

**Cultural Heritage Assessment of the Proposed Development of the
Lapalala Wilderness School on Portion 1 and 2 of the Farm Frischgewaagd
649LR, outside Lapalala Wilderness, Lephalale Local Municipality in the
Waterberg District Municipality, Limpopo Province**

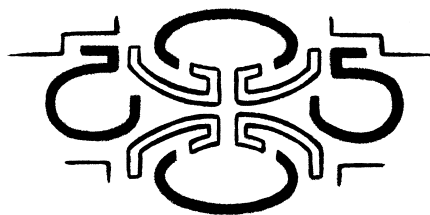


For

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Executive Summary

This report contains a comprehensive heritage impact assessment investigation in accordance with the provisions of Sections 38(1) and 38(3) of the *National Heritage Resources Act* (Act No. 25 of 1999) and focuses on the survey results from a cultural heritage survey as requested by Nuleaf Planning and Environmental (Pty) Ltd. The survey forms part of a Basic Assessment Report (BAR) as stipulated by the National Environmental Management Act (NEMA) (Act No. 107 of 1998) and NEMA Regulations. The proposed Lapalala Wilderness School entails the development of an environmental school facility to accommodate approximately 60 children. The facility will include both children and staff accommodation.

Site No	Site Type	Statement of Significance	Impact	Proposed Mitigation
1	Possible Iron Age house remains	Generally Protected C: Low significance	None	<ul style="list-style-type: none"> Site should be demarcated during the construction phase

Stone Age sites

Please note that no Stone Age settlements, structures, features, assemblages or artefacts were recorded during the survey.

Rock art sites

Although several rock art sites are known in the general region and more specifically, with in the Lapalala Wilderness Reserve, none were recorded near the survey area.

Iron Age Settlements

A total of one possible Iron Age settlement (Site 1) was recorded during the survey. Only two surface scatters of hardened clay were recorded that might indicate the remains of Late Iron Age houses. No other deposits (middens) or structures were recorded in association. It is important to note that all archaeological sites are protected by the NHRA (Act No. 25 of 1999, Section 35) and as such the site must be clearly demarcated during the construction phase.

Please note that several Late Iron Age settlements are known to occur in the Lapalala Wilderness such as Melora Hilltop and Saddle sites. These sites are associated with early Northern Ndebele and Tswana occupation of the Waterberg region.

The proposed new Lapalala Wilderness School, staff accommodation and associated infrastructure may proceed as there is no objection from a heritage perspective.

Also please note:

Archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during development activities, such activities should be halted, and a university or museum notified in order for an investigation and evaluation of the find(s) to take place (*cf.* NHRA (Act No. 25 of 1999), Section 36 (6)).

Definitions and abbreviations

Midden:	Refuse that accumulates in a concentrated heap.
Stone Age:	An archaeological term used to define a period of stone tool use and manufacture
Iron Age:	An archaeological term used to define a period associated with domesticated livestock and grains, metal working and ceramic manufacture
NHRA:	National Heritage Resources Act (Act No. 25 of 1999)
SAHRA:	South African Heritage Resources Agency
SAHRIS:	South African Heritage Resources Information System
PHRA-G:	Provincial Heritage Resources Authority - Gauteng
GDARD:	Gauteng Department of Agriculture and Rural Development
HIA:	Heritage Impact Assessment
DMR:	Department of Mineral Resources

I, Francois Coetzee, hereby confirm my independence as a cultural heritage specialist and declare that I do not have any interest, be it business, financial, personal or other, in any proposed activity, application or appeal in respect of the listed environmental processes, other than fair remuneration for work performed on this project.



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1. Introduction

NuLeaf Planning and Environmental (Pty) Ltd has been appointed by Mapula Trust to conduct the Basic Assessment process for the proposed Lapalala Wilderness School development. The 2014 EIA Regulations and its associated Listing Notices (Listing Notice 1 (GN R983) and Listing Notice 3 (GN R985)) specify the activities that require a Basic Assessment. Mapula Trust intends to apply for Environmental Authorisation from the Limpopo Department of Economic Development, Environment and Tourism (LEDET) as the Competent Authority, for the proposed establishment of the Lapalala Wilderness School in Limpopo Province.

2. Objectives

The general objective of the cultural heritage survey is to record and document cultural heritage remains consisting of both tangible and intangible archaeological and historical artefacts, structures (including graves), settlements and oral traditions of cultural significance.

As such the terms of reference of this survey are as follows:

- Identify and provide a detailed description of all artefacts, assemblages, settlements and structures of an archaeological or historical nature (cultural heritage sites) located on the study area,
- Estimate the level of significance/importance of these remains in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value,
- Assess any impact on the archaeological and historical remains within the area emanating from the development activities, and
- Propose possible mitigation measures which will limit or prevent any further impact.

3. Study Area

The proposed Lapalala Wilderness School is situated on Portion 1 and 2 on the farm Frischgewaagd 649LR near the south gate of the Lapalala Wilderness Reserve. The site is located on the Waterberg Mountain Plateau and is located roughly 50 km north of Vaalwater, 100 km west of Polokwane and 60 km south east of Lephalale in the Lephalale Local Municipality within the Waterberg District Municipality, Limpopo.

The survey area falls within the Savanna Biome, particularly the Central Bushveld Bioregion and specifically the Waterberg Mountain Bushveld (poorly protected) (Mucina & Rutherford 2006). In general the region is characterised by undulating hills with is dominated by the Lephalala River that forms the north and eastern boundary of the farm.

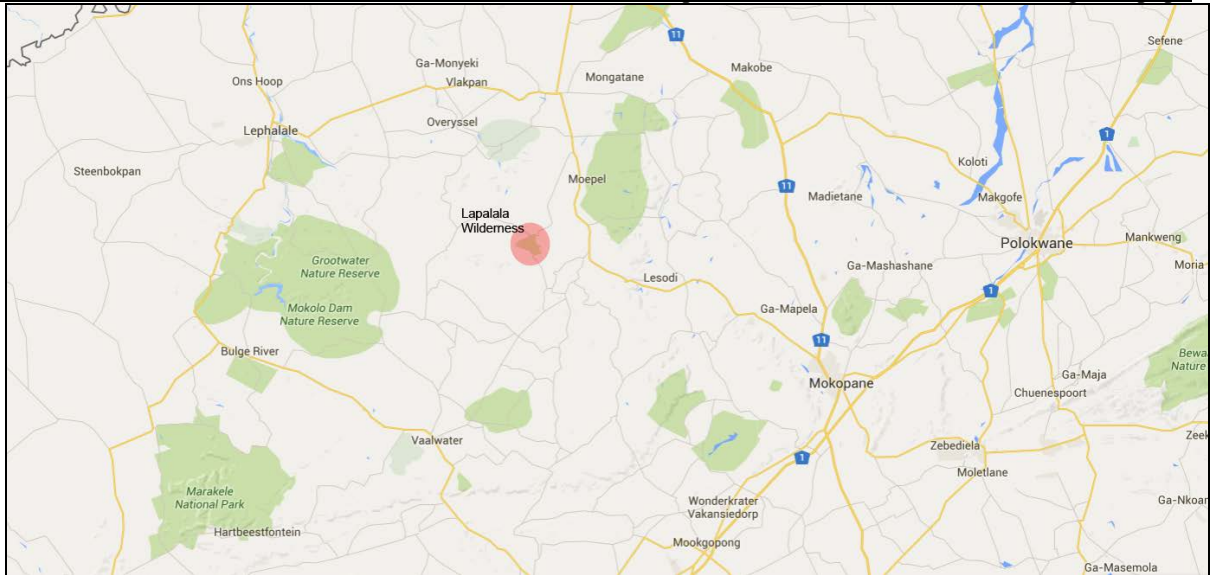


Figure 1: Regional context of the survey area (indicated by the red area)

