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**A PHASE 1 HERITAGE IMPACT ASSESSMENT & REPORT FOR THE
DEMARICATION OF SITES AS PART OF TOWNSHIP ESTABLISHMENT
ON THE REMAINDER OF THE FARM GOEDVERWACHTING 19LT
MAKHADO LOCAL MUNICIPALITY, LIMPOPO PROVINCE**

For:

***Global Geo Enviro Specialists
270 Malherbe Street
CAPITAL PARK
0084***

REPORT: **APAC021/79**

by:

***A.J. Pelser
Assisted by A. Matabane: Reach Archaeology***

Accredited members of ASAPA

September 2021

**P.O. BOX 73703
LYNNWOOD RIDGE
0040
Tel: 083 459 3091
Fax: 086 695 7247
Email: apac.heritage@gmail.com**

Member: AJ Pelser BA (UNISA), BA (Hons) (Archaeology), MA (Archaeology) [WITS]

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SUMMARY

APelser Archaeological Consulting (APAC) was appointed by Global Geo Enviro Specialists (on behalf of Mahlori Development Consultants) to conduct a Phase 1 Heritage Impact Assessment for the proposed demarcation of sites as part of Township Development on the Remainder of the farm Goedverwaching 19LT. The study area and proposed development is located in the Makhado Local Municipality of the Limpopo Province. The fieldwork was conducted in late August 2021 by Me. Annlin Matabane of Reach Archaeology.

Background research indicates that there are some cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls. The assessment of the specific study area identified a number of sites, features and material of cultural heritage (archaeological and/or historical) origin or significance. This report discusses the results of both the background research and physical assessment and provides recommendations on the way forward at the end.

It is recommended that the proposed demarcation of sites and related township development be allowed to continue, taking into consideration the recommendations put forward at the end of the report.

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1. INTRODUCTION

APelser Archaeological Consulting (APAC) was appointed by Global Geo Enviro Specialists (on behalf of Mahlori Development Consultants) to conduct a Phase 1 Heritage Impact Assessment for the proposed demarcation of sites as part of Township Development on the Remainder of the farm Goedverwaching 19LT. The study area and proposed development is located in the Makhado Local Municipality of the Limpopo Province. The fieldwork was conducted in late August 2021 by Me. Annlin Matabane of Reach Archaeology.

Background research indicates that there are some cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls. The assessment of the specific study area identified a number of sites, features and material of cultural heritage (archaeological and/or historical) origin or significance.

The client indicated the location and boundaries of the study & development footprint, and the work focused on this area.

2. TERMS OF REFERENCE

The Terms of Reference for the study was to:

1. Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the portion of land that will be impacted upon by the proposed development;
2. Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;
3. Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;
4. Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources;
5. Review applicable legislative requirements;

3. LEGISLATIVE REQUIREMENTS

Aspects concerning the conservation of cultural resources are dealt with mainly in two Acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

3.1. The National Heritage Resources Act

According to the Act the following is protected as cultural heritage resources:

- a. Archaeological artifacts, structures and sites older than 100 years
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The National Estate includes the following:

- a. Places, buildings, structures and equipment of cultural significance
- b. Places to which oral traditions are attached or which are associated with living heritage
- c. Historical settlements and townscapes
- d. Landscapes and features of cultural significance
- e. Geological sites of scientific or cultural importance
- f. Sites of Archaeological and paleontological importance
- g. Graves and burial grounds
- h. Sites of significance relating to the history of slavery
- i. Movable objects (e.g. archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment (AIA) only looks at archaeological resources. An HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000 m²
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

Structures

Section 34 (1) of the Act states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

Alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

Archaeology, palaeontology and meteorites

Section 35(4) of the Act deals with archaeology, palaeontology and meteorites. The Act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial)

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or paleontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and paleontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

Human remains

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- b. 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; or
- c. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated to) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

3.2. The National Environmental Management Act

This Act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

4. METHODOLOGY

4.1. Survey of literature

A survey of available literature was undertaken in order to place the development area in an archaeological and historical context. The sources utilized in this regard are indicated in the bibliography.

4.2. Field survey

The field assessment section of the study was conducted according to generally accepted HIA practices and aimed at locating all possible objects, sites and features of heritage significance in the area of the proposed development. The location/position of all sites, features and objects is determined by means of a Global Positioning System (GPS) where possible, while detail photographs are also taken where needed. The physical field documentation survey of the proposed site was undertaken on 23 August 2021, with an area-specific research approach to site documentation conducted.

The assessment was undertaken predominantly on foot (walk down) in accessible locations. Where physical safety was a concern, certain areas were avoided. Areas of interest were initially marked during the web-based geo-spatial review using high-definition site maps, and digital photographs as well as satellite imagery.

Areas with the potential of containing archaeological features and other interest sites were focused on during the walk down. This included rocky outcrops, erosion dongas and unnatural clumps of trees and other vegetation. The omission of areas with very low likelihood of identifiable feature was due to limitations that included safety limitations, low/poor visibility and vehicle inaccessibility. Detailed condition assessments of identified sites, features and objects were not conducted as it falls outside the scope of this field report. No measurements or analysis beyond that provided below, of features identified was conducted.

4.3. Oral histories

People from local communities are sometimes interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography. The oral interview with a community herbalist and traditional healer was done during the August 2021, who was also present and accompanied the field archaeologist during the physical survey of the site. The survey was undertaken with the community leader to further assist with any details of cultural heritage significance that proved to be invaluable. The community participants included the local traditional healer as well as a neighbor who assisted in identifying the rocky outcrops and stone walling sites

4.4. Documentation

All sites, objects, features and structures identified are documented according to a general set of minimum standards. Co-ordinates of individual localities are determined by means of the Global Positioning System (GPS). The information is added to the description in order to facilitate the identification of each locality.

4.5. Assumptions & Limitations

- The details of the site received from Global Enviro Specialists are true, accurate and correct.
- Visibility was VERY LOW in identifying features topographically due to dense vegetative overgrowth.
- VERY POOR visibility of structures and built environment sites due to extensive Bushveld, no access roads/ routes and very limited footpaths
- Physical safety limitations due to extreme terrain, animals and/ human beings posing a threat for field data retrieval.
- Observational bias due to areas accessible by means of a vehicle is to be noted.
- Topographic reconnaissance was limited to observable, identifiable features, objects, materials and/ sites. No sub-surface reconnaissance was undertaken as a permit is required for the alteration of heritage resources as per the NHRA 25 of 1999.
- Although numerous areas of interest, and possible sites for heritage objects, features and materials were identified during the desktop geo-spatial aerial images, not all sites were documented during the foot survey.

5. DESCRIPTION OF THE AREA

The study & proposed development area is located on the Remainder of Goedverwaching 19LT and is situated in the Makhado Local Municipality of the Limpopo Province, South Africa. The project area measures approximately 39.7ha in size, with no physically identifiable existing infrastructure. No formal or informal road networks exist, no electrical servitudes were observed topographically. Above ground and informal water pipe runs alongside and adjacent to as well as within the study & proposed development area.

