



PHASE 1 HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED VREEDE 4317/HS FARM PROJECT IN NEWCASTLE, KWAZULU NATAL PROVINCE



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Archaeology and Heritage Services

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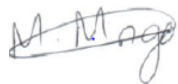
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DECLARATION OF INDEPENDENCE

This report has been compiled by Makhosazana Mngomezulu, principal archaeologist and heritage consultant. The views expressed in this report are independent of the author and no other interest was displayed during the decision-making process of the proposed Vreede 4317/HS Farm Project.

SIGNATURE:

A handwritten signature in blue ink, appearing to read 'M. Mngomezulu', is written over a horizontal line.

TERMINOLOGY

BP	Before Present
EIA	Early Iron Age
MIA	Middle Iron Age
LIA	Late Iron Age
ESA	Early Stone Age
MSA	Middle Stone Age
LSA	Late Stone Age
ya	years ago
Ibid	<i>Ibidem</i> , the Latin word meaning the same as the previous source
HIA	Heritage Impact Assessment
KZN Amafa	KZN Amafa and Research Institute – Provincial Heritage Resources Authority
SAHRA	South African National Resources Agency
SAHRIS	South African Heritage Resources Information System
NHRA	National Heritage Resources Act
SAPS	South African Police Services

DEFINITIONS

ESA dates between 2 million ya to 2 00 000 BP. Industries associated with this time period include Oldowan, Acheulean, and Fauresmith. ESA stone tools include hammerstones, flakes, cores, handaxes and cleavers (Pelser 2009).

MSA dates between 2 00 000 and 25 000 to 20 000 BP, this varies with location. Industries associated with this time period includes the Howieson's Poort. The stone tools which characterize this period include scrapers, blades, points, and flake.

LSA which dates between 25 000 and 20 000 to 2 000 BP. Stone tools of this period are characterized by their small size; this includes backed knives and borers (Pelser 2009).

EIA dates to AD 200 – 900 (Huffman 2007).

MIA dates to AD 900 – 1300 (ibid).

LIA dates to AD 1300 – 1840 (ibid).

EXECUTIVE SUMMARY

The proposed development has been sundered into 3 phase which includes phase 1 construction of an irrigation dam with a volume capacity of 1.7 million m³; phase 2 egg-laying batteries consisting of 8 chicken sheds and, phase 3 intensive sheep farming with 8 sheep feedlots. The Vreede 4317/HS farm is approximately 660.3618 hectares in extent. Vungandze Projects has been appointed to undertake a Phase 1 Heritage Impact Assessment in terms of the heritage significance on the proposed site.

During the physical survey conducted on 29 February 2020, heritage resources were found within and outside the proposed site; that is within a 100m radius. As such, the proposed site is viable for the proposed project from a heritage provided mitigation measures and recommendations proposed are adhered to.

The report will be submitted to KZN Amafa and Research Institute – Provincial Heritage Resources Authority through SAHRIS (South African Resources Information System) for comments and for a decision as per the National Heritage Resources Act (Act No 25 of 1999). The proposed project can proceed from a heritage perspective provided proposed mitigation measures and recommendations are adhered to and pending a decision from SAHRA.

Project Structure

Introduction	<ul style="list-style-type: none">• Report background• Methodology• Assumptions & limitations
Project locality	<ul style="list-style-type: none">• Location (include mapping)• Heritage Background
Findings	<ul style="list-style-type: none">• Types of findings• Mapping of findings• Assessment of findings• Level of significance• Possible impacts
Discussion	<ul style="list-style-type: none">• Evaluation of findings in relation to the historical background of the study area
Recommendations & conclusion	<ul style="list-style-type: none">• Mitigation measures
Additional Information	<ul style="list-style-type: none">• Applicable Legislation

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1. INTRODUCTION

Vungandze Projects was appointed by Sazi Environmental Consulting cc to conduct a phase 1 heritage impact study for the proposed Vreede 4317/HS Farm project within Amajuba District Municipality, KwaZulu Natal Province. The proposed development has been sundered into 3 phase which includes phase 1 construction of an irrigation dam with a volume capacity of 1.7 million m³, phase 2 egg-laying batteries consisting of 8 chicken sheds and, phase 3 intensive sheep farming with 8 sheep feedlots. The Vreede 4317/HS farm is approximately 660.3618 hectares in extent.

According to the National Heritage Resources Act (Act 25 of 1999), any person who intends to undertake a development must conduct a Heritage Impact Assessment to determine if there are any heritage resources along and within the proposed project and if any resources are found, mitigation measures and recommendations for the protection of such resources need to be adhered to. Below is the heritage act with reference to the proposed project and why a heritage impact assessment should be conducted:

Based on Section 38 under Heritage Resources Management of the National Heritage Act 25 of 1999 the heritage resources in South Africa should be managed in the following:

“(1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as—

(c) any development or other activity which will change the character of a site—

(i) exceeding 5 000 m² in extent” (see appendix A for the Heritage Act).

The aim of this report is to outline the anticipated impacts of the Vreede 4317/HS Farm Project on the heritage resources that were found during the site survey and provide recommendations/mitigation measures as a way forward.

2. TERMS OF REFERENCE (TOR)

The approach used for this report was:

- Undertake a Phase 1 HIA in accordance with the NHRA,

- Identify and map all heritage resources in the proposed area and its surroundings, as defined in Section 3 of the NHRA, including archaeological sites on or close (within a 100m boundary of the site) to the proposed area,
- Assess the significance of any identified resources in terms of the heritage assessment criteria as set out in the South African Heritage Resources Agency (SAHRA) regulations,
- Provide mitigation measures to safeguard heritage resources identified in the study area,
- Comply with specific requirements and guidelines of KZN Amafa and SAHRA, and
- Submit a final report to SAHRIS for comments and decision making.

3. METHODOLOGY

The physical survey was conducted and completed on 29 February 2020. This report is prepared according to the NHRA. Background research of the study area was conducted using literature such as books, journals, previously conducted HIA's in the study area and the internet before and after the site visit. The purpose of the research prior to the physical survey was to acquire information as to what to expect in the study area, the site visit was completed to identify heritage resources that may be impacted due to the proposed Vreede 4317/HS Farm Project.

A heritage resource means any place or object of cultural significance [NHRA1999 (Act No. 25 of 1999)]. The NHRA was used as a source of reference to identify what is known as a heritage resource (see Appendix A Section 3 for a list of heritage resources).

The survey was conducted on foot in order to record and locate any heritage resources within the study areas. An informal interview was conducted with Mr. Thabo who resides in homestead 3, he provided us with an overview of what to be expected on site and heritage resources such as graves known on the proposed site. The table from SAHRA Regulations will be used to grade the significance and evaluate the level of impact on the heritage resources identified.

