

**PROPOSED BABANANGO GAME RESERVE
SITUATED IN NORTH-WESTERN ZULULAND,
KWAZULU-NATAL**

Phase 1 Heritage Impact Assessment

29 August 2019

**FOR: EMCAKWENI COMMUNITY TRUST
Mr. Eric Buthelezi (Chairman)**

AUTHORS: Jean Beater and Roy Muroyi

EXECUTIVE SUMMARY

The Applicant proposes to establish the Babanango Game Reserve (Big Five) situated in north-western Zululand. The project will include:

- The upgrading and refurbishment of various existing lodge/camp infrastructure (camps and lodges), as well as the establishment of two new lodges/camps as a first phase development
- The area proposed for incorporation into the Reserve comprises various land portions owned in title by the Emcakweni Community Trust (ECT) and the Kwangono Community Trust (KCT) respectively, as well as the company African Habitat Conservancy. Certain other land portions proposed for incorporation are still variously owned at this time. The Reserve land incorporating Community Trust land will be leased from the respective land owners, with such land owners sharing in the ownership, benefit and management of the Reserve.
- The total Reserve area will be required to be fenced for game and Big Five purposes.

The scope of work for this Phase 1 HIA was to *inter alia* assess the footprint of the proposed Umfolozi Drift Lodge and Babanango Bush Camp (the aforesaid two new first phase developments), as well as the identification and mapping of heritage resources throughout the proposed Game Reserve.

The approximate size of the Game Reserve is 16 000 HA and the estimated size of the two new developments is approximately 8 HA per development. Both the Game Reserve and the new developments trigger section 41 (1) of the KwaZulu-Natal Amafa and Research Institute Act, 2018 (Act No 5 of 2018) which lists developments or activities that may require an HIA. Section 41 (1) (c) is triggered. This section refers to *“any development or other activity which will change the character of a site - (i) exceeding 5000m² in extent”; (ii) any activity or development that involves three or more existing erven or subdivisions thereof and (iii) any activity or development that involves three or more erven or subdivisions thereof which have been consolidated within the past five years.*

The BGR is situated roughly between the R34 road that connects Melmoth and Vryheid and the R68 road that connects Melmoth and the town of Babanango in northern KwaZulu-Natal. A site inspection was undertaken from 5 – 8 August 2019. The grass layer was very thick making the identification of low-lying heritage resources difficult.

The site and surrounding area for the Umfolozi Drift Lodge were inspected on foot. It is situated on the northern bank of the White Umfolozi River and is located on a steep slope which is very

rocky with a thick layer of grass and indigenous bush. During the inspection, a potential grave site was discovered close to the bank of the river. It is a scarcely visible mound of rocks heavily overgrown by vegetation. **No other heritage resources were found during the site inspection.**

The proposed Babanango tented camp is situated on the southern bank of the White Umfolozi not far from Umfolozi Drift Lodge. The site was extensively walked including the river banks. It had a very thick grass layer with several rocky outcrops. **No heritage resources were found in the proposed area of development during the site inspection.**

Many of the Zulu homesteads found within the development footprint had minimal traces of the original structures. In some sections, the foundations and walls of the huts and the cattle kraals are still visible and at some sites, only the cattle kraals are still standing. Certain patterns were noted on these homesteads across the game reserve. Surrounding the cattle kraals are smaller circles that are visible with standing walls at times and at times with faint foundations showing. The outer of these rings is a fence of timber, bushes or stone walling. Inside the perimeter are the round, dome-shaped grass huts in which the occupants of the homestead live, while the innermost ring is a fenced cattle byre.

The site inspection noted the possible existence of Stone Age sites within the game reserve. An investigation into the koppies in the Zulu Rock section of the reserve found a Stone Age hand axe. The hand axe could have been used by earlier Stone Age societies that previously lived within the game reserve.

A lower grinding stone was also noted within one of the abandoned homesteads and is evidence of a possible late 19th/early 20th century date for the settlement, although the object could have ended up on the site many years after its abandonment.

The field survey noted the existence of two disused mines in the game reserve, a copper mine situated close to the Babango Valley Lodge and a kalk (lime) mine situated in the Matatene section of the BGR. Both mines are in disuse and the remains of associated structures are still visible as well as several slag heaps.

A large number of graves were found in the game reserve indicating previous habitation of the area over a considerable period. Most of the graves appear to be older than 60 years and are protected by section 39 (1) of the KwaZulu-Natal Amafa and Research Institute Act, 2018. Most of the graves found are composed of packed rock or the grave site is outlined with rocks. The

vast majority were without headstones and many of the graves were found close to the remains of homesteads.

Several structures within the BGR were found to be older than 60 years therefore protected by the section 37 (1)(a) of the Amafa and Research Institute Act (2018).

The South African fossil sensitivity map indicates that the BGR largely falls into an area of insignificant/zero fossil sensitivity. An area of this fossil sensitivity does not require any further palaeontological studies.

The site inspection revealed many remains of homesteads throughout the game reserve. These remains are protected by section 37 (1)(a) of the Amafa and Research Institute Act (2018), which states that no structure which is, or which may reasonably be expected to be older than 60 years, may be demolished, altered or added to without prior written approval of the Institute having been obtained on written application to the Institute. Besides the historical significance the homesteads hold, most of the homesteads are reduced to foundation level leaving minimal possibilities of conservation. The homesteads are there therefore assigned a medium heritage significance and should be recorded before destruction.

The above section of the Amafa and Research Institute Act (2018) also applies to some of the 'colonial' buildings found in the game reserve. If any of the buildings identified as being older than 60 years are to be altered, added to or demolished, then a built heritage specialist must be appointed to undertake an assessment of these structures prior to such actions been undertaken.

All human remains have high heritage significance at all levels for their spiritual, social and cultural values. The relocation of graves is not recommended as graves are highly significant to people and there are many traditional, cultural and personal sensitivities and norms concerning the removal of graves. However, if graves are to be removed, then this needs to be done with a high degree of consultation and sensitivity in accordance with section 39 (2) of the above-mentioned Act and relevant regulations.

Due to the size of the BGR, it is doubtful that all heritage resources, including graves, were found during the site inspection. Therefore, if new lodges or camp sites or any other developments are to be undertaken in the BGR, it is recommended that a Phase 1 HIA is undertaken of the specific sites in order to ascertain if any heritage resources will be impacted by the proposed developments.

The proposed Babanango Game Reserve can proceed as long as the recommendations and mitigation measures proposed in this report are implemented.

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APPENDIX 1

List of heritage resources

APPENDIX 2

Maps of heritage resources found in the Babanango Game Reserve

I, **Jean Lois Beater** and **Roy Muroyi**, act as independent specialists for this project and we do not have any vested interest either business, financial, personal or other, in the proposed activity other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014.

