

## **7 THE PHASE I HERITAGE IMPACT ASSESSMENT FOR THE ESKOM PROJECT AREA**

### **7.1 The components of the Mokopane Integration Project**

The two main components of the Mokopane Integration Project, namely the sites for the proposed Mokopane Substation and the various transmission line corridors running between the Medupi Power Station, the Mokopane Substation and the Witkop Substation were assessed in terms of the presence of various types and ranges of heritage resources in or near the proposed sites for the Mokopane Substation as well in or near the proposed transmission line corridors.

These heritage resources are now briefly discussed and illuminated with photographs.

### **7.2 The sites for the proposed Mokopane Substation**

The following stands (sites) for the proposed Mokopane Substation were assessed in terms of their heritage significance, namely:

#### **7.2.1 Option 01 for the proposed Mokopane Substation**

This option for the proposed Mokopane Substation is located on a portion of the farm Doornfontein 721LS. The proposed site for the substation is located near the eastern shoulder of the dirt road running to the village of Ga-Mašašane, further to the north-east.

Option 01 for the proposed substation is a relatively flat piece of land with a small protrusion, Mokomowatlau, as the only higher part near this site. A part of Doornfontein 721LS, where the proposed substation may be established, is utilized for agricultural activities. Currently, farmers from Mašašane are exploiting large parts of Doornfontein721LS elsewhere for crop planting.

Option 01 for the proposed new Mokopane Substation has also been partly affected when Eskom's existing 2X400kV transmission lines were constructed across Doornfontein 721LS