The proposed site access is via a gravel road from the existing university grounds (Makhado University of Technology Campus). The topography of the larger study area is generally hilly, with vast trees, shrubs and forested dense vegetation. There are some areas with large trees, in rows, indicative of orchards that communities have planted. Most of the area is undisturbed, containing the natural and original vegetation. There are sections where the vegetation is fairly dense with tall trees, shrubs and vines as is typical of forest vegetation.

These areas are known to be highly likely to have heritage sites or features as this area is ideal for settling and building. Visibility in general was very poor, and in certain sections this was hampered by shrub, forest vegetation and dense grass cover. Recent historical developments, including farming/agriculture, other infrastructural developments such as residential (rural villages and informal settlement), roads, power lines, dirt roads, footpaths and site destruction has impacted on the larger area outside the project area. Whilst the project area remains generally undisturbed many sites and features that might have existed here in the past would have been disturbed and/or destroyed to a large degree by vegetation, animals and/ human intervention.

Despite this a fairly large number of sites of varying significance are known to exist in the area, with a number identified and recorded during the field survey. The larger study area is currently under threat of land theft, with locals building formal brick and mortar houses illegally. Locals also use the area for subsistence farming, and as a source of firewood, with local water storage tanks.

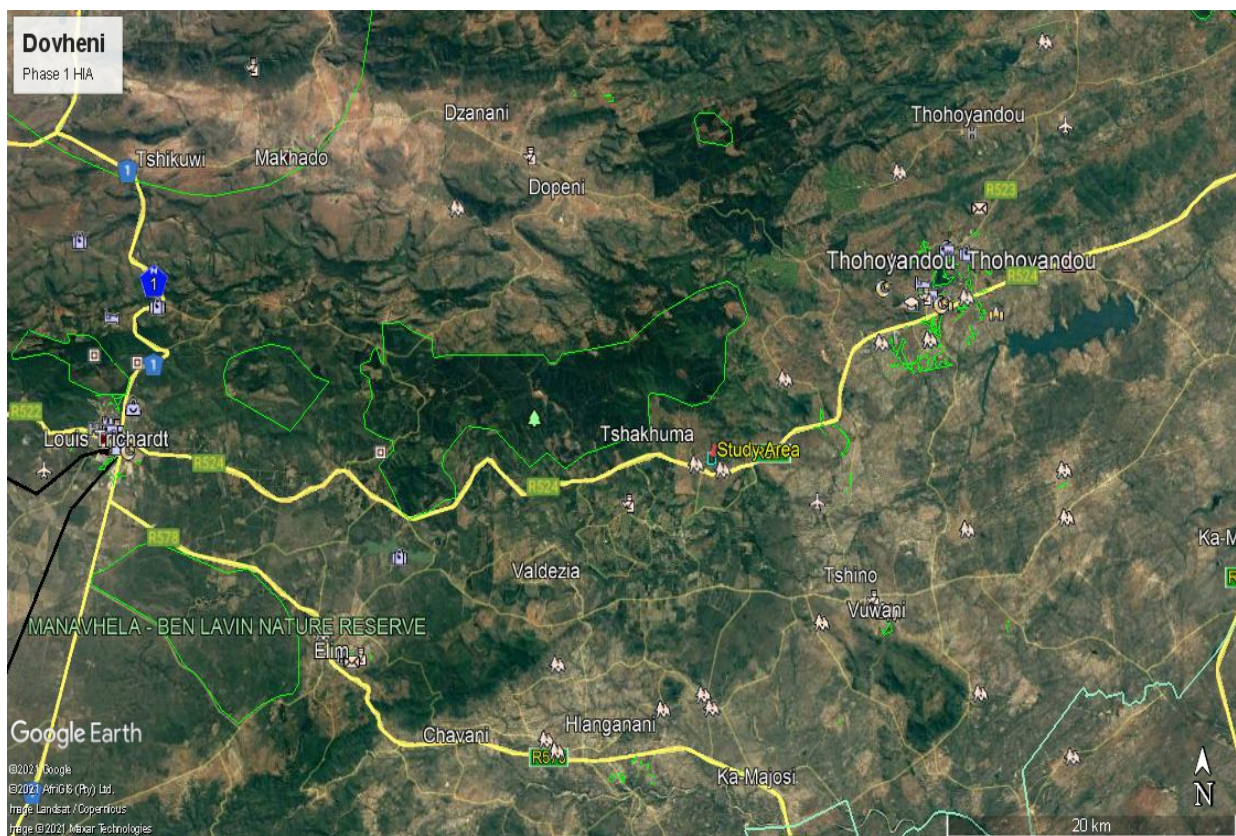


Figure 1: General location of study area (Google Earth 2021).