AUTHOR DETAILS

Name	Qualification	Professional Registration
Jean Beater (JLB Consulting)	MA (Heritage Studies) MSc (Environmental Management)	Member of Association of South African Professional Archaeologists (No. 349) Member of IAIAAsa (No. 1538)
Roy Muroyi (Tshimba Archaeological Footprints)	Hon (Archaeology Cultural Heritage and Museum Studies) MSc Archaeology (Candidate)	Member of Association of South African Professional Archaeologists (No. 453) Association of Professional Heritage Practitioners (No. C 0115)

1. INTRODUCTION

The Applicant proposes to establish the Babanango Game Reserve (Big Five) situated in north-western Zululand. The project will include:

- The upgrading and refurbishment of various existing lodge/camp infrastructure (camps and lodges), as well as the establishment of two new lodges/camps as a first phase development
- The area proposed for incorporation into the Reserve comprises various land portions owned in title by the Emcakweni Community Trust (ECT) and the Kwangono Community Trust (KCT) respectively, as well as the company African Habitat Conservancy. Certain other land portions proposed for incorporation are still variously owned at this time. The Reserve land incorporating Community Trust land will be leased from the respective land owners, with such land owners sharing in the ownership, benefit and management of the Reserve.
- The total Reserve area will be required to be fenced for game and Big Five purposes.
- Extensive community participation has already been undertaken, although not complete.

The scope of work for this Phase 1 HIA was to *inter alia* assess the footprint of the proposed Umfolozi Drift Lodge and Babanango Bush Camp (the aforesaid are two new first phase developments), as well as the identification and mapping of heritage resources throughout the proposed Game Reserve.

2. LEGISLATIVE BACKGROUND

The approximate size of the Game Reserve is 16 000 HA and the estimated size of the two new developments is 8 HA per development. Both the Game Reserve and the new developments trigger section 41 (1) of the KwaZulu-Natal Amafa and Research Institute Act, 2018 (Act No 5 of 2018) which lists developments or activities that may require an HIA. Section 41 (1) (c) is triggered. This section refers to “*any development or other activity which will change the character of a site - (i) exceeding 5000m² in extent*”; *(ii) any activity or development that involves three or more existing erven or subdivisions thereof and (iii) any activity or development that involves three or more erven or subdivisions thereof which have been consolidated within the past five years.*

The project may also impact on graves, structures, archaeological and palaeontological resources that are protected in terms of sections 37, 38, 39, and 40 of the KwaZulu-Natal Amafa and Research Institute Act, 2018.

In terms of Section 3 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), heritage resources are listed as:

- (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; and
- (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).

In addition, the KwaZulu-Natal Amafa and Research Institute Act, 2018, also refers to the intangible aspects of culture that should be kept in mind including cultural tradition, oral history,

performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships.

The Phase I HIA was undertaken to assess whether any heritage resources will be impacted by the proposed BGR.

3. LOCATION

The BGR is situated roughly between the R34 road that connects Melmoth and Vryheid and the R68 road that connects Melmoth and the town of Babanango in northern KwaZulu-Natal (see **Figure 1** below). The approximate centre point of the Game Reserve is 28°15'30.20" S 31°04'29.05" E.

4. TERMS OF REFERENCE

Undertake a Phase 1 Heritage Impact Assessment in order to determine the possible existence of heritage resources, as listed above, that could be impacted by the proposed new developments and the BGR.

Submit the HIA report to the provincial heritage resources authority, namely the KwaZulu-Natal Amafa and Research Institute (hereafter referred to as the Institute), for their consideration and comment.

5. METHODOLOGY AND CONSTRAINTS

A survey of literature, including other heritage impact assessment (HIA) reports completed for the surrounding area, was undertaken in order to ascertain the history of the area and what type of heritage resources have or may be found in the area of development.

A site inspection was undertaken from 5 – 8 August 2019. The specialists were taken around the BGR by an employee of the Game Reserve. In addition, the specialists spoke to Mr. Musa Mbatha, the BGR Manager regarding heritage resources within the reserve. Mr. Mbatha showed the specialists a number of heritage sites.

The grass layer was very thick making the identification of low-lying heritage resources, such as graves and archaeological material, difficult.



Figure 1: Boundary of Babanango Game Reserve

6. BACKGROUND INFORMATION OF THE AREA

Archaeological evidence shows that Bantu-speaking agriculturists first settled in southern Africa around AD 300. The earliest agricultural sites in KwaZulu-Natal date to between AD 400 and 550. All were situated close to sources of iron ore, and within 15 km of the coast. From 650 onwards, climatic conditions improved, and agriculturists expanded into the valleys of KwaZulu-Natal, where they settled close to rivers in savanna or bushveld environments. Metal production was a key activity since it provided the tools of cultivation and hunting. In general, sites dating between 1050 and 1250 are smaller than most earlier agriculturist settlements. This new pattern of settlement was in some way influenced by a changing climate, for there is evidence of increasing aridity from about AD 900. A new pattern of economic inter-dependence evolved that continued into the colonial period nearly 500 years later.

The survey noted the existence of many Iron Age Zulu stone walled homesteads. The stone walled sites consist of at least two distinct circular stone walled enclosures (livestock/cattle kraal), various sections of stone walling, some other less visible and distinct enclosures, with concentrations of stone cairns of varying sizes and other features. Iron Age studies have also noted the existence of these sites in the wider area. Archaeologists have also excavated some of these Iron Age sites in the interior grasslands of KwaZulu-Natal. These have aided in the interpretations for homestead patterns among the Zulu in the game reserve.

The Babanango or Type B settlement sites consisted of primary stone enclosures arranged in a roughly circular plan and linked by secondary walls to form secondary enclosures. The entrances to the Babanango enclosures were often distinctive with carefully cobbled passages that were invariably placed to lead up the slope of the hill (Mitchell 2002:354).

The eMakhosini Cultural Landscape is a combination of historic sites, landscapes and history bound by oral traditions and cultural significance defining the Zulu culture. eMakhosini (literally “the valley of the chiefs”) lies south-east of the project area. Much of the area is defined by the presence of several stone walled sites associated with the powerful Buthelezi and Khumalo clans. These clans among others were key players in the formation of the Zulu kingdom. The famous King Shaka Zulu was born here around 1785 and it is here that his forbearers, Nkosinkulu Zulu, Phunga, Mageba, Ndaba, Jama and Senzangakhona lie buried. The graves and royal residences of four paramount rulers of the Zulu – Shaka, Dingane, Mpande and Cetshwayo - are located in and around the eMakhosini Valley (G&A Heritage 2011:25).

