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CULTURAL HERITAGE RESOURCES IMPACT ASSESSMENT OF THE PROPOSED NEW POWER LINES FOR NKOMATI MACHADODORP MPUMALANGA PROVINCE CONTRACT NUMBER 4600034439

1. DEFINITION

- * The broad generic term *Cultural Heritage Resources* refers to any physical and spiritual property associated with past and present human use or occupation of the environment, cultural activities and history. The term includes sites, structures, places, natural features and material of palaeontological, archaeological, historical, aesthetic, scientific, architectural, religious, symbolic or traditional importance to specific individuals or groups, traditional systems of cultural practice, belief or social interaction.

2. PROTECTED SITES IN TERMS OF THE NATIONAL HERITAGE RESOURCES ACT, ACT NO. 25 OF 1999

The following are the most important sites and objects protected by the National Heritage Act:

- 2.1 Structures or parts of structures older than 60 years.
- 2.2 Archaeological sites and objects.
- 2.3 Palaeontological sites.
- 2.4 Meteorites.
- 2.5 Ship wrecks.

- 2.6 Burial grounds.
- 2.7 Graves of victims of conflict.
- 2.8 Public monuments and memorials.
- 2.9 Structures, places and objects protected through the publication of notices in the Gazette and Provincial Gazette.
- 2.10 Any other places or objects, which are considered to be of interest or of historical or cultural significance.
- 2.11 Geological sites of scientific or cultural importance.
- 2.12 Sites of significance relating to the history of slavery in South Africa.
- 2.13 Objects to which oral traditions are attached.
- 2.14 Sites of cultural significance or other value to a community or pattern of South African history.

3. METHODOLOGY

The site was visited with the Eskom land surveyor. Google positions of the lines and the positions of the individual pylons were studied and printouts were made. The route was inspected by vehicle and on foot. All heritage sites were GPS plotted and photographed.

4. RESULTS

The proposed two new power lines for Nkomati run parallel to an existing power line from just south of Machadodorp eastwards to the escarpment. The lines will be thirty kilometres long. The vegetation is mainly grassland with a few shrubs. There are also patches of invasive Wattle and blue gum trees. The line will also run through some pine plantations, see maps 1 & 2.

The following heritage sites were recorded:

- **Site 1 - Water Furrow S25° 44' 54.74" & E30° 14' 35.36" (Google site 1)**

At this locality the line crosses an old water furrow. These water furrows are typical of white pioneer farms. The water furrow determined where the farmhouse would be built as well as the position of the orchards and irrigation fields. These water furrows mainly date to the 1850 – 1900's period, see photograph and Google images Site 1.



Remains of water furrow

- **Site 2 - Large cattle kraal and ruin S25° 44' 58.53" & E30° 15' 9.23"**
Google Site 2

The historic site (No.2) most probably dates to the 1940 -50`s. The well constructed stone walls are to a large extent due to excellent building stone of the area. The stones are flat and very hard, a type of metamorphic slate that is easily stacked on to each other. The ruin of the house is built with dressed stone. The builder was a person who had mastered the craft of stone dressing and building. From observation it seems that this site originally was an archaeological site re used as a cattle enclosure by the owner of the farm, see photograph. To the east of the cattle kraal is a cattle dip. The dip is typical of early dips introduced to control ticks. The cattle had to go from the cattle enclosure through the dip to the drying enclosure which is paved to collect the dip water. This structure is unique with its walling made of large flat pieces of hardened slate planted in an upright position, see photographs (Maggs 1995 a & b).

Proof of archaeological stone being reused is the one large slab with circular engravings. These engravings are typical of Iron Age sites of the eastern escarpment especially in the Lydenburg area. The position of the rock art is marked with a large dot on the Google site 2 map, see photographs (Maggs, 1995 a & b).