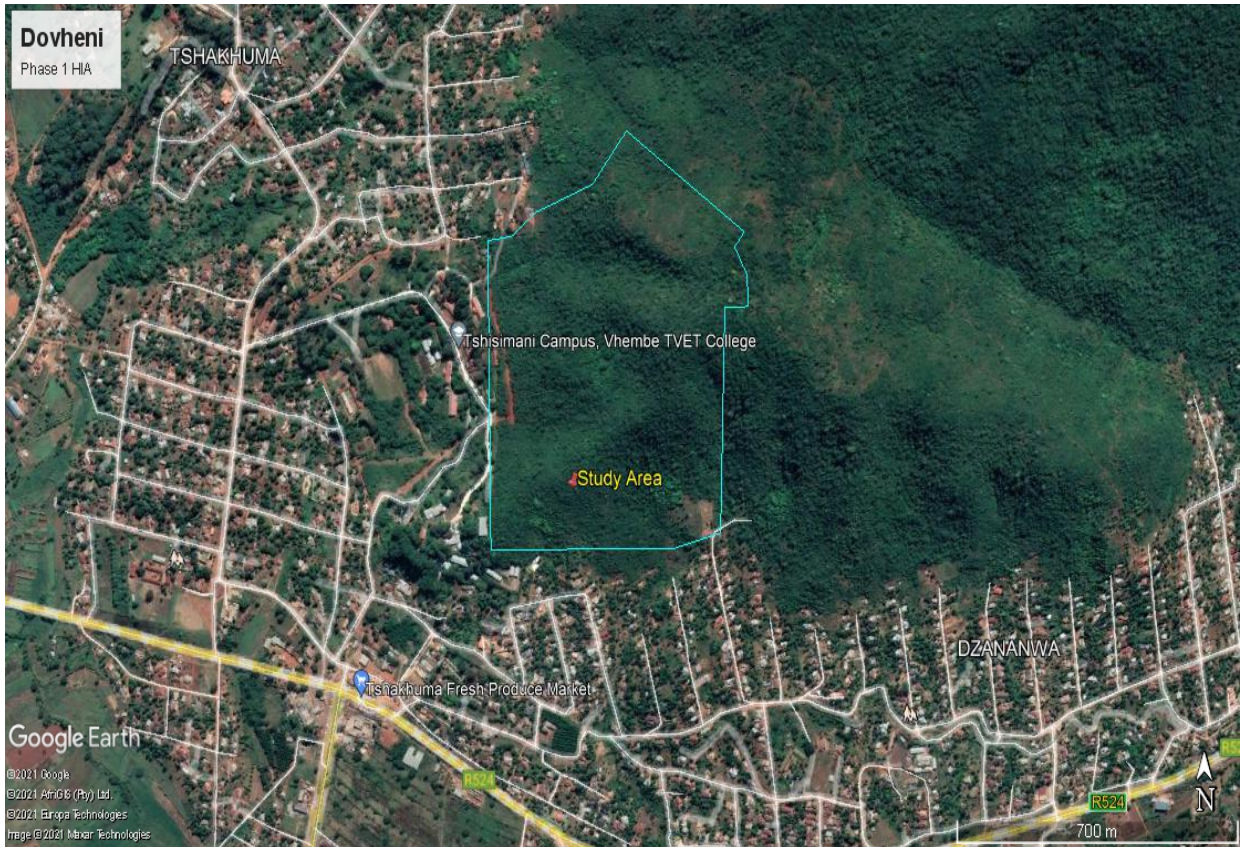


Figure 2: Closer view of study & development area footprint (Google Earth 2021).

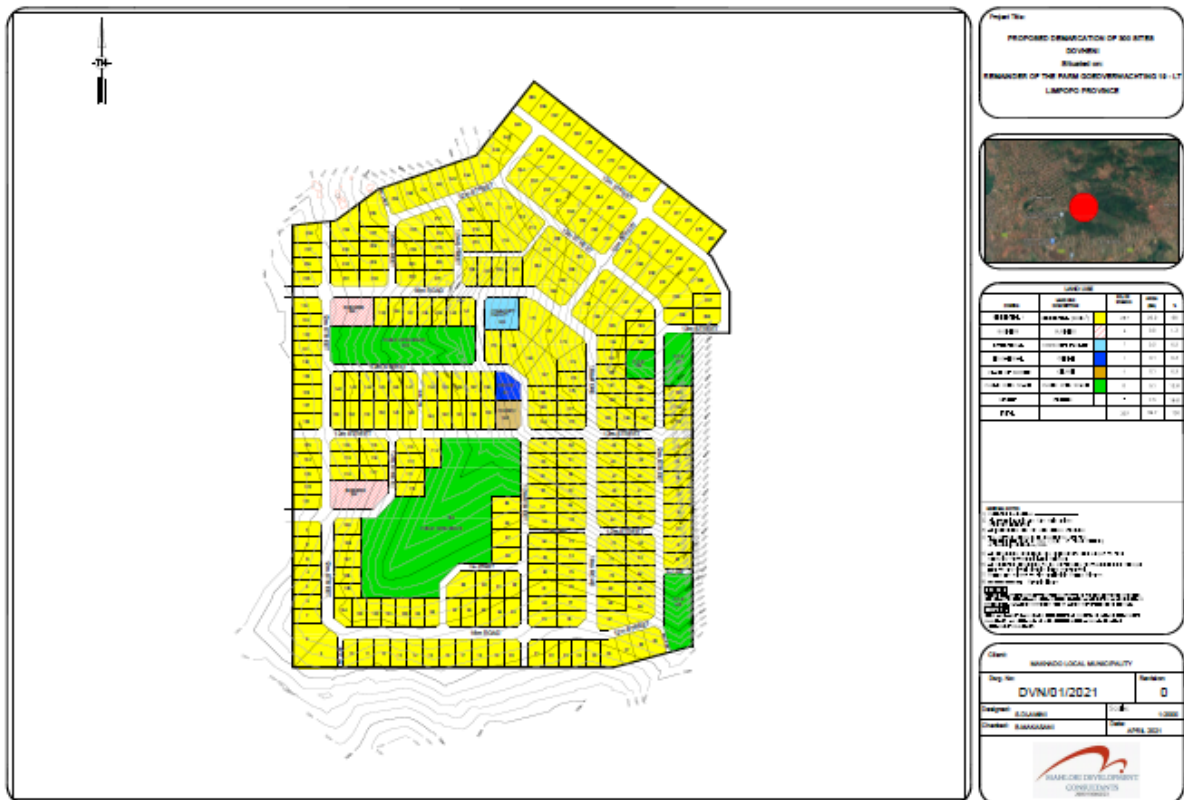


Figure 3: Development Layout Plan (courtesy Global Geo Enviro Specialists).



Figure 4: General view of the area. Note steep topography of the larger site, mountainous hills and dense vegetation (courtesy Reach Archaeology).



Figure 5: Historical architecture on University property with rocky outcrop visible (courtesy Reach Archaeology).



Figure 6: The vegetation consists mostly of small shrubs and large trees with grass (courtesy Reach Archaeology).



Figure 7: Another general view of the area (courtesy Reach Archaeology).



Figure 8: Large Water reservoir at entrance to the site accessible from the university (courtesy Reach Archaeology).



Figure 9: Some informal housing structures are present in the area (courtesy Reach Archaeology).



Figure 10: Note orchards on the left with water storage tank on right with a local resident assisting on site (courtesy Reach Archaeology).



**Figure 11: Evidence of chopping of trees for firewood.
The informal above ground water pipe in the area is also visible
(courtesy Reach Archaeology).**

6. DISCUSSION

The Stone Age is the period in human history when lithic (stone) material was mainly used to produce tools. In South Africa the Stone Age can be divided in basically into three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. A basic sequence for the South African Stone Age (Lombard et.al 2012) is as follows:

Earlier Stone Age (ESA) up to 2 million – more than 200 000 years ago

Middle Stone Age (MSA) less than 300 000 – 20 000 years ago

Later Stone Age (LSA) 40 000 years ago – 2000 years ago

It should also be noted that these dates are not a neat fit because of variability and overlapping ages between sites (Lombard et.al 2012: 125).

No Stone Age sites (including rock art) are known to occur in the immediate study area. The closest known Stone Age sites are located at a site called Kalkbank south-west of the study

area (Bergh 1999: 4), while known rock art (paintings) sites are located south and east of the study area along the Luvuvhu River (Bergh 1999: 5).

No Stone Age sites, features or objects (stone tools) were identified in the area during the assessment. If any are to be found it would be single, out of context stone tools.

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts. In South Africa it can be divided in two separate phases (Bergh 1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D
Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) however indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D.
Middle Iron Age (MIA) 900 – 1300 A.D.
Late Iron Age (LIA) 1300 – 1840 A.D.

