

SPECIALIST REPORT
**PHASE 1 ARCHAEOLOGICAL / HERITAGE IMPACT ASSESSMENT FOR A PROPOSED
4HA DEVELOPMENT OF THE TZANEEN MANUFACTURING ASPHALT & PAVING
BRICKYARD PLANT ON PORTION 7 OF THE FARM MOHLABA'S LOCATION 567LT,
MOPANI DISTRICT
LIMPOPO PROVINCE**

**REPORT PREPARED FOR
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SEPTEMBER 2018

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EXECUTIVE SUMMARY

A Phase 1 Heritage Impact Assessment (HIA) regarding archaeological and other cultural heritage resources was conducted on the footprint for the proposed Tzaneen manufacturing Asphalt and Paving brickyard Plant on *portion 7 the farm MOHLABA'S LOCATION 567 LT*, in Nkowankowa, Mopani district. The applicant, Tzaneen Asphalt & Paving Manufacturers (Pty) Ltd has appointed Dynamic Environmental Consultants to facilitate the process. The land belongs for the Mohlaba's Tribal Authority, and is zoned as Industrial.

The 4ha study area is located in the Nkowankowa residential area, which is in the Limpopo Province. This area falls under the jurisdiction of the Mopani District Municipality and the Greater Tzaneen Local Municipality.

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.

The proposed site for the Asphalt and paving brickyard development is situated in the Nkowankowa residential / industrial area in the Mopani District near Tzaneen. The property is currently vacant land which was previously used by local communities for small scale farming. Small demarcated plots are visible in the study area. A concrete dam and large amounts of demolished concrete rubble is visible in the southern section. This section is also invaded by alien species, which indicate previous disturbances. A few natural indigenous trees and a several mango trees remained from historic orchards. A railway line is south of the property and an ESKOM substation to the east. A large formal cemetery is located to the east, outside of the study area. Visibility in the area was excellent, as it had recently been burnt.

No archaeological, heritage features or graves were observed during the site survey.

It is recommended that the applicant be made aware that distinct archaeological material or human remains may only be revealed during the construction phase. It is recommended that earthmoving activities be monitored by a qualified archaeologist for any possible archaeological sub-surface finds after which an assessment will be made. Based on the survey and the findings in this report, Adansonia Heritage Consultants state that there are no compelling reasons which may prevent the proposed Tzaneen manufacturing asphalt and paving brickyard plant to continue.

Disclaimer: *Although all possible care is taken to identify all sites of cultural significance during the investigation, it is possible that hidden or sub-surface sites could be overlooked during the study. Christine Rowe trading as Adansonia Heritage Consultants will not be held liable for such oversights or for costs incurred by the client as a result.*

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- 3) Recommendations delivered to the Client.*



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C. Rowe

SEPTEMBER 2018

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MOPANI DISTRICT, LIMPOPO PROVINCE**

A. BACKGROUND INFORMATION TO THE PROJECT

Tzaneen Asphalt and Paving Manufacturers in co-operation with DYNAMIC Environmental Consultants, is requesting the development of an Asphalt and paving brickyard Plant on a 4ha piece of land in the industrial area of Nkowankowa, Mopani District, Tzaneen. The proposed area is situated on *portion 7 of the farm Mohlaba's Location 567LT*, Limpopo Province (map 4, Appendix 2: fig. 1).

Adansonia Heritage Consultants were appointed by DYNAMIC Environmental Consultants, to conduct a Phase 1 heritage impact assessment (HIA) on archaeological and other heritage resources within the study area. A literature study, relevant to the study area as well as a foot survey was done, to determine that no archaeological or heritage resources will be impacted upon (see Map 4: Topographical Map).

The aims of this report are to source all relevant information on archaeological and heritage resources in the study area, and to advise the client on sensitive heritage areas as well as where it is viable for the development to take place in terms of the specifications as set out in the National Heritage Resources Act no., 25 of 1999 (NHRA). Recommendations for maximum conservation measures for any heritage resource will also be made. The study area is indicated in maps 1 - 6, & Appendix 1 & 2.

- This study forms part of an EIA, Consultant: DYNAMIC Environmental Consultants, P.O. Box 143, Letaba, 0870. Tel: 0616631682 / e-mail: mnkanyama@outlook.com; The EIA is in the scoping phase.
- Type of development: Development of an asphalt and paving brickyard on a 4ha property *on portion 7 of the farm Mohlaba's Location 567LT*, Limpopo Province.
- The study area is historically disturbed agricultural / cultivated lands with demolished building infrastructure to the south. There is also a concrete dam in the south-western corner. The area is zoned as industrial.
- Location of Province, Magisterial district / Local Authority and Property (farms): The area falls within the Limpopo Province, under the jurisdiction of the Mopani District

Municipality and the Greater Tzaneen Local Municipality.

- Land owner: Mohlaba's Tribal Authority.¹

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 where applicable;
- b) Assessment of the significance of the heritage resources;
- c) Alternatives given to affected heritage resources by the development;
- d) Plans for measures of mitigation.

Legal requirements:

The legal context of the report is grounded in the National Heritage Resources Act no. 25, 1999, as well as the National Environmental Management Act (Act No. 107 of 1998) (NEMA as amended).

- **Section 38 of the NHRA**

This report constitutes a heritage impact assessment investigation linked to the environmental impact assessment required for the development. The proposed development is a listed activity in terms of Section 38 (1) of the NHRA. Section 38 (2) of the NHRA requires the submission of an HIA report for authorisation purposes to the responsible heritage resources agency, SAHRA.

Heritage conservation and management in South Africa is governed by the NHRA and falls under the overall jurisdiction of the South African Heritage Resources Agency (SAHRA) and its provincial offices and counterparts.

Section 38 of the NHRA requires a Heritage Impact Assessment (HIA) to be conducted by an independent heritage management consultant, for the following development categories:

- The construction of a road, wall, powerline, pipeline, canal or similar form of linear development or barrier exceeding 300m in length;
- Any development or other activity which will change the character of a site:
 - exceeding 5000m² in extent;
 - the rezoning of a site exceeding 10 000m² in extent;

¹ Dept. of EDET, *Scoping Report for Tzaneen Asphalt & paving brickyard Plant*, 2018.

In addition, the new EIA regulation promulgated in terms of NEMA, determines that any environmental report will include cultural (heritage) issues.

The end purpose of this report is to alert the applicant, DYNAMIC Environmental Consultants as well as interested and affected parties, about existing heritage resources which may be affected by the proposed development, and to recommend mitigation measures aimed at reducing the risks of any adverse impacts on these heritage resources. Such measures could include the recording of any heritage buildings or structures older than 60 years prior to demolition, in terms of section 34 of the NHRA and also other sections of this act dealing with archaeological sites, buildings and graves.