During the Anglo-Boer, 1899-1902, the wider area saw action when the Boer forces invaded northern Natal and Zululand in 1901. Gelykwater, near Babanango was used by Louis Botha as a base for his attack on the British forces based at Mount Itala and Fort Prospect on 26 September 1901. His attack was eventually repelled and the old farm house was used as a temporary hospital. The graves of several Boers who died in the attacks were buried in the farm cemetery (Carter 1971:6-7).

The field survey noted the existence of two disused mines in the game reserve, a copper mine and a kalk (lime) mine. According to oral history, the copper mine belonged to Paul Pollitzer, a geologist who committed suicide in 1910 after failing to get enough returns from the copper mine to pay bank loans he had taken to establish the copper mine. Using the date of the death of Pollitzer, the copper mine is dated to +/-110 years old. There is a possibility however that the copper mine might be older than this. Mining history of South Africa started much earlier. Generally, metallurgy was brought to southern Africa by early Iron Age farmers who, about 2000 years ago, made the journey across the Limpopo River and moved down along the eastern coast into southern Africa. Along with domesticated animals and plants, these farmers brought knowledge of metalworking. Initially iron, lime and copper were mined, smelted and traded in southern Africa on a small scale. But by the beginning of the 18th century metal goods from iron hoes to copper bangles were widely consumed across southern Africa and fed into a global trading system that linked the Indian Ocean rim, from the Mozambican coast to the Middle East, India and as far as China.

In 1498 on his first voyage to India, Vasco da Gama landed at the mouth of a 'small river', possibly the Limpopo, on the east coast of Southern Africa. The copper armlets and other ornaments worn by the local people were so plentiful that he called it the Rio de Cabre - the River of Copper. Two centuries later, Simon van der Stel, the Governor at the Cape, led an expedition northward into Namaqualand. His instructions were to find the source of the ore samples and metal artefacts that had been brought to the colony by local people. In the 1840s and 1850s, this part of Namaqualand and the north-western Cape Province became the scene of South Africa's first mining rush, which was for copper, and not for diamonds or gold as is commonly believed. Although many ventures failed, the mining of copper ores and the production of metal became firmly established at O'kiep in Namaqualand where operations continue to the present day. It is now also evident that most of the other major copper deposits, as well as the tin and iron deposits of South Africa, had been found and worked by local people long before the arrival of Europeans (Beale 1985:75). This may have been the case with the copper mine in the BGR.

Lime mines were used to extract lime that was used for plastering huts and other buildings. The evidence indicates that these mines were excavated by Iron Age Black people, who moved into South Africa from about A.D. 100 onwards. Of the well-known lime mines the Northern Lime Company was founded in 1907 to exploit a high-grade limestone deposit on the farm Uitloop in the Waterberg district of the then Northern Transvaal. In 1917 the company merged with the Nolan Lime Works at Taungs. The Taungs deposit consisted of a high-grade secondary limestone formation along the escarpment of the Kaap plateau. The deposit became known to the world following the discovery there of the famous Taungs Skull in 1924. The Taungs operation was gradually expanded to satisfy the growing demand, as the Uitloop operation had been closed down in 1925. A company called White Limes Limited was operating crude kilns in the Pietersburg (Pololwane) district burning limestone quarried in the caves at Makapansgat. The third of the major lime producers, Marble, Lime and Associated Industries, operated at Marble Hall in the then North-Eastern Transvaal which was first worked in 1922 to produce monumental marble (Douglas 1969:18). No information could be found regarding the lime mine in the BGR.

7. RESULT OF SITE INSPECTION

This section will deal with the two new developments (the Umfolozi Drift Lodge and Babanango Tented Camp) proposed for the BGR and then the heritage resources found throughout the game reserve. A list of all the heritage resources found during the site inspection can be found in **Appendix 1** which is appended to this report. Maps of the BGR showing the heritage sites found during the site inspection are included in **Appendix 2** which is attached to this report.

7.1 Umfolozi Drift Lodge

The site and surrounding area were inspected on foot. It is situated on the northern bank of the White Umfolozi River and goes as far back/northwards as the abandoned Leopard Rock resort. The proposed lodge is located on a steep slope which is very rocky with a thick layer of grass and indigenous bush.



Figure 2: Umfolozi Drift Lodge outlined in red

The buildings (rooms, kitchen, etc.) that comprised Leopard Rock resort still remain but the roofs, windows, doors, etc., of these structures have been removed (see **Figure 3** below) and the inside of buildings have been gutted.



Figure 3: Remains of structure at Leopard Rock

Mr Musa Mbatha, who worked at Leopard Rock, told the specialists that people who drowned in the White Umfolozi River were buried in the erosion gullies below Leopard Rock. An

inspection of some gullies revealed no burials and this will need to be confirmed if the gullies are to be impacted by the proposed Lodge development.

During the inspection, a potential grave site was discovered close to the bank of the river. It is a scarcely visible pile of rocks heavily overgrown by vegetation located at 28°13'00.6" S 31°04'29.5" E. If it is impacted by the proposed Lodge development, then either it must be kept *in situ* and fenced with a 2 m buffer around it or application will need to be made to the Institute for its relocation. **No other heritage resources were found during the site inspection.**



Figure 4: Potential grave



Figure 5: Development area of proposed Lodge



Figure 6: Footprint of Lodge looking towards river

7.2 Babanango Tented Camp

The tented camp is situated on the southern bank of the White Umfolozi River about 1.5 km south-east of the site of the proposed Umfolozi Drift Lodge. The site was extensively walked including the river banks. It had a very thick grass layer with several rocky outcrops. **No heritage resources were found in the proposed area of development during the site inspection.**



Figure 7: Babanango tented camp outlined in red



Figure 8: Area of tented camp looking towards river



Figure 9: Rocky outcrop that falls within tented camp area

7.3 Archaeology

Many of the Zulu homesteads found within the development footprint had minimal traces of the original structures. In some sections, the foundations of the huts and the cattle kraals are still visible whereas at other sites, only the cattle kraals are still standing and the original homestead is no longer visible (see **Figure 9**).



Figure 10: Overview of cattle kraals within development footprint

Iron Age farming community studies suggests that the type of cattle kraals found represent the 'Central Cattle Pattern' (CCP) where cattle were kept in the middle of the homestead, representing the wealthy of the family as well as their importance in the community. The field survey also noted the close proximity these sites to water sources. Iron Age sites of this nature were sited near water and good soils that could be cultivated with an iron hoe.