Table 1: Site significance rating according to SAHRA.

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION
National Significance (NS)	Grade 1	High Significance	Conservation; National Site nomination
Provincial Significance (PS)	Grade 2	High Significance	Conservation; Provincial Site nomination
Local Significance (LS)	Grade 3A	High Significance	Conservation; Mitigation not advised
Local Significance (LS)	Grade 3B	High Significance	Mitigation (Part of the site should be retained)
Generally Protected A (GP.A)	-	High / Medium Significance	Mitigation before destruction
Generally Protected B (GP.B)	-	Medium Significance	Recording before destruction
Generally Protected C (GP.A)	-	Low Significance	Destruction

The determination of the effects of environmental impact on an environmental parameter is determined through a systematic analysis of the various components of the impact. This is undertaken using information that is available from the Environmental Assessment Practitioner (EAP) through the process of the Environmental Impact Assessment (EIA). The impact evaluation of predicted impacts was undertaken through an assessment of the significance of the impacts. This is in line with specialist requirements as required by the client. For example, the request that:

The impact methodology (should) concentrate on addressing key issues. The methodology employed in the report thus allows for the evaluation of the efficiency of the process itself.

The following Assessment Criteria is used for Impact Assessment

Impacts can be defined as any change in the physical-chemical, biological, cultural and or socio-economic environmental system that can be attributed to humans. The significance of the aspects/impacts of the process will be rated by using a matrix derived from Plomp (2004) and adapted to some extent to fit this process. These matrixes use the consequence and the likelihood of the different aspects and associated impacts to determine the significance of the impacts.

The significance of the impacts will be determined through a synthesis of the criteria below:

Probability: describes the likelihood of the impact actually occurring

- **Improbable:** the possibility of the impact occurring is very low, due to the circumstances, design or experience.
- **Probable:** there is a probability that the impact will occur to the extent that provision must be made therefore.
- **Highly probable:** it is most likely that the impact will occur at some stage of the development.
- **Definite:** the impact will take place regardless of any prevention plans and there can only be relied on mitigation measures or contingency plans to contain the effect.

Duration: the lifetime of the impact

- **Short Term:** the impact will either disappear with mitigation or will be mitigated through natural processes in a time span shorter than any of the phases.
- **Medium Term:** the impact will last up to the end of the phases, whereafter it will be negated.
- **Long Term:** the impact will last for the entire operational phase of the project but will be mitigated by direct human action or by natural processes thereafter.
- **Permanent:** the impact is non-transitory. Mitigation either by man or natural processes will not occur in such a way or in such a time span that the impact can be considered transient.

Scale: the physical and spatial size of the impact

- **Local:** the impacted area extends only as far as the activity, e.g. footprint
- **Site:** the impact could affect the whole or measurable portion of the abovementioned property.
- **Regional:** the impact could affect the area including the neighboring residential areas.

Magnitude/Severity: Does the impact destroy the environment, or alter its function

- **Low:** the impact alters the affected environment in such a way that natural processes are not affected.
- **Medium:** the affected environment is altered, but functions and processes continue in a modified way.
- **High:** function or process of the affected environment is disturbed to the extent where it temporarily or permanently ceases.

Significance: This is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required.

- **Negligible:** the impact is non-existent or unsubstantial and is of no or little importance to any stakeholder and can be ignored.
- **Low:** the impact is limited in extent, has low to medium intensity; whatever its probability of occurrence is, the impact will not have a material effect on the decision and is likely to require management intervention with increased costs.
- **Moderate:** the impact is of importance to one or more stakeholders, and its intensity will be medium or high; therefore, the impact may materially affect the decision, and management intervention will be required.
- **High:** The impact could render development options controversial or the project unacceptable if it cannot be reduced to acceptable levels; and/or the cost of management intervention will be a significant factor in mitigation.

The significance is calculated by combining the criteria in the following formula:

Sum (Duration, Scale, Magnitude) x Probability (*Table -2*)

S = Significance weighting; Sc = Scale; D = Duration; M = Magnitude; P = Probability

Table 2: The significance weighing for each potential impact are as follows:

Aspe	Description	Weight
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	Sum (Duration, Scale, Magnitude) x Probability	
	Negligible	≤20
	Low	>20≤40
	Moderate	>40≤60
	High	>60

3.1 Assumptions

It was assumed based on the literature review that the study area may yield heritage resources such as burial grounds and graves and probably heritage sites. During the physical survey heritage resources were found within and outside the project area.

3.2 Limitations

The proposed site is within a farm with restricted access. They were many access gates to the site which were not locked, except for one gate on the western end of the boundary which was

locked. Apart from prior arrangements being made to access all parts of the site, the one gate restricted us to access half the portion of the site.

4. LOCALITY AREA

The proposed study area is located within a farm Vreede 4317/HS at Amajuba District Municipality in KwaZulu Natal. The study area is situated approximately 9km southwest of Newcastle. The site runs parallel to the Ncandu River with a distance from 0-600m. The northern portion of the site or its border is close to the riverbank of the Ncandu River and moves further out as it continues westward. Furthermore, the site is approximately 600m away from the Ncandu Falls although separated the main road. The site has small, medium and long grass with other areas containing thick vegetation. The area is also rocky with many access gates inside.