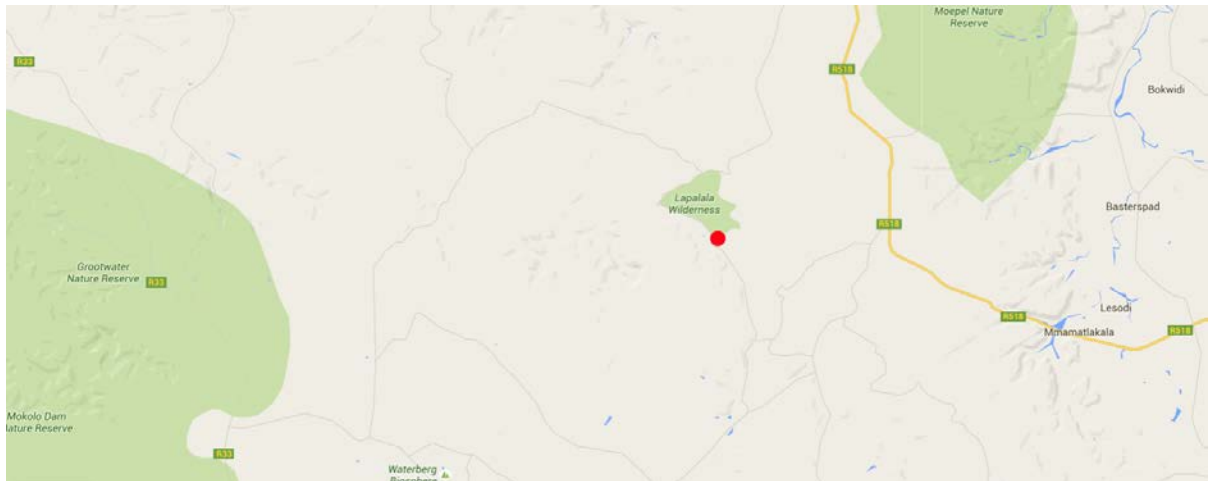


Figure 2: Local context of the location of the Lapalala Wilderness School site

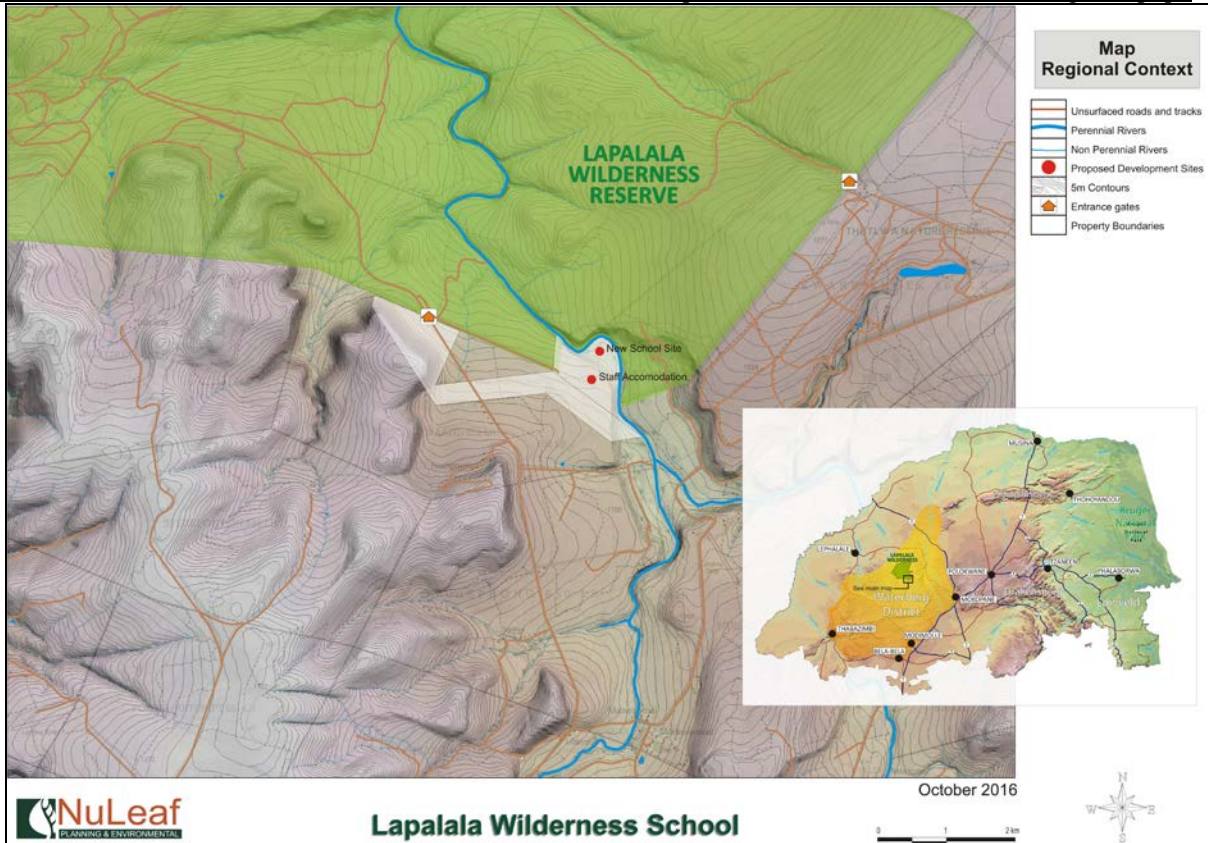


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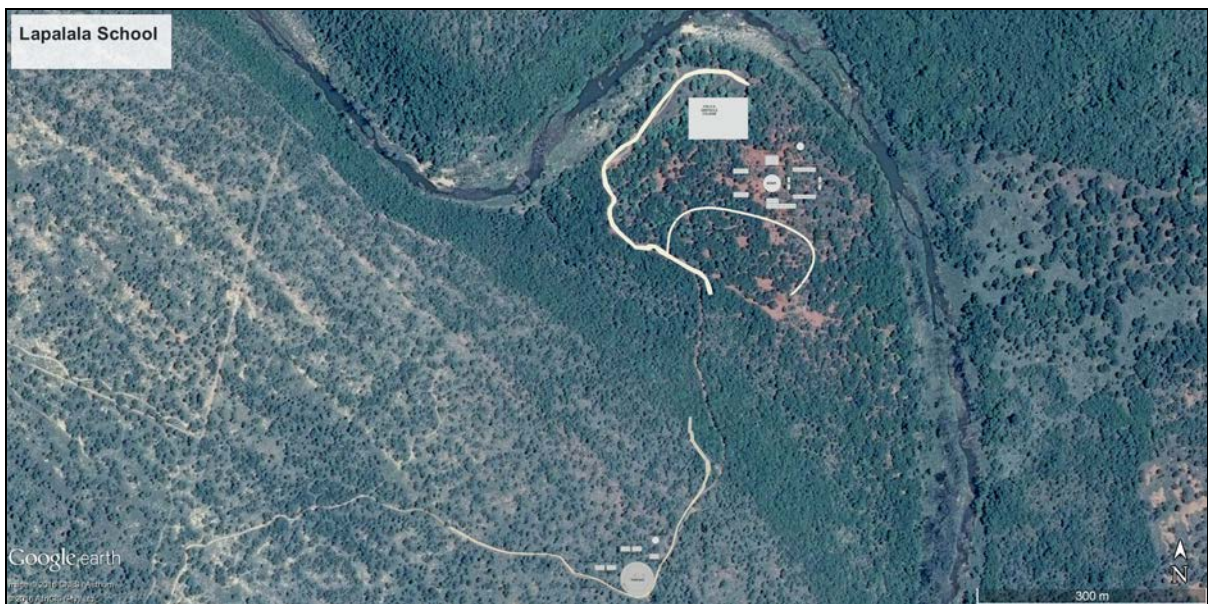


Figure 4: Detail layout of the two main components of the Wilderness School (Google Earth 2016)



Figure 5: General view of the area at the staff accommodation site



Figure 6: General view of the sand bank near the proposed school site

4. Proposed Project Activities

The proposed Lapalala Wilderness School entails the development of an environmental school facility to accommodate approximately 60 children. The facility will include both children and staff accommodation consisting of the following infrastructure:

- Dorms;
- Boma;
- Interpretive centre;
- Offices;
- Kitchen;
- Laundry area;
- Access roads and parking;
- Field and obstacle course; and
- Gate house.