Stone walling of kraal



Ruin of dressed stone house



Cattle dip



Rock art slab in drying area

- **Site 3 - S25° 44' 55.09" & E30° 14' 35.36" (Google site 3)**

On this site a stone slab with a rock engraving was recorded, see photograph. There might be more engravings in the vicinity. This rock engraving depicting circular structures also belongs to the Lydenburg group of engravings, see photograph (Maggs, 1995 a & b). *Pole no 11 will be in the middle of the site and should be moved.*



Rock art of circular structures

- **Site 4 - S25° 44' 51.87" & E30° 15' 50.89" (Google site 4)**

This site is a very large Late Iron Age site with five large stone circles. These sites are typical of the Koni sites of Machadodorp and Lydenburg area. A section of the site is overgrown by large Blue gum trees. *Poles no 14 are inside the one sites stone walling and should be moved outside the stone wall, see photograph.*



Large site with blue gum trees in the background



Blue gum trees in the archaeological site

- **Site 5 - S25° 45' 11.30" & E30° 16' 16.11" (Google site 5)**

This is also a large Late Iron Age Koni site, see photographs.



Site 5 seen from a distance

- **Site 6 - S25° 45' 29.90" & E30° 16' 58.57" (Google site 6)**

This is also a large Late Iron Age site of which the northern stone wall section have been reused by a farmer, see photograph.



Site 6 where the stone walls have been reused

- **Site 7 - S25° 45' 17.50" & E30° 17' 43.17" (Google site 7)**

This Late Iron Age Koni site consists of three large circular settlements, see photograph. *Poles 28 are in the middle of the site and should be moved.*



On this site some of the stone walls have been reused

- **Site 8 - S25° 43' 24.45" & E30° 23' 25.83" (Google site 8)**

This is also a Koni site. It seems that some of the stone walling has been reused by a farmer, see photograph



Portion of the remaining stone wall

5. DISCUSSION

The sites recorded fall within two categories. Sites 1 and 2 are historic sites associated with white farmers. Sites 3 to 8 are Koni Late Iron Age sites. Koni is the name given by Sotho – Tswana people for people of Nguni origin. The people south of the Springbok flats are known as Southern Ndebele and those North of the Springbok flats as Northern Ndebele. The Northern Ndebele claim Langa as their legendary leader. These who adopted Sotho – Tswana are known as Koni (Huffman 2002: 448).

Many Koni are associated with extensive Badfontein type stone walling, found along the Mpumalanga escarpment. This walling emphasises the centre side axis of the central cattle pattern expressed through concentric circles. The inner circle encompassed cattle, the next marked men's court and the outer ring the zone of houses. Rock engravings in the same area depict this settlement pattern (Maggs, 1995 a & b).

Extensive terrace walls, cattle lanes and circular settlements extend over a large area to the north of the recorded sites, along the escarpment (Huffman, 2007) see Google map no. ...).

Oral traditions place the Koni on the escarpment area before the arrival of the Pedi. Some of these stone walled sites must date before 1650, perhaps as early as 1600 (Huffman, 2007).

6. FIELD RATING

- **Historic sites**

Both the water furrows and the large cattle kraal sites are no more in use but are typical of early white pioneer farms. This is a neglected field of research and needs attention. Every pioneer farm established in the old Transvaal in the period 1850 – 1900 had a water furrow around which the development of the farm settlement developed. The reuse of stone walled archaeological sites for building material is also common through the northern part of South Africa. In the area investigated Google images revealed that the practice was common in the area as a number of similar sites were observed.

From the above it is clear that these sites are typical of pioneer practice and settlement and are at least of regional interest.

- **Koni stone walled sites**

These Koni stone walled sites occur all along the escarpment from Badplaas in the south to Machadodorp, Lydenburg and as far north as the Olifants River. As such they represent one of the largest stone walled complexes of South Africa.

Within this area of Koni stonewall settlement the site to be affected by the proposed two power lines fall in the outer rim of the large complexes of chiefs and headman and rather represent settlements of single extended families, scattered throughout the landscape. About five kilometres to the north lays a major site of several hectares, see Google image map.

Taking the above into account the sites are rated of local or even regional interest.

7. STATEMENT OF SIGNIFICANCE

- **Historic Sites**

The water furrow represents a typical pioneer farm and its landscaping. The cattle complex is exceptional well built. Its value lies in its rarity and uniqueness because of its high quality of craftsmanship.