Certain patterns were noted on these homesteads across the game reserve. Surrounding the cattle kraals are smaller circles that are visible with standing walls at times and at times with faint foundations showing. In ethnographic literature, there is consensus on the form of the typical Zulu homestead, or *umizi* (plural *imizi*) that it is founded on three concentric circles. The outer of these rings is a fence of timber, bushes or stone walling. Inside the perimeter are the round, dome-shaped grass huts in which the occupants of the homestead live, while the innermost ring is a fenced cattle byre.



Figure 11: Remains of round houses around cattle kraals

In the Zulu homestead, the main entrance is directly opposite the principal hut (the *indlunkulu*) and aligned with the entrance to the cattle byre. The layout is seen as an expression of the dominance of the polygynous family unit, with the headman, his wives and children forming the core of the settlement, which may also accommodate non-relatives in a client relationship. The positioning of the hut reflects the status of the wives and their children.

Behind some dwellings, the existence of midden /ash dumps were noted. The belief was that the ash would guard the homestead against evil spirits and witch craft.



Figure 12: Ash midden behind homestead

The site inspection noted the possible existence of Stone Age sites within the game reserve. An investigation into a koppie near Zulu Rock found a Stone Age hand axe. The hand axe could have been used by early Stone Age societies that lived in the game reserve.



Figure 13: Stone Age hand-ax

A small piece of china potsherd was also found on site near the remains of structures occupied by the owner of the copper mine near Babanango Valley Lodge. In Africa, goods that had an intrinsic value, acquired through long distance trade were considered to be prestigious. These goods varied from gemstones, precious minerals, and exotic glass imports to finely crafted metal jewelry (Moffet and Chirikure 2016; 338). Prestigious goods were used by the chiefs as source of power and wealthy. The china could also have been used by the Pollitzer family whilst occupying the structures when the copper mine was in operation.



Figure 14: Small piece of china ware found on site

Two pieces of pottery found by visitors to the game reserve were shown to the specialists. The pottery pieces, according to oral evidence, were collected from a koppie in the game reserve. The pottery pieces were not found in context of any other objects and are broken so that no clear shapes or designs could be deduced from them apart from a small indentation on one piece. It is clear though that the pottery was made by hand. The recovered pieces of pottery could be remains of Zulu Iron Age communities that lived in the game reserve. Taking into consideration the oral evidence theory that the pottery pieces were found on top of the koppie, it is possible that the pottery could have been part of burial goods of a king, as Zulu Kings were buried on top of kopjes.



Figure 15: Pieces of pottery

A lower grinding stone (see **Figure 16** below) was also noted within one of the abandoned homesteads. The grinder is evidence of agriculture and the growing and usage of crops such as maize, millet or sorghum. No upper grinding stones were identified on the site. This is evidence of a possible late 19th/early 20th century date for the settlement, although the object could have ended up on the site many years after its abandonment.



Figure 16: Lower grinding stone

7.4 Mining heritage

The field survey noted the existence of two disused mines in the game reserve, a copper mine situated close to the Babango Valley Lodge and a kalk (lime) mine situated in the Matatene section of the BGR.

The copper mine is currently disused and is made up of two tunnels and an open pit mine as well as many stonewalled structures associated with the mining operation as well as many slag heaps. It is unclear whether the copper mine had been mined prior to Paul Pollitzer. There are few copper mines in KwaZulu-Natal and it is recommended that the mine, associated buildings and slag heaps are left in tact as evidence of early copper mining in the province.

A headstone recording the death Paul Pollitzer is located in the then kitchen area of the copper mine. According to oral information, the location of his grave is unknown. During the inspection, what appears to be potentially a grave was found near the kitchen area.



Figure 17: Entrance to the two tunnels used to mine copper



Figure 18: Remains of structures associated with mining activities

The open cast kalk or lime mine is also disused and there is no known oral or written evidence indicating when the mine was established. The remains of several structures were noted close to the mine which appear to have formed part of the operations. As with the copper mine, it is recommended that this mine and associated structures are left *in situ* as evidence of lime mining in the province.



Figure 19: Open cast lime mine

7.5 Graves and built heritage sites

A large number of graves were found in the game reserve indicating previous habitation of the area over a considerable period. Most of the graves appear to be older than 60 years and are protected by section 39 (1) of the KwaZulu-Natal Amafa and Research Institute Act, which refers to the general protection of informal and private burial grounds. Most of the graves found are composed of packed rock or the grave site is outlined with rocks. The vast majority were without headstones and many of the graves were found close to the remains of homesteads.



Figure 20: Individual grave



Figure 21: Burial ground

A few recent graves (< 60 years) were found in the game reserve. These graves are protected by the Human Tissue Act, 1983 (Act 65 of 1983). It should be noted that all burial grounds and graves are protected by law irrespective of their age.

During the inspection, several structures were found to be older than 60 years therefore protected by the section 37 (1)(a) of the Amafa and Research Institute Act (2018).

The remains of two dwellings associated with Paul Pollitzer who owned the copper mine were inspected. The association of the structures with Pollitzer was through oral history. One structure is made from packed rock / stone walling whilst the other is made from mud bricks ('daga') with interconnected circular rooms. The remains of both structures appear to be older than 60 years.



Figure 22: Dwelling made from packed rock



Figure 23: 'Adobe' style dwelling

A farmhouse with several associated buildings located fairly close to the Babanango Valley Lodge was inspected. The main house, garage and some of the outbuildings are older than 60 years. The age of several associated structures including a silo could not be determined. A potential grave was found within the farmhouse complex. Several structures behind the main house and garage had been demolished and a cattle dip was found filled with building rubble.



Figure 24: Main house and garage



Figure 25: Silo and remains of cattle dip

The remains of structures were found on the banks of the White Umfolozi River. According to oral testimony they are the remains of a resort. There is stone walling with iron poles and a more recent structure located further back from the river bank. The age of these remains could not be determined.



Figure 26: Remains of structures on river bank

The South African fossil sensitivity map indicates that the BGR falls largely into an area of insignificant/zero fossil sensitivity as indicated by the grey colour in **Figure 27** below. An area of this fossil sensitivity does not require any further palaeontological studies. However, a protocol for chance fossil finds is included in **Chapter 9** of this report.

