

ADANSONIA HERITAGE CONSULTANTS
ASSOCIATION OF SOUTH AFRICAN PROFESSIONAL ARCHAEOLOGISTS
Christine van Wyk Rowe (Mpumalanga/Limpopo)
P.O. Box 75, Pilgrim's Rest, 1290.
Cell: 0828719553 / christinevwr@gmail.com

TO: SAHRA: Mpumalanga
Ms. Machete
P.O. Box 18403, Nelspruit, 1200
CC: SAHRA: ATT: Phillip Hine
P.O. BOX 4637, CAPE TOWN, 8000
FROM: CHRISTINE VAN WYK ROWE
P.O. BOX 75, PILGRIM'S REST, 1290
DATE: 16 October 2009



**SUBJECT: PHASE 1 ARCHAEOLOGICAL / HERITAGE IMPACT ASSESSMENT:
PORTION 39 OF LYDENBURG TOWNLANDS 31 JT, MASHISHING/LYDENBURG,
MPUMALANGA PROVINCE**

Please receive the phase 1 Heritage Impact Assessments for the above project.
Please receive documentation attached regarding my accreditation as field supervisor with
ASAPA.

Contact details:

<i>Name</i>	<i>Contact details</i>
Client: Wandima Environmental services: Ms. Anne-Mari Venter	P.O. Box 1072, Nelspruit, 1200 Tel: 013 – 7525452
Adansonia Heritage Consultants Cell: 0828719553	C. van Wyk Rowe P.O. Box 75 Pilgrim's Rest, 1290

Yours sincerely

Christine van Wyk Rowe

A handwritten signature in black ink, appearing to read "C. van Wyk Rowe".

**PHASE 1 ARCHAEOLOGICAL / HERITAGE IMPACT
ASSESSMENT: PORTION 39 OF LYDENBURG TOWNLANDS
31JT, MASHISHING/LYDENBURG,**

MPUMALANGA PROVINCE

PREPARED FOR:
WANDIMA ENVIRONMENTAL SERVICES
MS. ANNE-MARI VENTER
P.O. BOX 1072, NELSPRUIT, 1200
TEL: 013 – 7525452
FAX: 013 - 7526877

30 JULY 2009

ADANSONIA HERITAGE CONSULTANTS
ASSOCIATION OF SOUTHERN AFRICAN PROFESSIONAL ARCHAEOLOGISTS
C. VAN WYK ROWE
christinevwr@gmail.com
P.O. BOX 75, PILGRIM'S REST, 1290

EXECUTIVE SUMMARY

A phase 1 Heritage Impact Assessment (HIA) regarding archaeological and other cultural heritage resources was conducted on the proposed footprint for the township development on the *remainder of portion 39 of Lydenburg Townlands 31 JT*, adjacent to the town of Mashishing (Lydenburg), Mpumalanga Province. The study area is situated on topographical map 1:50 000, 2530AB Lydenburg, and falls within the Mpumalanga Province.

The aim of this report is to identify all archaeological, cultural heritage resources and / or graves which might be affected in the proposed township development adjacent to Mashishing (Lydenburg), and to document and assess the importance within the local, provincial and the national context. Comments and recommendations are made to manage the identified features which might be impacted upon, and to recommend mitigation measures which need to be implemented.

A number of Late Iron Age (LIA) stone walled sites were identified in the study area. Most of them are situated in the eastern section of the proposed area of development. Apart from small sections as indicated in *Appendix 2* (the grey sections) which will be kept as public open spaces (POS), the rest will be negatively impacted upon. According to J.P. Celliers (Lydenburg Museum), the recording and documentation of the Late Iron Age stone walling will contribute to the pre-history and tourism potential of the area. Mitigation measures are therefore recommended. A local resident of Mashishing township, Mr. G. Malopane, was also consulted regarding any graves and other heritage features which might be known to the community.

During the survey, a few square stone walled structures on the northern side, which are possibly associated with early pioneer settlement, were also identified. On and adjacent to the current site of the Vodacom Cell Tower is the site of Fort Howard. Some of these remains have already been destroyed by infrastructure.

It is recommended that a phase 2 archaeological study be undertaken as a mitigation measure on the LIA stone walling, and stone walls associated with pioneer or European settlement. The structures need to be measured and documented, and small sections be excavated in order to establish further scientific information, before destruction. The site of Fort Howard is historically an important feature of the South African War (1999-1902), and should be left intact, as this area will not be impacted upon and left as a public open space. It is however recommended that a management plan be developed to ensure future protection for this section. For the other features, the developer will have to apply to SAHRA for a destruction permit.

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**PHASE 1 ARCHAEOLOGICAL / HERITAGE IMPACT ASSESSMENT: PORTION 39 OF
LYDENBURG TOWNLANDS 31JT, MASHISHING / LYDENBURG, MPUMALANGA
PROVINCE**

A. BACKGROUND INFORMATION ON THE PROJECT

Adansonia Heritage Consultants were appointed by Wandima Environmental Services, to conduct a phase 1 Heritage Impact Assessment to identify all relevant archaeological and other cultural heritage resources on the footprint for the proposed residential development adjacent to the town of Mashishing (Lydenburg), Mpumalanga Province.

This study investigates all possible archaeological and other cultural heritage resources which might be affected in the proposed area of future development, and will make recommendations in terms of the proposed footprint, should any cultural heritage resources be impacted upon.

- Part of EIA / scoping report.
- Type of development: Residential, township.
- Contact details: Wandima Environmental Services, Ms. A. Venter, P.O. Box 1072, Nelspruit, 1200. Client: Thaba Chweu Municipality, Ms. T. Botha, Tel: 013 2357088, Fax: 013 2352895, P.O. Box 61, Lydenburg, 1120.
- Terms of reference: As specified by section 38 (3) of the NHRA, the following information is provided in this report.
 - a) The identification and mapping of heritage resources;
 - b) Assessment of significance of the resources;
 - c) Assessment of the impact of the development;
 - d) Evaluation of the impact of the development;
 - e) Alternatives given to affected heritage resources by development;
 - f) Plans for measures of mitigation.
- Legislative requirements:

The National Heritage Resources Act, no 25 (1999)(NHRA), protects all heritage resources, which are classified as national estate. The NHRA stipulates that any person who intends to undertake a development, is subjected to the provisions of the Act, (section 38 (1)(a), subsections (7)(8) and (9). It specifies that no person may destroy, damage, deface, excavate, alter, remove from its original position, subdivide or change the planning status of any heritage site without a permit issued by the heritage resources authority

responsible for the protection of such sites, (section 27(18)), and that special consent of the local authority must be required for any alteration or development affecting a heritage area (section 31(7)).¹

B. BACKGROUND TO ARCHAEOLOGY & HISTORY OF THE REGION

• Literature review; Museum databases; & previous relevant impact assessments

Research was conducted by means of collecting primary or secondary literary sources with relevant information on the prehistory and history of the area. In order to place the sites located in the study area in archaeological context, secondary sources, such as ethnographical and linguistic studies by early researchers such as Ziervogel and Van Warmelo were consulted. Other useful sources were that of Theal (pre-historic), De Jongh (ethnographic and historic information in the area), Bergh (historic), and the recent publication of Delius, *Mpumalanga: History and Heritage*.

Mr. J.P Cilliers conducted an HIA on the adjacent development, and also conducted a phase two impact assessment. Mitigation measures included excavations of sections of the adjacent current development towards the east (Extension 6). Mr. Celliers was also contacted to assist with information regarding the study area, as it overlaps in historic space and time.

The displays in the Lydenburg museum cover information on the general history and pre-history of the Lydenburg area, and focuses extensively on the Early Iron Age site of the Lydenburg Heads.