- **Late Iron Age**

Some of the sites are in a good state of preservation and undisturbed but some have been looted by the removal of the stone walling. The significance of these sites lies in the scientific information they can contribute to our knowledge of the family units within the large settlement pattern of the Koni stonewalled complexes. This includes social status, settlement pattern, technical ability, burial practice, home construction etc. Research is mostly focused on the large sites and the mitigation of these sites can help to understand the importance of the family and extended family settlements.

8. CONCLUSION

The water furrow and the large cattle kraal stone settlement represent early white pioneer farming on the escarpment. Both the water furrow and the cattle kraal are only a section of a larger farming landscape created according to a traditional pioneer farm layout and landscape development.

The extensive stone walled sites and associated rock art are part of the so called Badfontein stonewalled sites associated with the Northern Ndebele who adopted Sotho - Tswana and became known as Koni. To the north and the south of the recorded sites are other large similar sites as shown on **Google image of large archaeological site to the north of study area page 18.**

From this it is clear that it will be difficult to move the lines to a new position which will not affect the sites. The only solution would be to try and move the poles which are in the walled area to a position outside the sites.

Though some research have been done on the Koni sites by especially Maggs (1995 a & b), Evers 1975 & 1980, Huffman 2004, Marker & Evans 1976, Delius & Schoeman 2007, and many others this is far from sufficient. New archaeological research at these locations could make vital contribution to exploring questions of Koni and Pedi identity and to understanding the dynamics of conflict and change on the eastern escarpment.

9. RECOMMENDATION

Two historic sites and six Late Iron Age Koni sites will be affected by the two new power lines. To move the power lines to new routes will be very costly and difficult as there are heritage sites to the north and south of the proposed routes. (See Site clusters showing nearby archaeological sites page 17)

It is therefore recommended that:-

- A full phase II heritage impact assessment must be done on the historic as well as the Late Iron Age Koni sites.
- As these sites will fall in the servitude of Eskom a heritage management plan must be compiled for the sites.
- A heritage practitioner should be appointed to supervise the construction of the power lines to avoid unnecessary damage to the sites.
- The poles which were designed inside the Archaeological sites should be moved to new positions outside the stone enclosures.
- The large Blue Gum trees in site 4 should be cut and treated with herbicide as they are damaging the stone walls.

If during construction any cultural heritage resources or graves are unearthed all work has to be stopped until the site has been inspected and mitigated by a cultural heritage practitioner.

10. REFERENCES

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- 1/50 000 Maps 2530 CA & CB... and Google maps

