28 September, 2016
SAHRA - APM Unit
PO Box 437
Cape Town
8000

Ref: **ATC SA Base Station: Spapark North, Limpopo Province**

Attention: Ms Nokukhanya Khumalo

Dear Nokukhanya

RE: ATC SA Base Station: Spapark North

Background

ATC South Africa intends to construct a 36m lattice mast with antennae mounted onto the mast, and container housing associated equipment. The size of the base station (fenced area) in which the mast and associated equipment will be placed will measure 12m x 12m (144m^2).

The study area

The site is located on Erf 1499 Warmbad Ext 26 in the town of Bela-Bela in the Bela-Bela Municipality area (Figure 1). The study area falls within the bioregion described by Mucina *et al* (2006) as the Central Bushveld Bioregion with the vegetation described as Waterberg Mountain bushveld. Land use in the general area is characterized by agriculture and residential developments. The study area is located on the side of a small hill (Figure 2). The site is located at 24° 52' 25.1067" S, 28° 16' 06.6087" E.

Several previous heritage studies were conducted in the general study area (SAHRIS) including:

- Huffman, T.N. 2008. Historic Impact Assessment for the Noodhulp Caravan Park, Bela Bela, Limpopo. An unpublished report by Archaeological Resources Management
- Roodt, F. 2008. Phase 1 Heritage Resources Scoping Report: MTN Telecommunication Mast Buyskop Bela Bela (Warmbad), Limpopo. An unpublished report by R & R Cultural Resource Consultants
- Roodt, H. 1999. Phase 1 Archaeological Impact Assessment Warmbad Town Establishment Het Bad 465 KR. An unpublished report by R & R Cultural Resource Consultants on file at SAHRA as: 1999-SAHRA-0056
- Van der Walt, J. & Fourie, W. 2007. Heritage Scoping Report Proposed New Residential Development on Portions 94 of the Farm Buiskop 464 KR, Bela-Bela, Limpopo Province. An unpublished report by Matakoma Heritage Consultants (Pty) Ltd
- Van der Walt, J. 2008. Archaeological Impact Assessment on Portion 16 of the Farms Noodhulp 492 KR, Warmbaths, Limpopo Province. An unpublished report by Wits Heritage Contacts Unit

Previous finds in the greater study area include Stone Age flakes dating to the ESA, MSA and LSA and also Iron Age artefacts.

Google Earth and 1:50 000 maps of the area were utilised to identify possible places where archaeological and historical sites might be located.

Background of the greater study area

Warmbaths / Bela-Bela - has strong mineral springs that flows out of the Earth at a rate of 22 000 liters of water per hour with a temperature of 52°C. This water gave rise to the eventual establishment of the town of Warmbaths. The water from these springs is rich in sodium chloride, calcium carbonate and other salts that are highly beneficial to those suffering from rheumatic ailments.

Carl Van Heerden, a Voortrekker, established the first farm in this area at the Mineral Springs and called it Het Bad, at this time the area in and around the mineral springs was a marshland where great numbers of wild animals were trapped and died in the mud. After the marshes were drained, the skeletons of numerous animals including elephants were found.

In 1873, President Burger of the then South African Republic (ZAR) saw the tourism and recreational opportunities that Het Bad had to offer. He proposed the purchase of the farm to the ZAR. At first they refused the proposal but when President Burger wanted to purchase Het Bad from his own funds they accepted the proposal Although Hartingsburg was the authorized name - named after Pieter Harting (Dutch Biologist & Naturalist, 1812-1885) who conducted extensive groundwater research in effort to improve quality of water for public health – the place was commonly called “Warmbaths“. Hartingsburg and Nylstroom remained declared townships in the district of Waterberg. In 1903 the British government changed the name of the Post Office to Warm Baths (Tvl. Government Gazette. Vol. V111 - 1905, pp. 108-109).

During the Anglo-Boer war the British annexed the small hut and named it Warm Baths. The British also erected a blockhouse to protect the railway line to Pietersburg and it still stands today. Major Jackson Map, June 1902 (National Archives, Maps, 3/1895)

As seen on the“Hartingsburg (Warmbaths)” sheet of the Major Jackson Series. The series was compiled, surveyed and printed during the South African War of 1899 to 1902 (National Archives, Maps, 3/1895). This sheet was first compiled and drawn during June 1900 and lithographed during September 1900. It was revised during May 1902 as well as during June 1902. This map shows the railway line between Pretoria and present-day crossing over the study area. This line was officially opened during 1899.