All associated civil infrastructure (water, electricity and waste treatment) will be included. The total development footprint will not exceed twenty (20) hectares.

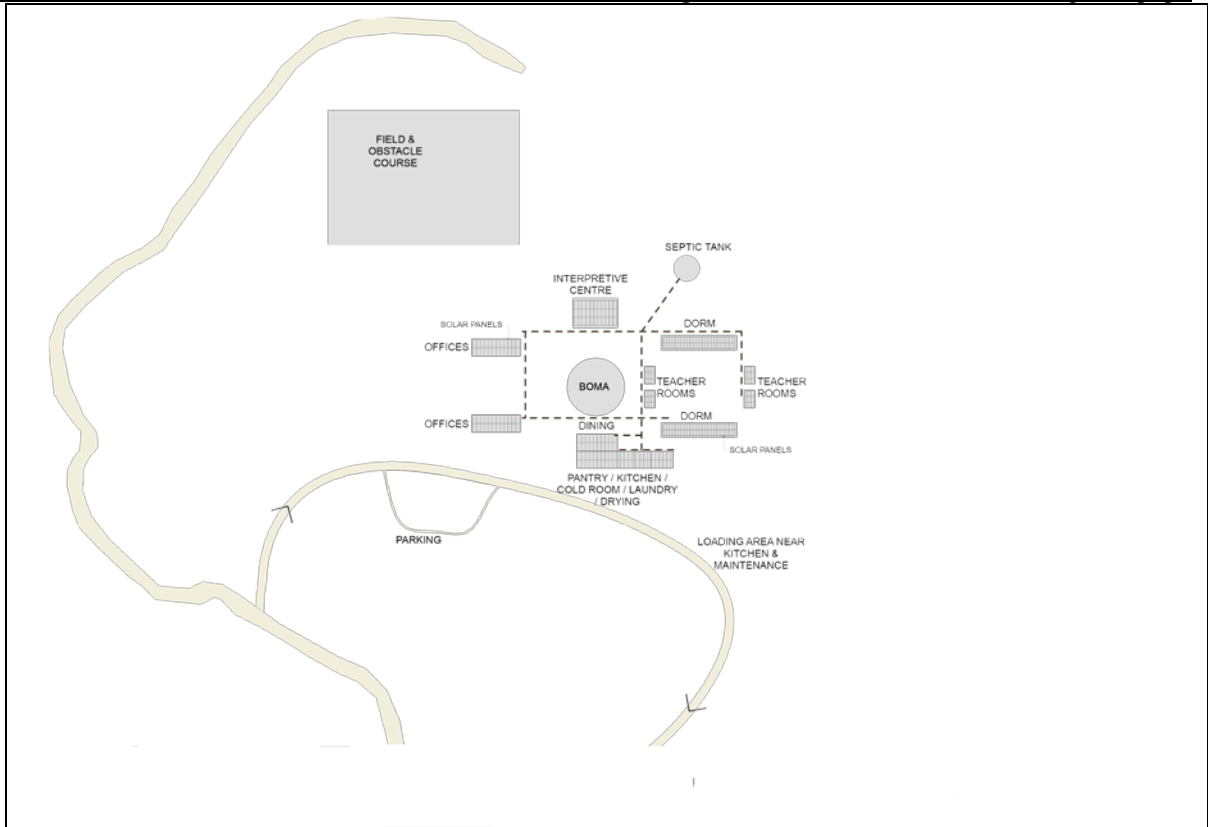


Figure 7: Detail aspects of the proposed Wilderness School

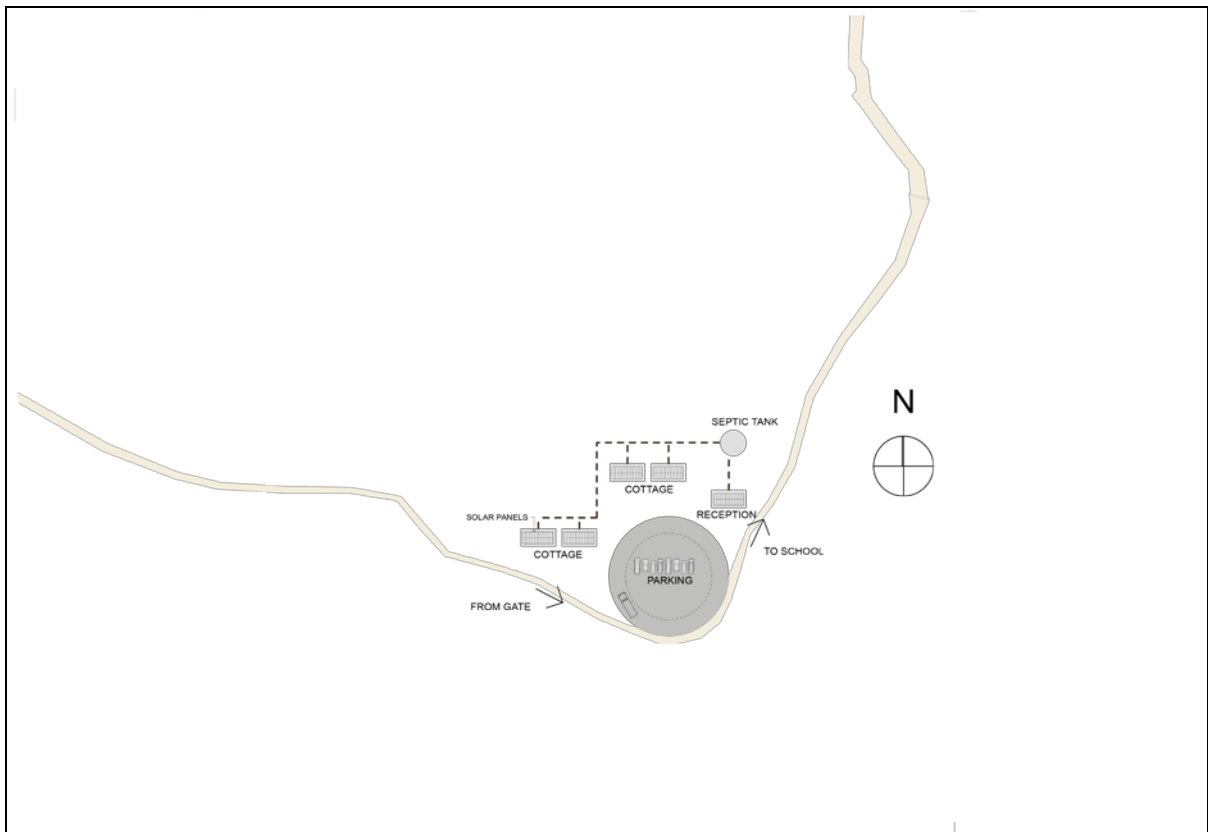


Figure 8: Detail aspects of the site proposed for the staff accommodation



Figure 9: Proposed layout of the new wilderness school (Google Earth 2016)



Figure 10: Proposed layout of the proposed staff accommodation (Google Earth 2016)