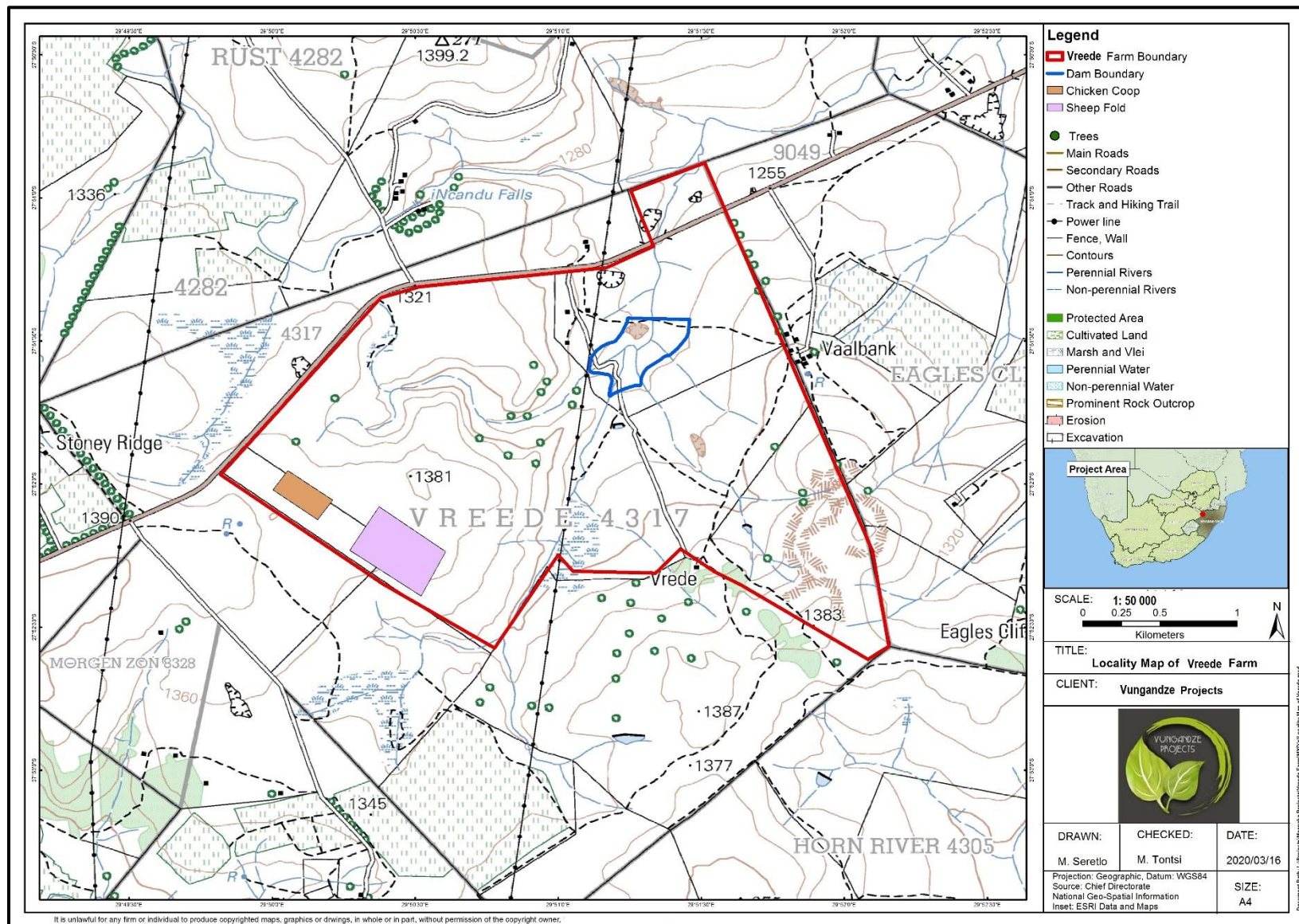


Figure 1: 1:50 000 locality map

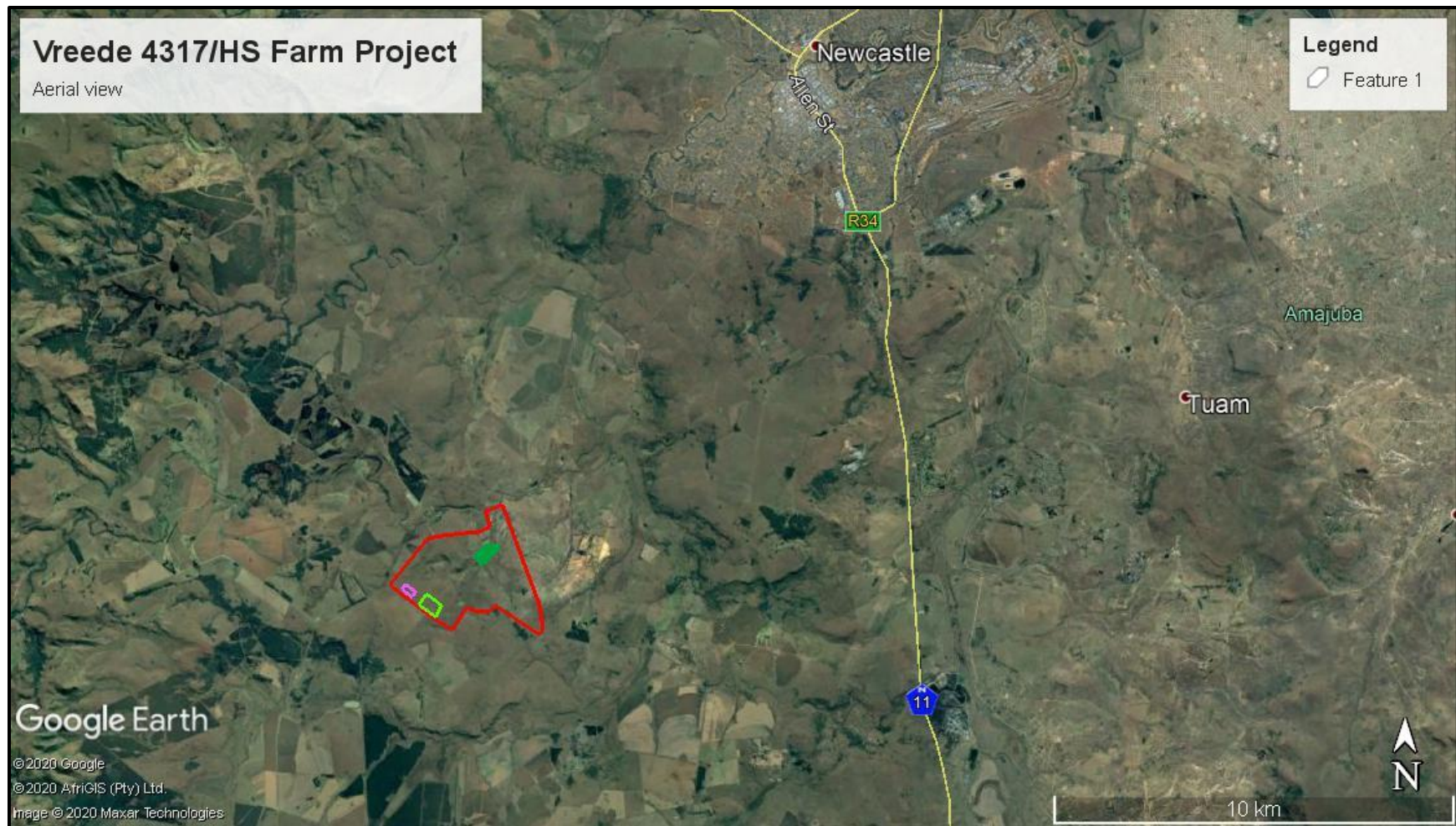


Figure 2: Locality map of the study area – Aerial view

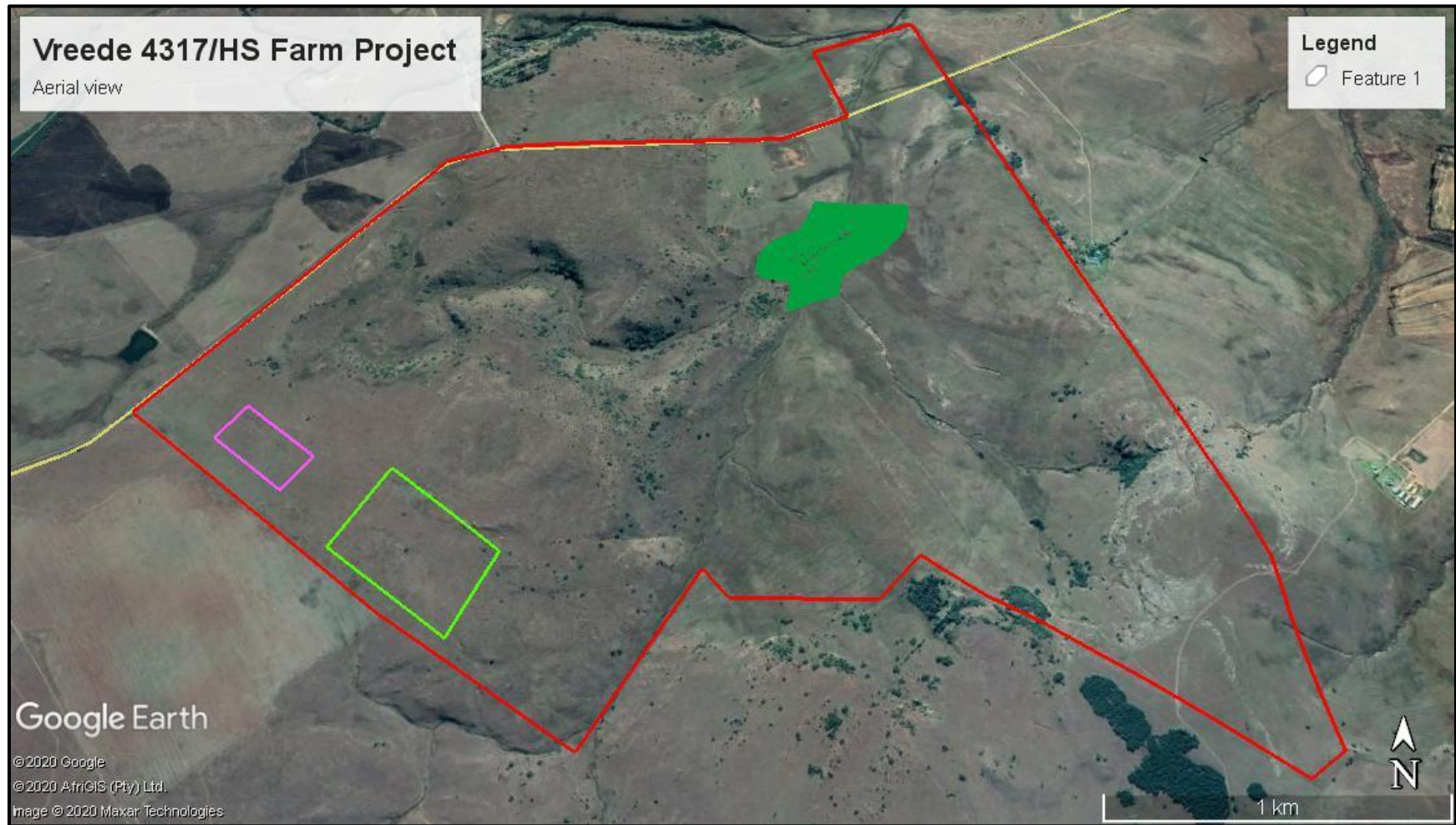


Figure 3: Close view of locality map.

5. HISTORICAL BACKGROUND OF THE STUDY AREA

History of human activity in South Africa, as in all parts of the world, dates back to millions of years. It is important to elaborate as far back in time to enable the reader to understand what is meant by archaeological material and why is it declared a heritage resource. Archaeological materials are divided into two periods, the Stone Age and the Iron Age. Late Iron Age marks the transition between prehistory and history, a period of the colonial era until recent.

5.1 Stone Age Archaeology:

The Stone Age is a time period that dates between 2 million years ago (ya) to 2000 ya. Due to the vast character found within stone tools of this period, it was then divided into three phases; Early Stone Age (ESA), Middle Stone Age (MSA) and the Late Stone Age (LSA). ESA dates between 2 million ya and 200 000 Before Present (BP). Industries associated with this time period include Oldowan, Acheulean, and Fauresmith. ESA stone tools include hammerstones, flakes, cores, hand axes and cleavers (Pelsner 2009). The more refined stone tools appeared during the MSA. MSA dates between 200 000 and 25 000 to 20 000 BP, this varies with location. Industries associated with this time period includes the Howieson's Poort. The stone tools which characterise this period include scrapers, blades, points, and flake. Lastly is the LSA which dates between 25 000 and 20 000 to 2 000 BP. Stone tools of this period are characterised by their small size; this includes backed knives and borers (Pelsner 2009).

No Stone Age site or material was noted on the proposed site or in close proximity.

5.2 Iron Age Archaeology

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

No Iron Age site or material was noted on the proposed site or in close proximity.