11. GOOGLE MAPS OF SITES



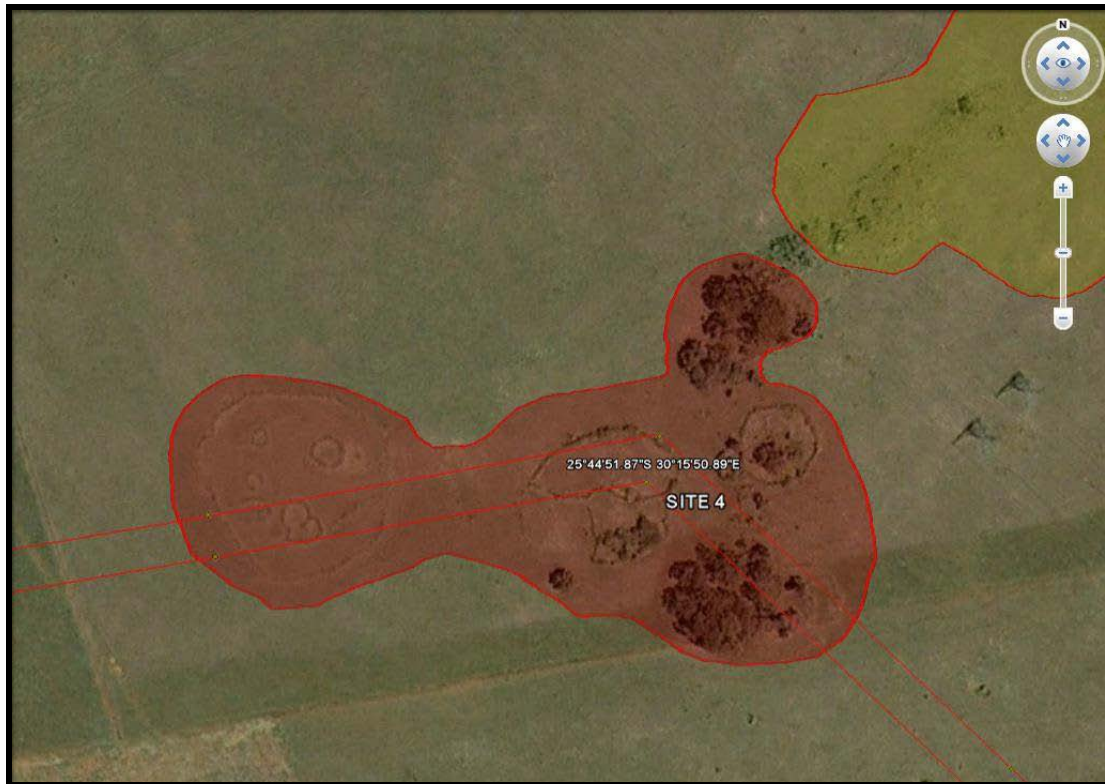
Site 1



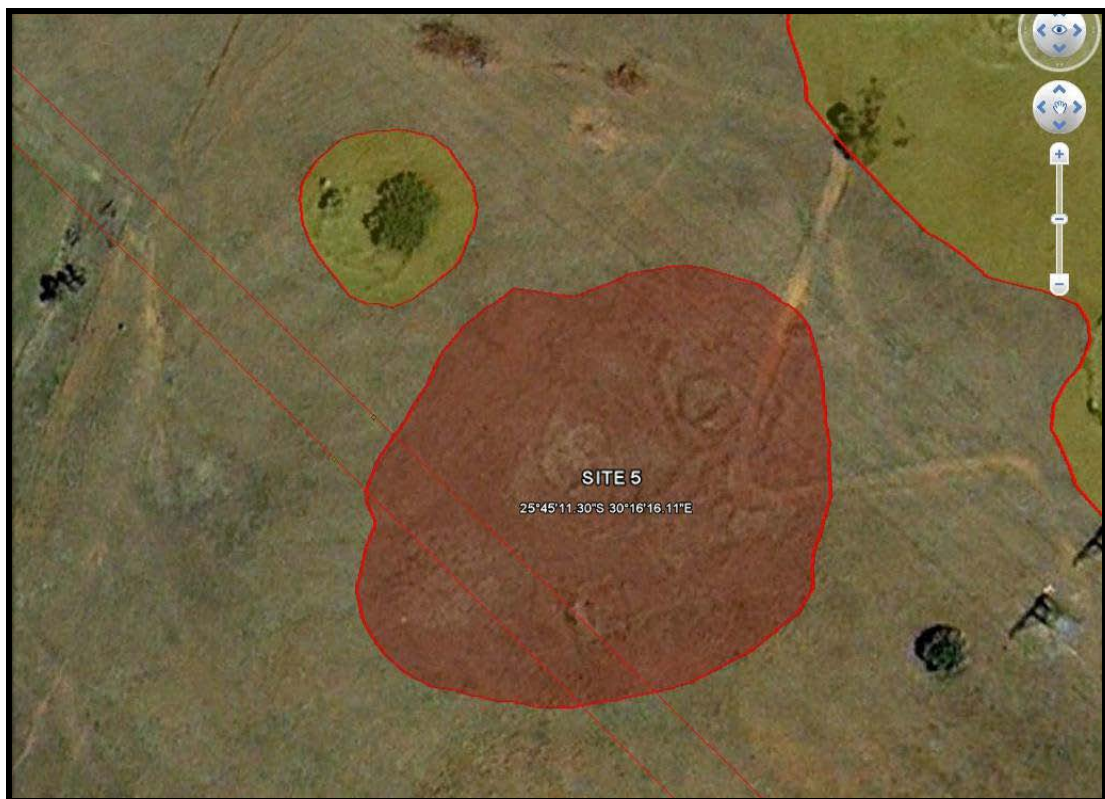