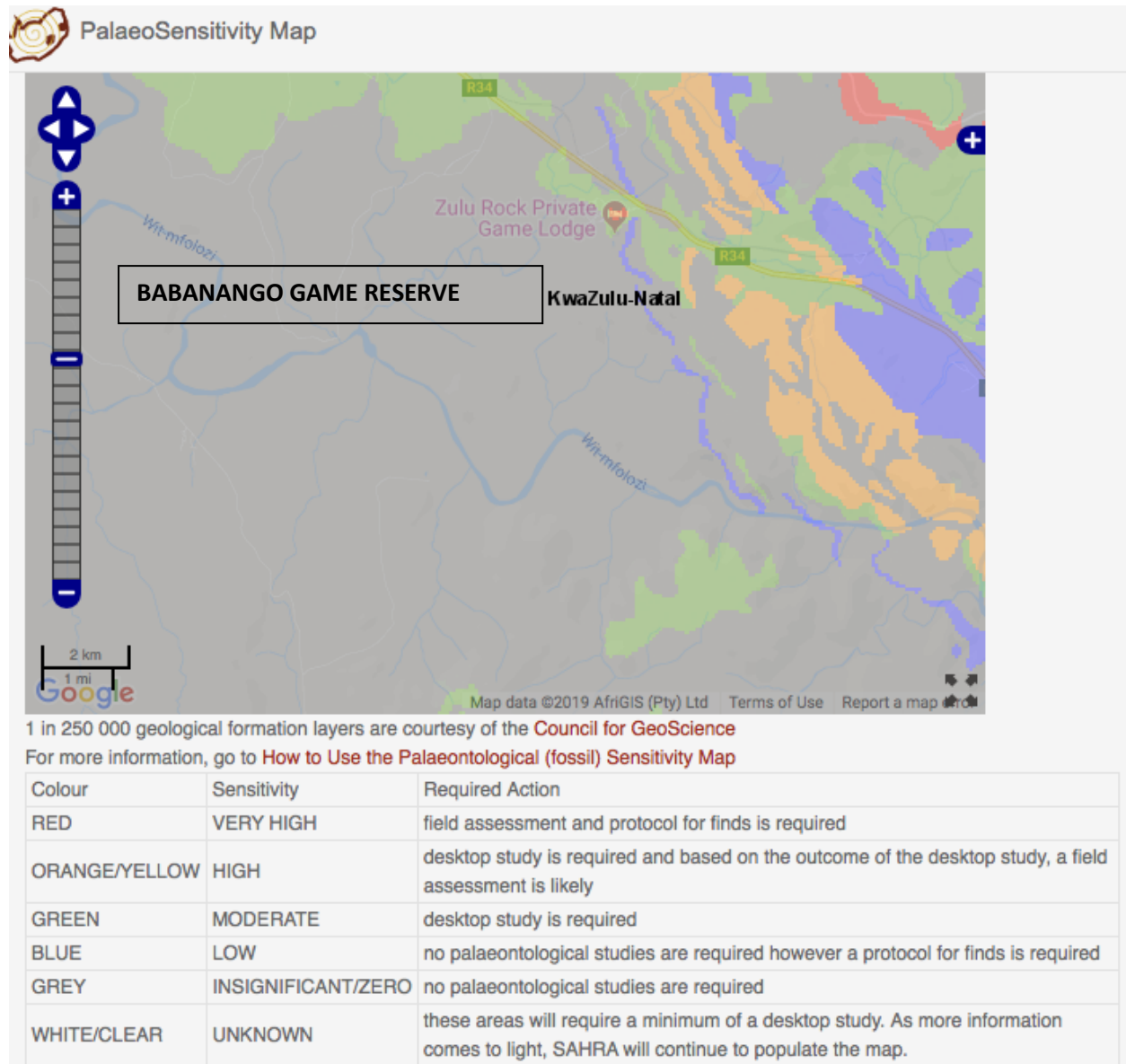


Figure 27: Fossil sensitivity of project area

The rating of the heritage resources found in the game reserve during the site inspection is provided in **Table 1** below. This is in accordance with the South African Heritage Resources Authority’s (SAHRA) field rating of 2005.

Table 1: Field rating of heritage sites found

Name of the resource	Coordinates	Description/Condition	Significance	Field Rating & Actions
Zulu homesteads	Various homestead (see Appendix 1 for coordinates)	Iron Age Zulu stone walled homesteads. The stone walled sites consist of at least two circular stone walled enclosures (livestock/cattle kraal), various sections of stone walling, some homesteads are less visible with less distinct enclosures, concentrations of stone cairns of varying sizes and other features.	Medium	Generally Protected B (GP.B) The sites need to be recorded before destruction
Grinding Stone	28° 13' 00.8" S 31° 04' 52.8" E	A lower grinding stone was within one of the abandoned homesteads. The grinding stone is evidence of the growing and use of crops such as maize, millet or sorghum.	Medium	Generally Protected B (GP.B) The artefact needs to be recorded before destruction
Stone Age hand axe	Approximate: 28° 13' 16.6" S 31° 05' 54.3" E	Stone Age hand axe found in isolation in a koppie in the vicinity of Lulu Farm	Medium	Generally Protected B (GP.B) The artefact needs to be recorded before destruction
China potsherd	Approximate 28° 16' 51.1" S 31° 01' 16.4" E	Piece of ceramic usually owned by the royal family as a symbol of status.	Medium	Generally Protected B (GP.B) The artefact needs to be recorded before destruction
Copper mine and kalk mine	Approximate centre copper mine: 28° 17' 11.2" S 31° 00' 49.3" E	Two disused mines in the game reserve	High	Copper mine: Local Grade IIIA Site must be retained as a heritage site

	Lime mine: 28°13'52.7" S 31°10'03.9" E			Lime mine: Local Grade IIIB The site should be mitigated & part retained as a heritage site
Graves	Many graves in BGR (see Appendix 1 for coordinates)	Graves are protected by heritage and other legislation	High	Local Grade IIIA Sites must be retained as heritage sites
Structures	Several structures in BGR (see Appendix 1 for coordinates)	Several protected structures, i.e. >60 years	Medium	Generally Protected B (GP.B) The structures need to be recorded before destruction

8. DISCUSSION, RECOMMENDATIONS AND CONCLUSION

The site inspection revealed many graves and remains of homesteads throughout the proposed game reserve. The remains of stonewalling are protected by section 37 (1)(a) of the Amafa and Research Institute Act (2018), which states that no structure which is, or which may reasonably be expected to be older than 60 years, may be demolished, altered or added to without prior written approval of the Institute having been obtained on written application to the Institute. The remains of homesteads have a medium heritage significance. Besides the historical significance the homesteads hold, most of the homesteads have been reduced to foundation level leaving minimal possibilities of conservation. The homesteads are there therefore assigned a medium heritage significance and should be recorded before destruction. It should be noted however, that the possibility of graves being found within old kraals would make such sites significant from a heritage perspective.

The above section of the Amafa and Research Institute Act (2018) also applies to some of the 'colonial' buildings found in the game reserve. The specialists who undertook the site survey are not built heritage specialists hence if any of the buildings identified as being older than 60 years are to be altered, added to or demolished, then a built heritage specialist must be appointed to undertake an assessment of these structures prior to such actions been undertaken.