The following historic information was compiled from the sources above:

• Stone Age

The San (or Bushmen) originally roamed the entire area. Unfortunately very little research in this regard has been conducted, although several rock painting sites have been recorded in the area of Ohrigstad, and rock engravings in the area of Lydenburg. In his book, *Geskiedenis Atlas van die Vier Noordelike Provinsies*, Bergh did not record any Stone Age sites in the immediate area of Lydenburg, Burgersfort and Steelpoort. The closest Middle- and Later Stone Age sites have been documented near Ohrigstad.²

¹National Heritage Resources Act, no. 25 of 1999.

²J.S. Bergh, *Geskiedenis Atlas van Suid-Afrika, Die Vier Noordelike Provinsies*, p. 4.

Secondary source evidence of Iron Age sites is lacking, with only one well known site indicated, the Lydenburg Heads site. Evidence of copper mines were recorded.³

- **Later Iron Age (LIA)**

It is believed that the areas around Lydenburg, Badfontein, Sekhukuneland, Roosenekal and Steelpoort were extensively inhabited during the later stages of the Iron Age (from 1500 until historic times). This phase, known as the Late Iron Age, is characterized by large-scale circular and semi-circular stonewalled settlements.⁴ These settlement complexes may be divided into three basic features: homesteads, terraces and cattle tracks. Researchers such as Mike Evers (1975) and Collett (1982) identified three basic settlement layouts. Basically these sites can be divided into simple and complex ruins. Simple ruins are normally small in relation to more complex sites and have smaller central cattle byres and fewer huts. Complex ruins consist of a central cattle byre which has two opposing entrances and a number of semi-circular enclosures surrounding it. The perimeter wall of these sites is sometimes poorly visible. Huts are built between the central enclosure and the perimeter wall. These are all connected by track-ways referred to as cattle tracks. These tracks are made by building stone walls, which forms a walkway for cattle to the centrally located cattle byres.⁵

The Pedi is the most famous group to have inhabited the Lydenburg area in historic times. The area in which these people settled is historically known as Bopedi but other groups resided here before the Pedi came onto the scene. Among the first of these were the Kwena or Mongatane, who came from the north and were probably of Sotho origin. A second tribe to settle in Bopedi before the arrival of the Pedi was the Roka, followed by the Koni.⁶

Some Koni entered the area from the east and others from the north-west. According to historians, most Koni trace their origin to Swaziland and therefore claim that they are related to the Nguni. After the first Koni settled in the southern part of Bopedi, the area became known as Bokoni. Many people who were previously known as Roka also adopted the name Koni as the name "Roka" was not always held in esteem by other groups.

³J.S. Bergh, *Geskiedenis Atlas van Suid-Afrika, Die Vier Noordelike Provinsies*, p. 8.

⁴J.P. Celliers, 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

⁵J.P. Celliers, 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

⁶J.P. Celliers, 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

Historically the Pedi was a relatively small group who by various means built up a considerable empire. The Pedi are of Sotho origin. They migrated southwards from the Great Lakes in Central Africa some five centuries ago. The names of their chiefs can be traced to a maximum of fifteen generations. Historical events can be deduced reasonably well for the last two centuries, while sporadic events can be described during the preceding centuries.⁷

Some 150 years before the Voortrekkers entered the area, some battles took place between the Koni (Zulu under Makopole) and Swazi (under Moselekatse). At that time the Mapedi resided in the Steelpoort area. The Bakoni (Koni) were attacked and defeated by the Matabele and their chief, Makopole, was killed. The Matabele, not yet satisfied with their victory, moved further north towards the Bapedi headquarters. At Olifantspoortjie the whole Bapedi regiment was wiped out as well as the sons of Thulare, the Bapedi chief (except for Sekwati who managed to escape).⁸

After four years, Sekwati together with a few followers who had also managed to escape the Matabele, now slowly started to rise. In 1830 Sekwati invaded some of the smaller groups and eventually the Koni (under Marangrang) were ambushed and defeated. Now the empire of Maruteng (Bapedi) ruled the Koni.

J.P. Celliers conducted a Heritage Impact Assessment on Extension 6 and consulted with archaeologist Prof. Tom Huffman on the origin of the stone walls of this area. It became clear that the ruins to be found near the town of Mashishing (Lydenburg), probably belonged to the Koni rather than the Pedi, who resided further to the south-west towards Steelpoort and Burgersfort. There is however not enough evidence to be certain. The ruins probably date from as far back as the seventeenth century.⁹

At the beginning of the 19th century, groups such as the **Pedi, Roka, Koni and Tau** densely populated the immediate area (Lydenburg, Steelpoort & Burgersfort).

⁷J.P. Celliers, 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

⁸J.P. Celliers, 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

⁹J.P. Celliers, 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

This is confirmed by ethnographical and linguistic studies by early researchers such as D. Ziervogel and N.J. Van Warmelo.¹⁰

The Pedi (who had their roots in the baKgatla, near the current Pretoria) moved under Thobele (who was banished from the Kgatla) to Sekhukhuneland in ca. 1650, where they settled alongside the baKoni. There was initially peace, but soon the Koni had to submit to the Pedi. In time, the Pedi also ruled over the baRoka, baTau, Matlala, baMohlala, and others. They ruled over the whole of Lydenburg, Pilgrim's Rest, Middelburg and Polokwane (Pietersburg) districts. This was understandably met with a lot of resistance.¹¹

The Pedi of chief Sekwati (ca 1860) lived at Phiring. Sekwati lived in constant fear of the Zulus. The country was unsafe and in an attempt to survive, some of the Koni turned to cannibalism.¹² This area was heavily under attack during the *Difaqane*. The Ndebele attacked this area in ca 1822, and Zwide (Swazi) attacked the Pedi in ca. 1825.¹³

• **European settlement**

The Voortrekkers passed the northern boundary of the Leolo mountains (Pedi area) in 1837 when Trichardt looked for a route to *Delagoa Bay*.¹⁴ Trichardt met the Pedi chief Sekwati.¹⁵ When more Europeans settled in the area from 1845, conflict was inevitable.

The Voortrekkers under Andries Hendrik Potgieter, settled at Ohrigstad in 1845. Soon conflicts arose between them and the Pedi leader, Sekwati. The smaller black groups also turned to Sekwati for help against the Voortrekkers. Sekwati moved his capital to the Leolo mountains at *Mosego* hill. Eventually they signed a treaty and it was decided that the Steelpoort or Tubatse River (north of Mashishing), would form the border between the Pedi and the Voortrekkers, and peace followed for a while.¹⁶

The conflict in the eastern parts of the country between white and black was of a more forceful nature than in the central areas of the country. The Kopa, Ndzundza-Ndebeles and Pedi were more able to resist European onslaught.

¹⁰N.J. Van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*. p. 111.

¹¹M. De Jongh, *Swatini*, p. 28.

¹²N.J. Van Warmelo, *A genealogy of the house of Sekhukhune*, p. 47.

¹³J.S. Bergh, *Geskiedenis Atlas van Suid-Afrika, Die Vier Noordelike Provinsies*, pp. 10-28.

¹⁴J.S. Bergh, *Geskiedenis Atlas van Suid-Afrika, Die Vier Noordelike Provinsies*, p. 14.

¹⁵G.M. Theal, *History of South Africa from 1873 – 1884*, p. 257.

¹⁶M. De Jongh, *Swatini*, p. 29.

