impact magnitude and impact significance. Impact magnitude is the measurable change (i.e. intensity, duration and likelihood). Impact significance is the value placed on the change by different affected parties (i.e. level of significance and



#### Proposed New Thembalethu Secondary School

acceptability). It is an anthropocentric concept, which makes use of value judgments and science-based criteria (i.e. biophysical, physical cultural, social and economic).

**Site:** a spatial cluster of artefacts, structures, and organic and environmental remains, as residues of past human activity.



### 1. Introduction

Consult Three Architects requested Vhubvo Archaeo-Heritage Consultant Cc to conduct an Archaeological Impact Assessment (AIA) for the proposed proposed new Thembalethu Secondary School on Erf. 6925 in the Greater Kokstad Local Municipality of Harry Gwala District Municipality in KwaZulu-Natal Province. This assessment is a specialist component which will provide the necessary input into the Basic Assessment Report, and form part of the Environmental Management Programme. The main objective of the assessment is to investigating the general state of heritage within the affected area, with the aim to identify and document archaeological sites, cultural resources, sites associated with oral histories, graves, cultural landscapes, and any structure of historical significance that may be affected by the proposed construction, these will in turn assist the developer in ensuring proper conservation measures in line with the National Heritage Resource Act, 1999 (Act 25 of 1999). The survey was conducted in accordance with the SAHRA Minimum Standards for Archaeology and Palaeontology which clearly specify the required contents of reports of this nature, and is in line.

## 2. Sites location and description

The proposed site is located on Erf. 6925 (See Fig 1 and 2) and falls within the Greater Kokstad Local Municipality of Harry Gwala District Municipality in the Province of KwaZulu-Natal. The site is located on an undulating landscape defined by grass land (See Fig 3). On the western side, there is a stream running on the edges of the site, while on the north-western side, there is a main road that goes to town. The southern side bordering the site is characterised by an old railway line. On the northern side, there are RDP houses, as well as townships of Shayamoya and Lindelani village. Footpaths characterised the proposed area.

#### **Summary of Project Location Details**

Province: KwaZulu-Natal Local: Greater Kokstad

District: Harry Gwala

Establishment of a school Proposed development:

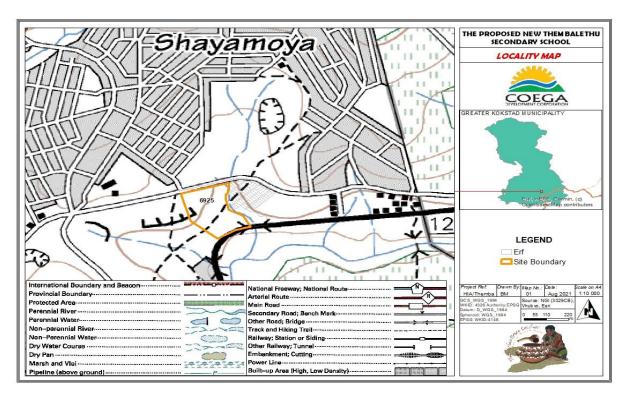


Figure 1: Topographical map indicating the study area.

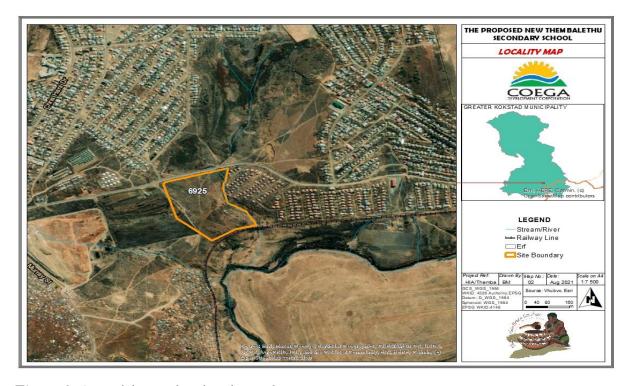


Figure 2: An aerial map showing the study area.





Figure 3: An overview of the area proposed for development.



**Figure 4:** View of the site overlooking the northern section of the site.



Figure 5: View of the site showing some of the footpath that characterised the site.



Figure 6: View of a section of the site showing an encroachment within the proposed area.





Figure 7: As can be seen in the picture, site disturbances owing to previous development is imminent.



Figure 8: View of the Low-Coast housing north east of the site.



Figure 9: An overview of the railway line on the southern section of the proposed area.

## 3. Nature of the proposed project

Education is a basic right, not only in South Africa, but the world over. COEGA Development Corporation proposes to build a secondary school on Erf. 6925 which falls within the Greater Kokstad Local Municipality. The development consists of classrooms, science laboratories, rooms for practical subjects, offices and sports fields. The proposed new secondary school will consist of:

- ↓ 1× administration
- 1×assembly
- 1×SNP Kitchen
- 30× standard classrooms
- 1×physical science classroom
- 1×natural science classroom
- 1×Consumer Needlework
- 1×Media Centre
- 1×Media Centre
- 1×computer room



- ♣ 1×team teaching
- ♣ H.O.D offices, Teacher's workrooms and Counselling Suite
- ♣ Garden and General Storerooms
- ♣ Hard Surface Combi Court
- Netball and Soccer fields

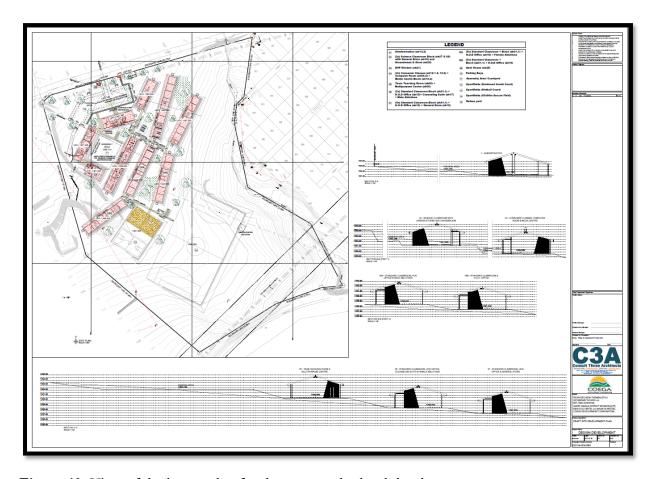


Figure 10: View of the layout plan for the proposed school development.