All human remains have high heritage significance at all levels for their spiritual, social and cultural values. Graves and burial sites are protected by section 39 (1) of the KwaZulu-Natal Amafa and Research Institute Act, which refers to the general protection of informal and private burial grounds. In terms of sub-section (1) no grave or burial ground older than 60 years, or deemed to be of heritage significance by a heritage authority –

(a) not otherwise protected by this Act; and

(b) not located in a formal cemetery managed or administered by a local authority, may be damaged, altered, exhumed, inundated, removed from its original position, or otherwise disturbed without the prior written approval of the Institute having been obtained on written application to the Institute and in terms of the regulations to this Act.

The relocation of graves is not recommended as graves are highly significant to people and there are many traditional, cultural and personal sensitivities and norms concerning the removal of graves. However, if graves are to be removed, then this needs to be done with a high degree of consultation and sensitivity. It is stated in section 39 (2) of the above-mentioned Act, that the Institute may only issue written approval once it is satisfied that-

(a) the applicant has provided evidence of efforts to consult with communities or descendants who may have an interest in the grave/s, using the guidelines and criteria for consultation set out in regulations; and

(b) the applicant and relevant communities or descendants have reached agreement regarding the grave/s.

Some of the graves and remains of stonewalling are found in close proximity to roads within the game reserve. If these roads are to be upgraded then it is recommended that the graves and stonewalling are fenced and a 2 m buffer must be placed between the roads and such sites.

If, during the construction of new developments or roads, graves, archaeological material or any other heritage resources are found then work within 5 m of the find must stop immediately and the contractor and project manager informed as well as the Institute. A heritage specialist will need to be called to site to ascertain the significance of the find/s. If the heritage site/s found cannot be avoided by the work, then application must then be made to the Institute for the rescue and relocation of such sites or destruction thereof.

It is understood by the BGR and recommended that the BGR allow relatives of those buried in the game reserve access to the graves in order for the families to undertake any ceremonies, etc., as required.

As mentioned in section 7.4 of this report, it is recommended that the remains of the copper mine and lime mine found on the BGR, their associated buildings and slag heaps are left intact as evidence of early mining in the province.

Due to the size of the BGR, it is doubtful that all heritage resources were found during the site inspection. Therefore, if new lodges or camp sites or any other developments are to be undertaken in the BGR, it is recommended that a Phase 1 HIA is undertaken of the specific sites in order to ascertain if any heritage resources will be impacted by the proposed developments.

The proposed Babanango Game Reserve can proceed as long as the recommendations and mitigation measures proposed in this report are implemented.

9. ADDITIONAL MITIGATION MEASURES

- For any chance heritage finds, all work must cease in the area affected and the Contractor must immediately inform the Project Manager. A registered heritage specialist must be called to site to inspect the finding/s. The provincial heritage resource agency, the KwaZulu-Natal Amafa and Research Institute (the Institute), must be informed about the finding/s.
- The heritage specialist will assess the significance of the resource and provide guidance on the way forward.
- Permits must be obtained from the Institute if heritage resources are to be removed, destroyed or altered.
- Under no circumstances may any heritage material be destroyed or removed from site unless under direction of a heritage specialist.
- Should any recent remains be found on site that could potentially be human remains, the South African Police Service (SAPS) as well as the Institute must be contacted. No SAPS official may remove remains until the correct permit/s have been obtained.
- Although most of the BGR falls into an area of insignificant fossil sensitivity, the following should be adhered to in terms of chance fossil finds:
 - When excavation takes place for the construction of new developments, any rocks disturbed during this process should be inspected by the environmental officer or designated person. Any fossiliferous material (trace fossils, plants, insects, bone, and coal) should be put aside in a suitably protected place.

- Photographs of possible fossils should be sent to a palaeontologist for preliminary assessment.
- If there are concerns regarding any fossil finds, then the palaeontologist must visit the site to inspect the selected material and check dumps where necessary.
- Fossil plants or vertebrates that are deemed to be of good quality or scientific interest by the palaeontologist must be removed, catalogued and housed in a suitable institution where they can be made available for further study. Before the fossils are removed from the site a permit must be obtained from the Institute. Annual reports must be submitted to the Institute as required by the relevant permits.

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APPENDIX 1

LIST OF HERITAGE RESOURCES

No.	COORDINATES	HERITAGE RESOURCE & SIGNIFICANCE	MITIGATION MEASURES
ZULU ROCK			
1	28°11'16.0" S 31°05'30.0" E 28°11'16.5" S 31°05'31.5" E	Remains of stonewalling that encompass at least 2 homesteads; low heritage significance.	Remains are situated close to road – care must be taken not to impact stonewalling by passing vehicles; no obvious graves were found but possibility of graves being present should not be discounted
2	28°11'18.7" S 31°05'32.1" E	Remains of stone-walling; could be associated with homesteads in No.1; low heritage significance	Remains are situated close to road – care must be taken not to impact stonewalling by passing vehicles
3	28°11'23.3" S 31°05'30.7" E	Remains of homestead; low heritage significance	No obvious graves associated with the site were found but the possibility of graves being present should not be discounted if development is to take place or roads upgraded
4	28°11'24.1" S 31°05'30.3" E	Remains of large homestead referred to as the Mbatha homestead; low heritage significance	None
5	28°11'25.9" S 31°05'31.6" E	Remains of large homestead situated about 40 m from homestead 4; low heritage significance	Remains are situated close to road – care must be taken not to impact stonewalling by passing vehicles
6	28°11'22.1" S 31°05'29.4" E	5 graves possibly associated with homesteads 4 & 5; high heritage significance	Protected by heritage legislation; not to be impacted in any way
7	28°11'21.9" S 31°05'30.0" E	Rubbish pit with burnt and rusted cans; negligible heritage significance	None
8	28°11'03.2" S 31°05'35.8" E 28°11'03.2" S 31°05'36.6" E	Remains of 2 homesteads; possible grave amongst homestead; if it is a grave, then it is of high heritage significance	Site must not be impacted due to presence of possible grave
9	28°11'07.5" S 31°05'59.9" E 28°11'10.9" S 31°05'57.6" E	Large homestead complex consisting of several dwellings and a largely intact stonewall cattle kraal; medium heritage significance	No obvious graves were found but the possibility of graves being present should not be discounted if development is to take place or roads upgraded
10	28°11'11.9" S 31°05'57.6" E	Approximately 30m east of above complex, several stone structures were found overlooking the valley; it is unknown what the structures were used for possibly animal enclosures; low heritage significance	None