There are no known Iron Age sites (EIA or LIA) in the immediate study area, although a large number of EIA to LIA sites are known to exist in the larger geographical landscape in which the study area falls. This includes the sites of Klein Afrika & Happy Rest (EIA) located north & west of Louis Trichardt respectively, and the sites of Verulam, Verdun & Machedema (LIA) north of the study area (Bergh 1999: 6-7).

Tom Huffman's research work shows that Iron Age sites, features or material could possibly be found in the area. This could include the so-called Silver Leaves facies of the Urewe Tradition dating to between AD280 and AD450 (Huffman 2007: 123); Mzonjani facies of the same tradition dating to between AD450 and AD750 (p.127); Icon facies of Urewe dating to between AD1300 and AD1500 (p.183); the Happy Rest facies of the Kalundu Tradition dating to between AD500 & AD750 (p.219); the Malapati facies of Kalundu dating to between AD750 & AD1030 (p.239); the Tavhatshena facies of Kalundu dating to between AD1450 & AD1600 (p.263); the Letaba facies of Kalundu dating to between AD1600 & AD1800 (p.267) and finally the Mutamba facies of the same tradition dating to between AD1250 and AD1450 (Huffman 2007: 271).

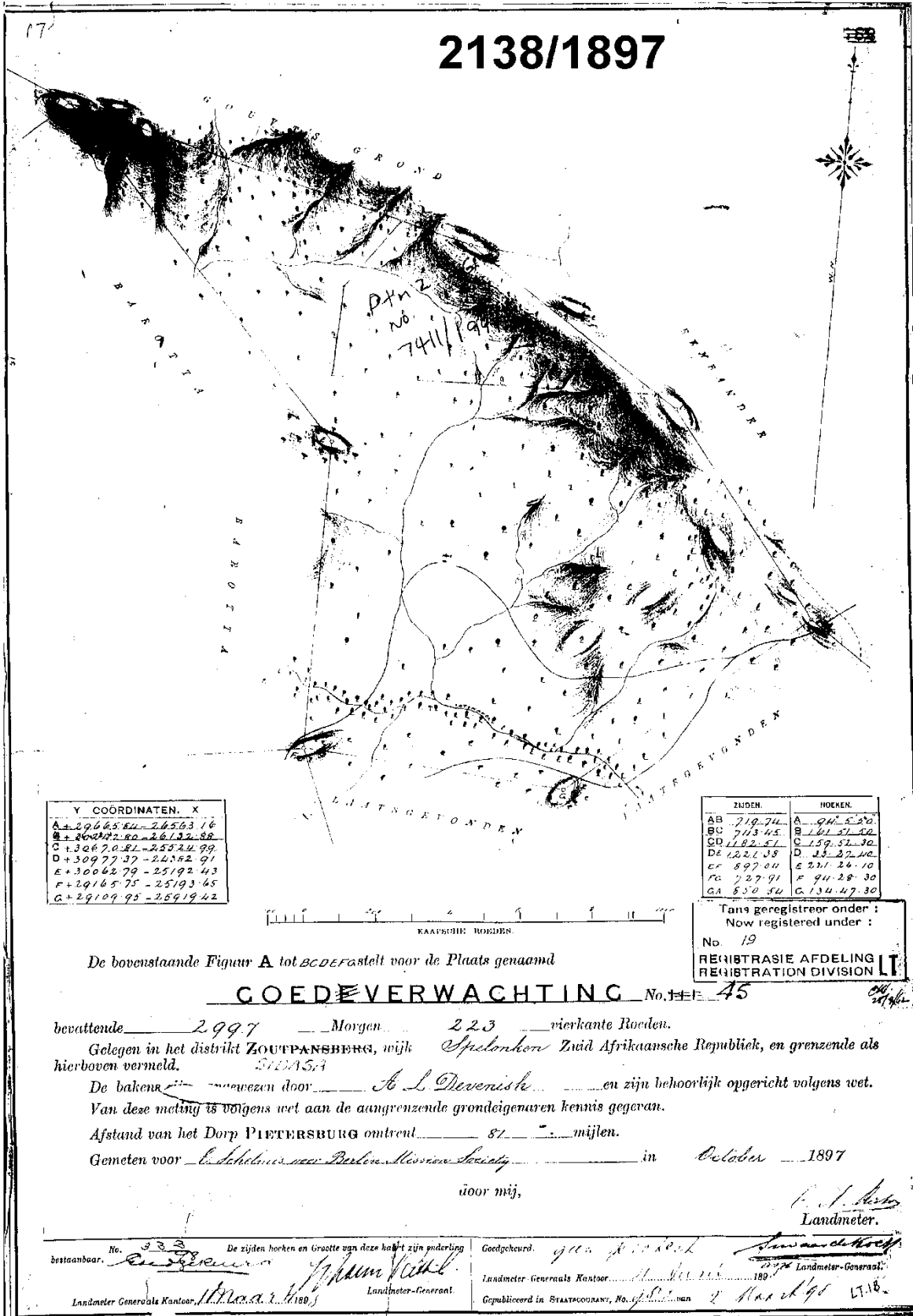
A number of sites and artifacts identified & recorded during the area assessment have an Iron Age origin and will be discussed in the next section.

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. The first European group to pass close by the area were that of Coenraad de Buys in 1821 and 1825, followed by groups of Voortrekkers after 1844 (Bergh 1999: 12-14). Schoemansdal (originally Zoutpansbergdorp) was established in 1848, and finally abandoned as a result of conflict with local groups in July 1867 (Bergh 1999: 131; 187). The town of Louis Trichardt was

formally established in February 1899 (Bergh 1999: 147). During the Anglo-Boer war (1899-1902) there was a skirmish between British and Boer forces at Fort Edward near Louis Trichardt between 20 and 28 March 1902 (Bergh 1999: 54).

Numerous historical sites, features or objects of cultural significance dating to the historic period were identified in the study area.

The oldest map obtained from the Chief Surveyor General's database (www.csg.dla.gov.za) for the farm Goedverwachting 19LT, dates to 1897 (CSG Document 10DVGW01). It shows that the farm was then numbered as No.45 and was situated in the Zoutpansberg District (later Sibasa) and Spelonken Ward of the Zuid-Afrikaansche Republiek (Z.A.R.). The whole of the original farm was surveyed for the Berlin Mission Society in October 1897.