The stressful relationship between the Pedi and Europeans since 1850, continued throughout the 1860's and 70's which lead to war. Sekhukhune, who took the reign after Sekwati in 1861, played an important role in this. After the Swazi attack on Sekhukhune in 1869, he moved his capital from *Thaba Mosego* to *Tshate*.¹⁷

Malaria and internal differences between Joubert and Potgieter resulted that Potgieter moved north to the Zoutpansberg to establish the Voortrekker settlement of Schoemansdal. The group which stayed behind decided to move to higher ground and Lydenburg (Mashishing), was founded in January 1850. It was named after the suffering which they endured at Ohrigstad ('Lyden' is the dutch word for 'suffering').¹⁸

The relationship between the Pedi and the Afrikaner stayed stressful. In 1876 the Afrikaners attacked the Pedi. A huge part of the Pedi capital was burnt down. In December 1876, the Pedi submitted to the Republic, as it was time to plant their crops and they could not afford to loose this valuable time.¹⁹

The British under Shepstone took over the Transvaal on 12 April 1877. At first Sekhukhune pretended to welcome them, but soon started raiding their cattle and other domesticated animals. In November the British, with the help of the Swazi, attacked the Pedi, and Sekhukhune's son and heirs were killed. Sekhukhune fled to a cave in the Leolo mountains, but was later captured and taken prisoner. He was succeeded by Mampuru (Middelburg district) and Ramoroko (Sekhukhuneland). Sekhukhune was killed in 1882 by Mampuru, after his release.²⁰

On 6 September 1900, Lydenburg surrendered to British forces under command of Sir Redvers Buller. The town was occupied by British forces throughout the duration of the war and numerous sources describe these times, such as in the diary of E.A. Mackey (as recorded in the Lydenburg News of 1948).²¹

¹⁷ J.S. Bergh, *Geskiedenis Atlas van Suid-Afrika, Die Vier Noordelike Provinsies*, p. 31.

¹⁸ J.P. Celliers, 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

¹⁹ M. De Jongh, *Swatini*, p. 30.

²⁰ M. De Jongh, *Swatini*, p. 30.

²¹ J.P. Celliers, 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

A map dated to 1900 (Major H.M. Jackson Series) indicated the military posts around Lydenburg, which include Fort Howard, Montreal Post, Strathcona post and Paardeplaats Post. Fort Howard and Paardeplaats Post were erected by the British Forces occupying the town.²² The map below indicates the location of Fort Howard (Fig 1), where the current Vodacom Cell mast is situated.

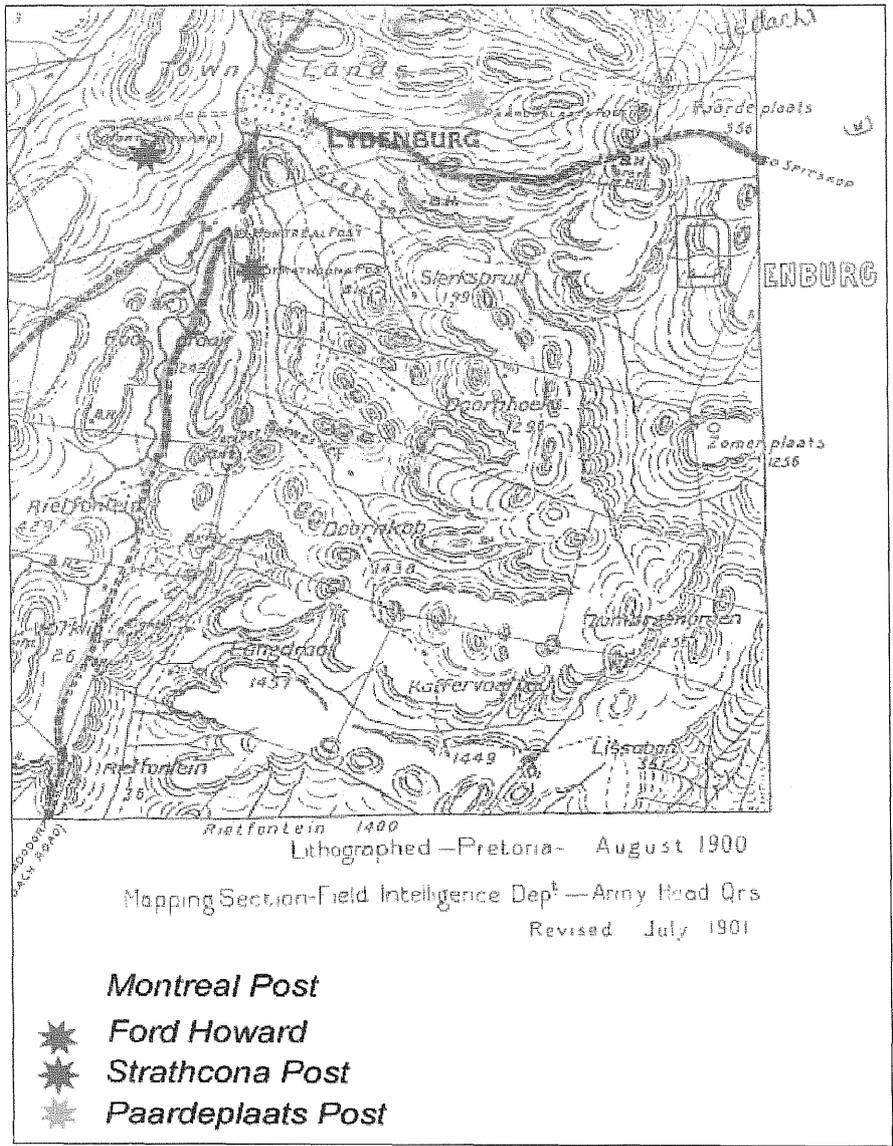


Fig 1: Location of Fort Howard and other military posts, 1900.²³

²² J.P. Celliers, 'HIA, Lydenburg Townlands, reply', icelliers@thabachweu.org.za 2009-06-18.

²³ J.P. Celliers, 'HIA, Lydenburg Townlands, reply', icelliers@thabachweu.org.za 2009-06-18.

C. DESCRIPTION OF AREA TO BE AFFECTED BY DEVELOPMENT

The proposed residential development is situated on the *remainder of portion 39 of Lydenburg Townlands 31 JT*, as indicated in *Appendix 1 (Location & Proposed area of Development)*, and *Appendix 2 (Concept Layout)*. The study area is undeveloped and was mainly used for grazing purposes by locals, but is locked in by established and current development. The north-western as well as the east and north-eastern sections are bordered by established townships. A new development is currently taking place on the eastern border. The air strip is situated on the south western section, and more future developments are planned on the borders of the study area.²⁴

The entire area is informally used as grazing for cattle and goats, and illegal hunting of small animals also takes place. Domestic waste and building rubble, litters the outskirts of the township sections towards to north-west, north-east and east.

• Locality

The study area was investigated for all possible heritage related features which might fall within the proposed residential development (see GPS co-ordinates in *section D*, as well as *Appendix 3: Location of archaeological/historical sites*), and which provides an indication of previous disturbances and current infrastructure. A visual layout of the location of the proposed development, is provided in *Appendix 1: Location and proposed area of development*, and *Appendix 2: Concept Layout: Proposed residential development*, in this report.

The area is situated on topographical map 1:50 000, *2530AB Lydenburg*, on the *remainder of portion 39 of Lydenburg Townlands 31 JT*, within the Mpumalanga Province.

• Description of methodology

A map of the layout for the proposed residential development was supplied by the client, Wandima Environmental Services (*Appendix 1*), and was used as a guideline for the investigation of the proposed township development. *2004 Google Earth* images were also studied to assess current and historic disturbed areas or infrastructure.

In order to reach a comprehensive conclusion regarding the archaeological and cultural heritage resources in the vicinity of the proposed development, the following methods were used:

²⁴Personal communication: Pierre Buys, Professional Planners, pierre@profplanners.co.za, 2009-06-10.

- Fieldwork and survey of the entire proposed residential development was conducted on foot with a three person team over six days;
- Visibility of the area was excellent as the grassland vegetation had been burnt;
- The area is mostly flat or sloping, with some rocky outcrops. A perennial stream splits the study area in two parts.
- All relevant data was located with a GPS instrument (Garmin Etrex), datum WGS 84, and plotted on a Google Earth image. Co-ordinates are within 4-6 meters.
- Evaluation of the resources which might be impacted upon by the footprint, was done within the framework provided by the National Heritage Resources Act, no. 25 (1999);
- Personal communication with relevant stakeholders.
- All the features in this report, were allocated with a code and number (eg: LT20), which indicates the farm name (Lydenburg Townlands), and number of sequence during the survey.