Christina Pretorius, wife of the well-known General Andries Pretorius passed away after a bought of flu and was buried in Warmbaths, she was brought to Warmbaths in the hope that the mineral waters would restore her health.

In *1920 Warm Baths* was re proclaimed a town and it was not until the *1st July 1950*, that it had a magisterial district of its own. In *1932 Warmbaths* attained village town status and town council status in *1960*. Since then the community has advanced with great strides.

New suburban areas sprang up, modern commercial concerns were established and superb schools and hotels made their arrival.

In the year 2002 Warmbaths was officially renamed Bela-Bela (which means the pot that boils in Tswana) and the Northern Province has been renamed the Limpopo Province.

Another important landmark in the general area is Buiskop located approximately 6 km to the east of the study area.

Buiskop

Buiskop is situated approximately four miles North of Warmbaths, this is a well-known and historical summit.

Buiskop was used as a halfway house during the Republican days for the mail coach that travelled between Pretoria and Pietersburg, fresh horses were provided here. The mountain was also found to contain a sandstone formation and this stone was used for the erection of a portion of Pretoria's Union Buildings.

This mountain has an interesting history and owes its name to a Coenraad De Buys who was forced to flee the Cape Colony at the beginning of the 19th Century. He fled North and with his two sons Machiel and Gabriel and a number of natives as bodyguards. Tradition relates that they incurred the wrath of a number of local tribesmen in the area and were driven to the mountain and encircled. The natives tried to get them to surrender by thirst, eight days later Coenraad de Buys made his appearance and dumbfounded the natives who were expecting surrender, to see him swinging a skin of water over the top of the mountain and declaring that he had certain higher powers on his side that enabled him to get water on the dry mountain top.

Terrified by this state of affairs the natives decided to cease hostilities and put an end to the seige on Buiskop. (http://www.accommodation-warmbaths.co.za/history.htm).

The early pioneer and traveller Coenraad de Buys was besieged on top of the hill known as Buiskop by local black groups. This is confirmed by T.V. Bulpin’s Lost Trails of the Transvaal. According to Bulpin (1989) De Buys went to the top of the hill and offered their last water container to the besiegers.

A person was sent up to receive the gift of water, upon which De Buys threw the water container at him. This suggestion by De Buys that they still had enough water to drink forced the besiegers to abandon the siege.

However, according to Dr. J.B. de Vaal (1990) Coenraad de Buys had disappeared during c.1821 after the death of his wife Elizabeth, the sister of Mzilikazi. Two of Coenraad and Elizabeth's sons, Doris and Gabriël, later resided in the Soutpansberg. After they had trouble with the Venda, both sons fled to present-day Bela-Bela and established themselves at Buiskop. This appears to have been during c. 1836. According to De Vaal they were besieged by the AmaNdebele. During the siege it was Gabriël de Buys who took their last water container, shouted at the besiegers that they still had lots of water and emptied the container onto the rocks.

Archaeology of the area

Earlier Stone Age
Hominids began to make stone tools about 2.6 million years ago. Known as the Oldowan industry, most of the earliest tools were rough cobble cores and simple flakes. The flakes were used for such activities as skinning and cutting meat from scavenged animals. These early artefacts are difficult to recognize and have so far only been found in rock shelters such as the Sterkfontein Caves (Kuman, 1998); they are unlikely to occur in the study area.

At about 1.4 million years ago hominids started producing more recognizable stone artefacts such as hand axes, cleavers and core tools (Deacon & Deacon, 1999). Among other things these Acheulian tools were probably used to butcher large animals such as elephants, rhinoceros and hippopotamus that had died from natural causes. Acheulian artefacts are usually found near the raw material from where they were quarried, at butchering sites, or as isolated finds.

A Single ESA site is on record near the project area at the Wits archaeological database, and isolated finds are possible. However, isolated finds have little value. Therefore, the project is unlikely to disturb a significant site.

Middle Stone Age
By the beginning of the Middle Stone Age (MSA), tool kits included prepared cores, parallel-sided blades and triangular points hafted to make spears (Volman, 1984). MSA people had become accomplished hunters by this time, especially of large grazing animals such as wildebeest, hartebeest and eland.