Y COÖRDINATEN. X

A	+296655.54	-24563.16
B	+262472.00	-26132.88
C	+30670.82	-25522.99
D	+30977.37	-22362.91
E	+30062.79	-25192.43
F	+29165.75	-25193.45
G	+29109.75	-25919.42

ZIJDEN	HOEKEN
AB	719.74
BC	743.45
CD	1182.51
DE	1221.38
EF	897.04
FG	727.91
GA	850.54
A	94.550
B	141.510
C	159.520
D	23.270
E	221.260
F	94.280
G	134.470

Tans geregistreer onder :
Now registered under :
No. 19
REINISTRASIE AFDELING LT
REGISTRATION DIVISION LT

De bovenstaande Figuur A tot BCDEFastelt voor de Plaats genaamd

GOEDERVERWACHTING No. 19 LT 45

bevattende 2997 Morgen 223 vierkante Roeden.
Gelegen in het distrikt ZOUTPANSBERG, wijk Spelonkhor Zuid Afrikaansche Republiek, en grenzende als hierboven vermeld.

De bakens gewezen door J. L. Devenische en zijn behoorlijk opgericht volgens wet.
Van deze meting is volgens wet aan de aangrenzende grondeigenaren kennis gegeven.

Afstand van het Dorp PIETERSBURG omtrent 81 mijlen.
Gemeten voor C. Schelmer van Berlen Mission Society in October 1897

door mij, *C. J. Schelmer*
Landmeter.

No. 19
De zijden hoeken en Gracette van deze kaart zijn onderling
Goedgekeurd. *Jan van der Hoff*
Landmeter-Generaals Kantoor. 1897
Landmeter-Generaal.
Landmeter Generaals Kantoor, 11 Maart 1897
Gepubliceerd in STAATSCOURANT, No. 2 Maart 1897 LT 19

Figure 12: 1897 map of Goedverwachting 19LT (www.csg.dla.gov.za).

Results of the August 2021 Study Area Assessment

During the survey cultural heritage sites of some significance were identified in the study area. Possible impacts were noted where heritage and cultural resources were identified and mitigation measures are proposed further on in the report. This report must also be submitted to the Limpopo Provincial Heritage Resources Agency (LIPHRA) for review.

During the physical survey (August 2021), the following sites, features and objects of cultural significance were identified in the study area:

- Stone Age: No sites, features or objects of cultural significance dating to the Stone Age were identified in the study area
- Iron Age: Stone walling, hut floors, other features and cultural material were identified (including undecorated potsherds). These objects are of cultural significance dating to the Iron Age period of occupation of the area
- Historic period: Some recent historical sites, features or objects of cultural significance dating to the historic period were identified in the area

Built Environment Findings

This included both Iron Age stone-walling and more recent historical remains such as hut flooring. The stone-walling is typical of Late Iron Age settlements and probably represents remnants of livestock enclosures, hut bays and other features such as agricultural terracing.

Burial Grounds & Graves Findings

The field survey proved inadequate to report on the presence, probability or likelihood of graves and burial grounds in the project receiving area.

- No Burial grounds or graves were identified or observed in the study area during the field assessment
- No interest areas where burial grounds or graves could be located were identified during the desktop assessment of the available geo-spatial data including a review of the satellite imagery
- The sub-surface nature of human remains/burials provides that the likelihood remains high
- Due to the very thick vegetative covering, topographic features associated with graves could not be identified.

Artifacts and Other Cultural Material

- Pieces of pottery were observed in the study area, indicative of an actively transformed cultural landscape
- Stone-walled sites were documented near 4 areas of interest



Figure 13: Recent historical hut floor in the study area (courtesy Reach Archaeology).



Figure 14: Undecorated piece of Iron Age-type pottery next to recent historical porcelain (courtesy Reach Archaeology).



Figure 15: Pieces of undecorated pottery identified along water pipeline (courtesy Reach Archaeology).



Figure 16: Three undecorated potsherds identified at a hut floor site (courtesy Reach Archaeology).



Figure 17: Stone-walled Site 1 (courtesy Reach Archaeology).



Figure 18: Stone walling Site 2 (courtesy Reach Archaeology).



Figure 19: Area of Interest 5 with possible floor/kraal circular enclosure (courtesy Reach Archaeology).



Figure 20: Area of Interest 6 with evidence of stone enclosure (courtesy Reach Archaeology).



Figure 21: Stone walling at Area of Interest 2 (courtesy Reach Archaeology).



Figure 22: Clearing at Area of Interest 1. Note partially buried packed stone indicative of stone walls commonly associated with Iron Age 'kraals' (courtesy Reach Archaeology).



Figure 23: Area of Interest 3. Possible hut floors with stone walling (courtesy Reach Archaeology).

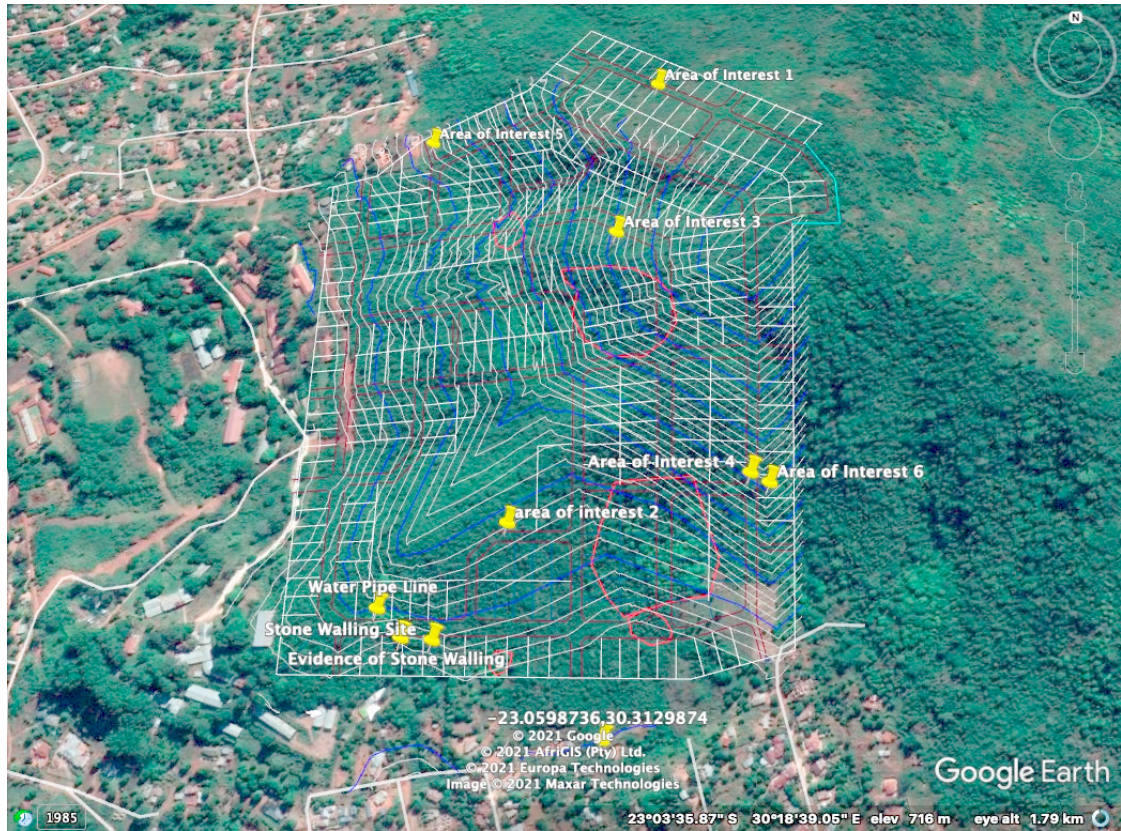


Figure 24: Map indicating location of Areas of Interest in study & development area footprint (Google Earth 2021 – courtesy Reach Archaeology).