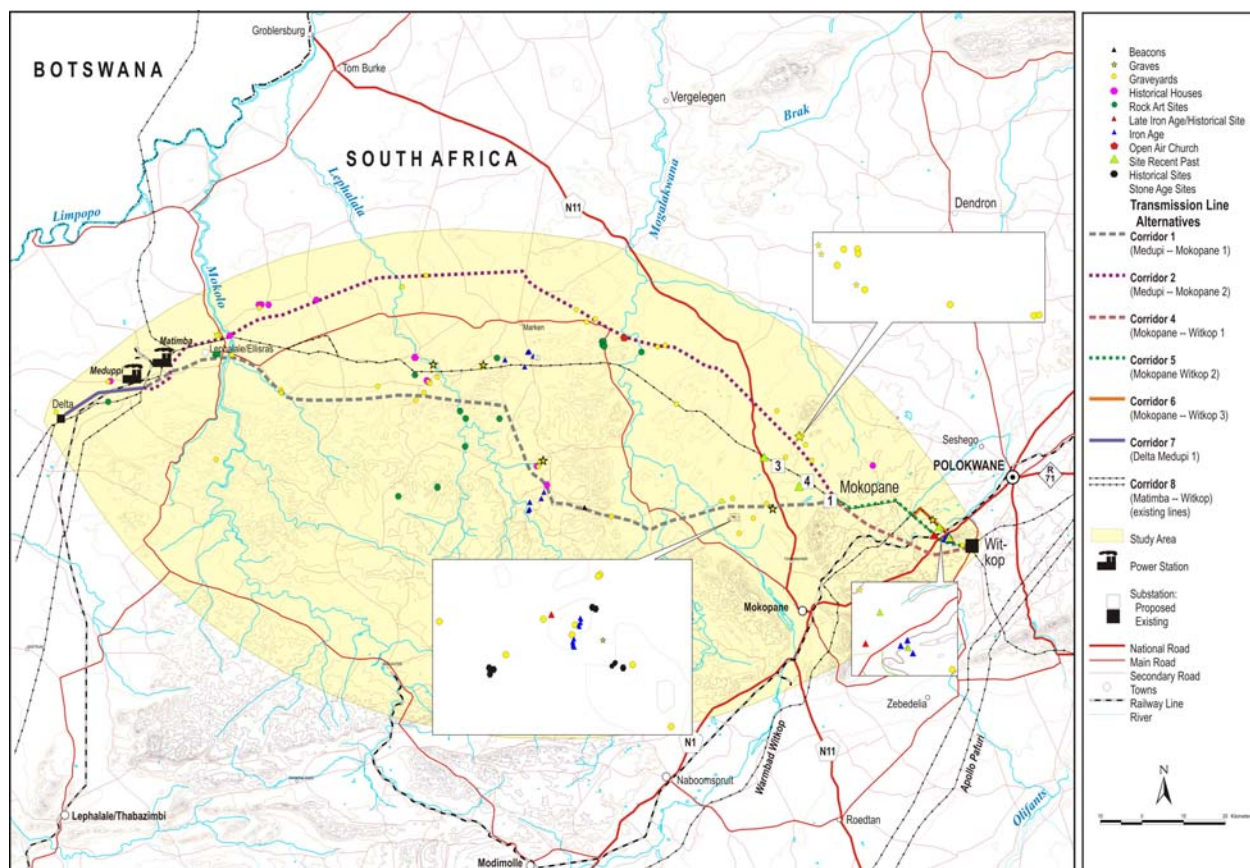


**Figure 6- Option 01 for the proposed Mokopane Substation on the farm Doornfontein 721LS**

### **7.2.2 Option 03 for the proposed Mokopane Substation**

Option 03 for the proposed Mokopane Substation is located on the farm Zuid Holland 7731LR near the southern shoulder of the dirt road running to Luxemburg further to the north.

The proposed site for Option 03 for the substation slightly slopes south-westwards along the transmission line corridor. Patches of agricultural land occurs towards the eastern perimeter of the proposed site for the substation.



**Figure 7- The Eskom Mokopane Integration Project between Lephalele and Mokopane.**

**Note the presence of heritage resources in and near the proposed sites for the Mokopane Substation and for the various power line corridors (above).**

### **7.2.2.1 Known heritage resources**

The following known heritage resources occur near Option 03 for the proposed Mokopane Substation, namely:

#### **7.2.2.1.1 Historical remains**

A historical farmstead complex composed of historical houses, associated outbuildings and a graveyard is located on the eastern shoulder of the sharp bend in the Luxemburg road, to the north-east of the proposed site for the substation.

This farmstead complex incorporates a magnificent main farm residence dating from the Victoria/Edwardian period, a second farmhouse, several outbuildings and a graveyard which holds the remains of the De Jager, Van der Merwe, Schoeman and De Jong families. The graves date from the middle of the 20<sup>th</sup> century.

This historical farmstead complex constitutes a cultural historical landscape of smaller proportions.

#### 7.2.2.1.2 Remains from the recent past

Stone walls, probably the remains of a village dating from the more recent past, occur to the south-east of the proposed site for the substation. These remains have low significance.



Figures 8 & 9- Option 03 for the proposed Mokopane Substation on Zuid Holland 773LR (above) and a Victorian/Edwardian farm house in a small cultural landscape to the north of Option 3 (above and below).



Option 04 for the proposed Mokopane Substation is located on the farm Noord Braband 774LR. This is a relatively undisturbed piece of veld except for the fact that part of the site has been affected due to the presence (and former construction) of Eskom's existing 2X400kV transmission lines across this farm.

The dilapidated remains of a farmstead, which probably dates from the more recent past judging by the concrete rubble, occur to the south-east of Option 04 on the border of Noord Braband 774LR and Suid Braband 719LS.



**Figure 10- Option 04 for the proposed Mokopane Substation on the farm Noord Braband 774LR (above).**

Farm/owner/village	Heritage Resource	Code	Coordinates
<b>Option 03</b> <b>Zuid Holland 721LS</b>	Remains from the recent past (stone walls)	RP	35° 51" 53' E; 28° 54" 47'
	Two historical houses Graveyard	HH	23° 52" 060' 28° 57" 716'
<b>Option 04</b> <b>Noord Braband 774LR</b>	Remains from the recent past	RP	23 ° 54' 90" 28° 59' 17"

**Table 1- Heritage resources in and near Options 01, 03 and 04 for the proposed Mokopane Substation (above).**

### **7.3 The proposed transmission line corridors**

The following transmission line corridors were assessed for the Mokopane Integration Project, namely:

- Corridor 01 is a 400kV transmission line corridor which runs from the Medupi Power Station eastwards to the new Mokopane Substation.
- Corridor 02 is a 400kV transmission line corridor which runs from the Medupi Power Station eastwards to the Mokopane Substation.
- Corridors 04, 05 and 06 are three 400kV loop-in and loop-out transmission lines which run between the proposed new Mokopane Substation in the west and the Witkop Substation in the east.
- Corridor 07 is a 400kV transmission line corridor which runs between the Delta Substation in the west to the Medupi Power Station in the east.
- Corridor 08 is Eskom's existing 2X400kV transmission lines which run between the Matimba Power Station and the Witkop Substation.
- Options 01, 03 and 04 for the proposed new Mokopane Substation.