D. DESCRIPTION OF IDENTIFIED SITES

The proposed residential development is earmarked towards the west of the town of Mashishing (Lydenburg). All comments should be studied in conjunction with *Appendix 1: Location and proposed area of development*, *Appendix 2: Concept Layout: Proposed residential development*; *Appendix 3: Location of archaeological / historical sites*, and *Appendix 4: Photographs*, which indicate the area, and which corresponds with the discussion below. GPS co-ordinates were taken with a Garmin etrex summit model, datum WGS 84. The accuracy varied between 4 - 5 meters.

• Late Iron Age Stone walled sites:

<i>Site location indicated in Appendix 3.</i>	<i>GPS Co-ordinates</i>	<i>Description, type and category of archaeological / cultural heritage features</i>
No. LT1 in Appendix 3.	Elev: 1334m S25°05'54.4" E30°26'18.9" Elev: 1414m S25°05'57.6" E30°26'18.4"	Extensive Late Iron Age (LIA) stone walling. Surface collection consisted of five upper grinders. The eastern side of this complex has already been disturbed by the new development. An established township situated towards the north has previously impacted negatively on the northern side of the stone walled site. Southern border of site no. 1: Clearly defined circular units. See photo 1 (Appendix 4).
No. LT2 in Appendix 3.	Elev: 1349m S25°05'54.9" E30°26'03.5" Elev: 1432m S25°06'03.4" E30°26'05.1" Elev: 1426m S25°05'58.1" E30°26'05.0"	No 2: LIA stone walling, some which are clearly defined and some which are poorly defined by the outline of small pebbles. The surface collection consisted of two upper grinders. The entire section is covered by stone walling and agricultural terraces which fades out towards the north and north-west. No 2a: LIA stone walling which are damaged by road infrastructure. Surface collection consists of a broken upper grinder. See photo 2 (Appendix 4). No. 2b: LIA stone walling which are clearly defined and forms part of no. 2. Some of the stones were removed by vandals and heaped up close to the settlement to be used by the community for building purposes. No. 2c: Surface collection consists of the following: A shallow lower grinder inside the stone walled complex. Undecorated clay potsherds of various thickness and decoration. See photo 3 (Appendix 4). Two lower grinders, one of which was used on both sides.
No. LT7 in Appendix 3.	Elev: 1425m S25°05'59.5" E30°26'08.2"	No. 7: Poorly defined LIA stone walling links up with site no. 2. It is visible throughout this area directly towards the east of no. 2b & 2c.

<i>Site location indicated in Appendix 3.</i>	<i>GPS Co-ordinates</i>	<i>Description, type and category of archaeological / cultural heritage features</i>
No. LT8 in Appendix 3.	Elev: 1418m S25°05'55.8" E30°26'04.6"	No. 8: In this section, LIA circular stone walls are still directly part of site no. 2. Surface collection: Upper grinder. See photo 4 (Appendix 4).
No. LT9 in Appendix 3	Elev: 1417m S25°05'55.7" E30°26'07.2" Elev: 1418m S25°05'57.4" E30°26'12.2"	No. 9: LIA stone walling is still an extension of site no. 2. The walls are poorly defined. It also extends towards the east. Surface collection: Upper grinder inside the filling of the walls. Broken upper grinder amongst poorly defined agricultural terraces.

<i>Site location indicated in Appendix 3.</i>	<i>GPS Coordinates</i>	<i>Description, type and category of archaeological / cultural heritage features</i>
No. LT12 in Appendix 3.	<p>Elev: 1417m S25°05'54.2" E30°26'03.6"</p> <p>Elev: 1422m S25°05'57.5" E30°26'02.2"</p> <p>Elev: 1423m S25°05'58.1" E30°25'59.4"</p> <p>Elev: 1427m S25°06'00.2" E30°26'01.2"</p> <p>Elev: 1426m S25°06'01.0" E30°25'57.9"</p> <p>Elev: 1434m S25°06'07.7" E30°25'51.7"</p> <p>Elev: 1415m S25°05'55.0" E30°25'49.1"</p>	<p>LIA stone walling which links up with no. 2 on the western side of dirt track. It would appear that this section forms part of the outer limit of the overall stone walled complex.</p> <p>Surface collection: Upper grinder. Broken upper grinder.</p> <p>The LIA stone walling has reached its outer limit in this section. The walls are poorly defined, and are situated almost directly under the existing power lines.</p> <p>Clearly defined LIA stone walling. Surface material consists of two upper grinders. One, which was used on three sides. The walls are still roughly underneath the power lines.</p> <p>Continuation of above circular stone walling complex, with an entrance clearly visible. (Still situated underneath the power lines). Surface collection includes a shallow lower grinder as well as a broken lower grinder.</p> <p>Surface collection includes: Broken lower grinder and 2 upper grinders.</p> <p>Broken lower grinder.</p>
No. LT4 in Appendix 3.	<p>Elev: 1388m S25°06'13.0" E30°26'01.4"</p>	<p>LIA stone walling which are clearly defined, with a prominent upright stone visible. See photo 5 (Appendix 4).</p>
No. LT5 in Appendix 3.	<p>Elev: 1374m S25°06'08.4" E30°26'13.8"</p>	<p>LIA stone walling down the slope of a hill bordering the area that is currently being developed. In some areas the foundation/base of the walls are clearly defined. Exceptionally large stones were used in the base of the walls. Surface material includes an upper grinder. See photo 6 (Appendix 4).</p>

<i>Site location indicated in Appendix 3.</i>	<i>GPS Coordinates</i>	<i>Description, type and category of archaeological / cultural heritage features</i>
No. LT10 in Appendix 3.	Elev: 1418m S25°05'58.1" E30°26'14.2"	LIA stone walling with large stones links up with site no. 5. The settlement continues although some areas are poorly defined.
No. LT11 in Appendix 3.	Elev: 1419m S25°06'00.6" E30°26'16.0"	No 11: LIA stone walling links up with sites no. 5 and 10. The stones are quite large and continues towards the east where the new development is currently taking place. Sections have been damaged by the road infrastructure towards the south.
No. LT6 in Appendix 3.	Elev: 1442m S25°06'16.0" E30°26'07.4"	LIA stone walling which are clearly defined. Mr J.P. Celliers excavated sections on this site as mitigation measures for the adjacent current development.
No. LT6a in Appendix 3.	Elev: 1438m S25°06'11.6" E30°26'07.0" Elev: 1432m S25°06'09.7" E30°26'09.0"	Continuation of LIA stone walling as described in site no. 6, although the walls are poorly defined. See photo 7 (Appendix 4). Surface collection: Small upper grinder.