5. Legal Framework

- Section 38 of the NHRA (Act No. 25 of 1999) stipulates that the following activities trigger a heritage survey:
 - the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
 - the construction of a bridge or similar structure exceeding 50 m in length;
 - 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;
- the re-zoning of a site exceeding 10 000 m² in extent; or
 - any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,
- Archaeological remains can be defined as human-made objects, which reflect past ways of life, deposited on or in the ground.
- Heritage resources have lasting value in their own right and provide evidence of the origins of South African society and they are valuable, finite, non-renewable and irreplaceable.
- All archaeological remains, features, structures and artefacts older than 100 years and historic structures older than 60 years are protected by the relevant legislation, in this case the **National Heritage Resources Act (NHRA) (Act No. 25 of 1999, Section 34 & 35)**. The Act makes an archaeological impact assessment as part of an EIA and EMPR mandatory (see **Section 38**). No archaeological artefact, assemblage or settlement (site) may be moved or destroyed without the necessary approval from the **South African Heritage Resources Agency (SAHRA)**. Full cognisance is taken of this Act in making recommendations in this report.
- Cognisance will also be taken of the **Mineral and Petroleum Resources Development Act (Act No 28 of 2002)** and the **National Environmental Management Act (Act No 107 of 1998)** when making any recommendations.
- Human remains older than 60 years are protected by the **NHRA**, with reference to **Section 36**. Human remains that are less than 60 years old are protected by the Regulations Relating to the Management of Human Remains (GNR 363 of 22 May 2013) made in terms of the National Health Act No. 61 of 2003 as well as local Ordinances and regulations.
- **Mitigation guidelines (The significance of the site):**

Rating the significance of the impact on a historical or archaeological site is linked to the significance of the site itself. If the significance of the site is rated high, the significance of the impact will also result in a high rating. The same rule applies if the significance rating of the site is low (also see Table 1).

Significance Rating	Action
Not protected	1. None
Low	2a. Recording and documentation (Phase 1) of site adequate; no further action required
	2b. Controlled sampling (shovel test pits, augering), mapping and documentation (Phase 2 investigation); permit required for sampling and destruction
Medium	3. Excavation of representative sample, ¹⁴ C dating, mapping and documentation (Phase 2 investigation); permit required for sampling and destruction

	[including 2a & 2b]
High	4a. Nomination for listing on Heritage Register (National, Provincial or Local) (Phase 2 & 3 investigation); site management plan; permit required if utilised for education or tourism 4b. Graves: Locate demonstrable descendants through social consulting; obtain permits from applicable legislation, ordinances and regional by-laws; exhumation and reinterment [including 2a, 2b & 3]

Table 1: Rating the significance of sites

- With reference to the evaluation of sites, the certainty of prediction is definite, unless stated otherwise.
- The guidelines as provided by the **NHRA (Act No. 25 of 1999)** in Section 3, with special reference to subsection 3, and the Australian ICOMOS (International Council on Monuments and Sites) Charter (also known as the Burra Charter) are used when determining the cultural significance or other special value of archaeological or historical sites.
- It should be kept in mind that archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during development activities, such activities should be halted, and a university or museum notified in order for an investigation and evaluation of the find(s) to take place (*cf.* **NHRA (Act No. 25 of 1999)**, Section 36 (6)).
- A copy of this report will be lodged with the **SAHRA** as stipulated by the National Heritage Resources Act (NHRA) (Act No. 25 of 1999), Section 38 (especially subsection 4) and the relevant Provincial Heritage Resources Authority (PHRA).
- Note that the final decision for the approval of permits, or the removal or destruction of sites, structures and artefacts identified in this report, rests with the SAHRA (or relevant PHRA).

6. Study Approach/Methods

Regional maps and other geographical information (ESRI shapefiles) were supplied by Nuleaf Planning and Environmental. The most up-to-date Google Earth images and topographic maps were used to indicate the survey area. The survey area is localised on the 1:50 000 topographic maps 2328CD. Please note that all maps are orientated with north facing upwards (unless stated otherwise).

The strategy during this survey was to survey all the areas associated with the various aspects of the development in detail. Both proposed areas namely the new Lapalala Wilderness School and the Staff Accommodation were intensively surveyed using pedestrian survey techniques. The survey tracks are indicated on the map below.

Due to the UNISA's Department of Anthropology and Archaeology involvement with archaeological research in the region a substantial database is available on known Stone Age and Iron Age sites. Also during aerial surveys, Lapalala Management has also accumulated location data on a number of sites. Thirteen rock art sites have also been recorded by the Rock Art Research Institute (RARI) at the University of the Witwatersrand.

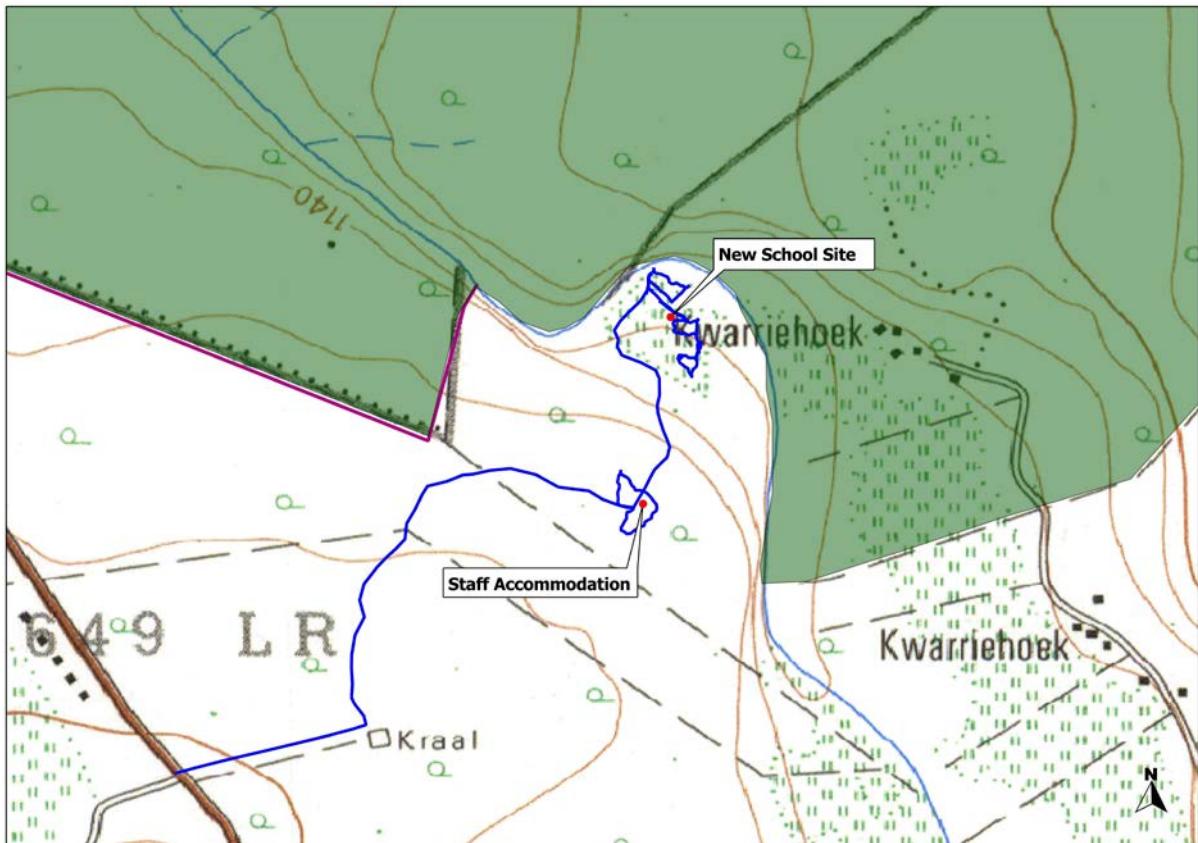


Figure 11: Recorded survey tracks for the project

6.1 Review of existing information/data

Additional information on the cultural heritage of the area was sourced from the following records:

- National Mapping Project by SAHRA (which lists heritage impact assessment reports submitted for South Africa);
- Online SAHRIS database;
- Maps and information documents supplied by the client; and
- Published and unpublished material on the area (Aukema 1989, Boeyens et al 2009, Huffman 1990, Mason 1962, Van der Ryst 1998, 2007, Walker 2016)

Formal archaeological investigation in the Waterberg region probably started with surveys and excavations conducted by Revil Mason in the 1960s (Mason 1962). This was followed by a detailed archaeological survey that was initiated by Jan Aukema in the early 1980s. His initial focus was along the Motlhabatse River and was later expanded to include the drainage basin of the Lephalala River which yielded a rich database of Early and Late Iron Age sites (Huffman 1990:117 & Aukema 1989). The well-known Late Iron Age Melora Hill and

Melora Saddle Sites were identified during Aukema's research project (also see Addendum 1 for more detail).