## 4. Purpose of the cultural heritage study

The purpose of this Archaeological and Cultural Heritage Impact Assessment study was to identify and document other archaeological sites, cultural resources, sites associated with oral histories, graves, cultural landscapes, and any structure of historical significance that may be affected by the proposed road upgrade and construction of culverts. Impact assessments highlight many issues facing sites in terms of their management, conservation, monitoring and maintenance, and the environment in and around the site. Therefore, this study involves the following:

- Identification and recording of heritage resources that maybe affected by the proposed road upgrade and construction of culverts; and
- Providing recommendations on how best to appropriately safeguard identified heritage sites. Mitigation is an important aspect of any development on areas where heritage sites have been identified.

## 5. Methodology and Approach

### Background study introduction

The methodological approach is informed by the 2012 SAHRA Policy Guidelines for impact assessment. As part of this study, the following tasks were conducted: 1) literature review, 2), consultations with the developer and appointed consultants, 3), completion of a field survey and 4), analysis of the acquired data, leading to the production of this report.

### Public Participation Process (PPP)

The study also entails stakeholder participation. Interviews with the local communities were held on the 12<sup>th</sup> of August 2021. The communities were interviewed on their knowledge of the cultural material on site as well as graves. The advertisement was enlarged into A3 size posters that were placed at strategic points in Kokstad area and surrounding area (See Figure 12), mainly at Shops and at property fences where community members could easily see them. A total of 8 site notices were placed. In addition to the site notices and background information document were distributed in Kokstad area and surrounding. All the houses in the nearby area were given a background information document. It must be indicated that in some houses there was no one, and we had to leave the document by the home postal or at the gate.

#### Physical survey

The study was carried out on the 13th of August 2021. Archaeologists from Vhubvo conducted the survey.

#### **Documentation**

The general project area was documented. This documentation included taking photographs using cameras a 10.1 mega-pixel Sony Cybershort Digital Camera. Plotting of finds was done by a Garmin etrex Venture HC.

### Restrictions and Assumptions

Although no archaeological resources are expected, archaeological materials may be under the surface and therefore unidentifiable to the surveyor until they are exposed once development resume.

## 6. Applicable Heritage Legislation

Several legislations provide the legal basis for the protection and preservation of both cultural and natural resources. These include the National Environment Management Act (No. 107 of 1998); Mineral Amendment Act (No 103 of 1993); Tourism Act (No. 72 of 1993); Cultural Institution Act (No. 119 of 1998), and the National Heritage Resources Act (Act 25 of 1999). Section 38 (1) of the National Heritage Resources Act requires that where relevant, an Impact Assessment is undertaken in case where a listed activity is triggered. Such activities include:

- (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; and
- (c) any development or other activity which will change the character of an area of land, or water -
  - (i) exceeding 5 000 m² in extent;
  - (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
  - (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.

Section 3 of the National Heritage Resources Act (25 of 1999) lists a wide range of national resources protected under the act as they are deemed to be national estate. When conducting a Heritage Impact Assessment (HIA) the following heritage resources have to be identified:

- (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 by 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) moveable objects, including -
  - (i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological 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 of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

### Other sections of the Act with a direct relevance to the AIA are the following:

**Section 34(1)** No person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

**Section 35(4)** No person may, without a permit issued by the responsible heritage resources authority:

 destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite

**Section 36 (3)** No person may, without a permit issued by SAHRA or a provincial heritage resources authority:

- destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside formal cemetery administered by a local authority; or
- bring onto or use at a burial ground or grave any excavation equipment, or any equipment which
  assists in detection or recovery of metals.

## 7. Degree of significance

This category requires a broad, but detailed knowledge of the various disciplines that might be involved. Large sites, for example, may not be very important, but a small site, on the other hand, may have great significance, as it is unique for the region. The following table is used to grade heritage resources.



**Table 1:** Grading systems for identified heritage resources in terms of National Heritage Resources Act (Act 25 of 1999).

Level	Significance	Possible action
National (Grade I)	Site of National Value	Nominated to be declared by SAHRA
Provincial (Grade II)	Site of Provincial Value	Nominated to be declared by PHRA
Local Grade (IIIA)	Site of High Value Locally	Retained as heritage
Local Grade (IIIB)	Site of High Value Locally	Mitigated and part retained as heritage
General Protected Area A	Site of High to Medium	Mitigation necessary before destruction
General Protected Area B	Medium Value	Recording before destruction
General Protected Area C	Low Value	No action required before destruction

### Significance rating of sites

(i) High (ii) Medium (iii) Low

This category relates to the actual artefact or site in terms of its actual value as it is found today, and refers more specifically to the condition that the item is in. For example, an archaeological site may be the only one of its kind in the region, thus its regional significance is high, but there is heavy erosion of the greater part of the site, therefore its significance rating would be medium to low. Generally speaking, the following are guidelines for the nature of the mitigation that must take place as Phase 2 of the project.

### High

- This is a 'do not touch' situation, alternative must be sought for the project, examples would be natural and cultural landscapes like the Mapungubwe Cultural Landscape World Heritage Site, or the house in which John Langalibalele resided.
- Certain sites, or features may be exceptionally important, but do not warrant leaving
  entirely alone. In such cases, detailed mapping of the site and all its features is imperative,
  as is the collection of diagnostic artefactual material on the surface of the site. Extensive
  excavations must be done to retrieve as much information as possible before destruction.