The NHRA section 2 (xvi) states that a “heritage resource” means any place or object of cultural significance, and in section 2 (vi) that “cultural significance” means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance. Apart from a heritage report assisting a client to make informed development decisions, it also serves to provide the relevant heritage resources authority with the necessary data to perform their statutory duties under the NHRA. After evaluating the heritage scoping report, the heritage resources authority will decide on the status of the resource, whether the development may proceed as proposed or whether mitigation is acceptable, and whether the heritage resource require formal protection such as a Grade I, II or III, with relevant parties having to comply with all aspects pertaining to such a grading.

- **Section 35 of the NHRA**

Section 35 (4) of the NHRA stipulates that no person may, without a permit issued by SAHRA, destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object. This section may apply to any significant archaeological sites that may be discovered. In the case of such chance finds, the heritage practitioner will assist in investigating the extent and significance of the finds and consult with an archaeologist about further action. This may entail removal of material after documenting the find or mapping of larger sections before destruction.

- **Section 36 of the NHRA**

Section 36 of the NHRA stipulates that no person may, without a permit issued by SAHRA, destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years, which is situated outside a formal cemetery

administered by a local authority. It is possible that chance burials might be discovered during the development. This section does not apply since no graves were identified.

- **Section 34 of the NHRA**

Section 34 of the NHRA stipulates that no person may alter, damage, destroy, relocate etc, any building or structure older than 60 years, without a permit issued by SAHRA or a provincial heritage resources authority. This section does not apply since no structure older than 60 years were identified during the survey.

- **Section 37 of the NHRA**

This section deals with public monuments and memorials but does not apply in this report.

- **NEMA**

The regulations in terms of Chapter 5 of the National Environmental Management Act, (107/1998) (as amended), provides for an assessment of development impacts on the cultural (heritage) and social environment and for specialist studies in this regard.

B BACKGROUND TO ARCHAEOLOGY AND HISTORY OF THE STUDY AREA

- **Literature review, museum databases & previous relevant impact assessments**

The study area *on portion 7 of the farm Mohlaba's Location 567LT*, is located approximately 20km east of Tzaneen, north of the R36 road, turning towards Nkowakowa residential area.

The area is generally known as the *Lowveld*, of which the farm *Mohlaba's Location* forms a part. The study area has originally been inhabited by the San or Bushman people as the many Stone Age tools and occasionally rock art sites, found from the escarpment to the arid *Lowveld* indicate.²

- **STONE AGE**

Evidence from rock shelters in the Mpumalanga / Limpopo region suggest that the earliest inhabitants in the area were small groups of Stone Age hunter- gatherers. These San people led a nomadic lifestyle and rock paintings found in some of the shelters are an indication of their presence.^{3 4} Unfortunately very little research in this regard has been conducted, although several rock painting sites have been recorded in the areas of Ohrigstad / Blyderivierspoort

²M. De Jongh, *Swatini*, p. 9.

³ Hampson et al., 2002, The rock art of Bongani Mountain Lodge, SA Archaeological Bullitin 57: p. 15.

⁴ Rowe C., 2009, Heritage Management of Archaeological, Historical and Industrial resources on the Blyde River Canyon Nature Reserve, p. 22.

Canyon, and rock engravings in the surrounding area of Lydenburg.⁵ Bergh,⁶ did not record any Stone Age sites in the immediate area of Tzaneen and no rock art sites are recorded in this area. The closest Early – and Middle Stone Age sites have been documented near Pietersburg (Polokwane). The Bushman Rock Shelter and Heuningneskrans near Ohrigstad are well-known Middle Stone Age sites, dating back to approximately 35000 BP.⁷

IRON AGE

Later Bantu-speaking tribes from further north moved into southern Africa, bringing with them a new way of life based on agriculture, pastoralism and metal working. This period is broadly referred to as the Iron Age, starting around AD 200. Cattle played a crucial role in the world-view and social organization of these societies, which is reflected in the layout of their homesteads – referred to as the Central Cattle Pattern. This type of settlement may be recognized archaeologically from centrally located cattle pens associated with high-status burials, grain storage pits, men's assembly areas and evidence of iron-forging.^{8 9}

The earliest appearance of Iron Age people in the foothills of the Drakenberg, is probably around 800 – 1100AD,¹⁰ although the earliest date so far for black settlement in South Africa is around 200 AD from the Silver Leaves site near Tzaneen.^{11 12} From the 15th and 18th centuries, the Lowveld was a hive of activity before European settlement. Research done by T.M. Evers and other researchers in the early 1970's, revealed that this area was inhabited by Sotho people of the baPhalaborwa tradition (or Late Iron Age - LIA) – from approximately 1000 AD.

Excavations on the farms *Harmony 24 and 25*, and *Makhutswi* (in the vicinity of the study area and Tzaneen), by T.M. Evers confirmed that the people belonged to the “Phalaborwa” culture or tradition, dating to the LIA.¹³ They produced salt and copper in the area for local and long-distance trade. A soapstone bowl factory was also identified, and the soapstone bowls were used for salt production.¹⁴

⁵ Rowe C., 2009, Heritage Management of Archaeological, Historical and Industrial resources on the Blyde River Canyon Nature Reserve, p. 22.

⁶ Bergh 2009 *Geskiedenis Atlas van Suid Afrika*, p.4.

⁷ Voight, E., 1981, *Guide to the Archaeological sites in the Northern and Eastern Transvaal*, p. 115.

⁸ Huffman T.N., 2007, *Handbook to the Iron Age*, p.331.

⁹ Pelser A., 2014, *A Report on the first phase archaeological investigations on LIA stone walled sites located on portion 7 of the farm Rooidraai 34JT to be impacted by commercial and residential developments: sites RDR 7 & 1C*, p. 8.

¹⁰ *Ibid.*, p. 9.

¹¹ T.M. Evers, *Three Iron Age Industrial sites in the Eastern Transvaal Lowveld*, Fig. 87.

¹² Bergh 2009 *Geskiedenis Atlas van Suid Afrika*, p.6.

¹³ *Ibid.*, pp. 54-56.

¹⁴ *Ibid.*, pp. 1-3.