Site 2



Site 3



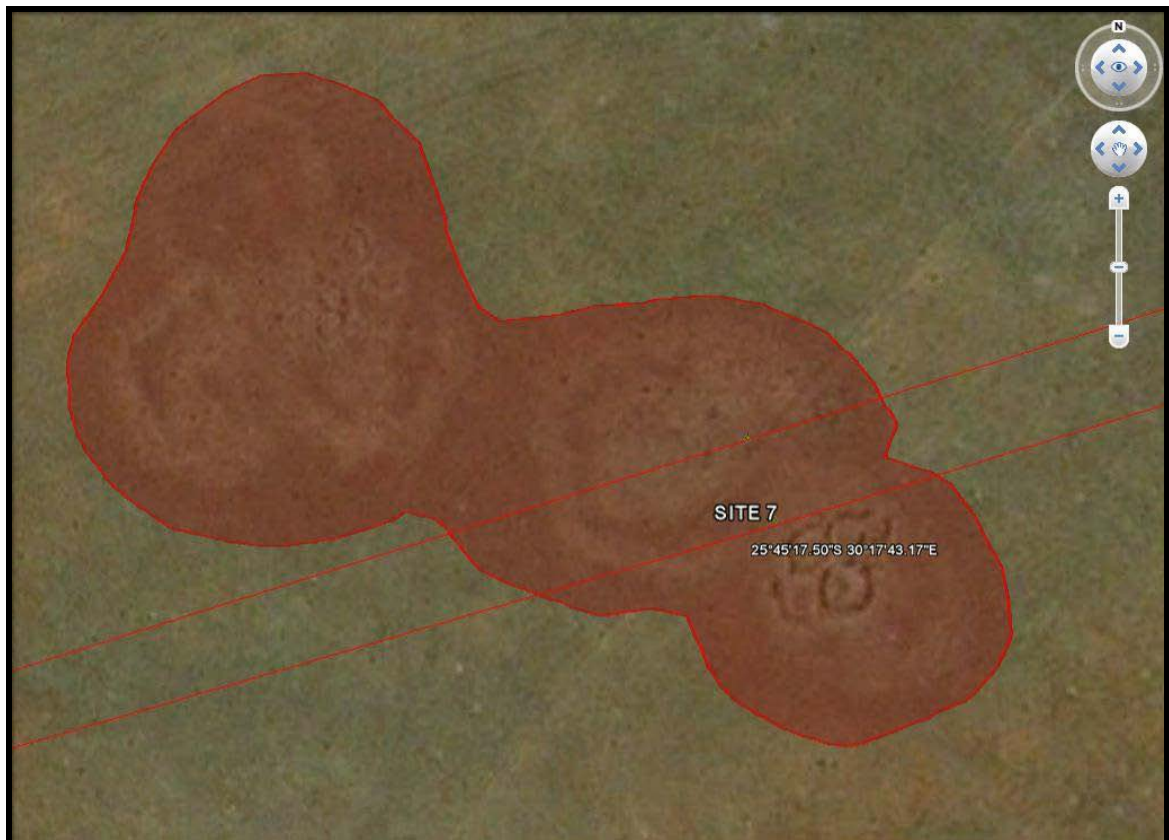
Site 4



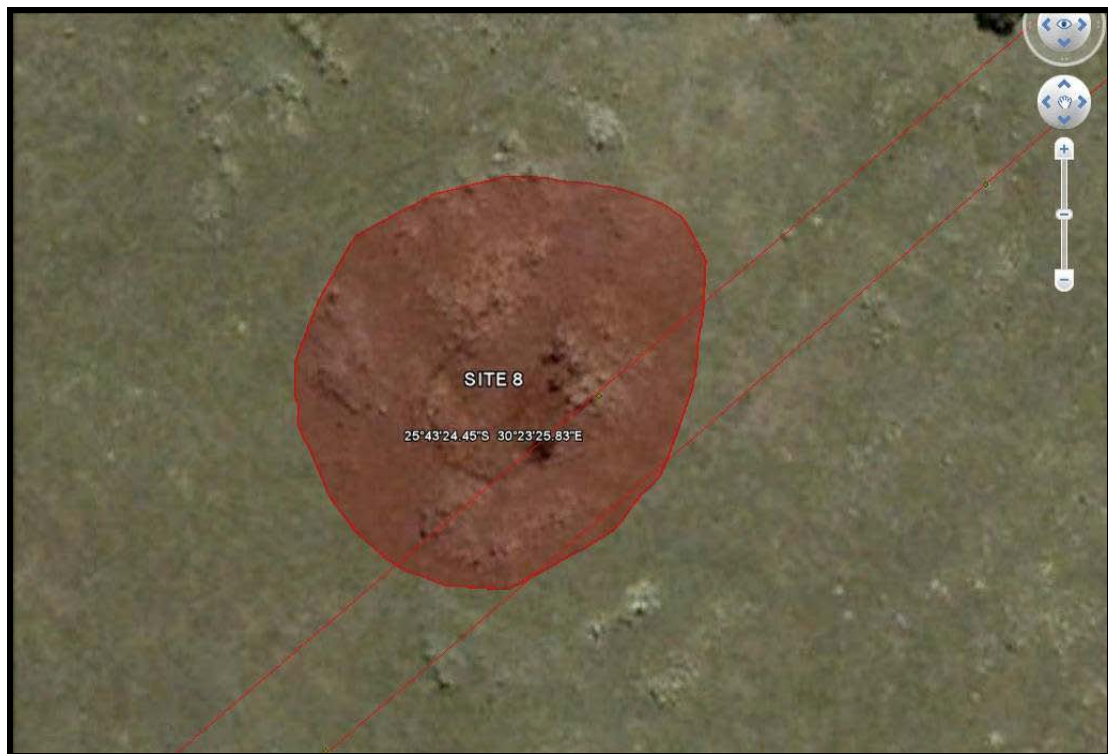