Such excavations might cover more than half the site and would be mandatory; it would also be advisable to negotiate with the client to see what mutual agreement in writing could be reached, whereby part of the site is left for future research.

#### Medium

• Sites of medium significance require detailed mapping of all the features and the collection of diagnostic artefactual material from the surface of the site. A series of test trenches and test pits should be excavated to retrieve basic information before destruction.

#### Low

These sites require minimum or no mitigation. Minimum mitigation recommended could
be a collection of all surface materials and/ or detailed site mapping and documentation.
No excavations would be considered to be necessary.

In all the above scenarios, permits will be required from the South African Heritage Resources Agency (SAHRA) or the appropriate PHRA as per the legislation (the National Heritage Resources Act, no. 25 of 1999). Destruction of any heritage site may only take place when the appropriate heritage authority has issued a permit. The following table is used to grade heritage resources.

Table 2: Rating System.

Probability			
Improbable	1		
Probable	2		
Highly Probable	4		
Definite	5		
Duration			
Short term	1		
Medium term	3		
Long term	4		
Permanent	5		
Scale			
Local	1		
Site	2		
Regional	3		

Magnitude/Severity		
Low	2	
Medium	6	
High	8	

#### Significance of the Impact:

Based on the information contained in the points above, the potential impacts are assigned a significance rating (S). This rating is formulated by adding the sum of the numbers assigned to extent (E), duration (D) and magnitude (M) and multiplying this sum by the probability (P) of the impact.

S=(E+D+M)P

### The significance ratings are given below;

(<30) low (i.e., where this impact would not have a direct influence on the decision to develop in the area),

(30-60) medium (i.e., where the impact could influence the decision to develop in the area unless it is effectively mitigated),

(>60) high (i.e., where the impact must have an influence on the decision process to develop in the area).

## 8. Discussion of (Pre-) History of the of South Africa

South Africa possesses a rich archaeological record. It has one of the longest sequences of human development in the world. South African scientists have been actively involved in the search of human origins since 1925 when Raymond Dart identified the *Taung* child as an infant halfway between apes and humans. Dart named the remains Austrolopithecus Africanus, southern apeman, and his work fundamentally changed the focus of human evolution from Europe and Asia to Africa, and it is now widely accepted that humanity originated from Africa, hence reference to Africa as the "cradle of humanity" (Robins *et al.*1998). In many ways Dart's discovery marked the birth of palaeonthropology as a discipline. The archaeology of South Africa which fits well into the southern African periodisation is broadly divided into Stone Age, Iron Age and the Historical Period.

#### Stone Age

The Stone Age is the pre-historic period when humans widely used stone for tool making (Robins et al. 1998). As the early ancestors progressed physically, mentally and socially they developed stone tools. These tools are the earliest evidence for culture in southern Africa (Clark & Kuman 2000). The Stone Age began approximately 2.6 million years ago and ended around 20 000 years ago. It is divided into three phases namely the Early Stone Age, Middle Stone Age and Later Stone Age. It is argued that there are two transitional periods. Noteworthy that the time used for Stone Age is approximate and it differs from one researcher to another (See Robins et al.1998; Korsman & Mayor 1999; Mitchell 2002).

Early Stone Age (ESA)

The Early Stone Age is dominated by two industries; the Oldowan and Acheulian. The Oldowan industry which was the earliest was developed by the earliest members of the genus Homo, such as Homo habilis around 2.6 million years ago. The Oldowan tools which are only found in Africa, and not anywhere else are mainly simple flakes which were struck from cobbles. The assemblage comprises tools such as cobble cores and pebble choppers. They were not task-specific tools, and one tool could be used for many functions (Wurz 2000). The Oldowan industry was completely replaced by the Acheulian around 1.7 million years ago. Homo ergaster was probably responsible for the manufacture of Acheulian tools in South Africa. Acheulian tools were longer with sharper edges which suggest they could be used for a variety of activities ranging from butchering of animals, chopping of wood, digging roots and cracking bones for marrow. The most diagnostic tools of this period are the handaxes and the cleaver. In South Africa, Oldowan tools have been found at Sterkfontein (Brian 1985), Kroomdrai Clark (1993). Wonderwerk Cave (Chazan et al. 2008). Sites that have yielded Acheulian tools in South Africa are Swartkraans, Kroomdrai and Sterkfontein.

Middle Stone Age (MSA)

The Middle Stone Age artefacts started appearing about 250 000 years ago and these replaced the larger handaxes and cleavers. In contrast to the ESA technique of removing flakes from a core, MSA tools were flakes to start with. There were of a predetermined size and shape and were made by preparing a core of suitable material and striking off the flake so that it was flaked according to a shape which the toolmaker desired. MSA people made a range of tools from both coarse and fine-grained rock types, sometimes rocks used for tool making were transported considerable distances, probably in bags or containers, as such tool assemblages from some MSA sites tend to lack some of the preliminary cores and contain predominantly finished products like flakes and

retouched pieces. The stone toolkit of this period is dominated by elongated, parallel-sided blades as well as triangular flakes. Many MSA sites have evidence of control of fire, prior to this, rock shelters and caves would have been dangerous for human occupation due to predators (Deacon & Deacon 1999). Besides the introduction of fire, the widespread use of red ochre, probably as body paint, also shows that MSA behavior had become more human. The recent finds of decorated ochre at Blombos and decorated ostrich egg shells at Diepkloof also in the Cape further cements the point. Other sites that have yielded MSA tools in South Africa are Klassies River Mouth, Blombos and Border Cave (Deacon & Deacon 1999).