The abundant minerals in the area, metallurgy and salt production may have been major reasons for settlement in this part of the Lowveld.¹⁵ Copper (on *Harmony* 25), ancient gold workings on the farm *Maranda*, mica on *Islington*, copper and iron at *Gravelotte* and *Phalaborwa*,¹⁶ were mined and worked by the local inhabitants, which indicate the use of an advanced technology. Prof J.F. Eloff mentions in *Neem uit die Verlede*, that iron was already worked since the fifteenth century.¹⁷

Ethnohistorical studies by Krige (1937), Van Warmelo (1944), Du Toit (1967) and Scully (1971) identified the community relations in this area as of Sotho and Tonga origin. Bergh is more specific and included groups such as the Lobedu (from Modjadji), the Letswalo/Narene (from Mmamathôla), the Mošote (Moshuti), the Tsolobololo (Selebul), Thabina (Thabine of Magaboya), the Kgaga (of Maupa / Mahoepa), the Tlou (of Makgoba / Magoeba), and the Mapitha.^{18 19 20} They settled here as long ago as ca 1000 AD.²¹

Early ethnographical and linguistic studies by early researchers such as D. Ziervogel and N.J. Van Warmelo, revealed that the study area (specifically) was sparsely inhabited by the baLobedu (Modjadji) as well as a few vaTonga (Nwamitwa) from before the 18th century²² (See map 1: 1935: Map of Van Warmelo). When concentrating on ethnographical history, it is important to include a slightly wider geographical area for it to make sense. Van Warmelo based his 1935 survey of *Bantu Tribes of South Africa* on the number of taxpayers in an area. The survey does not include the extended households of each taxpayer, so it was impossible to reliably indicate how many people were living in one area.²³ The boundaries of groups are intersected and overlapping.²⁴ Languages such as Zulu, Xhosa, Swazi, Nhlangu, Nkuna, sePedi, hiPau and seRôka, are commonly spoken throughout this area.²⁵

¹⁵T.M. Evers, *Three Iron Age Industrial sites in the Eastern Transvaal Lowveld*, p. 6.

¹⁶*Ibid.*, p. 5.

¹⁷J.F. Eloff, 'n Nuwe Orde: Swart indringing en kolonisasie van die Laeveld, in U. de V. Pienaar, *Neem Uit die Verlede*, p. 31.

¹⁸Bergh 2009 *Geskiedenis Atlas van Suid Afrika*, p.205.

¹⁹T.M. Evers, *Three Iron Age Industrial sites in the Eastern Transvaal Lowveld*, p. 79.

²⁰J.S. BERGH, (red.), *Geskiedenis Atlas van Suid-Afrika: Die vier Noordelike Provinsies*, p. 10.

²¹T.M. Evers, *Three Iron Age Industrial sites in the Eastern Transvaal Lowveld*, p. 80.

²²H. S. Webb, The Native Inhabitants of the Southern Lowveld, in *Lowveld Regional Development Association, The South-Eastern Transvaal Lowveld*. p.16.

²³N.J. van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, p.9.

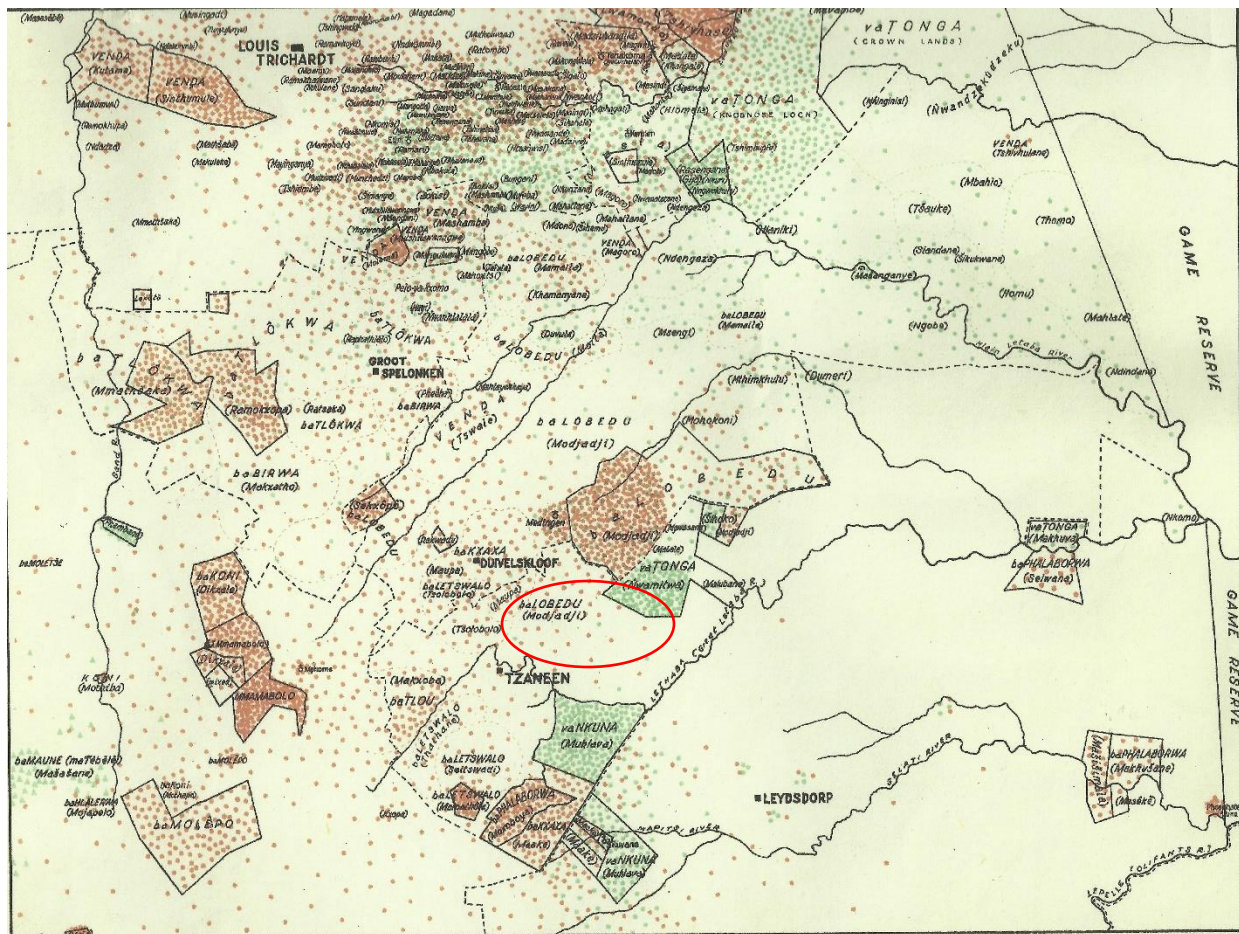
²⁴N.J. van Warmelo, *A Preliminary Survey of the Bantu Tribes of South Africa*, p. 51.

²⁵M. De Jongh (ed.), *Swatini*, p. 21.