Detailed Stone Age research was conducted by Maria van der Ryst at Afguns and Olieboomspoor (Van der Ryst 1998, 2007). In the last few years extensive research has also been conducted by UNISA at Melora Hilltop and Saddle sites as well as at Kirstenbos, a 13th century rainmaking site near Marken (Boeyens et al 2009; Coetzee et al 2005; Mouton 2014). The settlement pattern at Melora Hill has been recognised as a class type and other early Nguni sites have been classified according to its stone-walled layout (e.g. Buffelsfontein) (Huffman 2004).

It seems therefore that Early, Middle and Later Stone Age sites abound in the Waterberg with several sites associated with shelters. A number of rock art sites have also been identified which are usually associated with Later Stone Age shelters (Rudner & Rudner 1985; Van der Ryst 1998 and 2007).

Over 100 archaeological sites have been recorded in the Waterberg region ranging from Stone Age sites, rock art shelters and Iron Age early farming settlements.

We know that the earliest cattle farmers moved into the area under the auspices of the Transvaal Land and Exploration Company in the 1880s. This is substantiated by the Surveyor General's database as the farm Frischgewaagd 649LR was first surveyed in 1911; however the first Title Deed was granted in 1868 (see Addendum 3).

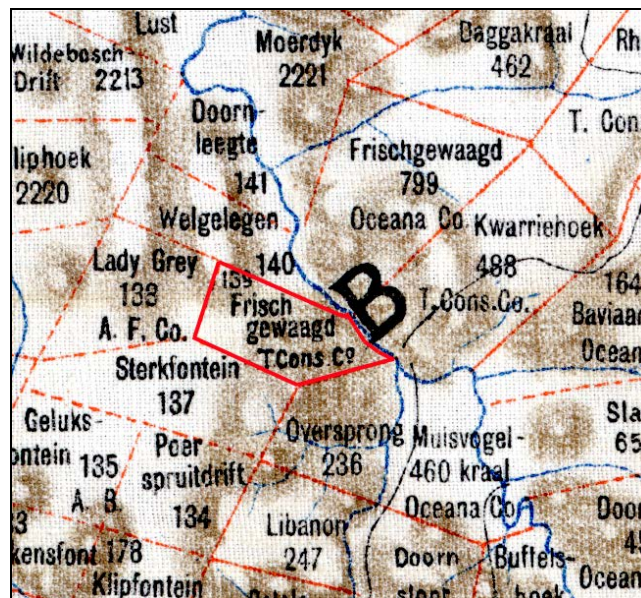


Figure 12: Jeppe's Map dating to 1899 clearly indicates the boundaries of the farm

During the early 1980s Clive Walker and Dale Parker purchased the first farm in the area from renowned hunter Eric Rundgren. After 20 years during which time they added another 17 farms, totalling 36 000 ha, Lapalala Wilderness became a reality in 2001 (www.lapalala.com; Walker 2016) (for further details see Addendum 1).

6.2 Site visit

The field survey was conducted on 25 October 2016.

6.3 Impact assessment

The criteria used to describe heritage resources and to provide a significance rating of recorded sites are listed in the NHRA (Act No. 25 of 1999) specifically Section 7(7) and Section 38. SAHRA also published various regulations including: Minimum standards: Archaeological and palaeontological components of impact assessment reports in 2006 and updated requirements in 2012.

6.4 Assumptions, restrictions and gaps in knowledge

No severe physical restrictions were encountered as roads provided access to the survey areas and all areas were accessible during the pedestrian survey.

7. Description and Evaluation of Cultural Heritage Sites

Arguably the most important archaeological sites in the Lapalala Wilderness are Melora Hilltop site and the Melora Saddle site). Archaeological excavations at Melora Saddle site has yielded over 50 house bases in association with Moloko ceramics which are decorated with comb-stamped bands interspersed with graphite and ochre burnishing (Boeyens et al 2009:216). The ceramics are provisionally classified as part of the Waterberg facies, which is derived from the Rooiberg facies, which in turn is an outcome of a merger between Ntsuanatsatsi/Uitkomst and Madikwe pottery. The Waterberg facies is associated with various Northern Ndebele and North Sotho people (Huffman 2007:174). The site probably dates to the early 19th century AD. On the other hand the Melora Hilltop site pre-dates the Saddle site and is a stone-walled settlement which is probably associated with Northern Ndebele speakers (Boeyens et al 2009). Also note that several Stone Age rock art sites are known in the Lapalala Reserve.

However, the recorded Iron Age site (Site 1) characterised by small surface scatters of baked clay indicating possible house remains. No other structures or features were recorded in association and it has been rated low in significance. Only a few undecorated potsherds were noted at the site.

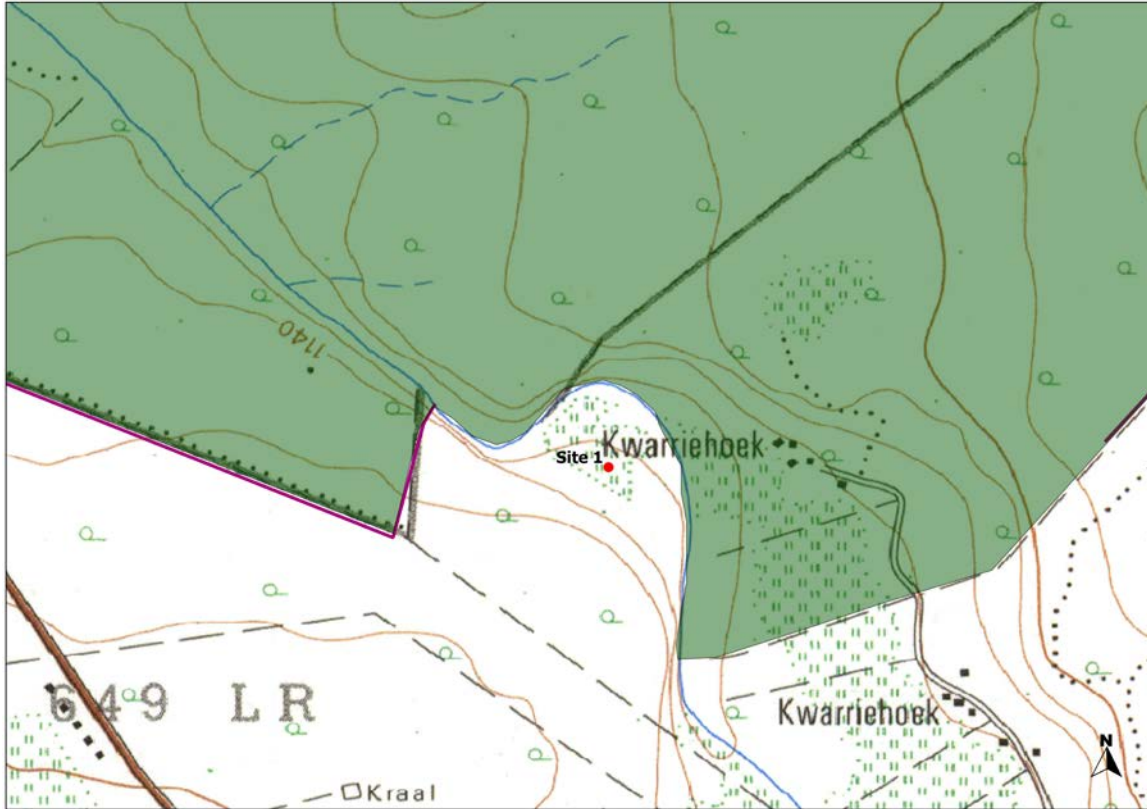


Figure 13: The location of the cultural heritage site recorded during the survey



Figure 14: The location of Site 1 in relation to the proposed school infrastructure

8. Locations and Evaluation of Sites

Site No	Coordinates	Site Type	Statement of Significance	Impact	Proposed Mitigation
1	23.938374°S 28.364027°E	Possible Iron Age house remains	Generally Protected C: Low significance	None	<ul style="list-style-type: none"> Site should be demarcated during the construction phase

Table 2: Description and evaluation of the recorded site

9. Recommendations and Conclusions

Stone Age sites

Please note that no Stone Age settlements, structures, features, assemblages or artefacts were recorded during the survey.