Later Stone Age (LSA)

The Later Stone Age ranges from 20 000 to 2000 years ago. It is important to note that the transition from MSA to LSA did not occur simultaneously in southern Africa. It is described by Deacon (1984) as a period when man refined small blade tools conversely abandoning the MSA prepared-core technique. Anatomically speaking, as the brain gets bigger, tools became smaller and more efficient. Thus refined artefacts such as thumbnails, convex —edge scrapers, crescents, and bladelets are associated with this period. Other tools of the period are hammers, adzes, bores, grooved stones, hafted tools, points. The period also saw the introduction of poisoned arrows to enhance the effectiveness of bone points and this led to improved hunting (Walker & Thorp 1997). Faunal evidence suggests that LSA hunter-gatherers trapped and hunted zebras, impala, warthog and bovid of various sizes. They also diversified their protein diet by gathering tortoises, marine resources and land snails (Achatina) in large quantities. In addition to bow-hunting and marine sources collection, human behaviour was recognisably modern in many ways; uniquely traits such as rock art and purposefully burial with ornaments were a common practice (Villa et al. 2012). Rock art in form of paintings and engravings is an important signature of this period. Examples of LSA sites in South Africa are Cottage Cave, Nelson Bay Cave.

#### Iron Age

Iron Age is a period in human history when metal was mainly used to produce tools. The period marks the movement of farming communities into South Africa in the first millennium AD, or 2500 years ago (Mitchell 2002:259). The people were agro-pastoralists that settled in the vicinity of water. In terms of material culture, pottery is a dominant and critical component of an Iron Age assemblage. Iron Age archaeologists use pottery to identify the presence and chronology of different cultural groups on sites. Through the study of stylistic traditions related to vessel shape and decoration, the movement, interaction and lineage of cultural groups can be traced (Huffman

1989). Pottery seriation in conjunction with linguistic data has been used by researchers to trace the origin of these people who brought the Iron Age culture. Researchers have traced the origin of the Bantu people with their agro pastoral to what is now the border of Nigeria and Cameroon. These people migrated eastward and southward breaking into two groups. According to Huffman (2007) there were two streams of Early Iron Age expansion in southern Africa, one referred to as the Urewe-Kwale tradition (or the eastern stream) and another one called the Kalundu tradition (or the western stream). Refer to figure 2 below:

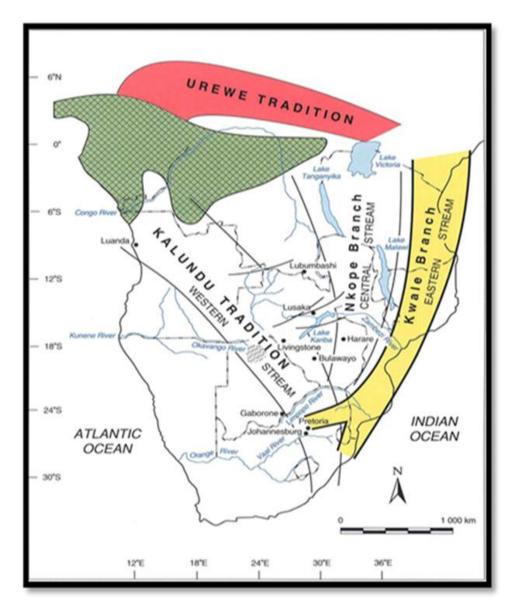


Figure 11: View of the spread of EIA movements, namely Urewe-Kwale and Kalundu traditions in southern Africa (from Huffman 2007:336).

Early Iron Age (EIA)

Early Iron Age dwellings were built-in low-lying areas, such as river valleys and the coastal plain, where forests and savannas facilitated shifting (slash and burn), they also cultivated grains such as cow peas, ground beans, sorghum and millets (Mitchell 2002). Early Iron Age pottery is characterised by large and prominent inverted rims, large neck areas and fine elaborate decorations. Unlike the broad and flat surface grinding stones of Late Iron Age, the Early Iron Age grinding stones are deeper and more lenticular grooves. Well known EIA sites in South Africa include Happy Rest in the Limpopo Province, Lydenburg Heads in Mpumalanga, Broederstroom in North West, and Mzonjani in KwaZulu-Natal Province.

Middle Iron Age (MIA)

The Middle Iron Age stretches from AD900 to 1300 and marks the origins of the Zimbabwe culture. It is marked by a change in emphasis from grain cultivation to cattle herding, however, the importance of cattle cut across all the three ages of the Iron Age period (Huffman 2007). In South Africa a clear shift from the EIA to the MIA is apparent in the Shashe-Limpopo basin where it marks the origins of the Zimbabwe culture where it came with class distinction and sacred leadership (Huffman 2005, 2007). Middle Iron Age sites in the Shashe-Limpopo basin are Schroda, K2 and Mapungubwe.

Late Iron Age (LIA)

The Late Iron Age dates from AD1300 to 1840. Greater focus on economic growth and the increased importance of trade marks the beginning of the LIA. Specialisation in terms of natural resources exploitation and utilisation is a characteristic feature of this period. Iron slags tend to occur only in certain localities compared to earlier times. Also Later Iron Age settlement were no longer located in rivers valleys, but were built on higher ground where homestead which in most instances were made of stone for building purposes would benefit from cooling breezes and good views most probably for strategic purposes. Pottery styles also underwent significant changes; maize was also introduced during this period (Maggs 1980). Well known Late Iron Age sites in South Africa are Badfontein in Mpumalanga, Thulamela in Limpopo (Huffman 2007).

#### Historical Period

The Historical period dates from 1600. It deals with the infiltration, settlement, spread and domineering of European influence in southern Africa. Its segments are; Dutch settlement in the Western Cape, the troubled times of Zululand (*mfeqane*) difagane), Voortrekkers, early missions and



the diamond rush. This period also witnessed or saw the compilation of early maps by missionaries, explorers and military personnel.