Other Features:

Site location indicated in Appendix 3.	GPS Co-ordinates	Comments on field survey: Archaeological / cultural heritage features
No. LT3 in Appendix 3.	Elev: 1375m S25°06'17.6" E30°25'41.8"	Remains of a recent structure associated with European settlement. Modern baked bricks, concrete floor and other building rubble and metal fragments in Kikuyu grass were observed. This might also be part of the previous Rifle Range (site no 13). -Cobble stone floor set in concrete; -Collapsed stone wall entrance with metal droppers used as re-enforcement. -Broken lower grinder near remains of structure (out of context). See photo 8 (Appendix 4).
No. LT13 in Appendix 3.	Elev: 1432m S25°06'07.1" E30°25'47.0"	Area of recent Rifle Range as indicated on the Topographical map 1:50 000, 2530 AB Lydenburg. Several trenches are still to be seen and used R1 bullet shells were observed;
No. LT14 in Appendix 3.	Elev: 1436m S25°06'00.2" E30°25'32.1"	Remains of a recent stone wall in a straight line, poorly defined. See photo 9 (Appendix 4).
No. LT15 in Appendix 3.	Elev: 1444m S25°06'03.9" E30°25'27.6"	Remains of a poorly defined rectangular stone walled structure, of which two sides are visible.
No. LT16 in Appendix 3.	Elev: 1410m S25°05'48.8" E30°25'48.3"	Foundation of a recent square building. Surface material consists of concrete and rusted modern metal fragments.
No. LT17 in Appendix 3.	Elev: 1410m S25°05'40.2" E30°25'37.6"	Modern concrete, rectangular foundations with heaps of building rubble. Surface material consists of metal objects as well as baked bricks.
No. LT18 in Appendix 3.	Elev: 1369m S25°05'43.8" E30°25'45.9"	Recent stone foundations of rectangular shape. See photo 10 (Appendix 4).
No. LT19 in Appendix 3.	Elev: 1412m S25°05'19.8" E30°25'48.8"	Well defined recent rectangular stone foundations with divisions. Surface material consists of metal objects and undecorated clay potsherds. See photo 11 (Appendix 4).
No. LT20 in Appendix 3.	Elev: 1407m S25°05'15.2" E30°25'57.3"	LIA circular stone walling (next to tarred road). Poorly defined with no surface material.

<i>Site location indicated in Appendix 3.</i>	<i>GPS Co-ordinates</i>	<i>Comments on field survey: Archaeological / cultural heritage features</i>
No. LT21 in Appendix 3.	Elev: 1385m S25°05'24.2" E30°26'10.8" Elev: 1384m S25°05'24.2" E30°26'13.0"	Several stone foundations of rectangular structures (with divisions), not more than 15 meters apart, together with one circular unit, and one square unit without divisions. Surface material consisted of metal fragments. See photo 12 (Appendix 4). Large rectangular stone foundations with divisions, in close vicinity of the above.
No. LT22 in Appendix 3.	Elev: 1344m S25°06'21.2" E30°26'02.8" Elev: 1294m S25°06'22.3" E30°25'56.0"	Location of Fort Howard as indicated in Fig. 1. Much of the remains have been disturbed or destroyed by the existing Vodacom Cell Tower and infrastructure. But there are many square and circular stone foundations left, as well as the clear outline of roads towards the fort. This area had been discussed in JP Celliers' report on Extension 6. It is currently fenced off with signs "No unauthorized entry" Surface material consisted of fragments of eroded metal. See photo 13 (Appendix 4). Outline of road associated with Fort, outside the fenced off area. See photo 14 (Appendix 4).

• **Discussion on footprint of the proposed residential development**

A total of twenty-two features were marked which comprised of one large Late Iron Age stone walling settlement (11 features: LT1, LT2, LT4, LT5, LT6, LT7, LT8, LT9, LT10, LT11, LT12). Feature LT20, consists also of a poorly defined stone walled site, but it is possibly not connected to the settlement in the east and could be more recent. The area used as a recent rifle range (feature LT13), concrete foundations associated with recent settlement (features LT3, LT16, LT17), recent loose stone foundations without concrete, (features LT14, LT15 & LT18); two areas which might be associated with early pioneer or European settlements (features LT19 & LT21), and LT22, which is the military site of Fort Howard, erected during 1900, (South African War).

Sites LT1, LT2, LT4, LT5, LT6, LT7, LT8, LT9, LT10, LT11, LT12:

Location: See Appendix 3.

The major archaeological significance on this study area, are the LIA stone walls which covers the entire eastern section of the proposed development. The findings are recorded with GPS points and are situated closely together, however, they all belong to the same cultural group. This settlement links up with the area where the current development is taking place and which has been researched, and excavated recently by J.P. Celliers (2009)²⁵, and in the area by Evers (1975) and Collett (1979).²⁶ They consist of circular stone-walled complexes, typical of the Late Iron Age and are mostly in a weathered condition and poorly defined, especially towards the western outskirts of the complex area. Surface collections comprise of a few fragments of undecorated clay potsherds, several upper grinders and a few complete and broken lower grinders.

A local inhabitant of the township of Mashishing, George Malopane was asked about general information on the study area. He was not aware of any graves in the area, and referred to the LIA stone walling, as “where the ancients” lived. He also indicated that the north-western side of the study area, was mostly inhabited by white people. He was unable to give any specific information.²⁷

Impact by proposed development: This entire section will be impacted upon by the proposed township development, although the green sections in *Appendix 2, Concept Layout: Proposed residential development*, will be used as public open spaces. LT4, LT5 & LT6 will therefore not be impacted upon. However, LT1, TL2, TL7, TL8, TL9, TL10, TL11 & TL12 will be impacted upon, and mitigation measures are necessary.

Mitigation: It is recommended that the LIA stone walls indicated as, LT1, TL2, TL7, TL8, TL9, TL10, TL11 & TL12, be documented and small sections excavated during a phase 2 study, and that the developer applies for a destruction permit from SAHRA, before construction activities commences.

Site LT20:

Location: See Appendix 3.

LIA circular stone walling (next to tarred road). This section has already been impacted upon by the existing tarred road. It is poorly defined, with no surface collection.

²⁵Personal information: J.P. Celliers, Curator, Lydenburg Museum, 2009-06-18.

²⁶J.P. Celliers, 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

²⁷Personal information: George Malopane, Mashishing, 2009-06-15.

Impact by proposed development: This section will be impacted upon by the proposed township development. See *Appendix 2, Concept Layout: Proposed residential development*.

Mitigation: It is recommended that the LIA stone wall be documented during a phase 2 study, a small section excavated and that the developer applies for a destruction permit before construction activities commences.

Site LT13:

Location: See Appendix 3.

This area was used as a rifle range as indicated on topographical map 1:50 000, 2530AB Lydenburg, the remainder of portion 39 of Lydenburg Townlands 31 JT. It is disturbed by several trenches, and used R1 bullet shells have been noted during the survey.

Impact by proposed development: This section will be impacted upon by the proposed township development. See *Appendix 2, Concept Layout: Proposed residential development*.

Mitigation: This section is regarded as of no significance and no mitigation measures are needed.

Sites LT3, LT16, LT17:

Location: See Appendix 3.

LT3: Remains of a recent structure associated with European settlement. Surface material consisted of modern baked bricks, concrete floors, other building rubble and metal fragments in Kikuyu grass. A small cobble stone floor is also set in concrete and the entrance to the property, which has collapsed, revealed a stone and concrete wall reinforced with modern metal droppers. A broken lower grinder is out of context and was probably used as a garden feature.

LT16: The foundations of a recent square building are visible. Surface material consists of concrete, brick and rusted modern metal fragments.

LT17: Modern concrete, rectangular foundations with heaps of building rubble. Surface material consists of metal objects as well as baked bricks.

Impact by proposed development: This section will be impacted upon by the proposed township development. See *Appendix 2, Concept Layout: Proposed residential development*.

Mitigation: This section is regarded as of no significance and no mitigation measures are needed.

Sites LT14, LT15 & LT18:

LT14: The remains of a recent stone wall in a straight line are poorly defined with no surface material.

LT15: The remains of a poorly defined rectangular stone walled structure, of which two sides are still visible. No surface material was identified.

LT18: Recent stone foundations of rectangular shape. No surface material was identified.

Location: See Appendix 3.

Impact by proposed development: This section will be impacted upon by the proposed township development. See *Appendix 2, Concept Layout: Proposed residential development..*

Mitigation: This section is regarded as of no significance and no mitigation measures are needed.

Sites LT19 & LT21:

LT19: Recent rectangular stone foundations with divisions. Surface material consists of recent metal objects and undecorated clay potsherds.

LT21: Several well defined stone foundations of rectangular structures (with divisions), not more than 15 meters apart, together with one circular unit, and one square unit without divisions. Surface material consisted of metal fragments. Another large rectangular stone foundation with divisions is also in close vicinity of the above units.