#### **7.3.1 Corridor 01**

Corridor 01 runs along the following main stretches and farms from the Medupi Power Station in the west to Option 01 for the Mokopane Substation in the east, namely:

##### **7.3.1.1 From the farm Zwartwater 507LQ to the Tamboti River**

This stretch runs north-eastwards crossing farms such as Zwartwater 507LQ, Altoos 506LQ, Groothoek 504LQ, Grootfontein 501LQ, crossing Road 510, Werk-en-Dam 474, Grietas Vlakte 500LQ, Windsor 499LQ/Othillia 530LQ, Leenie 531LQ/Sunnyside 532LQ, Bismarck 547LQ/Rendezvous 533LQ, Peveril 546LQ/Annexatie 544LQ and Grafton 585LQ/Poeskopdrift 545LQ before entering a mountainous stretch further to the east.

The first part of the Zwartwater/Tamboti stretch runs across flat sandveld in the west, close to the Medupi Power Station and the Grootegeluk Open Cast Mine.

After crossing Road 510 the Zwartwater/Tamboti stretch runs across small holdings with farming activities as well as along the northern banks of the Tamboti River.

##### **7.3.1.1.1 Known heritage resources**

Known heritage resources of significance along this stretch include Nelsonskop which, however, falls outside the Eskom Project Area. Other known heritage resources are the following:

#### 7.3.1.1.1.1 Rock art sites

Five rock art sites which are clustered closely together occur on Grootfontein 501LQ.

#### 7.3.1.1.1.2. Graveyards

Graveyards known to exist along the Zwartwater/Tamboti stretch include:

- A graveyard on Werkendam 474LQ with approximately fourteen graves.
- A graveyard on Annexatie 544LQ which is marked by three heaps of stone which are located next to a quarry.
- A second graveyard on Annexatie 544LQ which is located near the banks of the Tamboti River and holds two groups of graves. Two graves next to each other are fitted with cement headstones which respectively bear indecipherable inscriptions. The second group of graves are covered with small piles of stone. One is fitted with a rough cement slab. As many as four graves can be distinguished.
- A single grave on Annexatie 544LQ.
- A third graveyard on Annexatie 544LQ which holds the remains of a husband and wife.



Figure 11- Informal graves next to a quarry on the farm Annexatie 544LQ (above).

### 7.3.1.2 A mountainous stretch to a sharp bend in the east

This stretch crosses the following farms which are covered with an outstretched range of mountains occurring to the south of Corridor 01, namely: Bouwlust 566LQ, Duikersrivier 568, Sterkwater 560LQ, crossing the Beauty/Vaalwater road, Norfolk 559LR (Mama Tau), Colesberg 556LR, Hannover 555IR, Victoria 552, Zwellendam 548LR, New Belgium 608LR, Grootdenteren 533LR, crossing the Lephale River, Alem 544LR and Lith 541LR where the power line corridor bends sharply to the south-east.



**Figure 12- Informal graves on the banks of the Tamboti River near Corridor 01 on the farm Annexatie 544LQ (above).**

#### 7.3.1.2.1 Known heritage resources

Known heritage resources along the mountainous stretch to the sharp bend include remains from the Stone Age (including rock art sites), Iron Age remains as well as historical structures and graves and graveyards, namely:

##### 7.3.1.2.1.1 Remains from the Stone Age (including rock art)

Known remains from the Stone Age on New Belgium 608LR include the following:

- A small rock shelter, probably one of many considering the mountainous nature of the terrain, with extensive rock art panels of humans (many in trance position), animals and geometrics. (Two coordinates are available). One of these shelters was also used for rain making ceremonies into the historical period.