5.3 History of the study area

The study area is situated approximately 9km southwest of Newcastle. The site runs parallel to the Ncandu River with a distance from 0-600m. The northern portion of the site or its border is close to the riverbank of the Ncandu River and moves further out as it continues westward. Furthermore, the site is approximately 600m away from the Ncandu Falls. It should, however, be noted that the distance between the latter is divided by the main road. For the purpose of this report focus will be on the settlement of the European travelers to the Ncandu river onward as it is relevant history for the proposed project. The proposed irrigation dam will be placed on the tributary of the Ncandu River.

The source of the Incandu River lies in the Small Drakensberg, where several small streams, such as the Inguduma, rise on the upper slopes (and sometimes on the plateau above) from where they cascade swiftly down the heights to the plains below where they slow down, pick up some alluvial mud, joining together into the larger river Incandu. The river meanders across the plain through several farms, tumbles over a rocky outcrop at the Incandu Falls, is crossed by Lennoxton Drift, before sweeping before Fort Amiel where it is joined by the Inguduma Spruit. The second drift is just upstream from where the Ingeduma flows into the Incandu River. From here the river flows past the old town of Newcastle where the main Newcastle Drift is located. Eventually, the river joins up with the Ingagane River that flows into the bigger Buffalo River, a tributary of the Tugela River.

The rich grassed and well-watered plains and mountain slopes of the Newcastle district were once the habitats of numerous species of animals, especially antelope. They were so in abundance (especially the quaggas) that the European hunters moved inland to camp along the Incandu and Buffalo Rivers. During the 1840's - 1860's thousands of these animals were slaughtered in hunting drives for their horns, hooves, skins, and hides.