Rock art sites

Although several rock art sites are known in the general region and more specifically, with in the Lapalala Wilderness Reserve, none were recorded near the survey area.

Iron Age Settlements

A total of one possible Iron Age settlement (Site 1) was recorded during the survey. Only two surface scatters of hardened clay were recorded that might indicate the remains of Late Iron Age houses. No other deposits (middens) or structures were recorded in association. It is important to note that all archaeological sites are protected by the NHRA (Act No. 25 of 1999, Section 35) and as such the site must be clearly demarcated during the construction phase.

Please note that several Late Iron Age settlements are known to occur in the Lapalala Wilderness such as Melora Hilltop and Saddle sites. These sites are associated with early Northern Ndebele and Tswana occupation of the Waterberg region.

The proposed new Lapalala Wilderness School, staff accommodation and associated infrastructure may proceed as there is no objection from a heritage perspective.

Also please note:

Archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during development activities, such activities should be halted, and a university or museum notified in order for an investigation and evaluation of the find(s) to take place (*cf.* NHRA (Act No. 25 of 1999), Section 36 (6)).

10. References

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Addendum 1: Archaeological and Historical Sequence

The table provides a general overview of the chronological sequence of the archaeological periods in South Africa.

PERIOD	APPROXIMATE DATE
Earlier Stone Age	More than c. 2 million years ago - c. 250 000 years ago
Middle Stone Age	c. 250 000 years ago – c. 25 000 years ago
Later Stone Age (Includes San Rock Art)	c. 25 000 years ago - c. AD 200 (up to historic times in certain areas)
Early Iron Age	c. AD 200 - c. AD 900
Middle Iron Age	c. AD 900 – c. AD 1300
Late Iron Age (Stonewalled sites)	c. AD 1300 - c. AD 1840 (c. AD 1640 - c. AD 1840)

Stone Age sequence

Concentrations of Early Stone Age (ESA) sites are usually present on the flood-plains of perennial rivers and may date to over 2 million years ago. These ESA open sites may contain scatters of stone tools and manufacturing debris and secondly, large concentrated deposits ranging from pebble tool choppers to core tools such as handaxes and cleavers. The earliest hominins who made these stone tools, probably not always actively hunted, instead relying on the opportunistic scavenging of meat from carnivore kill sites.

Middle Stone Age (MSA) sites also occur on flood plains, but are also associated with caves and rock shelters (overhangs). Sites usually consist of large concentrations of knapped stone flakes such as scrapers, points and blades and associated manufacturing debris. Tools may have been hafted but organic materials, such as those used in hafting, seldom preserve. Limited drive-hunting activities are also associated with this period.

Sites dating to the Later Stone Age (LSA) are better preserved in rock shelters, although open sites with scatters of mainly stone tools can occur. Well-protected deposits in shelters allow for stable conditions that result in the preservation of organic materials such as wood, bone, hearths, ostrich eggshell beads and even bedding material. By using San (Bushman) ethnographic data a better understanding of this period is possible. South African rock art is also associated with the LSA.

Fifty kilometres east of the eastern escarpment of the Waterberg Plateau, near Mokopane, is one of the world's most important archaeological sites: Makapansgat. There, in a deep and large limestone cave, have been found the remains of some of the earliest hominids yet identified, the species *Australopithecus africanus*, who lived more than three million years ago; and also *Homo erectus*, who lived a million years ago.

In their book on The Waterberg, Taylor, Hinde and Holt-Biddle (2003) comment that “the australopithecines probably lived in small bands that wandered through the region following the seasonal abundance of foodstuffs such as insects, termites ... as well as the leaves, fruits and flowers of bushes and trees. They may well have found their way into the lower valleys of the Waterberg. Later tool users such as *Homo erectus* may well have moved purposely into the Waterberg in summer to follow the prey animals they hunted”.

Although no skeletal evidence of the presence of these Early Stone Age (ESA) ancestors has yet been discovered on the Waterberg plateau, it is likely that they at least visited the region.

The first substantial evidence of hominid habitation relates to people of the Middle Stone Age (MSA). There are extensive remains of MSA occupations in the Waterberg; until specific research is conducted in the Waterberg it will not be possible to know precisely when the Waterberg MSA occupations occurred and at present we can only say that the occupations would have been somewhere between 200 000 and 25 000 years ago. People living in the MSA lived in rock shelters or open camps, sometimes near pans, lakes or rivers, though they were not as dependent on close sources of water as their ancestral ESA counterparts. This independence from water suggests that they had water containers that could have been made of skin or ostrich eggshell.

People in the MSA were efficient hunters and gatherers. They hunted with spears tipped with stone. We know this because some South African sites like Klasies River Mouth (near Storms River) had stone spear-tips embedded in animal bones (Deacon & Deacon 1999; Mitchell 2002). In addition, researchers have found microscopic traces of blood and animal remains on stone points (Williamson 2000). Stone points were hafted onto handles because microscopic analysis has revealed resins on their bases, in addition to micro-chipping where twine would have been used to attach the stones to shafts (Wadley et al. 2004).

In the MSA, people were active hunters of large game, though they would also have scavenged opportunistically. At sites where the remains of bones from their hunts have been found, these bones include many eland, zebra, hartebeest, wildebeest, warthog and kudu (Deacon & Deacon 1999; Wadley 2001). The bones were invariably burnt and smashed to extract marrow.

Many MSA sites have good evidence for control of fire; fireplaces and ash lenses are present particularly in rock shelter sites where organic preservation is good. Prior to control of fire, rock shelters and caves would have been too dangerous for human habitation; they would have been predator lairs.

In the MSA, people made a wide range of stone tools from both coarse- and fine-grained rock types. Sometimes the rocks used for tools were transported considerable distances, presumably in bags or other containers. When this happened, the Stone Age people generally carried out part of the manufacturing process at the rock source. Thus tool assemblages from some MSA sites tend to lack some of the preliminary cores and contain predominantly finished products like flakes and retouched pieces. The most characteristic retouched tool type is the point, a triangular tool thought to have been a spearhead, but scrapers and blade-like cutting tools are also common.

There is a noticeable gap in the Waterberg between these early tool types of the MSA and younger ones of Later Stone Age (LSA) origin, leading to the conclusion that the Waterberg may have been without human life for tens of thousands of years. Numerous LSA sites have been discovered and excavated on the plateau, most of them in shelters overlooking, or at least close to, the Lephalala River. Several sites lie on the eastern slopes of the prominent hill Tafelkop, and were excavated by Maria van der Ryst of UNISA in the 1990s. Her research concluded that, after a hiatus following Middle Stone Age habitation, LSA occupation in the north-western portion of the Waterberg commenced 'only during the late eleventh/beginning of the twelfth century AD. It would seem that the main period of semi-permanent settlement of the Waterberg plateau by hunter-gatherers corresponds to the movement of Iron Age agropastoralists into this area (Van der Ryst 1998).