- **European settlement:**

The presence of malaria and tsetse fly in the north-eastern *Lowveld* areas were the main factors which prevented Europeans from settling here for a long time. Eventually two groups of people, with different motives, made the journey into the *Lowveld* - the first was the *Voortrekkers* (early 1800's) and the second, hunting parties, prospectors and miners.²⁶

The search for gold was one of the reasons why geologists and prospectors visited the *Lowveld* area. Reef gold, was discovered in 1870 on the farm *Eersteling* (near the current Polokwane (Pietersburg)). The gold was not viable, but it was enough to create a gold rush by fortune seekers, of whom some stayed behind. Remains of their presence are abundant.²⁷



MAP 1: Van Warmelo: 1935: The study area is indicated by the red oval.

²⁶J. Verhoef, *Prospekteerders en delwery, in U. de V. Pienaar, Neem Uit die Verlede*, p. 230.

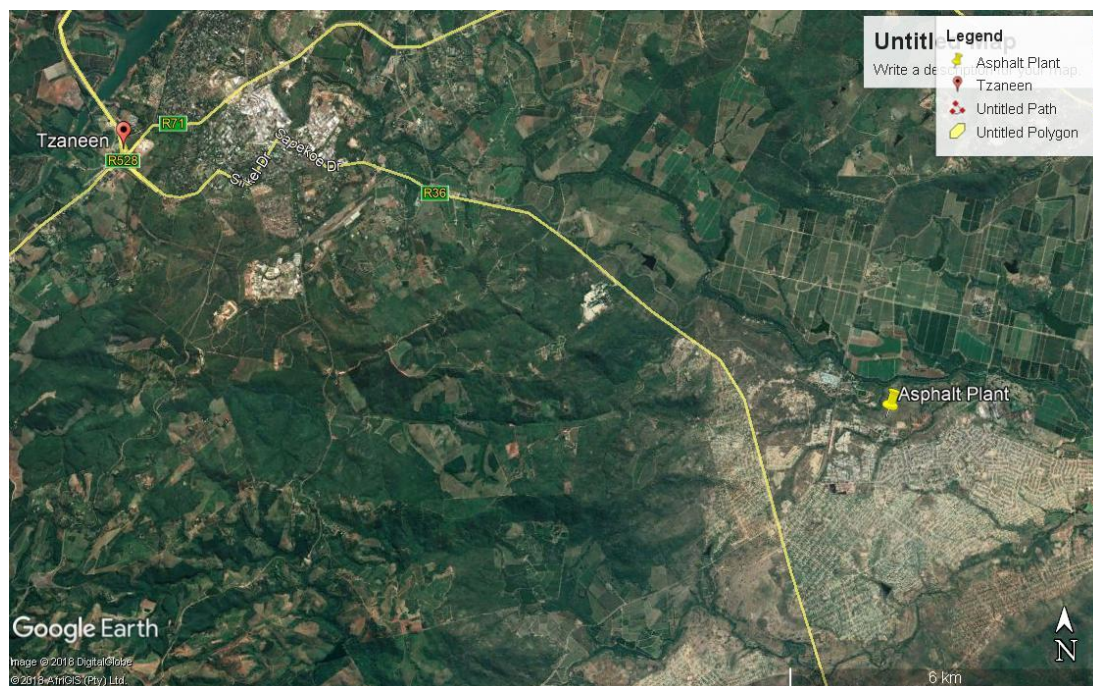
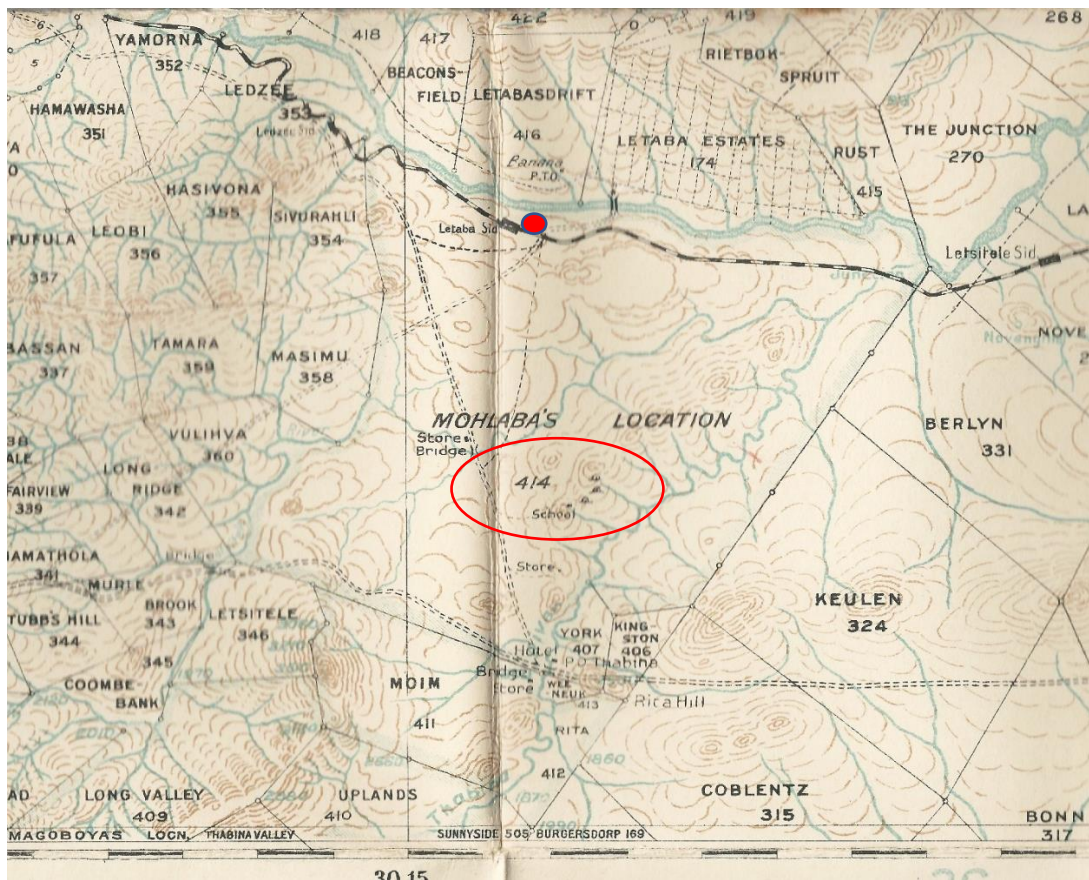
²⁷*Ibid.*, p. 232.