No.	COORDINATES	HERITAGE RESOURCE & SIGNIFICANCE	MITIGATION MEASURES
11	28°11'33.0" S 31°04'30.6" E centre of complex	Remains of very large complex (100m x100m) with at least 6 other structures situated around central area; several graves located throughout site; high heritage significance	Remains are situated close to road – care must be taken not to impact site by passing vehicles
11A	28°11'32.1" S 31°04'30.4" E	Grave associated with above site; high heritage significance	Grave to be left untouched
11B	28°11'31.9" S 31°04'30.1" E	Grave in cattle kraal; high heritage significance	Grave to be left untouched
11C	28°11'32.1" S 31°04'30.1" E	Grave; high heritage significance	Grave to be left untouched
11D	28°11'32.5" S 31°04'30.2" E	Grave; high heritage significance	Grave to be left untouched
11E	28°11'32.4" S 31°04'29.7" E	Grave; high heritage significance	Grave to be left untouched
11F	28°11'32.9" S 31°04'31.6" E	Potential grave; high heritage significance if confirmed that it is a grave	Grave to be left untouched
12	<p>Area between 28°11'45.2" S 31°04'18.7" E and 28°11'48.5" S 31°04'13.1" E</p> <p>Graves are at: 28°11'46.3" S 31°04'16.0" E</p> <p>28°11'47.6" S 31°04'16.1" E</p> <p>28°11'47.2" S 31°04'17.1" E</p> <p>28°11'46.9" S 31°04'18.8" E</p> <p>28°11'47.5" S 31°04'19.2" E</p> <p>28°11'46.3" S 31°04'18.8" E</p> <p>28°11'46.1" S 31°04'18.7" E</p> <p>28°11'46.0" S 31°04'18.3" E</p>	Remains of stone walling and many graves (± 12 graves) scattered around a large area between game reserve road and BGR boundary; high heritage significance	Graves and remains of stonewalling to be left untouched; if road is to be upgraded then graves closest to road must be fenced with at least a 2 m buffer between graves and road

No.	COORDINATES	HERITAGE RESOURCE & SIGNIFICANCE	MITIGATION MEASURES
	<p>28°11'46.3" S 31°04'16.0" E</p> <p>28°11'45.8" S 31°04'18.6" E</p> <p>28°11'49.7" S 31°04'15.6" E</p> <p>28°11'49.6" S 31°04'16.1" E</p> <p>28°11'46.5" S 31°04'16.4" E</p> <p>28°11'48.9" S 31°04'16.9" E</p> <p>28°11'49.5" S 31°04'14.4" E</p> <p>28°11'49.0" S 31°04'14.3" E</p>		
13	28°12'51.3" S 31°04'32.6" E	Leopard Rock - disused lodge/camp; low heritage significance; however, oral testimony refers to burials in eroded gullies. This needs to be confirmed.	Burials to be confirmed if area is to be upgraded
14	28°12'51.0" S 31°04'18.6" E	Three graves; high significance	Graves are located within 6m of road; if road is to be upgraded then graves should be fenced with a buffer of at least 2m between graves and road
15	28°13'00.6" S 31°04'29.5" E	Potential grave covered by vegetation; high significance	Grave is situated within development area of Umfolozi Drift Lodge; to be confirmed that it is a grave if it is to be disturbed by construction of lodge. If left <i>in situ</i> , then it must be fenced as it is located within 5m of road
16	28°12'03.5" S 31°05'14.0" E Grave: 28°12'03.9" S 31°05'13.9" E	Remains of homestead and one grave; grave has high heritage significance	None
17	Homesteads: 28°11'33.6" S 31°04'55.3" E And	Remains of 2 x homesteads as well as graves; high heritage significance	Some of the remains of stonewalling and some of the graves are situated within 5m of road; if road is upgraded, the area

No.	COORDINATES	HERITAGE RESOURCE & SIGNIFICANCE	MITIGATION MEASURES
	28°11'33.3" S 31°04'54.9" E Grave: 28°11'33.5" S 31°04'54.6" E Grave 28°11'33.8" S 31°04'54.5" E Grave 28°11'33.9" S 31°04'55.0" E Grave 28°11'32.6" S 31°04'55.9" E		must be fenced to prevent damage to the graves and remains
18	28°10'50.9" S 31°04'55.0" E	Grave at Zulu Rock farmhouse; high heritage significance	None
19	28°11'37.5" S 31°05'15.5" E	Approximate position where pottery was found by employee of BGR; high heritage significance	Rocky outcrop and immediate surrounding area should not be disturbed
20	28°11'42.5" S 31°05'24.5" E	Grave at Zulu Rock Lodge; high significance	None
21	28°12'11.6" S 31°05'10.0" E	Seven graves; high significance	Close to road; fence graves if road is to be upgraded; 2 m buffer must be maintained between graves and road
22	28°12'19.1" S 31°04'59.4" E	Potential large grave, if it is a grave then high heritage significance	Close to road, ensure that passing traffic does not impact it
23	28°12'49.3" S 31°06'02.9" E	Remains of stone structure; low heritage significance	Although no graves were found in or close to the structure, the possibility of graves been present should not be discounted; structure probably associated with windmill and cattle dip situated ±180 m south-west of it
24	28°12'59.9" S 31°05'32.4" E	Five graves, high heritage significance	Close to road; fence graves if road is to be upgraded; 2 m buffer to be maintained between graves and road
25	28°12'59.7" S 31°05'30.5" E	Remains of stone structure; low heritage significance	Close to road; ensure that if road is upgraded the remains are not disturbed
26	28°12'58.4" S 31°05'25.1" E	Foundations of homestead, low heritage significance	Close to road; ensure that if road is upgraded the remains are not disturbed
27	28°13'00.3" S 31°04'52.3" E	Remains of large stone-walled complex with inner & outer walling; low significance	Close to road; ensure that if road is upgraded the remains of the homestead are not disturbed