These European settlers called the area adjacent to the drift across the Incandu River the Post Halt 2; as it lay on the rough route to the hinterland and the newly-founded Boer Republics of the Orange Free State and the Transvaal. The drift eventually became a stop for travelers (especially the post chaise) before heading inland. Post Halt 2 was also called Waterfall River Township after the Incandu Waterfall found in the area (figure 4).



Figure 4: (Left) Incandu Falls by Mary-Joye Louw. (Right) An old postcard of the Incandu Falls (McCallum, 2014).

When AmaZulu, Dutch (Trekker), British and German settlers arrived in the area, they quickly realised the potential of the district, especially the fine grasslands that could support herds of cattle and sheep. The district is also well-watered by numerous rivers and streams. From 1861 to 1880 several new farms were laid-out to the north, south, and east of Newcastle, like 'Northlands' where the latter steelworks Iscor was built in the 1970's. Finally, the remainder of the Crown lands were sold-off to farmers. The majority of these smaller-sized farms lie to the east of Newcastle in the vicinity of the Buffalo River and atop the escarpment and were established from 1881 to 1900.

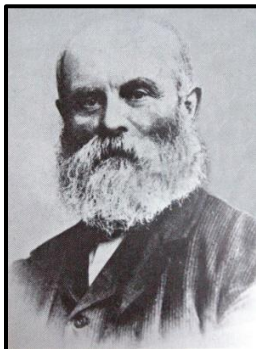


Figure 5: Dr. Peter Cormac Sutherland, Surveyor-General to Natal (McCallum, 2014).

In 1854 a Dr. Sutherland (figure 5), who was to become the Surveyor General of the Colony, found himself and his new wife, held up by the swollen Ncandu River, so for the next two weeks he spent his time setting out the township that he was later to register as Newcastle after the then Secretary of the Colonies. Strategically situated where the main road splits to lead up to the Orange Free State and the Zuid Afrikaanche Republiek (Transvaal) and the town was to grow rapidly.

In 1876 with the threat of war with the Zulu Kingdom of Cetshwayo and the pending annexation of the Transvaal by the British, the colonial authorities decided to establish a fort at Newcastle.

Major Amiel and some 200 men of the 80th Staffordshire Volunteers Regiment arrived in Newcastle and built the Fort, now known as Fort Amiel, on the high ground overlooking the Drift. The fort became an important commissariat for the troops operating in the Transvaal after its annexation, in the Anglo Zulu War, and again during the Transvaal War of Independence 1880-81 (First Boer War).

In 1891 the Town was declared a Borough. The discovery of coal had brought a new era of prosperity and several ambitious building projects were planned, including the construction of the Town Hall, which was completed in July 1899 just in time to be occupied by the Boer Forces at the start of the Anglo Boer War in October 1899 (figure 6). It is one of the very few old buildings in Newcastle to have survived to date.

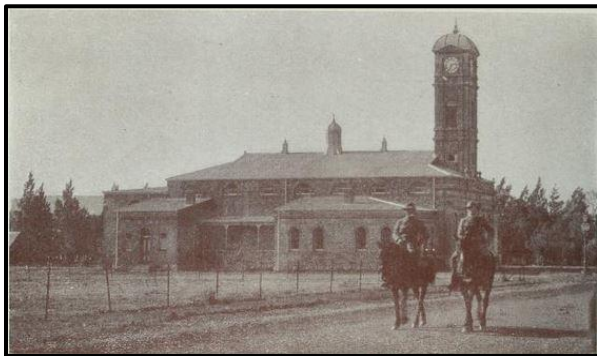


Figure 6: The Town Hall by Scott Street (McCallum, 2014).

The increase in traffic and demand for improved transport soon brought the railway, and on 15th May 1890 the first passenger train arrived in Newcastle to be followed some 2 months later by goods trains (figure 7). By 7th April 1891 the railway had been extended through Laing's Nek to Charlestown. The construction of the 640m long tunnel being considered something of an engineering feat in its time.



Figure 7: A steam locomotive and goods train alongside the Newcastle Railway Station siding (McCallum, 2014).

In 1895 the large concentration of Zulu people along the Ngagane River established for themselves a piece of Trust Land in the area known as Blaauwbosch and established a township there where they built a school and church.

The first record of any educational work in Newcastle dates back to 1874 when a small school committee was formed and a school opened in the Dutch Reformed Church building in Lennoxton however, it only lasted until 1878 (figure 8). In 1881 renewed efforts were made to establish a permanent Government School. The site chosen was that where the Junior Primary School stands today. the school opened in October 1882 with 47 boys and 30 girls.



Figure 8: The Nederduitse Gereformeerde Kerk, Newcastle, (Dutch Reformed Church) (McCallum, 2014).

In 1904 it was decided to build a new Boys' School and a new site was chosen "far out of town" and the new buildings were opened on 4 February 1907. The building that now houses the main offices of the Newcastle High School was erected in 1907 and served as a boys-only school. That changed in 1911 when the Headmaster, TD Wilson made a determined effort to introduce education levels higher than standard six. Although the parents were not happy with the change, the boys' and girls' schools were integrated and divided into junior and high schools, both being co-educational. During this same period, a Convent was opened in Sutherland Street and in 1909 The Order of St Dominic bought the property of Sir Charles Gubbins and opened the St Dominics Academy (figure 9).



Figure 9: The Roman Catholic Convent, later St. Dominic's Academy, Newcastle (McCallum, 2014).

The Anglo Boer War 1899-1902 saw the town occupied by the Boer Forces under the command of General Viljoen who promptly changed the name of the town to Viljoen's Dorp. When the town was relieved by General Buller and the British in May of 1900 the name of the town reverted back to Newcastle.

6. FINDINGS

During the physical survey, heritage resources were found within and outside the boundary of the proposed site. Eleven (11) heritage resources were found within the proposed site (figure 10-12) which include graves from each of the four (4) homesteads as they still bury within the homesteads (figure 13-16); Two (2) separate graves (figure 17 & 19); seven (7) graves outside and south of homestead 2 (figure 18); and four (4) stonewalling one of which is within homestead 4 (figure 20-23). Each of these stonewalling were situated in dense vegetation, which made it difficult to take photographs. One (1) heritage resource was found outside the proposed area in approximately 600m and that is Ncandu Falls (figure 10). According to Mr. Jabu who resides in homestead 3 who was asked about the area, he explained that the western portion of the site that could not be accessed does have abandoned graves. People who used to stay on the western portion also buried at their homesteads like everyone else in the area. When they left the area, they left their graves behind. It is highly possible that there would also be stonewalling, which is a very common feature in the area.