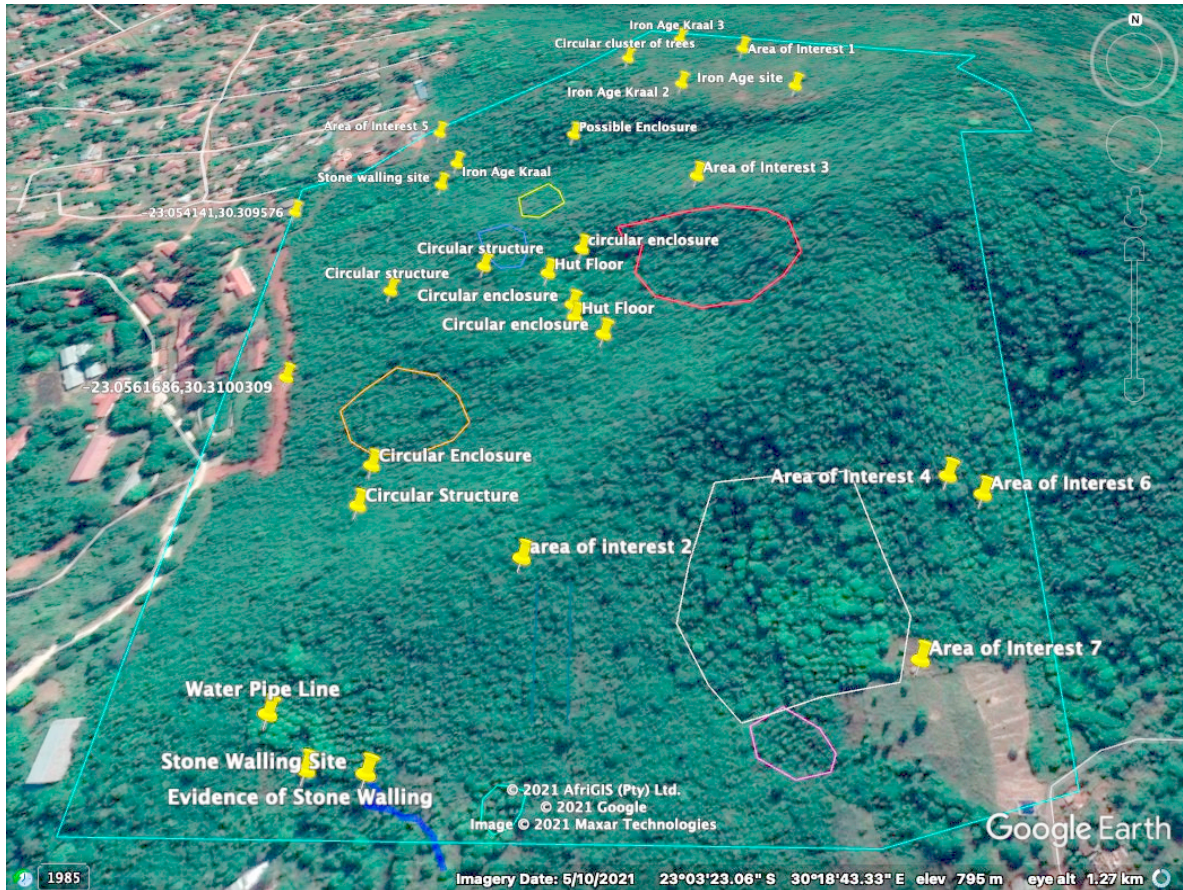


Figure 25: Map of study area with identifiable features. Note the orchard of trees in rows and polygons highlighting areas of heritage significance to be revisited after ground clearance (Google Earth 2021 – courtesy Reach Archaeology).

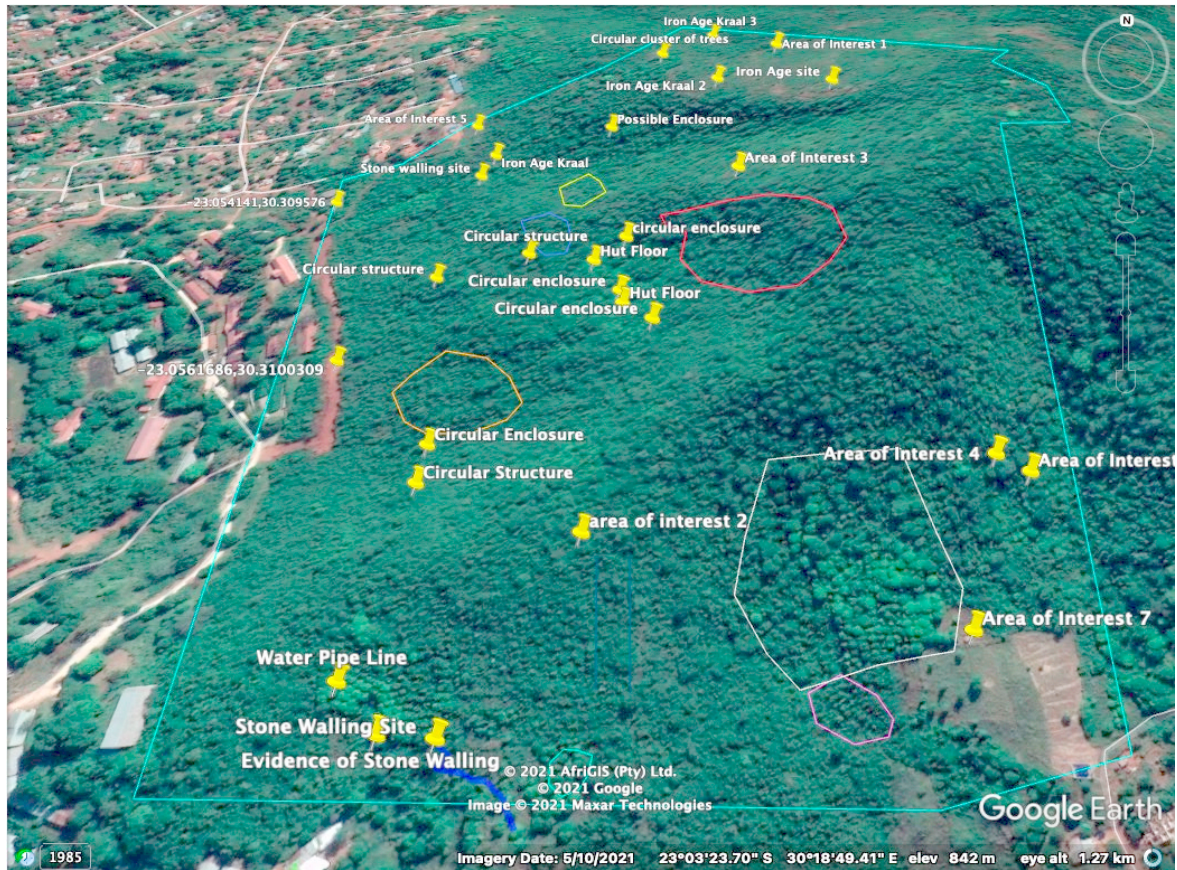


Figure 26: Map of study area showing identified heritage sites and Areas of Interest. Note the cultural landscape (Google Earth 2021 – courtesy Reach Archaeology).