The author was also involved in desktop studies and surveys in the area, such as:

- C. Rowe & Ruth Maguire, 2006: *Phase 1 HIA study for portion 39 of the farm Harmony no. 140KT, Limpopo*. Early- & Middle Stone Age artefacts, and upper grinders from the Iron Age were found out of context.
- C. Rowe, 2008: *Archaeological Heritage Impact assessment for the remainder of the farm Lekkergoed no 158KT, Residential stand no. 10, Leopard Rock Nature estate, Limpopo*. Remains of an Iron Age stone wall as well as clay potsherds were found.
- C. Rowe, 2009: *Phase 2 HIA report: Residential House, Doornhoek 535LT, Portion 14, Tzaneen Dam, Limpopo*. No mitigation measures needed.
- C. Rowe, 2016: *Specialist Report: For the Hans Hoheisen Homestead at Ngala Private Game Reserve, Timbavati, Limpopo*. No mitigation measures needed.

The SAHRA database for archaeological and historical impact assessments was consulted and revealed other recent Archaeological Impact assessment reports in the wider area:

- S. Gaigher, 2007 & 2010: *Phase 1 & HIA for the proposed township establishment on portion 2 of the farm Cooyong 1100-LS, Haenertsburg, Limpopo* – A historic house was identified; 2010: *Phase 2 on the historic building*: revealed that no impact was anticipated;
- A. Pelser, 2016, *Final report on the assessment of cultural Heritage Resources to be impacted upon by the Nwamithwa dam an associated infrastructure development, Limpopo* – Mitigation measures was recommended for graves, archaeological and historical sites.
- F. Roodt & L. Stegman, 2015: *Phase 1 Heritage Resources Scoping Report: Proposed croplands for Berry cultivation near Tzaneen, Limpopo* - No archaeological material of significance was identified.
- J van Schalkwyk, 2013: *HIA for the proposed upgrading of a section of the R71 between Polokwane and Tzaneen, Moria City Region, Limpopo*. An informal cemetery was identified.



C. DESCRIPTION OF THE AREA TO BE AFFECTED BY THE PROPOSED DEVELOPMENT

The proposed project will involve the construction of a manufacturing asphalt and paving brickyard on a small property, with associated infrastructure such as sewage, water, electricity and access roads etc.²⁸ The proposed development further entails the Asphalt Plant, offices and workshops, brickyard manufacturing workshop and the drilling of one borehole.²⁹ The study area was accessed by a small dirt road which runs parallel to the railway line in the south. A large formal cemetery is situated to the east, away from the study area. The site is in the industrial section of the Nkowankowa residential area, approximately 20km east of Tzaneen.

The proposed area for the manufacturing Plant is in the extent of 4ha. (see map 6, Appendix 2: figs. 1 - 17). The study area is flat and is still used by the local community to practice small scale subsistence farming (see figs. 1 - 8). The extent of the historically disturbed sections is clearly visible in the 2009 google image (map 5). The southern and western sections had recent concrete building infrastructure, which was demolished previously (figs. 9, 11 – 15). Google images from 2004 do not show any building infrastructure although metal supports indicate the existence of previous buildings. The metal supports were removed (see fig. 14), possibly for scrap metal. Some of the building rubble still had remains of modern tiles on them (fig. 15). A concrete dam (fig. 10) was the only structure that is still complete (although not in use).

The southern section is invaded by alien vegetation, with only a few natural trees (such as Ficus- and Acacia species). Several mango trees are possibly evidence that this section was an old fruit orchard in previous years, as some of the trees are still in distinct rows (see figs. 1, 3, 6, 16 & 17). A small sand quarry is located in the north-western corner of the study area (map 6). Visibility in general was excellent, as the veld had recently been burnt. The southern section (also burnt) was also easily accessible. Alien invasive species in this section are an indication of previous disturbances. In conclusion it is clear that the entire study area was compromised over time.

D. LOCALITY

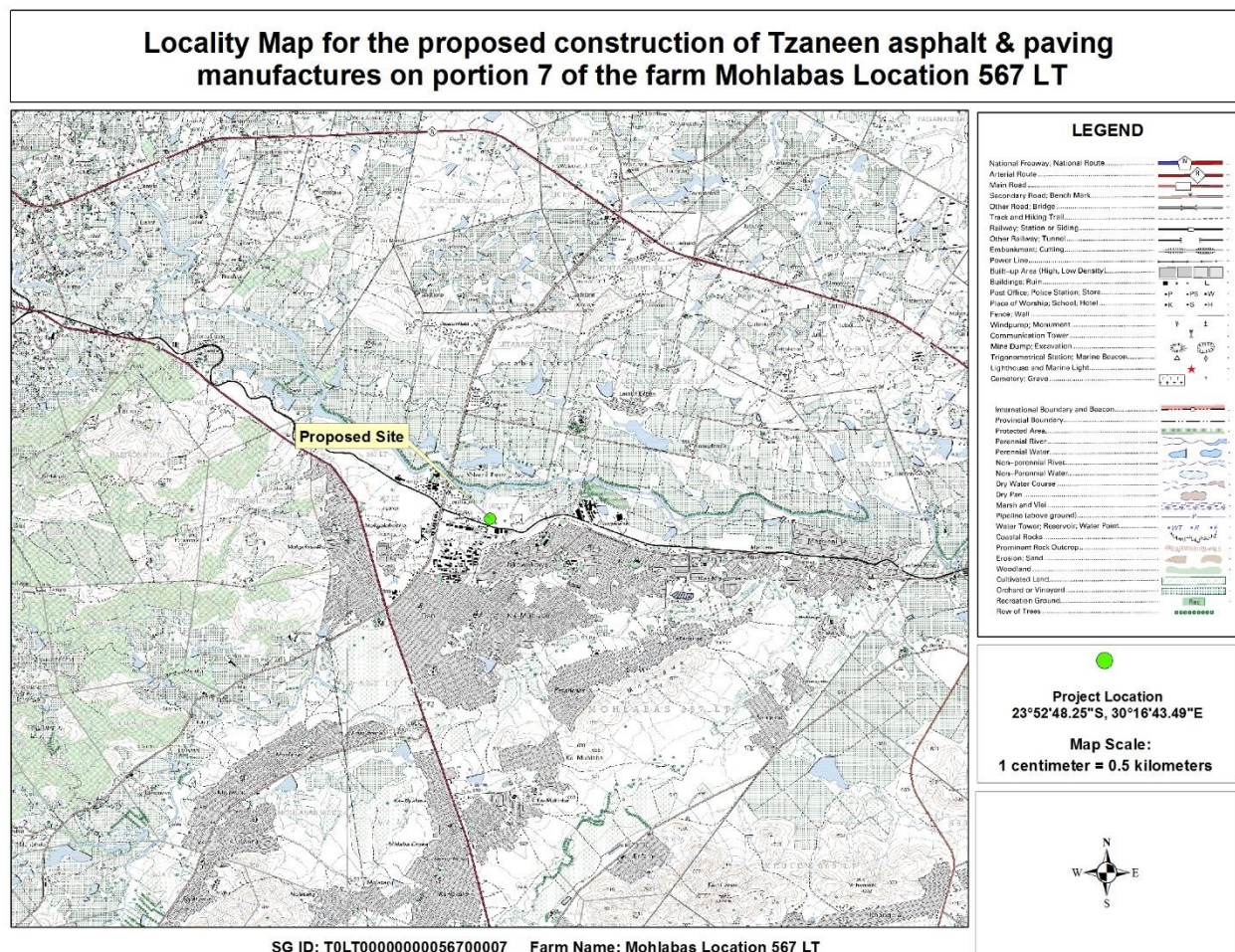
The proposed development is situated on *portion 7 of the farm Mohlaba's Location 567LT* in the Greater Tzaneen Municipality, Limpopo Province. The site is in the industrial section of the Nkowankowa residential area, approximately 20km east of Tzaneen. The property is 4 hectares