These hunters are classified as early humans, but by 100,000 years ago, they were anatomically fully modern. The oldest evidence for this change has been found in South Africa, and it is an important point in debates about the origins of modern humanity. In particular, the degree to which behaviour was fully modern is still a matter of debate. The repeated use of caves indicates that MSA people had developed the concept of a home base and that they could make fire. These were two important steps in cultural evolution (Deacon & Deacon, 1999). As there are no caves in the study area, there is a low possibility of finding sites of high significance in the area.

MSA artefacts have been found in the larger study area (van der Walt & Fourie 2007, Roodt 2008 and Hufman 2008) These are however open air sites and of limited significance.

Later Stone Age

By the beginning of the Later Stone Age (LSA), human behaviour was undoubtedly modern. Uniquely human traits, such as rock art and purposeful burials with ornaments, became a regular practice. These people were the ancestors of the San (or Bushmen).

San rock art has a well-earned reputation for aesthetic appeal and symbolic complexity (Lewis-Williams, 1981). In addition to art, LSA sites contain diagnostic artefacts, including microlithic scrapers and segments made from very fine-grained rock (Wadley, 1987). Spear hunting probably continued, but LSA people also hunted small game with bows and poisoned arrows. Important LSA deposits have been excavated in Oliboompoort Cave (Mason, 1962) and other sites in the Waterberg to the south (Van der Ryst, 1998). Sites in the open are usually poorly preserved and therefore have less value than sites in caves or rock shelters. As there are no caves in the study area, there is a low possibility of finding sites of high significance in the area.

The Iron Age (AD 400 to 1840)

Bantu-speaking people moved into Eastern and Southern Africa about 2,000 years ago (Mitchell, 2002). These people cultivated sorghum and millets, herded cattle and small stock and manufactured iron tools and copper ornaments. Because metalworking represents a new technology, archaeologists call this period the Iron Age. Characteristic ceramic styles help archaeologists to separate the sites into different groups and time periods. The first 1,000 years is called the Early Iron Age.

As mixed farmers, Iron Age people usually lived in semi-permanent settlements consisting of pole-and-daga (mud mixed with dung) houses and grain bins arranged around a central area for cattle (Huffman, 1982). Usually, these settlements with the 'Central Cattle Pattern' (CCP) were sited near water and good soils that could be cultivated with an iron hoe. For the project area, archaeological sites such as these may occur.

According to the most recent archaeological cultural distribution sequences by Huffman (2007), the study area falls within the distribution area of various cultural groupings originating out of both the Urewe Tradition (eastern stream of migration) and the Kalundu Tradition (western stream of migration). The facies that may be present are:

Urewe Tradition: Moloko Branch – Icon facies AD 1300 - 1500 (Late Iron Age)

Madikwe facies AD 1500-1700 (Late Iron Age)

Blackburn Branch- Uitkomst facies AD 1650-1820 (Late Iron Age)

Rooiberg facies AD 1650-1750 (Late Iron Age)

Kwale branch- Mzonjani facies AD 450 – 750 (Early Iron Age)

Kalunda Tradition: Benfica sub-branch – Bambata facies AD 150-650 (Early Iron Age)

Happy Rest sub-branch – Diamant facies AD 750-1000 (Early Iron Age)

Eiland facies AD 1000-1300 (Middle Iron Age)