Bartolomeo Dias was the first European to sail around the southern point of Africa in 1486, he named it "The Cape of Good Hope", nine years later it was Vasco da Gama, however, these Portuguese seafarers were not seriously interested in southern Africa. Nevertheless, the history of southeast part will change forever on the 6th of April 1652. This is when the Dutch seafarer Jan van Riebeeck arrived in Table Bay with his three ships. His mission was not to establish a fullfledged colony at the Cape but to establish supply station on behalf of the Dutch East India Company (DEIC); however, it committed itself when it granted nine company servants freedom in 1657 to establish private farms in the Rondebosch area below the eastern slopes of Table Mountain. One of the reasons why the Dutch settled at the Cape was to access the herds of cattle kept by the Khoi-Khoi, this was first achieved by friendly trade, however it was not long before disputes over land erupted after Free Burghers began to encroach on traditional communal grazing lands. By the early 1700's the Dutch colonists have prevailed (Bergh 1999). These new white settlers will influence the context and content of South African's culture forever, starting with development of Cape Town into an urban centre, however it took many years for it to equal the size of Mapungubwe Kingdom which was attained five centuries earlier (it is also argued that Mapungubwe was during its peak more developed than other areas in Europe). These newcomers also introduced new style of houses consisting of flat roofs and ornate pediments, slaves were also imported from other parts of Africa, i.e., Madagascar, India and East Asia, these slaves who were used as labourers were skilled carpenters and bricklayers as such their skills played an invaluable role in speeding up the progress and development of the Cape. It is important to note that the intermingling between the slaves, Africans and the European population marked the beginning of the coloured community.

## 9. Discussion of (Pre-) History of the Area

The history of KwaZulu-Natal (KZN) Province dates back to about 2 million years ago, marking the beginning of the Stone Age period. In KZN ESA have produced very little with regards to material culture, and as a result very little is known about the ESA of the region. Olivier Davies, a pioneer archaeologist in the region being the only person to have researched on the ESA period in the province recognised different traditions of the ESA in which the traditions are characterised

by heavy tools made from cores, such as scrapers, picks, handaxes and cleavers (Davies 1974; Mazel 1989). Other than the stone tools, very little has been produced from the ESA sites in the province. The information on the diet of the ESA people in the province is sketchy; however, it can be assumed that their menu consisted of animals and plant food (Mazel 1989). The Middle Stone Age (MSA) is better researched in the province with widely known sites such as Umhlatuzana Rock Shelter (Butzer et al. 1978), Sibudu Cave (Wadley 1996), Border Cave (Cooke et al. 1945), Umbeli Belli Rock Shelter (Mitchell 1998). The MSA was replaced by the Later Stone Age (LSA), Just like anywhere in South Africa, the LSA in the province is characterised by smaller tools but still performed the same tasks as those in the ESA and MSA. There are many LSA sites in the province, these include Mgede Shelter (Mazel 1988), KwaThwaleyakhe Shelter (Mazel 1993), Inkolimahashi Shelter (Mazel 1999). The LSA of the KZN Province is dominated by its amazingly beautiful rock art at sites such as Game Pass, the Giants Castle, to name but a few (Williams 1981; Wilcox 1990; Hoerle& Solomon 2004, Nhundu 2015). There are no Stone Age sites in the study area. The absence of Stone Age sites in the study area does not equate to absence, but rather lack of focused research. The Natal Museum database indicates that there are several archaeological sites that have been recorded in the general area of Kokstad. Roodt & Roodt (2013) report some rock art sites in the wider region of Kokstad.

In KwaZulu-Natal Province, Early Iron Age (EIA) people occupied the region from the Great Lakes region of Congo and Cameroon (Huffman 2007). The EIA of KZN date to around 500 and 900 AD. Basing on ceramic traditions it is divided into Msuluzi (AD 500), Ndondondwane (AD 700-800), and Ntshekane (AD 800-900). When they first entered the region the climate was dry, and it only improved around AD 650 when they expanded into the interior of the region and settled in well-watered areas in the savanna or bushveld environments (van Schalkwyk 2013). They preferred these environments because they were suitable for both crop production and animal husbandry; they grew sorghum and millet, and kept cattle (Maggs 1984).KZN was occupied by the Nguni speaking group of the eastern stream characterised by settlement pattern defined as the Central Cattle Pattern (CCP) (Huffman 1982, 2000). The earliest known type of settlement resembling the CCP is Moor Park which dates from the 14-16th century (Huffman 2007.) 2009). The LIA in KZN dates from AD 1300 to 1840. Although one of the most distinct features of the LIA was massive stone wall structures, stone walls were not common in this part of the country, as the Nguni people used thatch and wood to build their houses (Maggs 1989; Huffman 2007). Artefacts associated with this period beside pots which cut across all divides are knife-

#### Proposed New Thembalethu Secondary School

blades, hoes, adzes, awls, bone tools, glass beads and grinding stones. There are no Iron Age sites recorded in the study area, however, due to the fact that the study area is found in a farming area, the possibility of finding Iron Age sites is there. This is due to the fact that Iron Age Farmers favoured areas with arable soils, sweetveld grazing and wood for domestic and industrial uses.

The Greater Zululand was christened Natal by the Portuguese explorer Vasco da Gama in 1497. The colonial history of KZN starts around 1820 when early English ivory traders established themselves at Port Natal (Durban), at a time when Shaka, king of the Zulu was firmly in charge of the area. It is argued that the kingdom he established remained the most powerful in the region throughout the 19th century (Wright & Hamilton 1989). Shaka's majesty rule came to an end in 1828 when he was assassinated by his half-brothers Dingane and Mhlangana, with Dingane eventually taking over the kingship (Wright & Hamilton 1989). In 1837 Piet Retief led the Dutch descendants, the voortrekkers into Natal (Stapleton 2017). Interestingly the old wagon road which they used in 1838 when they were trooping down the slopes of the Drakensberg mountains into Pietermaritzburg can still be seen today (Oberholser 1972). After a series of battles between the two groups, the Zulus were defeated at the Battle of the Blood River in 1838, and the Boers established a short lived republic called Natalie. In 1845 the Boer Republic of Natalie was annexed by the British. Northern and central parts of the province are strewn with sites of battles between the Zulus, Boers and the British between 1800 and 1900s. In 1879 the British finally conquered the Zulu in the Anglo-Zulu war and acquired the area north of the Tugela River, the lands to the north of the Buffalo River were added in 1902 (Wright & Hamilton 1989).