²⁸ DYNAMIC Environmental Consultants, BID document, p. 2.

²⁹ Dept. of EDET, *Scoping Report for Tzaneen Asphalt & paving brickyard Plant*, 2018.

in extent and abutted by residential developments such as the Hlovani Lodge, Mosopotamia & Greater Tzaneen Busses and an ESKOM substation.³⁰ A railway line and dirt road borders the site in the south (fig. 5). The Letaba River runs towards the north (see map 3). A 1929 topographical map (LEYDSDORP) revealed a few kraal settlements to the south of the study area (see map 2), and the Letaba (Railway) Station, to the west.

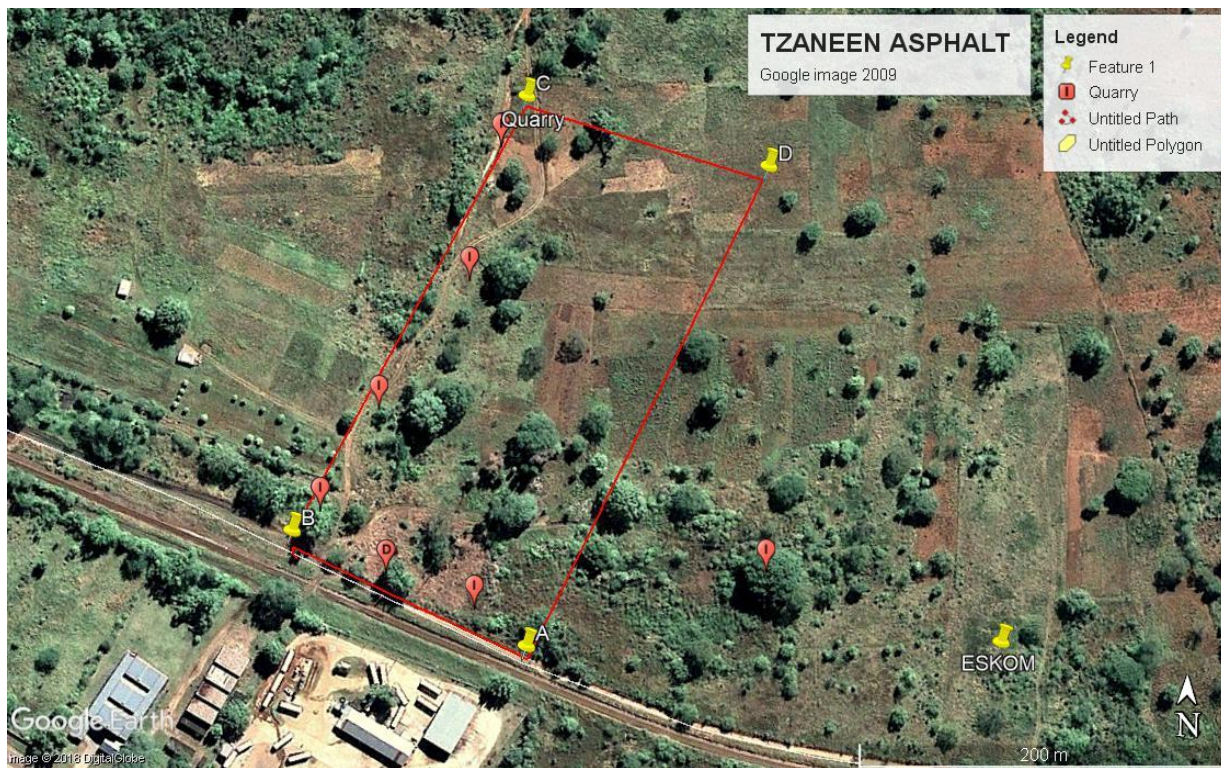
The site falls under the Greater Tzaneen Local Municipality and the Mopani District Municipality in the Limpopo Province. The land belongs to the Mholaba's Tribal Authority. A lease agreement was signed for the development of the property (see Maps 2 - 6 & Appendix 2: Fig. 1 – 17 for the study area). The area is zoned as industrial.



MAP 4: Locality map for the proposed Tzaneen Asphalt Plant.³¹

³⁰ DYNAMIC Environmental Consultants, BID document, p. 2.

³¹ Dept. of EDET, *Scoping Report for Tzaneen Asphalt & paving brickyard Plant*, 2018.



MAP 5: 2009 Google image of the study area, show the extent of the historically disturbed agricultural sections. The red markers indicate the dam (south) as well as demolished building rubble from previous infrastructure.

Description of methodology:

The topographical maps (including the 1929 map, Map 2: LEYDSDORP), and Google images of the study area (Map 3, 5 & 6), indicate the site for the proposed development. These were intensively studied to assess the current and historically disturbed areas and infrastructure. A few native kraals are indicated on the 1929 map, but they are south of the study area. In order to reach a comprehensive conclusion regarding the cultural heritage resources in the study area, the following methods were used:

- The desktop study consisted mainly of archival sources studied on distribution patterns of early African groups who settled in the area since the 17th century, and which have been observed in past and present ethnographical research and studies.
- Literary sources, books and government publications, which were available on the subject, have been consulted, in order to establish relevant information.
- Specialists currently working in the field of anthropology and archaeology have also been consulted on the subject.³²

³² Personal communication: Anton Pelser, 2018-09-04.