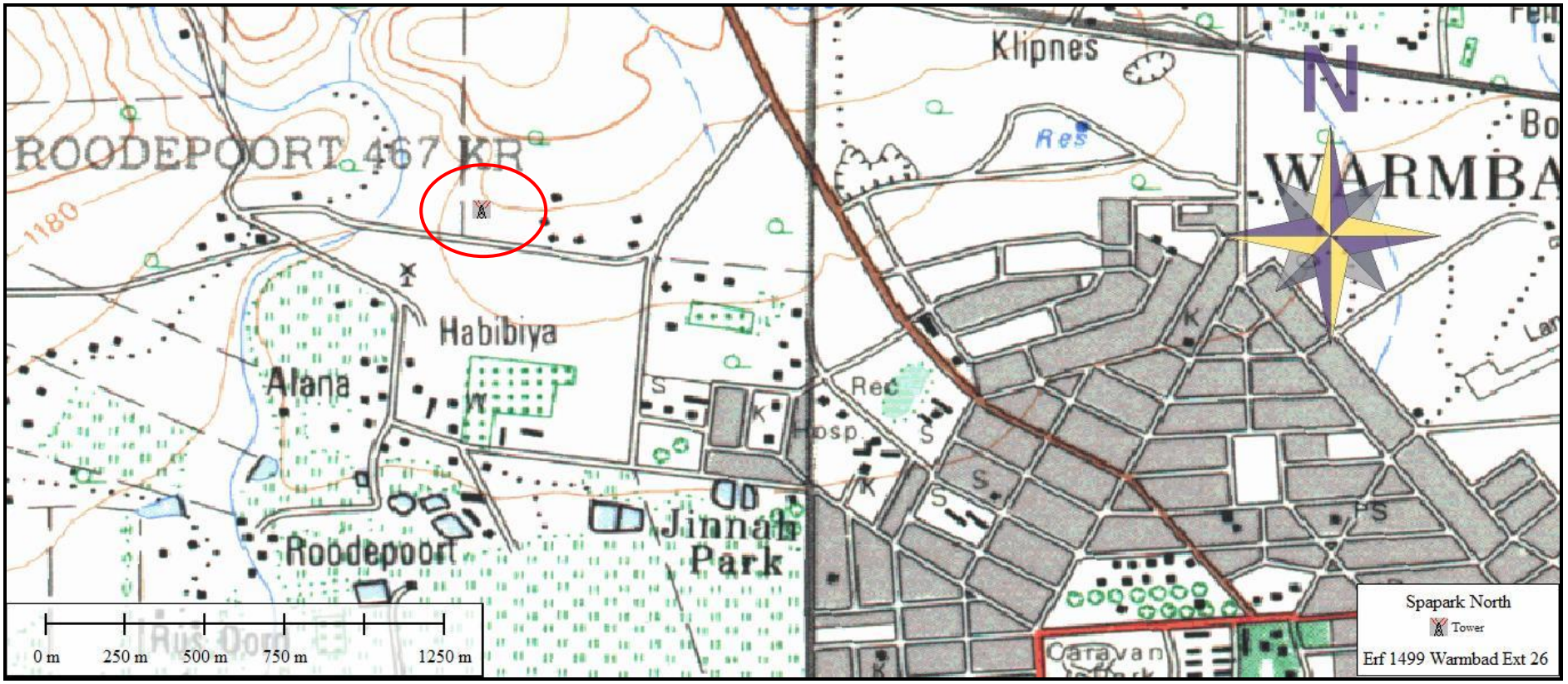

Figure 1: Location Map

Figure 2 Satellite Image of the study area with track logs of the areas covered.

.

Figure 3: General Site Conditions

Figure 4: General Site Conditions

Figure 5: General Site Conditions.

Figure 6: Vegetation in the study area.

Conclusion

Tekplan has been appointed as the independent environmental consultant, to undertake the required environmental management process for the project to identify and assess potential environmental impacts, and to propose appropriate mitigation and management measures as part of an Environmental Management Programme (EMP). They subsequently requested heritage input to identify potential impacts.

Table 1. NHRA Triggers

Action Trigger	**Yes/No**	**Description**
Construction of a road, wall, power line, pipeline, canal or other linear form of development or barrier exceeding 300 m in length.	No	NA
Construction of a bridge or similar structure exceeding 50 m in length.	No	NA
Development exceeding 5000 m²	No	NA
Development involving more than 3 erven or sub divisions	No	NA
Development involving more than 3 erven or sub divisions that have been consolidated in the past 5 years	No	NA
Re-zoning of site exceeding 10 000 m²	No	NA
Any other development category, public open space, squares, parks or recreational grounds	No	NA

From a heritage perspective no heritages related sites or features are known to exist within the study area. During the field survey conducted on 26 September no heritage resources were identified in the area. The impact area of 144m² is considered to have a negligible impact on the heritage resources in the larger study area and does not warrant a full Phase 1 study as no *in-situ* archaeological material, cultural heritage sites, historic structures or burial grounds were identified during this study and none of these resources are likely to be present on the affected landscape.