Table 1: Heritage Findings Summary Table

FEATURE ID	CO-ORDINATES	DESCRIPTION
Polygon (Yellow)	23° 3'16.54"S 30°18'42.76"E	Small, North East, evidence of possible stone enclosure
Polygon (Red)	23° 3'20.97"S 30°18'47.34"E	Large, North, Evidence of possible Kraal
Polygon (White)	23° 3'28.83"S 30°18'48.67"E	Large, North East, Orchard of Trees
Polygon (Purple)	23° 3'31.56"S 30°18'48.59"E	Small, South East, Circular structure
Polygon (Turquoise)	23° 3'16.49"S 30°18'42.60"E	Small, South, Possible stone enclosure
Polygon (Blue)	23° 3'18.53"S 30°18'41.87"E	Large, North East, Circular enclosure of Trees
Polygon (Orange)	23° 3'32.81"S 30°18'43.02"E	Large, North East, Circular enclosure of Trees
Iron Age Site	23° 3'32.46"S 30°18'40.33"E	Evidence of Iron Age Kraal
Stone wall site	23° 3'32.39"S 30°18'39.14"E	Stone Walling

Circular enclosure	23° 3'25.69"S 30°18'39.22"E	Evidence of Iron Age Kraal
Circular enclosure	23° 3'21.60"S 30°18'43.81"E	Evidence of Iron Age Kraal
Hut Floor	23° 3'22.06"S 30°18'43.90"E	Evidence of Iron Age Kraal
Hut Floor	23° 3'20.26"S 30°18'43.10"E	Evidence of Iron Age Kraal
Circular Structure	23° 3'26.85"S 30°18'39.13"E	Evidence of Iron Age Kraal
Circular Structure	23° 3'19.55"S 30°18'38.55"E	Evidence of Iron Age Kraal
Circular Enclosure	23° 3'22.81"S 30°18'44.64"E	Evidence of Iron Age Kraal
Circular Structure	23° 3'19.43"S 30°18'41.24"E	Evidence of Iron Age Kraal
Circular Enclosure	23° 3'19.57"S 30°18'43.98"E	Evidence of Iron Age Kraal
Possible Enclosure	23° 3'13.84"S 30°18'43.49"E	Evidence of Iron Age Kraal
Kraal Floor	23° 3'9.34"S 30°18'46.93"E	Iron Age Site
Kraal Floor	23° 3'12.62"S 30°18'46.86"E	Iron Age Site
Kraal Floor	23° 3'12.62"S 30°18'46.86"E	Iron Age Site
Circular Cluster of Trees	23° 3'10.32"S 30°18'45.17"E	Possible enclosure site
Possible structure	23° 3'14.26"S 30°18'50.13"E	Iron Age Site
Stone Walling Site	23° 3'14.87"S 30°18'39.33"E	Stone Wall

The findings recorded indicate that the area had been settled during both pre-historic (Iron Age) and recent historic periods. The identified stone walling sites is typical of a Late Iron Age period of occupation preceding the historic period. Identified cultural material, (i.e. potsherds, possible hut floors, stone walls) provides an overall condition assessment of the sites which is VERY POOR, with a HIGH RISK rating for further destruction.

No fencing or demarcation of any burial grounds was identified, and oral traditions from locals stated there are no known burial areas in the study area. The presence of the Iron Age stone wall sites identified by the oral interview was originally identified on the satellite imagery and confirmed during the foot survey. Some of the areas of interest marked in the topographic images could not be physically identified and assessed due to physical limitations to documenting and the very low visibility. The majority of surface features could not be physically identified and confirmed topographically. Some evidence could be found

but limited visibility of surface features requires the clearing of vegetation to fully confirm what is present on site.

Field Rating & Significance

Evaluation of Heritage Resources

Based on the SAHRA Standards of Best Practice and Minimum Standards & Principals of Heritage Conservation, data capture methods were implemented in the collection of data and information from the field through site condition survey and observations. After data was gathered from the field, it was combined with information from other sources deemed essential to establish the value and significance of individual sites as well as to identify any threats and potential risks to the heritage resource(s). The NHRA (Act 25 of 1999) grading scale was used to assess significance and provide the appropriate rating recommendation.

The general aim of the impact assessment is to determine the extent of impact of the proposed development on the identified heritage resources and; through deduction attempt to predict any possible impacts on any of the unidentified heritage resources. All impacts are envisaged to occur during construction activities and during the surface earthwork. A heritage resource with a high significance rating will have a much higher impact on the magnitude of impact that the development can have on it. As a result, mitigation approaches and recommendations for these will be more extensive than those with a very low significance rating.

Significance ratings vary between HIGH negative and MEDIUM negative. The implementation of the aforementioned mitigation measures will reduce the impact rating to LOW negative or at least MEDIUM negative.

ICOMOS Rating

- ¥ Very High (World Heritage Sites)
- ¥ High (Nationally significant sites)
- ¥ Medium (regionally significant sites)
- ¥ Low (locally significant sites)

Table 2: Table Indicating Significance Rating Scale as per International Standards

RATING	SIGNIFICANCE DESCRIPTION
LOW	Locally significant sites for that area
MEDIUM	Regionally significant sites
HIGH	Nationally significant sites
VERY HIGH	Internationally significant sites &/ World heritage listing

The sites documented in this report are rated as Locally Significant as they are heritage resources that are considered significant to the local community. The conservation, protection, and management of these resources are the responsibility of the state.