-Literary sources: A list of books and government publications about prehistory and history of the area were cited, and revealed some information;

-The archaeological database of SAHRA as well as the National Cultural History Museum was consulted. Heritage Impact Assessment reports of specialists who worked in the area were studied and are quoted in section B.

- The fieldwork and survey were conducted extensively by two people on foot. Tracks and paths were mainly used to access sections (see Appendix 1).
- The 4ha terrain was flat, even and accessible and the area was previously small cultivated sections used for subsistence farming. Some alien vegetation occurs in the southern section but posed no restriction. In general, visibility was excellent.
- The relevant data was located with a GPS instrument (Garmin Oregon 750), and plotted. Co-ordinates were within 4-6 meters of identified sites.
- 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 environmental practitioner Miyelani Nkanyana (Dynamic Environmental Consultants) was held, and she also provided background information for the project.³³
- GPS co-ordinates were used to locate the perimeters and any heritage features within the study area (Co-ordinates provided by DYNAMIC Environmental Consultants:

GPS CO-ORDINATES			
Location	Elevation	South	East
A = SE corner	564m	S 23° 52' 53.19"	E 30° 16' 43.78"
B = SW corner	564m	S 23° 52' 51.38"	E 30° 16' 38.75"
C = NW corner	556m	S 23° 52' 43.51"	E 30° 16' 43.05"
D = NE corner	557m	S 23° 52' 45.09"	E 30° 16' 47.93"

³³ Personal information: Miyelani Nkanyana, Dynamic Environmental Consultants, 2018-08-22.



MAP 6: The study area (Google image 2018) (Map from Dynamic Env. Consultants).

E. DESCRIPTION OF IDENTIFIED SITES

The applicant, Tzaneen Asphalt & Paving Manufacturers (Pty) Ltd, in co-operation with DYNAMIC Environmental Consultants is requesting the development of a 4ha Asphalt and paving brickyard Plant on *portion 7 of the farm Mohlaba's Location 567LT*.

The 1929 topographical map (Map 2) indicates kraal settlements south of the study area. The terrain was flat, even and accessible and visibility was excellent throughout the survey (see Appendix 2: Fig. 1 – 17). The entire section was historically compromised by cultivated lands, orchards, and infrastructure.

All comments should be studied in conjunction with the maps, figures and appendices, which indicate the study area, and which correspond with the summary below. Photographs in Appendix 2 show the general view of the study area (figs: 1 – 17).

The property is currently a vacant environment, extensively disturbed as a result of historical cultivation, mango orchards (figs. 16 & 17), and demolished infrastructure (figs. 9 – 15). Invader species have established in the southern section (see google image map 5). The study area is currently still used by the local community for farming as well as dumping of rubble. A large

formal cemetery is located approximately 500m to the east. The study area was surveyed on foot for any remains of an archaeological or historical nature.

No archaeological sites, stone walls, historic structures or graves were identified.

F. DISCUSSION ON THE FOOTPRINT OF THE PROPOSED DEVELOPMENT

ACT	COMPO-NENT	IMPLICATION	RELEVANCE	COMPLIANCE
NHRA	S 34	Impact on buildings and structures older than 60 years	None present	None
NHRA	S35	Impacts on archaeological and palaeontological heritage resources	None Present	None
NHRA	S36	Impact on graves	None present	None
NHRA	S37	Impact on public monuments	None present	None
NHRA	S38	Developments requiring an HIA	Development is a listed activity	HIA done
NEMA	EIA regulations	Activities requiring an EIA	Development is subject to an EIA	HIA is part of EIA

- **Summarised identification and cultural significance assessment of affected heritage resources: General issues of site and context:**

Context		
Urban environmental context	No	NA
Rural environmental context	No	NA
Natural environmental context	No	NA

Context		
Formal protection (NHRA)		
(S. 28) Is the property part of a protected area?	No	NA
(S. 31) Is the property part of a heritage area?	No	NA
Other		
Is the property near to or visible from any protected heritage sites	No	NA
Is the property part of a conservation area of special areas in terms of the Zoning scheme?	No	NA
Does the site form part of a historical settlement or townscape?	No	NA
Does the site form part of a rural cultural landscape?	No	NA
Does the site form part of a natural landscape of cultural significance?	No	NA
Is the site adjacent to a scenic route?	No	NA
Is the property within or adjacent to any other area which has special environmental or heritage protection?	No	NA
Does the general context or any adjoining properties have cultural significance?	No	NA

<i>Property features and characteristics</i>		
Have there been any previous development impacts on the property?	Yes	Historically disturbed cultivated lands and infrastructure
Are there any significant landscape features on the property?	No	NA
Are there any sites or features of geological significance on the property?	No	NA
Does the property have any rocky outcrops on it?	No	NA
Does the property have any fresh water sources (springs, streams, rivers) on or alongside it?	Yes	Letaba River to the north

<i>Heritage resources on the property</i>		
<i>Formal protection (NHRA)</i>		
National heritage sites (S. 27)	No	NA
Provincial heritage sites (S. 27)	No	NA
Provincial protection (S. 29)	No	NA
Place listed in heritage register (S. 30)	No	NA
<i>General protection (NHRA)</i>		
Structures older than 60 years (S. 34)	No	NA
Archaeological site or material (S. 35)	No	NA
Palaeontological site or material (S. 35)	No	NA

<i>Heritage resources on the property</i>		
Graves or burial grounds (S. 36)	No	NA
Public monuments or memorials (S. 37)	No	NA
<i>Other</i>		
Any heritage resource identified in a heritage survey (author / date / grading)	No	NA
Any other heritage resources (describe)	No	NA

NHRA S (3)2 Heritage resource category	ELE- MENT S	INDICATORS OF HERITAGE SIGNIFICANCE										RISK
		Hist orica l	Rar e	Sci ent ific	Typi cal	Tech - nolo gical	Aes theti c	Pers on / com muni ty	Land mark	Mate rial con ditio n	Sust aina bility	
Buildings / structures of cultural significan ce	No	No	No	No	No	No	No	No	No	No	No	-
Areas attached to oral traditions / intangible heritage	No	No	No	No	No	No	No	No	No	No	No	-
Historical settlement / townscap es	No	-	-	-	-	-	-	-	-	-	-	-

NHRA S (3)2 Heritage resource category	ELE- MENT S	INDICATORS OF HERITAGE SIGNIFICANCE										RISK
		Hist orica l	Rar e	Sci ent ific	Typi cal	Tech - nolo gical	Aes theti c	Pers on / com muni ty	Land mark	Mate rial con ditio n	Sust aina bility	
Landscape of cultural significance	No	-	-	-	-	-	-	-	-	-	-	-
Geological site of scientific/cultural importance	No	-	-	-	-	-	-	-	-	-	-	-
Archaeological / palaeontological sites	No	-	-	-	-	-	-	-	-	-	-	-
Grave / burial grounds	No	-	-	-	-	-	-	-	-	-	-	-
Areas of significance related to labour history	No	-	-	-	-	-	-	-	-	-	-	-
Movable objects	No	-	-	-	-	-	-	-	-	-	-	-