As for Kokstad, the Griqua under the tutelage of Adam Kok III trooped under what is popularly known as the Griquk Trek from the vicinity of Philippolis in the Free State after they had lost their lands to the Voortrekkers. After crossing the Drakensberg, they settled in the slopes of a mountain which they named after Sir Walter Currie who had supported them to settle in the area. The area which they occupied was referred to as "No-man's land located between then Cape and Natal colonisers (Balpan 1986:480). In September 1869, Adam Kok founded Kokstad as the capital of Griqualand East on the banks of the Mzintlava River. The Griqua's independence was short-lived as East Griqualnd area was annexed in 1874 by the Cape colony on the 5th of April 1892, Kokstad became a municipality.

At the outbreak of the Anglo-Boer war in 1899, break volunteer units were developed in the area and consisted predominantly of Bhaca, Themba and Mfengu who were absorbed the Thembuland and the East Griqualand Field Forces. Most of these volunteer were disbanded in March 1900. Another unit raised during the same war was the Griqua Light Horse. Rose in the Mount Currie Kokstad and Matietele districts. The unit comprised/consisted of 300 men. All non-commissioned officers were Griquas including Thomas Kok, a relative of Adam Kok (<a href="www.angloboerwar.com">www.angloboerwar.com</a>). There are no historical monuments in the study area, but the wider area is strewn with historical cultural material. There is the Adam Kok Monument in the town of Kokstad. It is situated next to the police station. There is also the Kokstad Bandstand ornament. This was donated to the Town Council by the Engineers who were responsible for the Kokstad water scheme. It dates from 1912, and was declared a National Monument in 1983. There is also the Boy Scouts Monument dedicated to those who perished during the World War II. It is located in the foothills of Mount Currie. Another historical monument is the old St. Patricks Catholic church. The East Griqualand Museum contains detailed history of the Griqua. Another outstanding Historical monument is Old Town Hall, a historical building, one of the oldest structures in town. It predates the WWI.

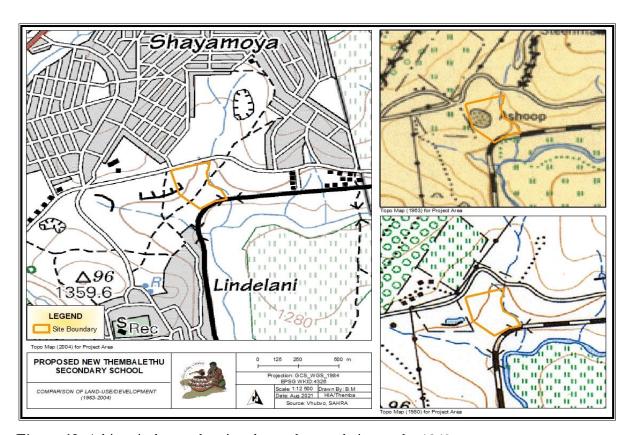


Figure 12: A historical map showing the study area dating to the 1960s.

# 10. Social Consultation

The social consultation process undertaken was guided by Public Participation guidelines. In addition, the following legislation also guided the process:

- I. Constitution of the Republic of South Africa (Act No. 108 of 1996); and
- II. Promotion of Access to Information Act (Act No. 2 of 2000) which recognises that everyone has the constitutional right to access any information held by the state and by another person when that information is required to exercise or protect any rights.

## The Proponent:

- I. Provide adequate information to I&APs
- II. Adopt an open and transparent attitude during the interaction with I&APs
- III. Understand that the consultant acts independently and objectively in order to improve communication between I&APs and the Proponent
- IV. Have empathy and patience with I&APs who do not possess the relevant background knowledge
- V. Avoid raising unrealistic expectations.



Figure 13: View of some of the site notices placed on site.

#### Findings and discussions 11.

historical material in the footprint of the proposed study area.

The proposed area is disturbed by previous secondary activities, and preceding surrounding installation. As such, no land based archaeological or graves are expected. However, adjoining the proposed area, there is remnants of railway line. This site is approximately 100m south of the proposed area for development. The railway line form part of industrial archaeology, and thus protected by the National Heritage Resources Act (Act 25 of 1999) by virtue of age and historical value. There are also houses that are located within the proposed area, however, these are of low significance since they are less than 60 years, and do not possess any social or aesthetic value. It should be borne in mind that none of these resources can be considered to be of such significance that can prevent the proposed development from proceeding. Therefore, the Archaeological and Cultural Heritage Impact Assessment for the proposed development of the new Thembalethu Secondary School did not reveal any archaeological (Stone and Iron Ages) and

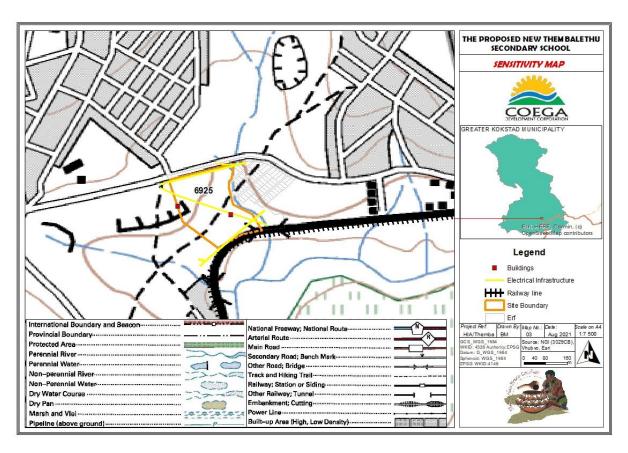


Figure 14: A sensitivity map of the study area.