Site 5



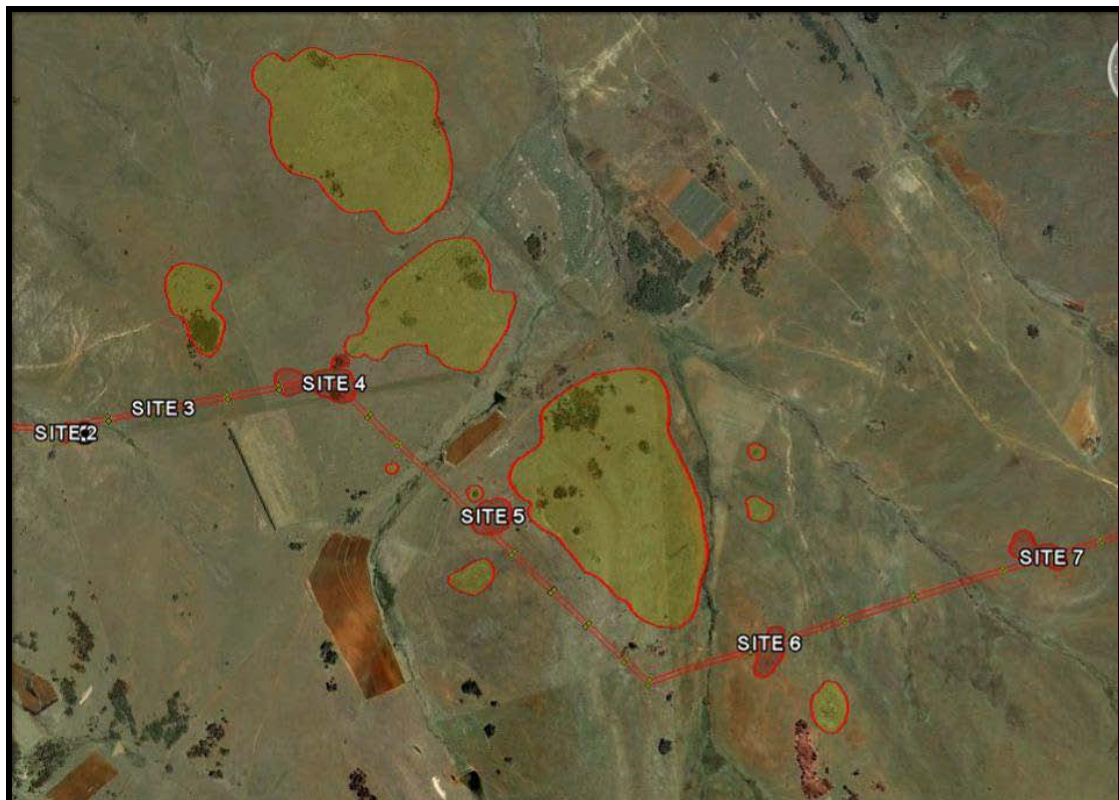
Site 6



Site 7



Site 8

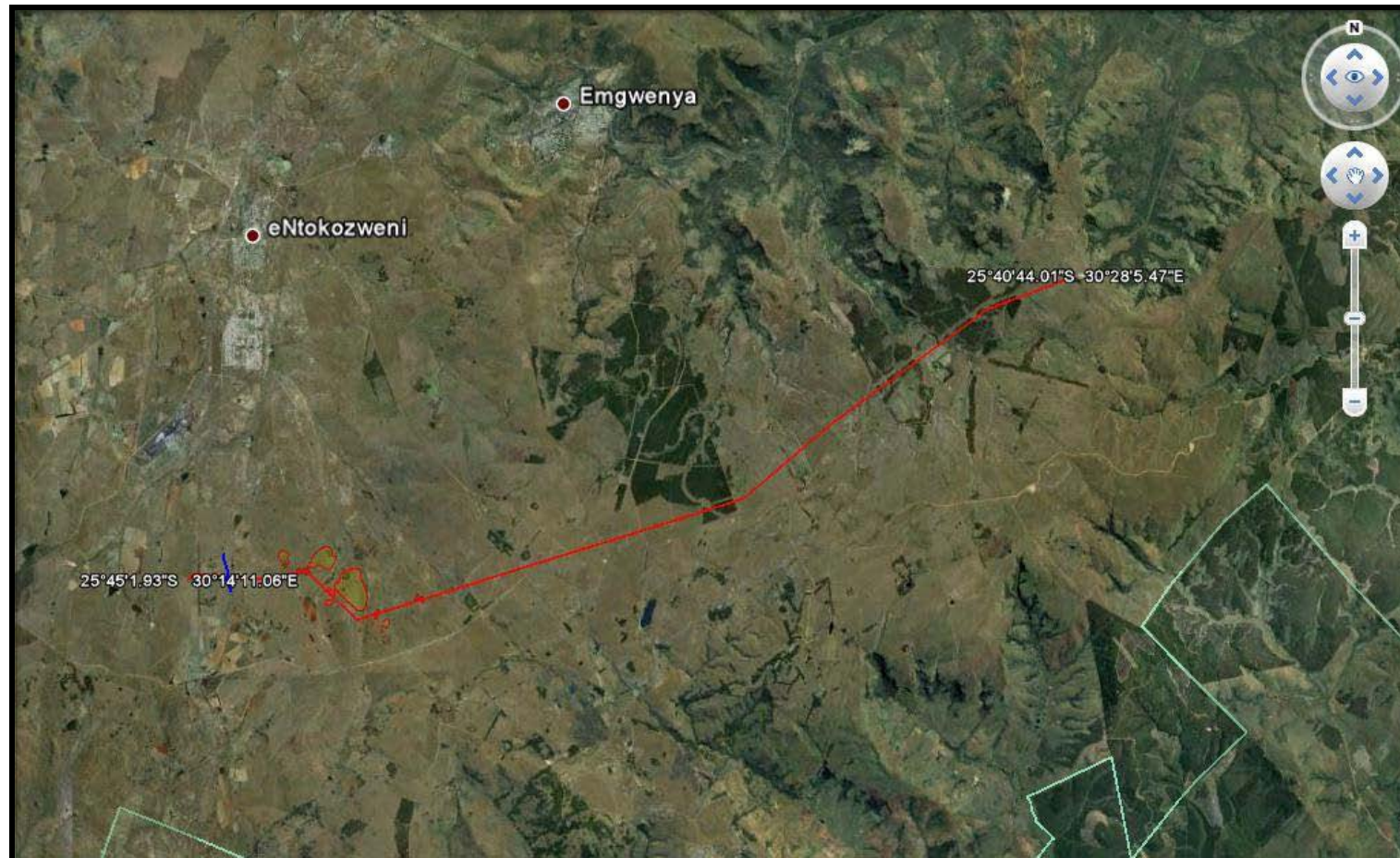