Rock Art

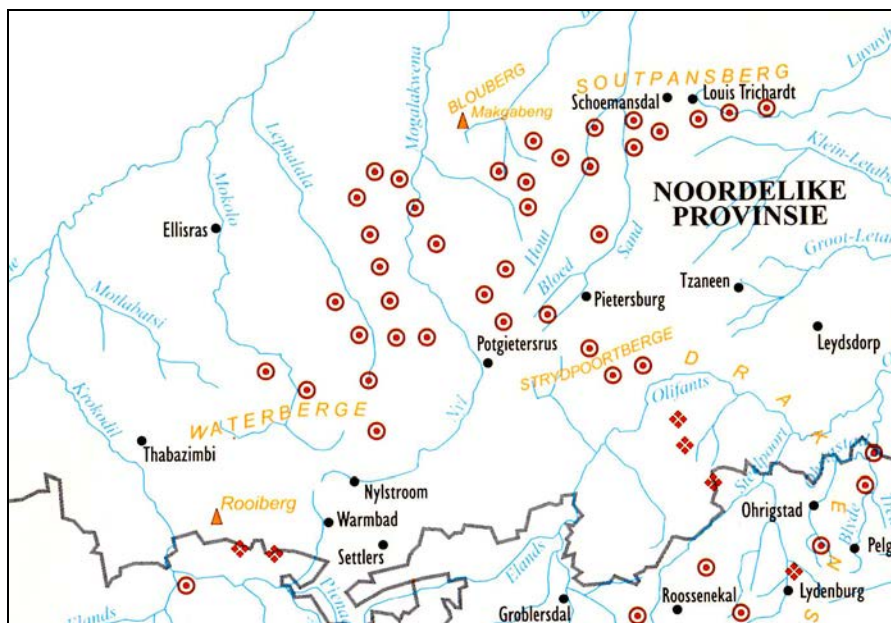


Figure 15: Known rock art sites in the Waterberg and surrounds (Bergh 1998)

As indicated on the map, various rock art sites are known in the Waterberg, most of which are linked to the San hunter-gatherers. Specific sites at Afguns and Spruitkloof are situated further to the east near the Mokolo River. The very important panel at Bokpoort is situated further east of the survey area (traced in 1959) (Rudner & Rudner 1970). Rock art panels were also recorded at Olieboomspoort (Van der Ryst 2007). It does however emphasize the importance of rock art in the area and there is a clear possibility that sites may still be found on the farm (also see Bergh 1998 and Küsel 2007).

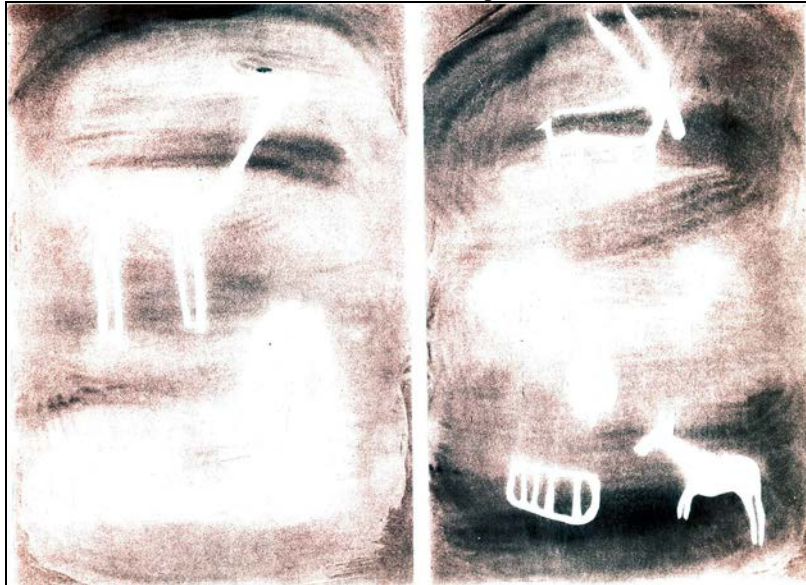


Figure 16: Rock paint tracing from Afguns (left) and Spruitkloof, Waterberg (right) (Rudner & Rudner 1970)



Figure 17: A rock art tracing of a panel at Bokpoort, Waterberg (Rudner & Rudner 1970)

Due to Clive and Anton Walker's efforts a total of 13 rock art sites (attributed to both San people and Bantu-speaking people) have been recorded in the Lapalala Reserve (Walker 2016).

Iron Age settlements and associated ethnography

Although a large number of Early, Middle and Late Iron Age sites have been recorded in the region, it seems that the veld type played a major role in selecting an area in which to settle. Generally the lower valleys were dominated by sweet grasses, which were preferred. That might explain why higher laying areas, which were dominated by sour grasses, were usually not occupied (Huffman 1990). Early Iron Age sites contain ceramics attributed to Happy Rest and Klein Africa and also an early Diamant fasies. Middle Iron Age sites with Eiland ceramics have also been recorded in the Waterberg. During the Late Iron Age settlements

In contrast, the Late Iron Age settlements of the second phase of occupation are found on hilltops and they have stone walled settlements and undecorated pottery. These settlements may be linked to the arrival of Nguni-speakers (Ndebele people) in the region, that is, between the 16th and 17th centuries AD. A good example can be seen at Melora, in the Lapalala Wilderness. Here, dry stone walling encloses an area of some six hectares on a hilltop to form what is interpreted to have been a defensive position, although there are also remains of hut dwellings outside the enclosure. At its peak, the site may have accommodated up to a thousand people. The third phase of Iron Age settlement, dating to the 18th and early 19th century, contains multichrome (ochre and graphite) Moloko pottery, believed to have been made by Sotho-Tswana.

Aukema (1989) mentioned rain-making ceremonies in rock shelters in the Waterberg. The shelters themselves do not seem to have been occupied yet they contain clay pots, stone cairns, cupulas (small ground holes on rock floors) and grindstones. Rock paintings are also often associated with rainmaking sites. Iron Age People even began to paint depictions of animals for themselves. Rather Crude depictions in red or white paint (sometimes black), painted directly with fingers, are often found at the same Waterberg sites as the more refined San paintings (Van Der Ryst 1998), for example at Masebe and Telekishi, North of Kloof Pass.

Historical Sequence

Most of the Waterberg Mountains fell under the vast cattle empire of the Tansvaal Land and Exploration Company since the 1890s. One of the first pioneers was Arthur Peacock who came to South Africa and then the Waterberg region in 1886. He settled at Cremartardfontein where his wife Katherine Fawssett and her sister Edith joined him in 1892. They later moved to the farm Blaauwbank near Visgat due to multiple Malaria attacks (Hunter 2010:27).

Most of the early farmers in the Waterberg were employed by the Company and they early on also started operating trade stores and they were therefore instrumental in establishing an extensive trade network in the region. However, tragedy struck in 1895 with the outbreak of rinderpest which killed thousands of head of cattle in the region. Most of these cattle ranches were close down by the Company. Arthur lost his managership but could still lease his farm. Most of these early farmsteads were mud-wall and thatch structures (Hunter 2010:28).



Figure 20: Early life on farms in the Waterberg region



Figure 21: Arthur Peacock and his wife Katherine and her sisters Edith and Molly and Ted Davidson



Figure 22: Trade routes and shops in the region

Lapalala Wilderness

Clive Walker, came to the fore as the Director of the Endangered Wildlife Trust (EWT) with several initiatives to protect wildlife. He finally came to the Waterberg region in 1981 not as a landowner but through his involvement with Educational Wildlife Expeditions. He was motivated to start environmental education programmes for children, specifically in the bushveld. Through Val Ford and Pippa Thomas, Clive eventually made contact with Eric Rundgren (a one-time Kenyan big-game hunter turned game farmer) at his reserve named Double R Game Ranch (Dubbelwater) in the northern Waterberg. After some sojourn Clive eventually met Dale Parker as the chairperson of the Botanical Society's Flora Conservation Committee. In 1981 Dale Parker purchased the first farm (5000 ha) that would become the heart of the Lapalala Reserve. Rundgren's old farmhouse, which was built in 1967, would become the Educational School at Lapalala. Later a Board of Governors of the Lapalala Wilderness School (LWS) was appointed to manage and guide activities. Clive and Conita Walker officially retired from Lapalala Wilderness in December 2004 and the school was registered under Section 21 in 2006 (Walker 2016).