Location: See Appendix 3.

A local inhabitant of the township of Mashishing, George Malopane was asked about general information on this area. He indicated that this area (north-western side), was previously mostly inhabited by white people. He could not give any specific information.²⁸

Impact by proposed development: This section will be impacted upon by the proposed township development. See *Appendix 2, Concept Layout: Proposed residential development.*

Mitigation: It is recommended that this area be documented and a section excavated during a phase 2 study as it is believed to be older than 60 years and belonging to pioneer farmers. The developer should then apply for a destruction permit before construction activities commences.

²⁸Personal information: George Malopane, Mashishing, 2009-06-15.

Site LT22: This is the area of Fort Howard, erected by the British Forces in 1900, who occupied the town of Lydenburg during the South African War (see Fig. 1).

Location: See Appendix 3.

Impact by proposed development: This area will not directly be impacted upon by the proposed development, as it is earmarked as a public open space (see the green section in *Appendix 2, Concept Layout: Proposed residential development*). It will however be impacted upon, once the area is developed.

Mitigation: It is recommended that a management plan be developed for this section as this area will be vulnerable once the surrounding area is developed. Please note that JP Cilliers already recommended that this area be investigated, excavated and further researched, in his report on Extention 6, which borders the current development.²⁹

E. STATEMENT OF SIGNIFICANCE AND EVALUATION OF HERITAGE RESOURCES IN STUDY AREA

Section 38 of the National Heritage resources act (25 o 1999), rates all heritage resources into National, Provincial or Local significance, and proposals in terms of the above is made for all identified heritage features.

• Evaluation methods

Site significance is important to establish the measure of mitigation and/or management of the resources. Sites are evaluated as *HIGH (National importance)*, *MEDIUM (Provincial importance)* or *LOW (local importance)*, as is specified in the NHRA. It is explained as follows:

• National Heritage Resources Act

The National Heritage Resources Act no. 25, 1999 (NHRA) aims to promote good management of the national estate, and to enable and encourage communities to conserve their legacy so that it may be bequeathed to future generations. Heritage is unique and it cannot be renewed, and contributes to redressing past inequities.³⁰ It promotes previously neglected research areas of which the study area is in crucial need of. Any research information resulting from this study is also contributing to the eMakhazeni Tourism Association initiative currently envisioned for the area.³¹

²⁹ J.P. Celliers, 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

³⁰ National Heritage Resources Act, no. 25 of 1999. p. 2.

³¹ Rossouw, C., A new experience in local tourism. The Lowvelder, 2009-06-09.

The significance and evaluation of the archaeological and cultural heritage features can be summarized as follows:

<i>Site no:</i>	<i>Cultural Heritage features</i>	<i>Significance</i>	<i>Measures of mitigation</i>
LT4, LT5 & LT6	Late Iron Age Stone walls	Outside proposed development – part of public open space	NONE
LT1, TL2, TL7, TL8, TL9, TL10, TL11 & TL12	Late Iron Age Stone walls	Low - Local	A section to be excavated and walls documented during a phase 2 study; Developer to apply for a destruction permit from SAHRA before activities commence
TL20	Late Iron Age stone walling	Low - Local	A section to be excavated and walls documented during a phase 2 study; Developer to apply for a destruction permit from SAHRA before activities commence
TL13	Modern rifle range	None	None
LT3, LT16, LT17	Remains of a recent concrete and brick structures	None	None
LT14, LT15 & LT18	Remains of a poorly defined rectangular stone walled structures	None	None
LT19 & LT21	Several stone foundations of rectangular structures (with divisions), together with one circular unit, possibly associated with pioneer settlement	Low - Local	A section to be excavated and walls to be documented during a phase 2 study; Developer to apply for a destruction permit from SAHRA before activities commence
LT22	Site of South African War: British Fort Howard	High – National value	Will be kept as a public open space, and therefore a management plan be developed to ensure its future protection.

All archaeological and other cultural heritage resources are evaluated according to the National Heritage Resources Act, no. 25 (1999) (NHRA), section 3(3). The features identified in the study area are considered to be part of the national estate, and has cultural significance or other special value in terms of the following criteria:

- (a) its importance in the pattern of South Africa's history;
- (c) its potential to yield information that will contribute to an understanding of South Africa's cultural heritage;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.³²

• **Field rating:**

The LIA cultural heritage features, as it is discussed in the section above, are rated as Low and therefore of local significance. Mitigation measures include the further research, recording and excavation of certain sections. The site of Fort Howard is rated as High and of national value, but will not be directly impacted upon by the development. Therefore a management plan is recommended to ensure its future protection. Once the mitigation measures have been conducted, the developer may apply for a destruction permit from SAHRA, for the areas, as indicated.

F. RECOMMENDATIONS

Most of the Late Iron Age sites in the study area, are situated in the eastern section of the proposed development, apart from small sections, as indicated in *Appendix 2* (the green sections), which will be kept as public open spaces. The rest will be negatively impacted upon by the proposed development.

According to J.P. Celliers (Lydenburg Museum), any new information on the Late Iron Age stone walling may contribute to the scientific value and to the tourism potential of the area as a whole.³³

It is recommended that:

- the site be mitigated and recorded before destruction takes place. A phase 2 archaeological study, should be undertaken as a measure of mitigation on the LIA stone walling, and stone walls associated with pioneer or European settlement. The structures need to be measured and documented, and small sections be

³²National Heritage Resources Act, no. 25 of 1999. pp. 12-14

³³Personal information: J.P. Celliers, Curator, Lydenburg Museum, 2009-06-18.

excavated inside TL1, TL2, TL7, TL8, TL9, TL10, TL11, TL12, TL20, TL19 & TL21, in order to establish further scientific information.

- A management plan should be developed for the site of Fort Howard. This site will not be directly impacted upon by the proposed development, as it is planned to be kept as a public open space, but it will be vulnerable once the development is in place.
- The developer will have to apply to SAHRA for a destruction permit for the LIA sites, before any construction activities may commence.

G. CONCLUSION

Archaeological material or graves are not always visible during a field survey and therefore some significant material may only be revealed during construction activities. It is therefore recommended that the developers be made aware of this possibility and when human remains, clay or ceramic pottery etc. are observed, a qualified archaeologist must be notified and an assessment be done. Further research might be necessary in this regard for which the developer is responsible.

Adansonia Heritage Consultants can not be held responsible for any archaeological material or graves which were not located during the survey.

H. SOURCES

• GOVERNMENT PUBLICATIONS:

• National Legislation

- Republic of South Africa, *National Heritage Resources Act*, (Act No. 25 of 1999).

• NEWSPAPER ARTICLES

- Rossouw, C., A New experience in local tourism. *The Lowvelder*, 2009-06-09.

• LITERATURE

- BERGH, J.S. (red.), *Geskiedenis Atlas van Suid Afrika: Die vier Noordelike Provinsies*. J.L. van Schaik, 1999.
- DE JONGH, M. (red.), *Swatini*, UNISA, 1987.
- DELIUS, P, *Mpumalanga: History & Heritage*, KZN University Press, 2007.
- THEAL, G.M., *History of South Africa from 1873 – 1884*, Cape Town, unknown.
- VAN WARMELO, N.J., *A Preliminary Survey of the Bantu Tribes of South Africa*, Pretoria, 1935.
- VAN WARMELO, N.J., *A genealogy of the house of Sekhukhune*, Pretoria, 1944.