Field Grading Ratings

The grading scale of heritage resources identified during the field survey are provided as a guideline to assist the heritage authority in decision making and/ the nomination of cultural heritage sites. They range from Grade 1- Grade 3 where they vary in significance as presented below:

- i. National Grade I significance should be managed as part of the national estate
- ii. Provincial Grade II significance should be managed as part of the provincial estate
- iii. Local Grade IIIA should be included in the heritage register and not be mitigated (high significance)
- iv. Local Grade IIIB should be included in the heritage register and may be mitigated (high/ medium significance)
- v. General protection A (IV A) site should be mitigated before destruction (high/ medium significance)
- vi. General protection B (IV B) site should be recorded before destruction (medium significance)
- vii. General protection C (IV C) phase 1 is seen as sufficient recording and it may be demolished (low significance)

Table 3: Summary Table Grading Assessment as per NHRA Guidelines

SCORE	GRADE	PROTECTION	RECOMMENDED HERITAGE MITIGATION
16-18	Grade I	National	Nomination for inclusion on the national estate register
13-15	Grade II	Provincial	Nomination as a provincial site/object, included in the national estate
10-12	Grade I II A	Local	Nomination as a regional site/object, included in the national estate
7-9	Grade I II B	Local	Heritage resources must be mitigated and partly conserved
4-6	Grade IV A	General	Heritage resources must be mitigated before destruction
1-3	Grade IV B	General	Heritage resources must be recorded before destruction
0	Grade IV C	General	No mitigation required (application for destruction permit maybe required)

The proposed project area’s built environment is recommended a Grading Score 1-3 Grade IV B where general protection is provided for and no mitigation is required. A destruction permit will not be required as no historical buildings/structures were observed and identified in the study area outside of the historic structures associated with the existing school in the area.

As no burial grounds and graves where identified, these have not been graded. Should human remains be accidentally uncovered during the course of development these will require an assessment and a grading. The significance rating will remain HIGH for graves and burial grounds.

Cumulative Rating

Considering the nature of the observed sites and resources the proposed development sites' general grading is 4-6 Grade IV A which provides general protection and requires that all heritage resources be recorded, mitigated and partially conserved prior to the study area's transformation for the proposed development.

Finally it should be noted that although all efforts are made to cover a total area during any assessment and therefore to identify all possible sites or features of cultural (archaeological and/or historical) heritage origin and significance, that there is always the possibility of something being missed. This will include low stone-packed or unmarked graves. This aspect should be kept in mind when development work commences and if any sites (including graves) are identified then an expert should be called in to investigate and recommend on the best way forward.

7. CONCLUSIONS AND RECOMMENDATIONS

APelser Archaeological Consulting (APAC) was appointed by Global Geo Enviro Specialists (on behalf of Mahlori Development Consultants) to conduct a Phase 1 Heritage Impact Assessment for the proposed demarcation of sites as part of Township Development on the Remainder of the farm Goedverwachting 19LT. The study area and proposed development is located in the Makhado Local Municipality of the Limpopo Province. The fieldwork was conducted in late August 2021 by Me. Annlin Matabane of Reach Archaeology.

Background research indicates that there are some cultural heritage (archaeological & historical) sites and features in the larger geographical area within which the study area falls. The assessment of the specific study area identified a number of sites, features and material of cultural heritage (archaeological and/or historical) origin or significance.

The sites, features and cultural material identified during the field assessment included Late Iron Age stone-walling representing possible livestock enclosures, hut bays and agricultural terracing, while undecorated pottery was also recorded. Some recent historical hut floors and porcelain fragments were also found in the area. Based on the significance rating for these cultural resources the following is recommended before the development commences:

- The project environmental control officer (ECO) be notified that a "Chance Find Protocol" needs to be implemented and adhered to should any cultural heritage structures, objects, materials, features or graves/burials be uncovered during earth-moving activities in the construction phase of the project.
- Construction Teams to be inducted in the identification of heritage features prior to engaging any earth moving equipment on site and during initial development work.

- An archaeologist should be appointed to be on-site to monitor the earth-moving and construction work, to thoroughly inspect areas of interest to ensure their detailed assessment.
- The appointed archaeologist be on-site to monitor the clearing of the vegetation during ground-clearance to ensure areas of interest are adequately assessed.
- A full Phase II Heritage Impact assessment needs to be conducted, including an intensive public participation and/ stakeholder engagement process to be undertaken for the relocation of any graves or burial grounds that could be identified on the site prior to construction and development commencing.
- The Phase II HIA is to include a detailed Paleontological Assessment to ensure the area's palaeo-environmental sensitivity is assessed and rated, with the appropriate recommendations and mitigation requirements presented.

Finally, it is recommended that the proposed Dovheni Demarcation of Sites and related Township Development be allowed to continue, once the recommended mitigation measures provided above have been implemented.

Although all efforts are made to locate, identify and record all possible cultural heritage sites and features (including archaeological remains) there is always a possibility that some might have been missed as a result of grass cover and other factors. The subterranean nature of these resources (including low stone-packed or unmarked graves) should also be taken into consideration. Should any previously unknown or invisible sites, features or material be uncovered during any development actions then an expert should be contacted to investigate and provide recommendations on the way forward.

8. REFERENCES

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APPENDIX A: DEFINITION OF TERMS:

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

Structure: A permanent building found in isolation or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

APPENDIX B: DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE

Historic value: Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.

Aesthetic value: Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.

Scientific value: Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period

Social value: Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

Rarity: Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.

Representivity: Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

APPENDIX C: SIGNIFICANCE AND FIELD RATING:

Cultural significance:

- Low: A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- Medium: Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.
- High: Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

Heritage significance:

- Grade I: Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II: Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate
- Grade III: Other heritage resources of local importance and therefore worthy of conservation

Field ratings:

- i. National Grade I significance: should be managed as part of the national estate
- ii. Provincial Grade II significance: should be managed as part of the provincial estate
- iii. Local Grade IIIA: should be included in the heritage register and not be mitigated (high significance)
- iv. Local Grade IIIB: should be included in the heritage register and may be mitigated (high/medium significance)
- v. General protection A (IV A): site should be mitigated before destruction (high/medium significance)
- vi. General protection B (IV B): site should be recorded before destruction (medium significance)
- vii. General protection C (IV C): phase 1 is seen as sufficient recording and it may be demolished (low significance)

APPENDIX D: PROTECTION OF HERITAGE RESOURCES:

Formal protection:

National heritage sites and Provincial heritage sites – Grade I and II

Protected areas - An area surrounding a heritage site

Provisional protection – For a maximum period of two years

Heritage registers – Listing Grades II and III

Heritage areas – Areas with more than one heritage site included

Heritage objects – e.g. Archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

General protection:

Objects protected by the laws of foreign states

Structures – Older than 60 years

Archaeology, palaeontology and meteorites

Burial grounds and graves

Public monuments and memorials

APPENDIX E: HERITAGE IMPACT ASSESSMENT PHASES

1. Pre-assessment or Scoping Phase – Establishment of the scope of the project and terms of reference.
2. Baseline Assessment – Establishment of a broad framework of the potential heritage of an area.
3. Phase I Impact Assessment – Identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
4. Letter of recommendation for exemption – If there is no likelihood that any sites will be impacted.
5. Phase II Mitigation or Rescue – Planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
6. Phase III Management Plan – For rare cases where sites are so important that development cannot be allowed.