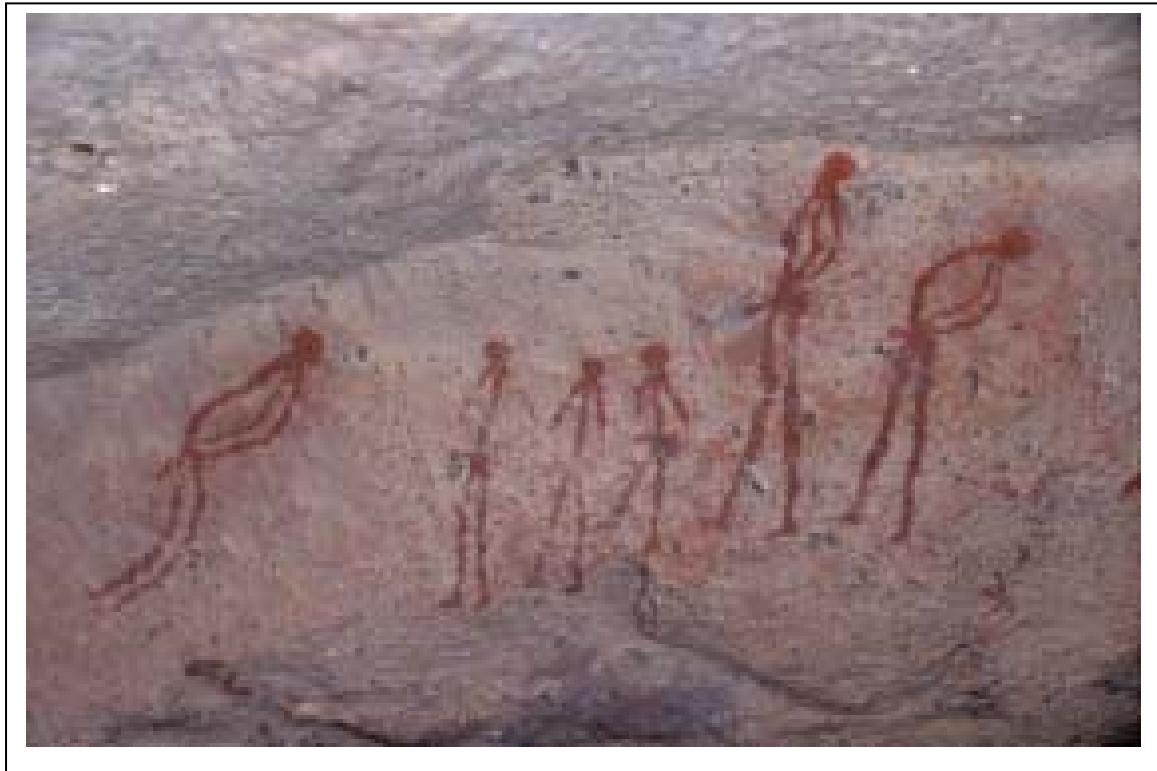
- A number of other small shelters have been reported. Paintings occur underneath some of the isolated boulders. These rock painting sites have not been investigated yet
- Some of the shelters are associated with MSA and LSA assemblages while stone tools also occur as scatters across New Belgium 608LR.
- A rock art site has also been reported from Haasjesveld 576LR.



**Figure 13- White animal figures painted with fingers on a rock face on Haasjesveld 576LR. These paintings are associated with African farmer communities (above).**

#### **7.3.1.2.1.2 Remains from the Iron Age**

- Eiland as well as scatters of Moloko potsherds have been reported from New Belgium 608LR.



**Figure 14- San paintings of human figures on a rock face on Grootdenteren 533LR (above).**

#### **7.3.1.2.1.3 Historical remains**

The following historical remains were recorded along this stretch, namely:

- A historical house and an adjacent structure (second possible historical dwelling) occur on Caledon 547KR. Both dwellings date from the 1930/40's but have been altered significantly. Both were square structures that were constructed with clay bricks and with cement and both were covered with pitched roofs that are covered with corrugated iron plates.
- A similar house, but which was modernised, occur on Hannover 555LR and are occupied by Mr. A.J.A. van Rensburg and family. This house was constructed in 1936 but has been altered significantly.



**Figure 15- Animal and human figures on a rock face on New Belgium 608LR. Note that the animal in the foreground is a red hartebeest, one of the most common depicted animal figures in the Waterberg (above).**

#### **7.3.1.2.1.4 Graveyards**

A number of graveyards and single graves occur along the second stretch of Corridor 01, namely:

- At least two formal and one informal graveyard occur on Caledon 547KR. The first formal graveyard holds the remains of the Duvenage family as well as a third unmarked grave (probably for a child). The second graveyards holds four graves, two graves are for adults and are fitted with granite headstones. Two graves fitted with cement headstones are those of children. The third informal graveyards comprises three heaps of stone (one grave is edged with stones).
- The graveyard of Mr. Johan van Rensburg's wife and three daughters occur on Victoria 552KR.
- The grave of an elderly woman is located on Victoria 552KR on the property of Mr. M.C. Pretorius.
- A graveyard on the property of Mr. Ken Mord on Duna 554KR holds the remains of the Prinsloo and Opperman families.
- Mr. A.J.A. van Rensburg's property holds a graveyard with three graves of the Van Rensburg family.