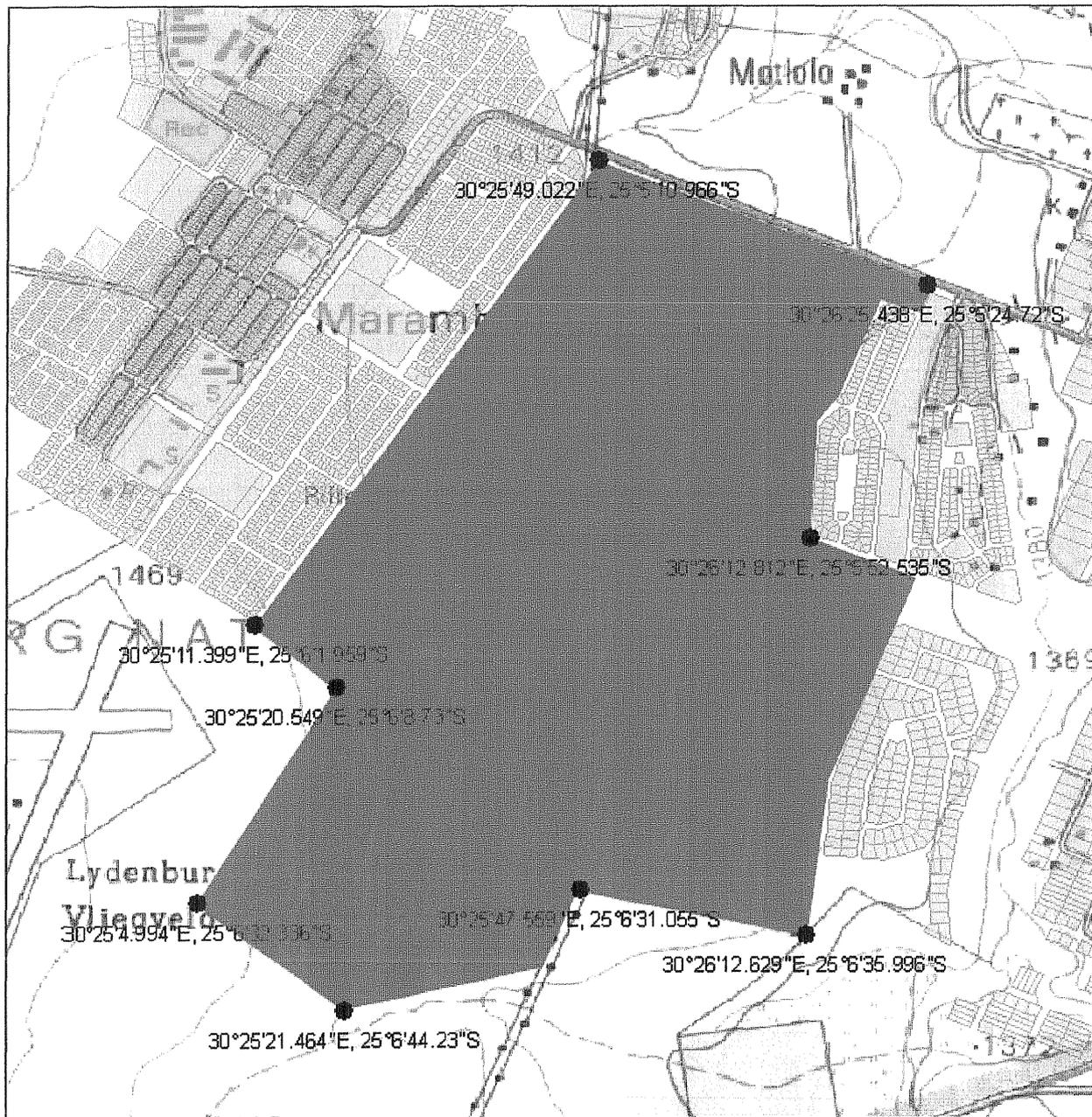
ELECTRONIC INFORMATION SOURCES

- BUYS, P., 'HIA, Lydenburg Townlands, reply', pierre@profplanners.co.za 2009-06-10.
- CELLIERS, J.P., 'HIA, Lydenburg Townlands, reply', jcelliers@thabachweu.org.za 2009-06-18.

PERSONAL INFORMATION

- Personal information: J.P. Celliers, Curator, Lydenburg Museum, 2009-06-18.
- Personal information: G. Malopane, Resident, Mashishing, 2009-06-18.

APPENDIX 1: Location & Proposed area of Development (Topographical map provided by Wandima Environmental Consultants).



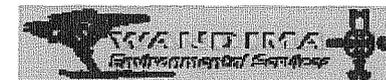
Proposed Township development on the remainder of portion 39 of Lydenburg Townlands 31-JT, Mpumalanga

Legend

-  Proposed Township establishment in Lydenburg
-  Existing Township -Lydenburg



1:20,000



**APPENDIX 2: Concept Layout: Proposed
Residential development (Map provided by Wandima
Environmental Consultants).**

CONCEPT LAYOUT PLAN 7

MASHISHING +2 776 000

MASHISHING

MASHISHING

X+2 777 000

RESTANT VAN 40 30

LYDENBURG TOWNLANDS 31-JT

REPERED EXTENSION

POSITION 003

POSITION 170

THABA CHWEU Municipality



NOTES:

Layout only concept / draft end for discussion purposes

Spills not in all instances indicated.

Numbers within blocks indicate number of residential units that can be accommodated and is of an average of for design sites e.g., 600 eqm.

Stormwater and drainage channels still to be provided after input from civil engineers.

Other supporting land uses still to be provided after consultation with all the relevant stakeholders.

Geotechnical conditions not taken into consideration.

No floodlines taken into consideration.

LEGEND:

- TOTAL AREA = 2200 Ha
- ave. 350m² AREA = 1022 ERVEN (25%)
- ave. 425m² AREA = 2118 ERVEN (95%)
- ave. 600m² AREA = 600 ERVEN (16%)
- TOTAL RESIDENTIAL = 3737 ERVEN**
- RES 2 ERVEN = 23,000 Ha @ 40 dwellings criteria = 1035 dwellings
- RESIDENTIAL 2 = 27 ERVEN
- BUSINESS = 2 ERVEN
- SCHOOLS = 3 ERVEN
- INSTITUTIONS = 10 ERVEN (Clinic, Pre-school, Church)
- MUNICIPAL = 28 ERVEN
- P.O.S. = 41 ERVEN
- REST OF LAYOUT = 85 ERVEN
- TOTAL = 3849 ERVEN**

PETERS DU TOIT & ASSOCIATES CC

TOWN AND REGIONAL PLANNERS

100 ACCORDIA DRIVE, 100 ACCORDIA DRIVE, 100 ACCORDIA DRIVE

011 461 1000, 011 461 1000, 011 461 1000

100 ACCORDIA DRIVE, 100 ACCORDIA DRIVE, 100 ACCORDIA DRIVE

MASHISHING(LYDENBURG)

MIDDLE INCOME CONCEPTUAL FRAMEWORK

Project Name	Mashishing (Lydenburg)
Client	Thaba Chweu Municipality
Scale	1:2000
Date	JULY 2007
Author	PL
Check	PL
Drawn	PL
Project No.	PL/07/001

APPENDIX 3: Location of archaeological /
historical sites (Google Earth).