As such, we support the recommendation that the project be exempted from further archaeological assessment studies. In the unlikely event that any sites might occur within the proposed site the following recommendations are to be included in the EMP and are the responsibility of the ECO of the project to implement these:

- If during construction any possible finds such as stone tool scatters, artefacts or bone and fossil remains are made, the operations must be stopped and a qualified archaeologist must be contacted for an assessment of the find.

If the above mentioned recommendations are adhered by we support the application for exemption from a Phase 1 Archaeological Impact Assessment and Palaeontological study.

Any further queries can be forwarded to Jaco van der Walt on Cell: +27 82 373 8491 or to jaco.heritage@gmail.com

Jaco van der Walt
Archaeologist
Heritage Contracts and Archaeological Consulting CC (HCAC)

References

Archaeological Database Wits University 2009

Berg, J.S. (Ed).,Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies. Edited by J. S. Bergh. 1999. Pretoria: J. L. van Schaik Uitgewers.

Bulpin, T.V., 1989: Lost Trails of the Transvaal. Books of Africa (Pty) Ltd, Johannesburg.

Deacon, H.J. & Deacon, J. 1999. Human Beginnings in South Africa: Uncovering the Secrets of the Stone Age. Cape Town: David Phillips Publishers.

De Vaal, J.B. Ou Handelsvoetpaaie deur die Laeveld in U. De V. Pienaar, 1990: Neem uit die Verlede. Nasionale Parkeraad van Suid-Afrika, Pretoria.

De Vaal, J.B. Coenraad de Buys – renegaat en baanbreker van Soutpansberg in U. De V. Pienaar, 1990: Neem uit die Verlede. Nasionale Parkeraad van Suid-Afrika, Pretoria.

Huffman, T.N.1982. Archaeology and ethnohistory of the African Iron Age. Annual Review of Anthropology 11: 133-50.

Huffman, T.N. 2008. *Historic Impact Assessment for the Noodhulp Caravan Park, Bela Bela, Limpopo.* An unpublished report by Archaeological Resources Management

Huffman, T.N. 2007. Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa. University of KwaZulu-Natal Press, Scotsville.

Kuman, K., 1998. The earliest South African Industries. In: *Lower Palaeolithic Settlement of the Old World*. Eds by M.D. Petraglia and R. Korisetter, pp 151-186. Routledge Press, London.

Lewis-Williams, J.D., 1981. *Believing and Seeing: Symbolic Meanings in southern San Rock Paintings*. Academic Press, London.

Mason, J.R. 1962. *The Prehistory of the Transvaal*. Johannesburg: Witwatersrand University Press.

Mitchell, P. 2002. The Archaeology of Southern Africa. Cambridge: Cambridge University Press.

Mucina, L. & Rutherford,M.C. 2006. The vegetation map of South Africa, Lesotho and Swaziland. SANBI, Pretoria.

National Heritage Resources Act NHRA of 1999 (Act 25 of 1999)

Roodt, F. 2008. Phase 1 Heritage Resources Scoping Report: MTN Telecommunication Mast Buyskop Bela Bela (Warmbad), Limpopo. An unpublished report by R & R Cultural Resource Consultants

Roodt, H. 1999. Phase 1 Archaeological Impact Assessment Warmbad Town Establishment Het Bad 465 KR. An unpublished report by R & R Cultural Resource Consultants on file at SAHRA as: 1999-SAHRA-0056.Ross, R. 2002. A concise history of South Africa. Cambridge: Cambridge University Press.

SAHRA Report Mapping Project Version 1.0, 2009

Van der Ryst, M.M., 1998. *The Waterburg Plateau in the Northern Province, Republic of South Africa, in the Later Stone Age*. BAR International Series 715, Oxford.

Van der Ryst, M.M., 2006. *Seeking Shelter: Later Stone Age Hunters, Gatherers and Fishers of Oliboompoort in the western Waterberg south of the Limpopo*. Unpublished doctoral thesis, University of the Witwatersrand, Johannesburg

Van der Walt, J. & Fourie, W. 2007. *Heritage Scoping Report Proposed New Residential Development on Portions 94 of the Farm Buiskop 464 KR, Bela-Bela, Limpopo Province.* An unpublished report by Matakoma Heritage Consultants (Pty) Ltd

Van der Walt, J. 2008. *Archaeological Impact Assessment on Portion 16 of the Farms Noodhulp 492 KR, Warmbaths, Limpopo Province.* An unpublished report by Wits Heritage Contacts Unit