Site clusters showing nearby archaeological sites



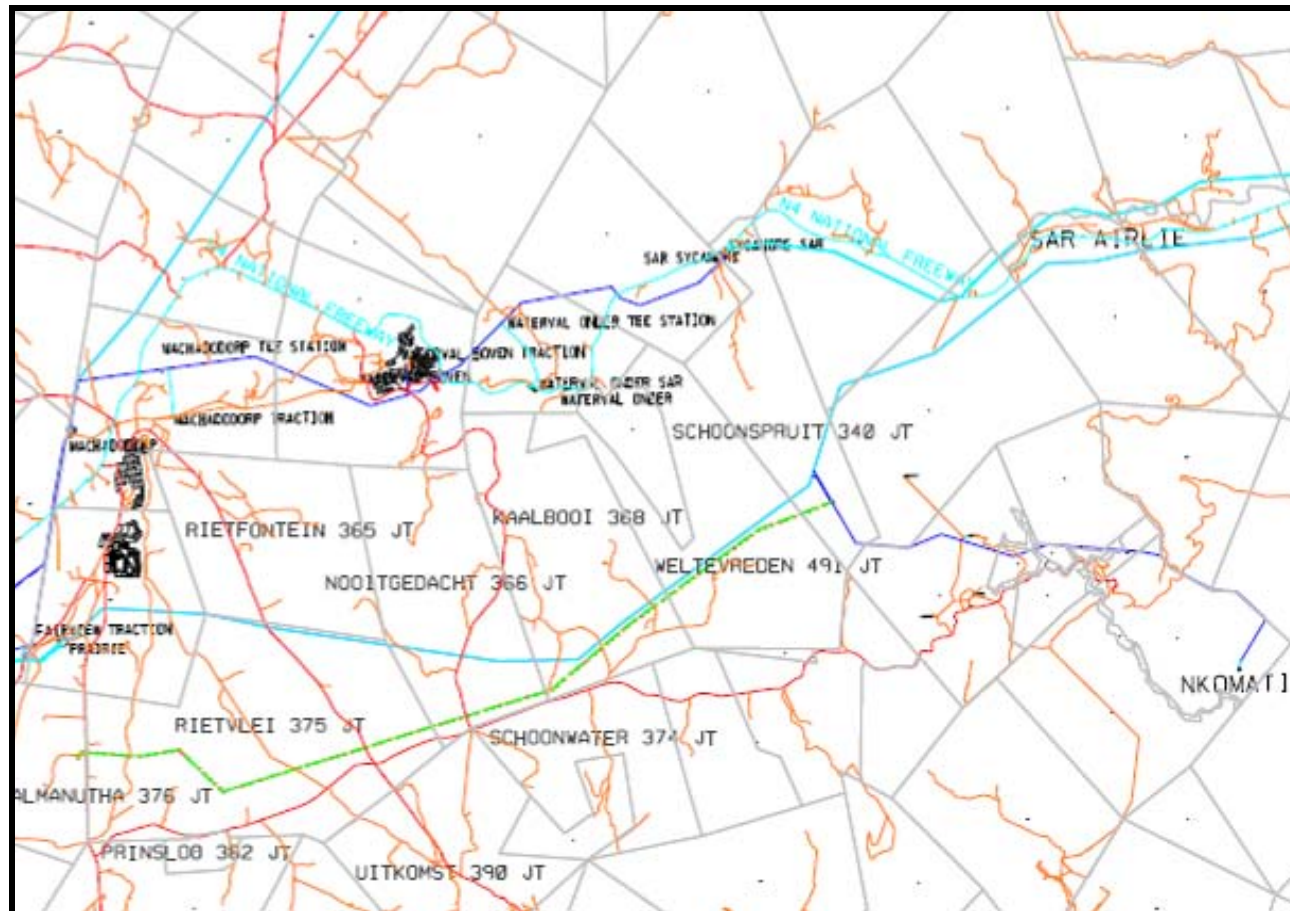
Google image of large archaeological site to the north of study area

MAPS



MAP 1

GREEN INDICATES LINE ROUTE



MAP 2