Lydenburg, South Africa

Google

Eye alt 5.86 km

Jun 1, 2004

© 2009 Tele Atlas
© 2009 Europa Technologies
Image © 2009 DigitalGlobe
© 2009 AND

elev 1408 m

20

19

21

17

18

14

15

16

7

8

9

12

10

11

2

13

5

4

6

22

6a

3

1258 m

25°06'01.45" S 30°26'22.20" E

APPENDIX 4: Photographs (C. Rowe)

PHOTOGRAPHS OF STUDY AREA:



Photo 1: Site LT1: The LIA stone walls have already been disturbed by current township development

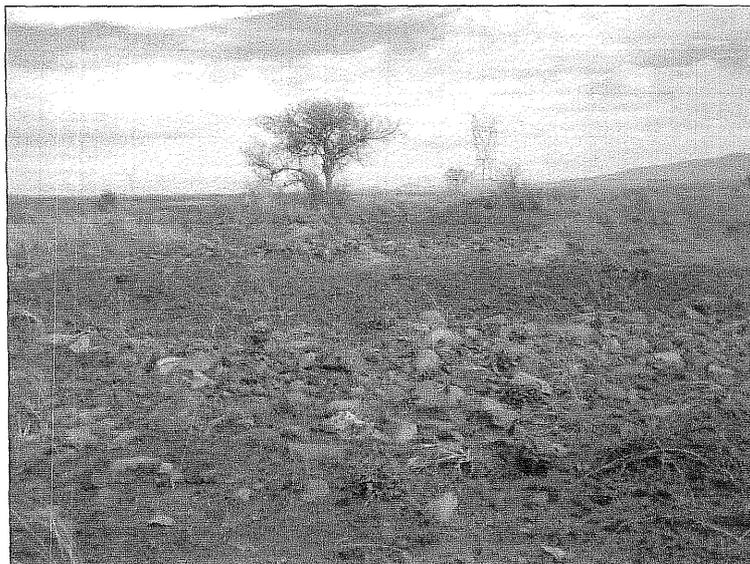


Photo 2: Site LT2: The LIA stone walls are extensive in this area but have been damaged by secondary road infrastructure.

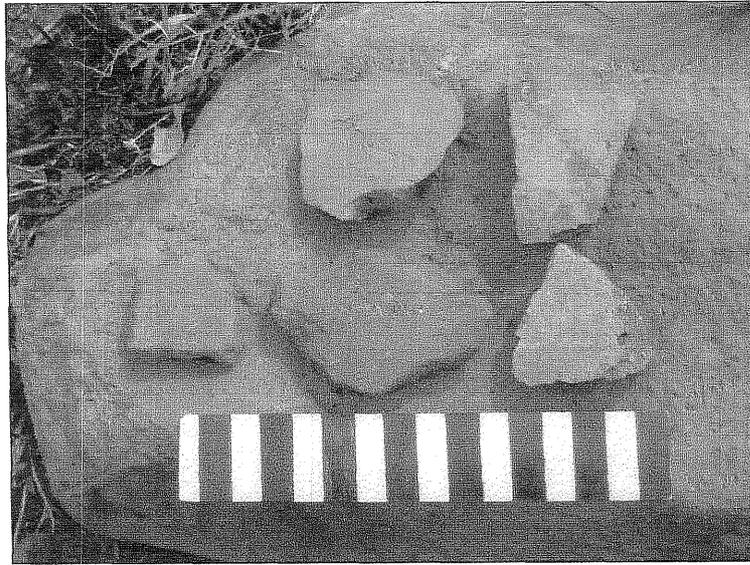


Photo 3: Site LT2: Surface collection - undecorated potsherds.

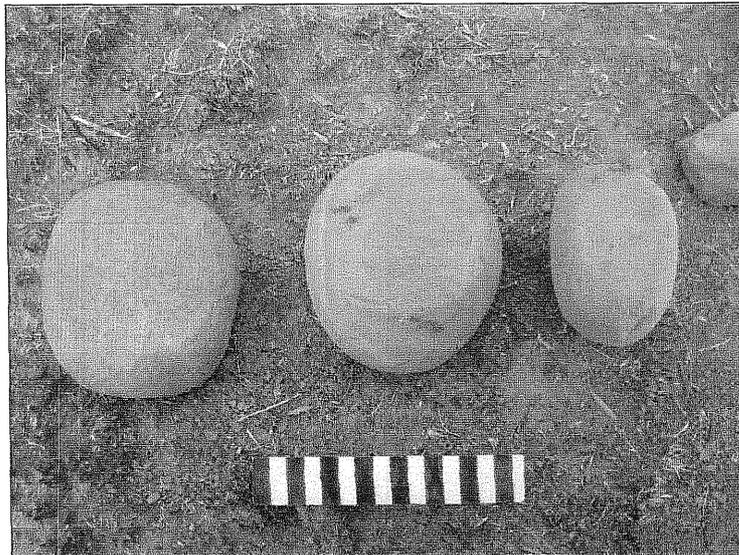


Photo 4: Site LT2: Upper grinders are to be found throughout the study area.

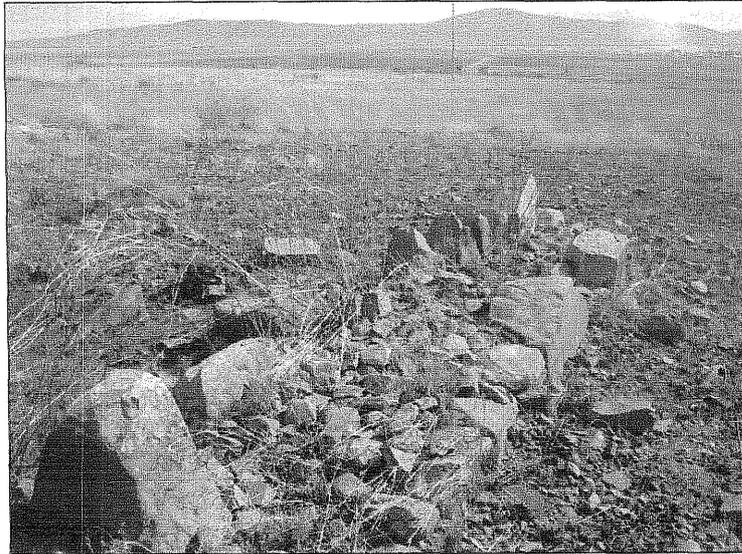


Photo 5: Site LT4: Sections of LIA stone walling are well defined with prominent upright stones.



Photo 6: Site LT5: LIA stone wall, well defined.



Photo 7: Site LT6a: Some LIA stone walls are not well defined.



Photo 8: Site LT3: Remains of a recent structure associated with European settlement.



Photo 9: Site LT14: Remains of a recent stone wall in a straight line, poorly defined.



Photo 10: Site LT18: Recent stone foundation of rectangular shape.



Photo 11: Site LT19: Recent stone foundation with divisions.



Photo 12: Site LT21: Rectangular stone foundations associated with early pioneer settlement.

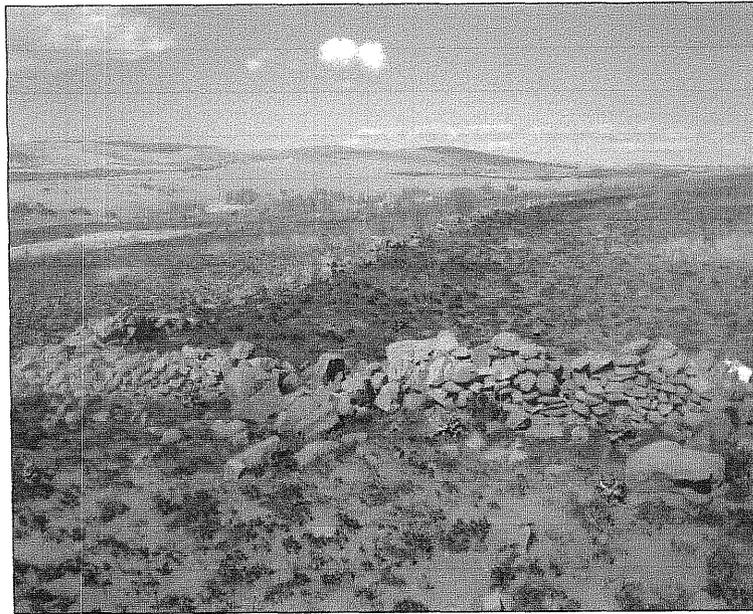


Photo 13: Site LT22: Site of Fort Howard. Sections of this site have been impacted upon by the construction of the Vodacom Cell Mast.



Photo 14: Site LT22: Outline of the historic road associated with Fort Howard.