#### 10.1 Impact assessment

The desktop study has shown that the proposed site has no potential to yield any archaeological site or isolated tools. The survey conducted confirm that there is no evidence of any archaeological materials on the proposed site. Similarly, no information has been received from the resultant social facilitation. The site was found to be disturbed and chances of finding archaeological resources are very low. The wider area of Kokstad is however known to contain Stone Age, Iron Age and historical sites. The Natal Museum database has a number of archaeological sites located around the town of Kokstad. These includes rock art sites documented by Roodt and Roodt (2013), and Iron Age sites (Huffman, 2007). The town of Kokstad is also strewn with sites of historical significance ranging monuments commemorating war times to historical churches and buildings. Below is a description of the proposed development as well as related impact ratings. These ratings are for archaeological and cultural heritage sites known to exist in the proposed area, and include Stone and Iron Age, as well as Historical era materials. Note that these impacts are assessed as per Table 2 above:

**Table 3**: Thembalethu Secondary School Development Rating.

Nature: During the construction phase activities resulting in disturbance of surfaces and/or sub-surfaces may destroy, damage, alter, or remove from its original position archaeological material or objects.

	Without Mitigation	With Mitigation
Extent	(Site) 2	(Site) 2
Duration	(Permanent) 5	(Permanent) 5
Magnitude	(Low) 2	(Low) 2
Probability	(Improbable) 1	(Improbable) 1
Significance	(Low) 8	(Low) 8
Status	Negative	Negative
Reversibility	Not reversible	Not reversible
Irreplaceable loss of resources	No loss of resources	No loss of resources

Mitigation: Although the significance remains low, it is advisable to exercise caution



## 12. Recommendations

Investigation of past archaeological studies in the region, aerial photography and historical maps, coupled by a site visit revealed that the development is proposed on a land where no archaeological sites, burial grounds or isolated artefacts can be found. It is thus recommended that Amafa exempt the project from any further archaeological assessment studies, since the landscape is severely degraded for any archaeological site/and or artifact to be found. Recommendations are given from a heritage point of view and considering the nature of the proposed project and the cultural significance of the heritage resources in the vicinity of the proposed area. The following are the recommendations based on the above findings:

- A buffer zone of approximately 50m must be maintained between the proposed site and the railway line;
- No dumping of construction material should be allowed within this buffer zone; and
- Labor-intensive workers should be notified about this railway line, and its sensitivity.

The client is further reminded that the archaeological material often happens underground, as such should any archaeological material be unearthed accidentally during the course of construction, SAHRA should be alerted immediately and construction activities be stopped within a radius of at least 10m of such indicator. The area should then be demarcated by a danger tape. Accordingly, a professional archaeologist or an Amafa Officer should be contacted immediately. In the meantime, it is the responsibility of the Environmental Officer and the contractor to protect the site from publicity (i.e., media) until a mutual agreement is reached. It is mandatory to report any incident of human remains encountered to the South African Police Services, SAHRA staff member and professional archaeologist. Any attempt to cover up the suspected archaeological material or to collect any resources is illegal and punishable by law under Section 35(4) and 36(3) of the National Heritage Resources Act, Act 25 of 1999. The developer should induct field workers about archaeology, and steps that should be taken in the case of exposing archaeological materials.

# Pre-construction education and awareness training

Prior to construction, contractors should be given training on how to identify and protect archaeological remains that may be discovered during the project. The pre-construction training should include some limited site recognition training for the types of archaeological sites that may occur in the construction areas. Below are some of the indicators of archaeological site that may be found during construction:

✓ Flaked stone tools, bone tools and loose pieces of flaked stone;



- ✓ Ash and charcoal;
- ✓ Bones and shell fragments;
- ✓ Artefacts (e.g., beads or hearths);
- ✓ Packed stones which might be uncounted underground, and might indicate a grave or collapse stone walling.

# 12. Conclusions

A thorough background study and survey of the proposed development was conducted and findings were recorded in line with SAHRA guidelines. As per the recommendations above, there are no major heritage reasons why the proposed development could not be allowed to proceed. Thus, the proposed development can proceed on condition that the recommendations mentioned above are adhered to.

# References

- Beater, J. 2016. Phase 1 Heritage Impact Assessment Kokstad CRU Housing Project, Greater Kokstad Municipality, KwaZulu-Natal.
- Butzer, K.W, Beaumont, P.B & Vogel, J.C. 1978. Lithostratigraphy of Border Cave, KwaZulu-Natal, South Africa: a Middle Stone Age sequence beginning c. 195,000 B.P. Journal of Archaeological Science, 5: 317-341.
- 3. Clarke, R.T. &Kuman, K. 2000.The Sterkfontein Palaeontological and Archaeological sites. Johannesburg: University of the Witwatersrand.
- 4. Cooke, H.B.S., Malan, B.D & Wells, L.H.1945. Fossil man in the Lebombo Mountains, South Africa: The "Border Cave" Ingwavuma District Zululand. *Man*, 45: 6-13.
- 5. Davies, O.1974. Excavations at the walled Early Iron Age site in Moor Park near Escourt, Natal. *Annals of the Natal Museum*, 22 (1): 289-323.
- 6. Deacon, J. 1984. Later Stone Age people and their descendants in southern Africa. In Klein, R.G. (ed). Southern Africa prehistory and palaeoenvironments. Rotterdam: A.A. Balkema.
- 7. Deacon, H.J. & Deacon, J. 1999. Human beginnings in South Africa: uncovering the secretsof the Stone Age. Cape Town: David Philip.
- 8. Hoerle', S. & Solomon, A. 2004.Microclimatic data and rock art conservation at Game Pass Shelter in the Kamberg Nature Reserve, KZN. South African Journal of Science 100: 340-341.
- 9. Huffman, T.N. 1982. Archaeology and the ethnohistory of the African Iron Age. *Annual Review of Anthropology* 11: 133-150.
- 10. Huffman, T.N. 1989. Ceramics, settlements and Late Iron Age migrations. *African Archaeological Review* 7: 155-182.
- 11. Huffman, T.N.2000. Mapungubwe and the origins of Zimbabwe culture. *South African Archaeological Society Goodwin Series* 8: 14-29.
- 12. Huffman, T.N.2007. Handbook to the Iron Age: the archaeology of pre-colonial farming societies in southern Africa. Cape Town: University of KwaZulu-Natal Press.
- 13. Lambert, J.1994. Violence and the state in colonial Natal: conflict between and within chiefdoms. *South African Historical Journal* 31: 149-164.
- 14. Lewis-Williams, J.D.1981. Believing and seeing: symbolic meanings in southern san rock paintings. Cambridge: Cambridge University Press.
- 15. Maggs, T.M.O'C. 1980.Msuluzi confluence: a seventh century Early Iron Age site on the Tugela River. *Annals of the Natal Museum* 24 (1): 111-145.