Clive and Dale first shared Driemanslust and later Doornleegte with their families. In 1982 Byuitsoek and Ongegund were added to the stable as well as Landmanslust. Dale eventually bought up 17 farms that took years to get back to their prime after decades of cattle farming and hunting. Lapalala Wilderness includes approximately 25 km of the Lephalala River. Kolobe (Tswana word for warthog) Lodge opened in May 1989 and along with a number of other camps were an instant success (Walker 2016).

After several initiatives the Waterberg Conservancy was established in 1989, leading to the declaration of the Waterberg Biosphere by UNESCO in 2001.

Addendum 2: Description of Recorded Sites

Site 1

A. GENERAL SITE DESCRIPTION				
The site comprises the remains of a possible Iron Age house. Surface concentrations and scatters of clay dagha, indicative of the wall and floor remains of a house have been recorded. Several pieces of undecorated potsherds were also noted at the site. However, no stone-walling or any other feature or structure was recorded. The site is roughly 4 metres in diameter and contains two possible house foundations.				
B. SITE EVALUATION				
B1. HERITAGE VALUE			Yes	No
Historic Value				
It has importance to the community or pattern of South Africa's history or precolonial history.				√
It has strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa.				√
It has significance relating to the history of slavery in South Africa.				√
Aesthetic Value				
It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.				√
Scientific Value				
It has potential to yield information that will contribute to an understanding of South Africa's natural and cultural heritage.			√	
It has importance in demonstrating a high degree of creative or technical achievement at a particular period.				√
It has importance to the wider understanding of the temporal change of cultural landscapes, settlement patterns and human occupation.				√
Social Value				
It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).				√
Tourism Value				
It has significance through its contribution towards the promotion of a local sociocultural identity and can be developed as tourist destination.			√	
Rarity Value				
It possesses unique, uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.			√	
Representative Value				
It is importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.				√
B2. REGIONAL CONTEXT				
Other similar sites in the regional landscape.			√	
B3. CONDITION OF SITE				
Integrity of deposits/structures.		Unstable, eroding out		
C. SPHERE OF SIGNIFICANCE				
	High	Medium	Low	
International			√	
National			√	
Provincial			√	
Local			√	
Specific community			√	
D. FIELD REGISTER RATING				
National/Grade 1 [should be registered, retained]				
Provincial/Grade 2 [should be registered, retained]				
Local/Grade 3A [should be registered, mitigation not advised]			√	
Local/Grade 3B [High significance; mitigation, partly retained]				
Generally Protected A [High/Medium significance, mitigation]				

Generally protected B [Medium significance, to be recorded]	
Generally Protected C [Low significance, no further action]	√
E. GENERAL STATEMENT OF SITE SIGNIFICANCE	
Low	√
Medium	
High	
F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT	
None	√
Peripheral	√
Destruction	
Uncertain	
G. RECOMMENDED MITIGATION	
<ul style="list-style-type: none"> The site should be clearly demarcated during the construction phase to prevent any impact 	
H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS	
<ul style="list-style-type: none"> National Heritage Resources Act (Act No. 25 of 1999) 	
I. PHOTOGRAPHS	
	
<p>Figure 23: A cluster of clay indicating the remains of a possible Iron Age house</p>	
	
<p>Figure 24: A cluster of clay indicating the remains of a possible Iron Age house</p>	

Addendum 3: Surveyor General Farm Diagram

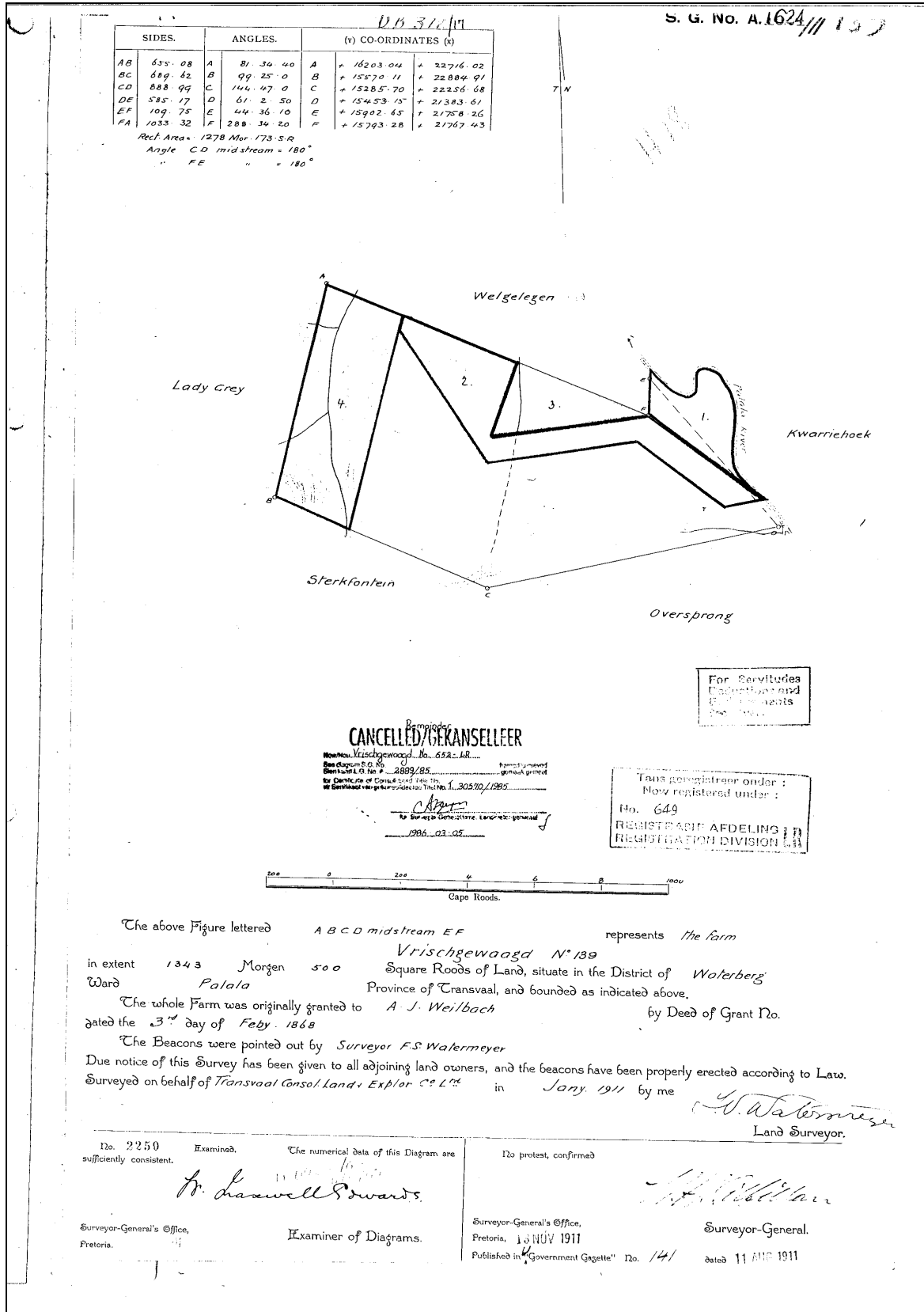


Figure 25: Surveyor General's map of the Frischgewaagd 649LR which was surveyed in 1911, however note that the Title Deed was first granted in 1868 to Mr A.J. Weilbach