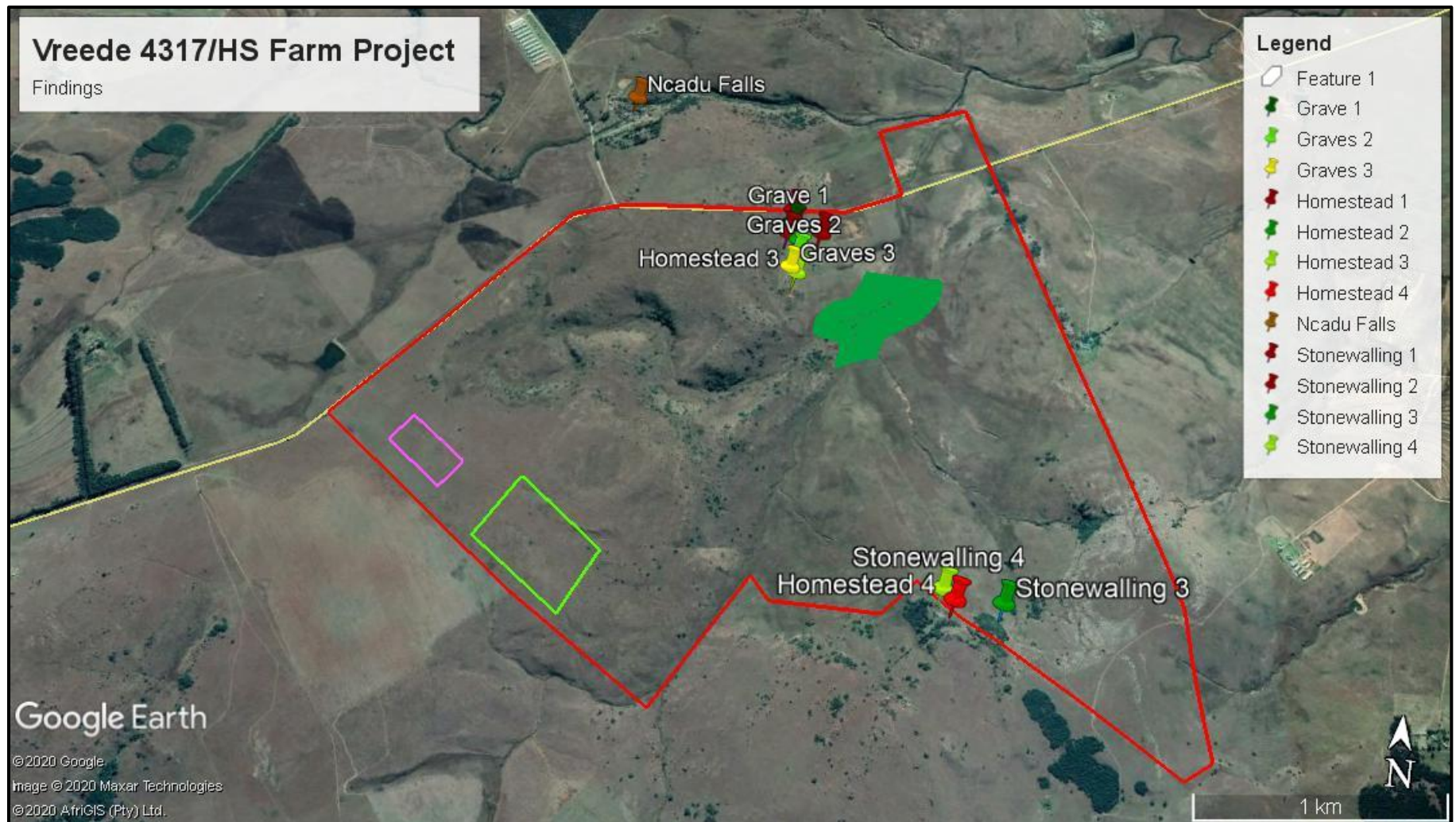


Figure 10: Map of heritage resources found in and outside proposed site.

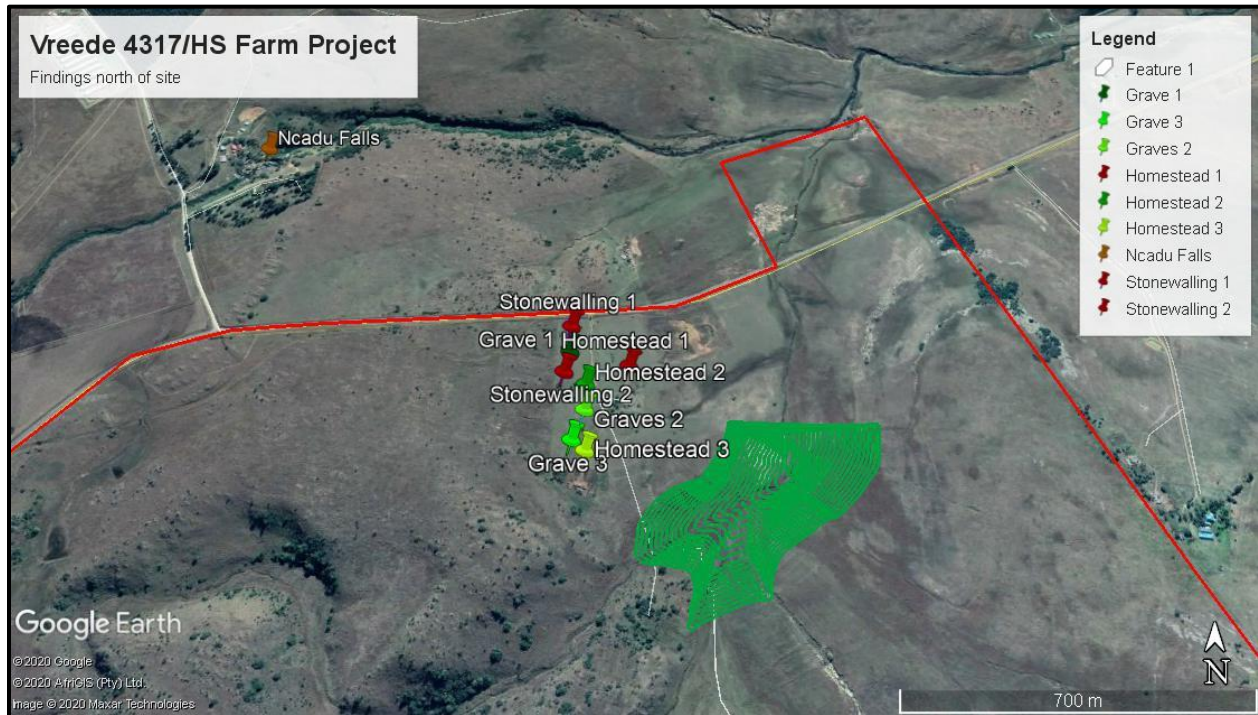


Figure 11: Heritage resources found northeast of the proposed site.