- Summarised recommended impact management interventions

NHRA S (3)2 Heritage resource	SITE	IMPACT SIGNIFICANCE		Impact managemen t	Motivation
		Cultural sianifican	Impact sianifican		
Buildings / structures of cultural significance	No	No	None	-	-
Areas attached to oral traditions / intangible heritage	No	None	None	-	-
Historical settlement/ townscape	No	None	None	-	-
Landscape of cultural significance	No	None	None	-	-
Geological site of scientific/ cultural importance	No	None	None	-	-
Archaeologi cal / palaeontolo gical sites	No	None	None	-	-
Grave / burial grounds	No	No	None	-	-

NHRA S (3)2 Heritage resource	SITE	IMPACT SIGNIFICANCE		Impact managemen t	Motivation
		Cultural sianificance			
Areas of significance related to labour history	No	None	None	-	-
Movable objects	No	None	None	-	-

ACT	COMPO- NENT	IMPLICATION	RELEVANCE	COMPLIANCE
NHRA	S 34	Impact on buildings and structures older than 60 years	None present	None
NHRA	S35	Impacts on archaeological and palaeontological heritage resources	None present	None
NHRA	S36	Impact on graves	None present	None
NHRA	S37	Impact on public monuments	None present	None
NHRA	S38	Developments requiring an HIA	Development is a listed activity	Full HIA
NEMA	EIA regulation s	Activities requiring an EIA	Development is subject to an EIA	HIA is part of EIA

G. STATEMENT OF SIGNIFICANCE & EVALUATION OF HERITAGE RESOURCES

Section 38 of the NHRA, 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 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.³⁴ It promotes previously neglected research areas. All archaeological and other cultural heritage resources are evaluated according to the NHRA, section 3(3). A place or object is considered to be part of the national estate if it has cultural significance or other special value in terms of:

- (a) its importance in the community, or pattern of South Africa's history;
- (c) its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa.³⁵

The demolished infrastructure on the study area, are all of a recent nature. No archaeological / heritage features or graves were identified on the extensively compromised study area.

H. RECOMMENDATIONS & CONCLUSION

No archaeological / heritage features or graves were identified on the 4ha site of extensively disturbed cultivated lands, orchards and demolished infrastructure, which might prevent the proposed development to continue. Archaeological material or graves are not always visible during a field survey and therefore some significant material may only be revealed during

³⁴National Heritage Resources Act, no. 25 of 1999. p. 2.

³⁵National Heritage Resources Act, no. 25 of 1999. pp. 12-14

construction activities for the proposed development.

It is recommended that the applicant should be made aware that distinct archaeological material or human remains may only be revealed during the construction phase. Based on the survey and the findings in this report, Adansonia Heritage Consultants state that there are no compelling reasons which may prevent the proposed Tzaneen manufacturing Asphalt & paving brickyard Plant to continue. It is recommended that any earthmoving activities be monitored by a qualified archaeologist and that an assessment and recommendation be done should any archaeological material be found.

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

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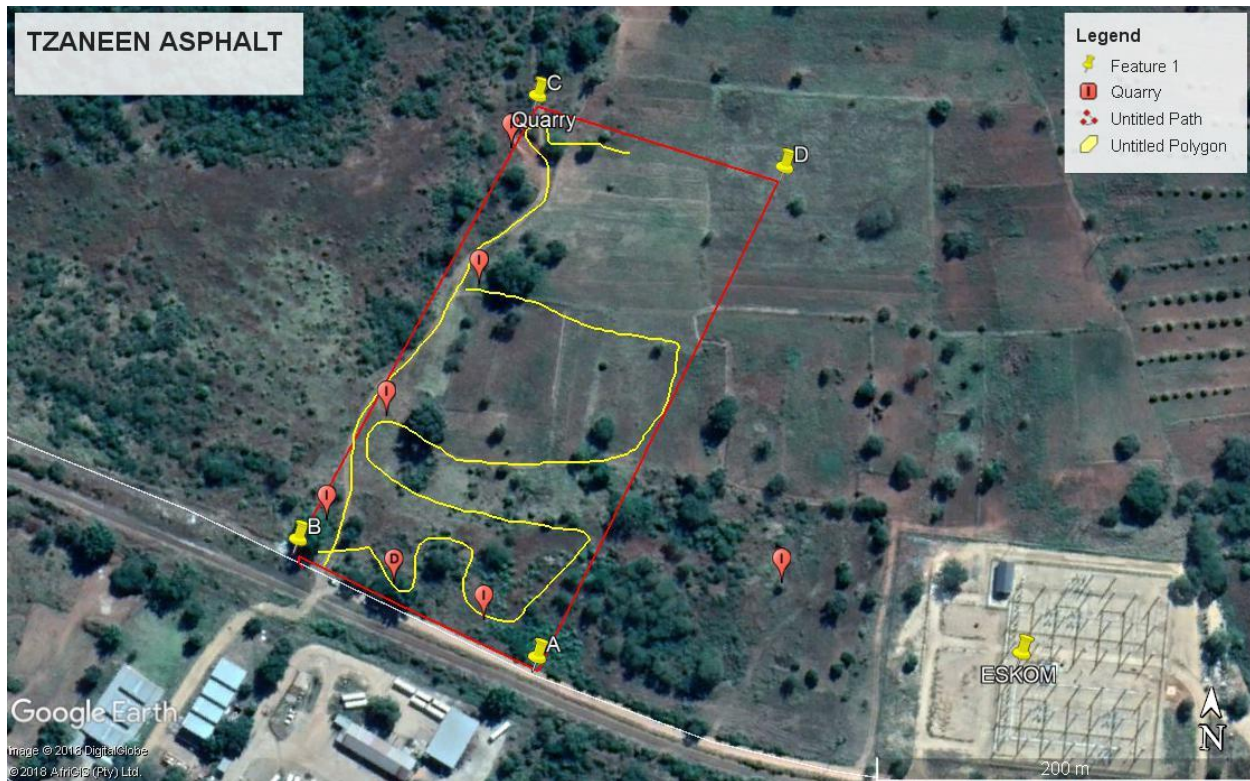
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APPENDIX 1

Tracks and Paths



Tracks and Paths used to access the study area are indicated by the yellow lines.