- 16. Maggs, T.M. O'C.1984.Ndondondwane: a preliminary report on an Early Iron Age site on the lower Tugela River. *Annals of the Natal Museum* 26: 71-94.
- 17. Maggs, T.M.O'C.1989.The Iron Age farming communities. In Duminy, A. & Guest, B(eds.) Natal and Zululand from earlier times to 1910. A New History. Pietermaritzburg: University of Natal Press and Shuter and Shooter (Pvt), Ltd, pp 28-38.
- 18. Mazel, A. D. 1986. Mgede Shelter. A mid- and late Holocene observation in the western Biggarsberg, Thukela Basin, Natal, South Africa. *Annals of the Natal Museum* 27: 357-387.
- 19. Mazel. A.D. 1988. Sikhanyisweni Shelter. report on excavations in the Tukela Basin, Natal, South Africa. Annals of the Natal Museum 29 (2) 379-406.
- 20. Mazel, A.D. 1989. Changing social relations in the Thukela Basin, Natal 7000-2000 BP. South African Archaeological Society Goodwin Series 6: 33-41.
- 21. Middleton, J. 1997. Encyclopaedia of Africa south of the Sahara, volume 4. New York: Charles Scribners' sons.
- 22. Mitchell, P. 1998. The archaeology of the Alfred county cave, KwaZulu-Natal. Southern African Humanities 10 (12) 1-17.
- 23. Mitchell, P. 2002. The Archaeology of Southern Africa. Cambridge University Press: Cambridge.
- 24. National Heritage Resources Act (Act No 25 of 1999).
- 25. Nhundu, A. 2015. The effects of global warming on the rock art in the uKhahlamba-Drakensberg Park World Heritage Site, South Africa. In: JurgenRunge (ed.) Changing Climates, Ecosystems within Arid southern Africa and Adjoining Regions: Palaeoecology of Africa volume 33.pp 191-202
- 26. Oberholster, J.J. 1972. The Historical monuments of South Africa. The Rembrandt Van Rijin Foundation for Culture. Cape Town.
- 27. Philipson, D.W. 1994. African Archaeology. Cambridge: Cambridge University Press.
- 28. Prins, F. 2019. Addendum-Heritage Impact Assessment for the Masunka Ngubo Community Road and Bridge, Tugela Ferry, KZN, Active Heritage. Unpublished report for Terratest.
- 29. Roodt, F.E & Roodt, F. 2013. Phase 1 Heritage Resources Scoping Report proposed Forestry Project NIA, Sibayi Sisonke District Kokstad Municiapality, and KwaZulu-Natal Province.
- 30. SAHRA, 2005. Minimum Standards For The Archaeological And The Palaeontological
- 31. Components Of Impact Assessment Reports, Draft version 1.4.
- 32. Toth, N. & Schick, K. 2007. Handbook of Palaeoanthropology. Berlin: Springer.



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- 33. Van Schalkwyk, T. 2013. Cultural Heritage Resources Impact Assessment for the proposed Swaziland Rail link, southern section, KwaZulu-Natal Region. Unpublished Report.
- 34. Villa, P., Sonano, S., Tsanova, T., Dengano, I., Higham, T. F. G., d'Erico, F., Blackwell, L., Lucejko, J. J., Colombini, M. P & Beaumont, P. B. 2012. *National Academy of Sciences* 109 (33): 13208-13213.
- 35. Wadley, L. & Jacobs, Z. 2004. Sibudu Cave, KwaZulu-Natal: Background to the excavations of Middle Stone Age and Iron Age occupations. *South African Journal of Science* 100: 145-151.
- 36. Willcox, A.R. 1990. *The Drakensberg Bushmen and their art: with a guide to the rockpainting sites.* Natal: Drakensberg publications.

# Appendix I: Site Significance

The following guidelines for determining site *significance* were developed by SAHRA in 2003. It must be kept in mind that the various aspects are not mutually exclusive, and that the evaluation of any site is done with reference to any number of these.

## (a) Historic value

- Is it important in the community, or pattern of history?
- Does it have strong or special association with the life or work of a person, group or organization of importance in history?
- Does it have significance relating to the history of slavery?

#### (b) Aesthetic value

• Is it important in exhibiting particular aesthetic characteristics valued by a community or cultural group?

## (c) Scientific value

- Does it have potential to yield information that will contribute to an understanding of natural or cultural heritage?
- Is it important in demonstrating a high degree of creative or technical achievement at a particular period?

#### (d) Social value

 Does it have strong or special association with a particular community or cultural group for social, cultural or spiritual reasons?

#### (e) Rarity

 Does it possess uncommon, rare or endangered aspects of natural or cultural heritage?

## (f) Representivity

- Is it important in demonstrating the principal characteristics of a particular class of natural or cultural places or objects?
- What is the importance in demonstrating the principal characteristics of a range of landscapes or environments, the attributes of which identify it as being characteristic of its class?
- Is it important in demonstrating the principal characteristics of human activities (including way of life, philosophy, custom, process, land-use, function, design or



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technique) in the environment of the nation, province, region or locality?