Figure 12: Heritage resources found southeast of the proposed site.



Figure 13: Homestead 1.



Figure 14: Homestead 2.



Figure 15: Homestead 3.



Figure 16: Homestead 4.



Figure 17: Grave 1 (one).



Figure 18: Graves 2 (seven).



Figure 19: Grave 3 (one).



Figure 20: Stonewalling 1.



Figure 21: Stonewalling 2.



Figure 22: Stonewalling 3.



Figure 23: Stonewalling 4 (yellow circle).

7. IMPACT ASSESSMENT

The proposed Vreede 4317/HS Farm Project has a high chance of impacting the heritage resources found on the proposed site, especially those on the northern portion close to the proposed irrigation dam. This section evaluates the extent of the impact WITH and WITHOUT mitigation measures in relation to the project under study.

Using Table 1 from the methodology which is now labeled Table 3, the heritage resources identified on-site can be rated as follows:

Table 3: Rating of the heritage resource found on study area.

Heritage Resource Identified	Field Rating & Grading	Significance	Recommended Mitigation	Heritage resource	Coordinates
Burial grounds and graves	Generally Protected A	High/Medium	Mitigation before destruction	Homestead 1	27°51'21.92"S 29°51'5.57"E
				Homestead 2	27°51'23.74"S 29°51'1.79"E
				Homestead 3	27°51'29.38"S 29°51'1.87"E
				Homestead 4	27°52'18.36"S 29°51'30.74"E
				Grave 1	27°51'20.79"S 29°51'0.36"E
				Graves 2	27°51'25.94"S 29°51'1.75"E
				Grave 3	27°51'28.55"S 29°51'0.73"E
Stonewalling	Generally Protected B	Medium Significance	Recording before destruction	Stonewalling 1	27°51'18.43"S 29°51'0.40"E
				Stonewalling 2	27°51'22.68"S 29°50'59.90"E
				Stonewalling 3	27°52'18.24"S 29°51'38.14"E
				Stonewalling 4	27°52'16.95"S 29°51'28.86"E

Ncandu Falls	Provincial Significance (PS)	High Significance	Conservation; Provincial Site nomination		27°51'0.53"S 29°50'30.06"E
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Table 4: Evaluation of the impacts of the project on the heritage resource **WITHOUT** mitigation measures.

Aspect	Description	Weight
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	Sum (Duration, Scale, Magnitude) x Probability	
	Negligible	≤20
	Low	>20≤40
	Moderate	>40≤60
	High	>60

Results: $5+3+8 \times 5 = 80$ i.e >60

This means without mitigation measures, heritage resources such as those found on the southwest of the site will be impacted and its impact may render the project unacceptable.

*Table 5: Evaluation of the impacts of project on the structures **WITH** mitigation measures.*

Aspect	Description	Weight
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	Sum (Duration, Scale, Magnitude) x Probability	
	Negligible	≤ 20
	Low	$>20 \leq 40$
	Moderate	$>40 \leq 60$
	High	>60

Results: $4+1+6 \times 1 = 11$ i.e. ≤ 20

The impact is non-existent or unsubstantial and is of no or little importance to any stakeholder and can be ignored.

7.1 Site Significance

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

Social value is when a place has become a focus of spiritual, political, national, or other cultural sentiments to a majority or minority group. This may be because the site is accessible and well known, rather than particularly well preserved or scientifically important (SAHRA Regulations). The proposed site has social value.

Historical value refers to areas where historical events took place, and such events have high significance either locally, regionally, provincially or nationally. The proposed site is within an area with historical value.

Scientific value refers to the importance of the study area for research purposes. The proposed site has no scientific value.

Aesthetic value refers to the unique beauty of the site. No aesthetic value found on the proposed site.

Based on the level of significance, the proposed area is socially and historically significant from a heritage perspective.

8. RECOMMENDATIONS AND CHANGE FINDINGS

- During the construction phase, the contractor should keep within the proposed parameters of the site to avoid impacting on any heritage resources found outside of the proposed project site, this may include unknown burial grounds and graves and Ncandu Falls;
- The contractor should induct all employees on the importance of heritage sites and resources that they should not be impacted in any way. This is to ensure that even if any heritage resources are found during the construction phase or exposed due to construction activities, should by no means be impacted or destroyed.

- Prior to construction, the developer may decide whether to incorporate the heritage resources found within the proposed project (this include homesteads) or relocate; and this is at the expense of the developer. Should the developer choose to incorporate the findings within the proposed boundary, the following is recommended:
 - The graves must be left *in situ* and be incorporated into the development by barricading/fencing off with an entrance to ensure that they are protected while allowing access for the family.
 - The stonewalling must be left *in situ* and be incorporated into the development by barricading/fencing off.
 - The homesteads must be incorporated into the development and ensure safety of the residents during construction and operation phase.

Should the developer choose to relocated the findings within the proposed boundary, the following is recommended:

- A Phase 2 HIA will have to be conducted whereby a process of relocation be conducted which includes tracing the families (public participation) and reburial of the remains to another place as recommended by relevant family. All of which will be under the expense of the client.
- The families whose homesteads are within the boundary will have to be relocated together with their graves to a suitable area. All of which will be under the expense of the client.
- A Phase 2 HIA will have to be conducted whereby the stonewalling will be recorded or documented by a professional archaeologist.
- Should any other heritage resources be found on site during the construction phase apart from the ones already found; be it archaeological artifacts such as stone tools and pottery; burial grounds and graves and structures; the contractor should cease construction immediately and contact the client. A heritage expert should be called to the site to assess the significance of the archaeological artifacts and the impacts of the proposed activities on such artifacts, and then provide mitigation measures.

- The possibility of uncovering unearthed human remains or shallow graves should not be ruled out. Should potential human remains be found on site, the contractor should cease construction immediately and the South African Police Service and the client should also be contacted. Should the remains be below 60 years old since time of death, it is considered a forensic case and further investigations will be conducted by the police and should the remains be above 60 years old since the time of death, it becomes a South African Heritage Resources Agency case. This means an archaeologist should be called on site to remove the remains at the expense of the client.

9. CONCLUSION

In conclusion, based on the findings of the survey the proposed site has social, historical value and, has medium significance from a heritage perspective. The developer can decide whether to incorporate or relocate the heritage resources found within the boundary of the proposed site. Chances of finding other burial grounds and graves on the proposed site are high given that the area was previously occupied, and the deceased were buried in the homesteads.

The proposed project may proceed provided mitigation measures and recommendations provided are adhered to and implemented. Should the developer not do as such, the project will be deemed unacceptable and in contravention of the National Heritage Resources Act 25 of 1999.