No.	COORDINATES	HERITAGE RESOURCE & SIGNIFICANCE	MITIGATION MEASURES
28	28°13'00.8" S 31°04'52.8" E	Grinding stone found close to outer wall; broken in half hence low heritage significance	Leave <i>in situ</i> ; must not be removed from site
29	28°11'04.5" S 31°04'40.6" E	Possible remains of homestead, could be a pile of rocks; low significance	Close to road & fence, ensure that it is not impacted by passing vehicles.
30	28°11'20.8" S 31°04'29.1" E	Grave; high heritage significance	Close to road & fence; ensure that graves are not impacted by passing vehicles
31	28°11'21.6" S 31°04'29.8" E	Grave; high heritage significance	Close to road & fence; ensure that graves are not impacted by passing vehicles
32	28°11'21.4" S 31°04'29.9" E	Grave/s; high heritage significance	Leave <i>in situ</i>
33	Graves: 28°11'26.7" S 31°04'25.7" E Homestead 28°11'26.7" S 31°04'26.1" E	Grave/s; high heritage significance; remains of associated homestead	Leave <i>in situ</i>
34	28°11'50.3" S 31°05'16.0" E	Foundations of homestead; low heritage significance	None
35	28°11'29.2" S 31°05'12.4" E	Remains of dwelling; low significance	Leave <i>in situ</i> ; possibility of graves been present should not be discounted
36	28°14'05.4" S 31°10'15.6" E	Foundations of structure; low significance	Leave <i>in situ</i>
37	28°13'16.6" S 31°05'54.3" E	Stone age hand ax; medium significance	Leave <i>in situ</i>
SOUTH OF UMFOLOZI RIVER			
1	28°17'27.7" S 31°00'49.8" E 28°17'27.8" S 31°00'49.8" E	Two graves at Babanango Valley Lodge; high heritage significance	Graves to be left <i>in situ</i> ; not to be disturbed by renovations to Lodge
2	Round stone structure above slag heaps: 28°17'13.5" S 31°00'50.0" E Stone water canal/s 28°17'12.1" S 31°00'51.2" E	Remains of structures and other residue as a result of copper mining activities; high heritage significance	The area where copper mining took place including slag heaps should not be disturbed

No.	COORDINATES	HERITAGE RESOURCE & SIGNIFICANCE	MITIGATION MEASURES
	<p>Complex of stone walling between 28°17'10.4" S 31°00'49.6" E & 28°17'10.9" S 31°00'48.4" E</p> <p>Small cave 28°17'12.0" S 31°00'47.2" E</p> <p>Remains of kitchen area with h/s of Paul Pollitzer 28°17'12.7" S 31°00'47.2" E</p> <p>Deep hole created by removal of material 28°17'14.2" S 31°00'45.3" E</p> <p>Entrance to main copper mine 28°17'13.7" S 31°00'47.7" E</p>		
3	<p>28°17'34.2" S 31°01'18.9" E & 28°17'33.9" S 31°01'18.0" E</p>	Buthulezi burial ground with ±35 graves; high heritage significance	Leave <i>in situ</i>
4	<p>Extent of structure 28°16'52.0" S 31°01'16.7" E & 28°16'50.7" S 31°01'16.4" E</p> <p>Approximate centre of structure 28°16'52.1" S 31°01'15.7" E</p>	<p>Two structures where Paul Pollitzer lived; structure north-east of road is >60 years; remains of stone walling; medium heritage significance due to relation to copper mining</p> <p>Structure made from mud bricks (adobe) with circular and interconnected rooms; > 60 years; medium heritage significance</p>	<p>Leave <i>in situ</i>; if road is upgraded then a buffer of 2m must be retained between road and remains of structure</p> <p>Leave <i>in situ</i>; if road is upgraded then a buffer of 2m must be retained between road and remains of structure</p>
5	<p>28°16'48.8" S 31°01'07.2" E</p>	Old cattle dip that has been added to over the years; low significance	Can be destroyed as it has been altered a number of times, leading to loss of any cultural values it may have had.

No.	COORDINATES	HERITAGE RESOURCE & SIGNIFICANCE	MITIGATION MEASURES
6	28°18'07.0" S 31°01'37.1" E	Remains of circular homestead; low heritage significance	Leave <i>in situ</i>
	28°18'08.2" S 31°01'34.9" E	Graves; high heritage significance	Leave <i>in situ</i>
7	28°18'24.7" S 31°01'48.2" E	Farmhouse with several associated buildings; main house is >60 years; some of the other buildings are >60 years including the garage; low heritage significance	If farmhouse & buildings are to be altered, added to or demolished, then a built heritage specialist must record existing structures & application made to Amafa for permission to undertake above-mentioned actions.
7A	28°18'25.4" S 31°01'43.7" E	Silo which forms part of above farmhouse complex; age could not be verified but looks to be <60 years; low heritage significance	Leave <i>in situ</i> ; if it is to be altered or demolished built heritage specialist to assess age of structure; application to be made to Amafa if >60 years
7B	28°18'25.6" S 31°01'43.2" E	Possible grave; if it is a grave then high heritage significance	Leave <i>in situ</i>
7C	28°18'21.5" S 31°01'44.7" E	Cattle dip; low heritage significance	Leave <i>in situ</i> ; can be altered or demolished
8	28°19'29.9" S 31°04'30.8" E	Old structure close to Argyll farmhouse; could be >60 years; low significance	Leave <i>in situ</i>
	28°19'29.2" S 31°04'28.0" E	Remains of stone-walled structure near Argyll farmhouse; low significance	Leave <i>in situ</i>
9	28°18'43.9" S 31°05'14.8" E	Grave close to Hamish farmhouse; high heritage significance	Leave <i>in situ</i>
	28°18'41.8" S 31°05'14.6" E	Potential grave near Hamish farmhouse; high significance if confirmed	Leave <i>in situ</i>
	28°18'34.4" S 31°05'14.7" E	Centre of intact stone-wall cattle kraal near Hamish farmhouse; medium / high heritage significance	The cattle kraal is still intact and should be recorded and left <i>in situ</i>
MATATANE			
1	28°14'02.9" S 31°09'46.4" E	Modern grave with headstone destroyed by previous landowner	Leave <i>in situ</i> ; fence site of grave to ensure that grave is protected from further damage
2	28°14'03.1" S 31°09'46.2" E	Grave of baby Mlambo, possibly more graves; high heritage significance	Leave <i>in situ</i>
3	28°14'04.3" S 31°09'41.6" E	Structures near river; old resort complex; potentially >60 years; low significance	Leave <i>in situ</i>
4	28°13'52.7" S 31°10'03.9" E	Kalk mine with associated infrastructure; high heritage significance	Remove rubbish dumped within mined area; leave <i>in situ</i>
	28°13'52.0" S 31°10'03.7" E	Infrastructure associated with kalk mine; high heritage significance	leave <i>in situ</i>









No.	COORDINATES	HERITAGE RESOURCE & SIGNIFICANCE	MITIGATION MEASURES
5	28°14'05.3" S 31°10'12.1" E	Grave; high heritage significance	Leave <i>in situ</i> , close to road, if road is upgraded ensure that grave is fenced with a 2 m buffer between grave & road.
6	28°14'55.1" S 31°08'50.1" E	Grave at abandoned homestead; high heritage significance	Leave <i>in situ</i>

APPENDIX 2

MAPS OF HERITAGE SITES

**BABANANGO
GAME RESERVE**

Legend

-  BGR Boundary
-  Prince Dee Land
-  Places
-  Heritage Sites
-  Provincial Road
-  District Road
-  Local Road
-  Cadastral