### **7.3.1.3 From the sharp bend along a curve to a second sharp bend**

This stretch runs south-eastwards from the farm Gorcum 577LR across the following farms, Dordrecht 578LR, Daggakraal 591LR, Rhenosterfontein 538LR, Kwarriehoek 588LR, Baviaansdraai 587LR, Slangfontein 655LR and Lola Montez 796LR.

This stretch of Corridor 01 runs across an area which harbours low, isolated mountains with flat outstretched sandveld between these mountains. Some of the flat areas, e.g. on Daggakraal 591LR, have been utilised for agricultural activities in the past.

#### **7.3.1.3.1 Known heritage resources**

The following heritage resources were recorded along this stretch, namely:

##### **7.3.1.3.1.1 Iron Age remains (including mining heritage)**

It seems as if extensive Iron Age remains, in places without stone walls and in other places with limited stone walls, occur across this stretch of Corridor 01, namely:

- Dr. K. Botha reported sites with what seems like limited stone walls occurring across a large area of Daggakraal 591LR.

The following remains dating from the Iron Age have been reported from Baviaansdraai 587LR, namely:

- An extensive Iron Age site occurs on a plateau approximately 5km to the east of the Lephalale River. This site has been partly ploughed under as a result of agricultural activities in the past.
- An Iron Age site without stone walls and undecorated pottery occur on red soil close to the Lephalale River.
- A second Iron Age site on red soil and without stone walls occurs on this farm.
- Mining activities, probably to obtain haematite, also occur on Baviaansdraai 587LR.



**Figure 16- A stone walled site on Magagamatala, previous capital of the Langa Ndebele in the Masebe Nature Reserve (above).**



**Figure 17- Clay bins in which grain was stored in a rock shelter on a flat-topped sandstone hill. These Late Iron Age sites are associated with Sotho and Ndebele communities and are in some instances associated with Moloko styled pottery (AD1500 to AD1880) (above).**

An Iron Age site without stone walls occurs on Slangfontein 655LR. It is likely that this site may be an extension of the large Iron Age site which is located on Baviaansdraai 587LR

#### **7.3.1.3.1.2 Historical remains**

At least two historical houses were recorded along this stretch, namely;

- A pioneer dwelling which was constructed with red clay bricks and which was fitted with a pitched corrugated iron roof occurs on Daggakraal 591LR. This structure has fallen into a state from which it cannot be restored.
- A historical house, which has been renovated extensively, occurs on Baviaansdraai 587LR.



**Figure 18- A severely dilapidated colonial dwelling which dates from 1917 (but which was renovated in the past) on Daggakraal 591LR (above).**

#### **7.3.1.3.1.3 Graveyards**

A number of graveyards were recorded along this stretch, namely;

- At least eleven individuals were buried in a graveyard on the Kunneke's property on Daggakraal 591LR. The graveyard includes the graves of members of the Van Heerden, Loubser, Furstenburg and Groesbeek families.
- The grave of Mr. Jacobus Johannes Botha is situated next to his residence on Daggakraal 591.

- A graveyard holding the remains of at least twenty individuals is located on the property of Mr Johan Kloppers on Daggakraal 591
- A graveyard holding the remains of two or three individuals occur on Rhenosterfontein 538LR.



**Figure 19- A historical graveyard on Daggakraal 591LR (above).**

#### **7.3.1.4 From the second sharp bend to Appingendam 805LR**

This stretch runs from the sharp bend on Slangfontein 655LR south-eastwards across farms such as Lola Montez 796LR, St Etienne LR, Eldorado 208KR, Klipfontein 79LR and Wydehoek 216LR to Appingendam 805LR (the former joining point between Corridors 01 and the discarded Corridor 03).

This stretch of Corridor 01 runs close to the southern shoulder of the Road 561 and follows an extremely mountainous stretch which incorporates the Kloof Pass which is a scenic stretch along Road 561 which runs between Mokopane (south) and Marken (north).