The final report will be submitted on SAHRIS for review and decision by KZN Amafa. Furthermore, subject to approval from KZN Amafa, the proposed Vreede 4317/HS Farm Project may proceed in terms of the NHRA.

10. REFERENCES

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11. PHOTOGRAPHS OF THE STUDY AREA



Figure 24: Main entrance used to access the site, northern view.



Figure 25: South view from entrance.



Figure 26: East view from entrance.



Figure 27: West view from entrance.



Figure 28: Southeast view next to river tributary where dam is proposed (blue dotted line is the river).



Figure 29: Overview of landscape.



Figure 30: Other type of vegetation apart from small, medium and long grass where mostly stonewalling is found.

APPENDIX A

LIST OF LEGISLATION APPLICABLE TO THE SITE

12. LEGISLATION

National Heritage Resources Act 25 of 1999

12.1 Section 3 of the NHRA 25 of 1999

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

“(1) For the purposes of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.

(2) Without limiting the generality of subsection (1), the national estate may include –

- (a) places, buildings, structures and equipment of cultural significance;
- (b) places to which oral traditions are attached or which are associated with living heritage; (c) historical settlements and townscapes;
- (d) landscapes and natural features of cultural significance;
- (e) geological sites of scientific or cultural importance;
- (f) archaeological and paleontological sites;
- (g) graves and burial grounds, including—
 - (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders;
 - (iii) graves of victims of conflict;
 - (iv) graves of individuals designated by the Minister by notice in the Gazette;
 - (v) historical graves and cemeteries; and
 - (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);

(h) sites of significance relating to the history of slavery in South Africa;

(i) movable objects, including:

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

(3) Without limiting the generality of subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of –

(a) its importance in the community, or pattern of South Africa's history;

(b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;

(c) its potential to yield information that will contribute to an understanding of

South Africa's natural or cultural heritage;

(d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;

(e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;

- (f) its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- (i) sites of significance relating to the history of slavery in South Africa”.

12.2 Section 36 of NHRA 25 of 1999

According to Section 36 under **Burial grounds and graves** of the National Heritage Act 25 of 1999 the graves in South Africa are protected as follows:

- (1) Where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.
- (2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.
- (3)(a) No person may, without a permit issued by SAHRA or a provincial heritage resources authority—
 - (a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
 - (b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
 - (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.

- (4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority.
- (5) SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection (3)(b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority—
 - (a) made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and
 - (b) reached agreements with such communities and individuals regarding the future of such grave or burial ground.
- (6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority—
 - (a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and
 - (b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.
- (7)(a) SAHRA must, over a period of five years from the commencement of this Act, submit to the Minister for his or her approval lists of graves and burial grounds of persons connected with the liberation struggle and who died in exile or as a result of the action of State security forces or agents provocateur and which, after a process of public consultation, it believes should be included among those protected under this section.
- (b) The Minister must publish such lists as he or she approves in the Gazette.

- (8) Subject to section 56(2), SAHRA has the power, with respect to the graves of victims of conflict outside the Republic, to perform any function of a provincial heritage resources authority in terms of this section.
- (9) SAHRA must assist other State Departments in identifying graves in a foreign country of victims of conflict connected with the liberation struggle and, following negotiations with the next of kin, or relevant authorities, it may re-inter the remains of that person in a prominent place in the capital of the Republic.

12.3 Section 38 of NHRA 25 of 1999

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

“(1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as—

(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;

(b) the construction of a bridge or similar structure exceeding 50 m in length;

(c) any development or other activity which will change the character of a site—

(i) exceeding 5 000 m² in extent; or

(ii) involving three or more existing erven or subdivisions thereof; or

(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or

(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;

(d) the re-zoning of a site exceeding 10 000 m² in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

(2) The responsible heritage resources authority must, within 14 days of receipt of a notification in terms of subsection (1)—

(a) if there is reason to believe that heritage resources will be affected by such development, notify the person who intends to undertake the development to submit an impact assessment report. Such report must be compiled at the cost of the person proposing the development, by a person or persons approved by the responsible heritage resources authority with relevant qualifications and experience and professional standing in heritage resources management; or

(b) notify the person concerned that this section does not apply.

(3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2)(a): Provided that the following must be included:

(a) The identification and mapping of all heritage resources in the area affected;

(b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7;

(c) an assessment of the impact of the development on such heritage resources;

(d) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;

(e) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;

(f) if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and

(g) plans for mitigation of any adverse effects during and after the completion of the proposed development.

(4) The report must be considered timeously by the responsible heritage resources authority which must, after consultation with the person proposing the development, decide—

(a) whether or not the development may proceed;

(b) any limitations or conditions to be applied to the development;

- (c) what general protections in terms of this Act apply, and what formal protections may be applied, to such heritage resources;
- (d) whether compensatory action is required in respect of any heritage resources damaged or destroyed as a result of the development; and
- (e) whether the appointment of specialists is required as a condition of approval of the proposal.
- (5) A provincial heritage resources authority shall not make any decision under subsection (4) with respect to any development which impacts on a heritage resource protected at national level unless it has consulted SAHRA.
- (6) The applicant may appeal against the decision of the provincial heritage resources authority to the MEC, who—
- (a) must consider the views of both parties; and
- (b) may at his or her discretion—
- (i) appoint a committee to undertake an independent review of the impact assessment report and the decision of the responsible heritage authority; and
- (ii) consult SAHRA; and
- (c) must uphold, amend or overturn such decision.
- (7) The provisions of this section do not apply to a development described in subsection (1) affecting any heritage resource formally protected by SAHRA unless the authority concerned decides otherwise.
- (8) The provisions of this section do not apply to a development as described in subsection (1) if an evaluation of the impact of such development on heritage resources is required in terms of the Environment Conservation Act, 1989 (Act No. 73 of 1989), or the integrated environmental management guidelines issued by the Department of Environment Affairs and Tourism, or the Minerals Act, 1991 (Act No. 50 of 1991), or any other legislation: Provided that the consenting authority must ensure that the evaluation fulfils the requirements of the relevant heritage resources authority in terms of subsection (3), and any comments and recommendations of the relevant heritage resources authority with regard to such development have been taken into account prior to the granting of the consent.

(9) The provincial heritage resources authority, with the approval of the MEC, may, by notice in the Provincial Gazette, exempt from the requirements of this section any place specified in the notice.

(10) Any person who has complied with the decision of a provincial heritage resources authority in subsection (4) or of the MEC in terms of subsection (6) or other requirements referred to in subsection (8), must be exempted from compliance with all other protections in terms of this Part, but any existing heritage agreements made in terms of section 42 must continue to apply.