##### **7.3.1.4.1 Known heritage resources**

The following heritage resources were recorded in the stretch between the second sharp bend and the farm Appingendam 805LR, namely:

#### **7.3.1.4.1.1 Graveyards**

A large informal cemetery occurs on the southern shoulder of Road 561, opposite the village of Mmamatlakala along the northern foot of a mountain with a similar name.

#### **7.3.1.4.1.2 A commemorative beacon**

A beacon is located on the northern shoulder of Road 561 which commemorates the opening of the Kloof Pass by S.E. Schoeman (M.E.C) on 1 July 1988.

#### **7.3.1.5 From the farm Appingendam 805LR to Option 01 for the Mokopane Substation**

This stretch runs north-eastwards across farms such as Groenvley 224KR, Mooihoek 226KR, Moordkoppie 813LR, Zwartfontein 818LR, Blinkwater 820LR, Armoede 823LR, Rietfontein 720LS and Doornfontein 721LS where Option 1 for the Mokopane Substation is located.

#### **7.3.1.5.1 Known heritage resources**

Heritage resources between Appingendam 805LR and Option 1 for the Mokopane Substation are numerous and include the following:

##### **7.3.1.5.1.1 Stone tools**

Stone tool occurrences that were recorded along this stretch include:

- MSA tools along the gravel banks of the Moholosane as well as the Sandsloot Rivers.
- Eroded areas to the east of the Matlotlo Mountains revealed MSA tools.
- An eroded patch to the east of the N11 contains MSA tools.





**Figure 20- MSA tools manufactured from felsite, dating between 200 000 to 22 000 years ago. These types of stone tools are relatively common in the last stretch of Corridor 01**

#### **7.3.1.5.1.2 Remains from the Late Iron Age and/or Historical Period**

Remains dating to the Late Iron Age and/or Historical Period occur along and on plateaux in the Fonthane mountain range. It is highly likely that some of these remains date from the late 19<sup>th</sup> century and that they have been occupied, uninterrupted, during the first decades of the 20<sup>th</sup> century as well. These remains are well preserved along the lower foot and on higher altitudes of the Fonthane mountain range where contemporary villages were established in the more recent past.

The remains mainly consist of the outer walls of homesteads which are linked together in small villages. The walls demarcate the remains of dwellings, sometimes with the graves of the occupants of these homesteads. Pottery, middens and 'modern' rubbish such as tin plate and glass are associated with these settlements.

These remains can be divided into four groups, mainly as a result of their geographical location in association with the Fonthane mountain range.

##### Remains west of the Fonthane mountain range

These remains comprise of a large settlement (Site LIA/HS01) along the western foot of the mountain range. The site was partly destroyed when a dirt road was constructed through the site. GY01 is also established on top of the site.

This settlement is associated with low stone walls close to the base of the mountain. A conspicuous rectangular stone-walled structure as well as potsherds, tin plate and upright stones running in lines are associated with these remains.

Remains on a plateau on the Fonthane mountain range 01

Extensive remains associated with the Late Iron Age and/or Historical Period occurs on a plateau near Mamaala village. These remains are associated with GY02 as well as with a commemorative beacon dedicated to the Mapela clan although it also may hold the remains (grave) of an important individual such as a former chief.

The remains are associated with upright lines of stone, piles of stone, a semi-circular low stone wall and the remains of at least one relatively well preserved homestead.



**Figures 21 & 22- Potsherds from a settlement along the western foot of the Fonthane mountain range and homesteads from the historical period on a plateau on this mountain range (above).**



Remains on a plateau on Fonthane mountain range 02

These remains are also located near Mamaala village and consist of extensive remains of the outer boundary walls of homesteads which were located on a plateau along the lower base line of one of the mountains in the Fonthane series.

Several of these walls are well preserved and some are of considerable length. At least one heavy rectangular stone structure is associated with these homesteads.



**Figure 23- A commemorative beacon (or possible grave) (above) on a plateau on the Fonthane mountain range (above).**

Remains on a plateau on the Fonthane mountain range 03

These remains comprise of rectangular outer boundary walls which demarcate various homesteads which were linked together. These remains are well preserved and at least two homesteads are associated with graves. It is possible that more graves may be associated with these households.



**Figures 24 & 25- Remains of homesteads of Langa Ndebele clans in the Fonthane mountain range and a grave within the confines of a homestead. Some of these remains date from turbulent first half of the 19<sup>th</sup> century (below).**

