

ARCHAEOLOGICAL IMPACT ASSESSMENT

FOR THE PROPOSED WATERKLOOF MARINA RETIREMENT
VILLAGE, GAUTENG PROVINCE

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LEAP

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General

The possibility of unmarked or informal graves and subsurface finds cannot be excluded. If any possible finds are made during construction, the operations must be stopped and a qualified archaeologist contacted for an assessment of the find/s.

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- Recommendations delivered to the Client.

CLIENT: Leap Environmental

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EXECUTIVE SUMMARY

Site name and location: The the Proposed Waterkloof Marina Retirement Village on the Remaining Extent of the Farm Waterkloof 428 J.R, Gauteng Province

1: 50 000 Topographic Map: 2528 CC.

EIA Consultant: Leap

Developer: The Stone Arch Development Company (Pty) Ltd

Heritage Consultant: Heritage Contracts and Archaeological Consulting CC (HCAC).

Contact person: Jaco van der Walt Tel: +27 82 373 8491 E-mail jaco.heritage@gmail.com.

Date of Report: 19 April 2016

Findings of the Assessment:

This report endeavoured to provide information regarding the history of the Remaining Extent of the farm Waterkloof 428 JR. This included the history of land ownership, as well as the development of the property. It seems that the farm, which was first known as a portion of Waterkloof 29, had been surveyed by 1861. A number of buildings had already been constructed on the farm by 1939, although nothing was constructed in the study area by 1943 (Figure 8). The property was purchased by Rosema and Klaver Pty Ltd in 1942, but it is not known if this company started the brick fields on the portion under investigation. By 1951, the property was known as the Remainder of Portion 43 of Waterkloof 29. By 1964 the brickworks business was in operation, a number of buildings had been constructed and excavations were underway. As a result of the brickwork operations the site is extensively disturbed and these activities would have impacted on surface indicators of archaeological sites.

In terms of the built environment of the area (Section 34), some ruins occur in the study area. These buildings were constructed between 1943 and 1964. The exact age of these structures is unknown but if they are older than 60 years they are subject to the Act in terms of age. It is therefore recommended that the age of these structures is established. If older than 60 years the structures must be assessed by a conservation architect and a destruction permit will be needed. If the structures are younger than 60 no further action is necessary.

In terms of Section 36 of the Act no grave sites were recorded in the study area. The possibility of graves anywhere on the landscape cannot be excluded. If any graves are found in the future, these will have to be dealt with subject to the applicable legislation.

The study area is surrounded by high density residential developments and no significant cultural landscapes or viewsapes were noted during the fieldwork.

Due to the lack of significant heritage features in the study area there is from an archaeological point of view no reason why the development cannot commence based on approval from SAHRA.

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ABBREVIATIONS

AIA: Archaeological Impact Assessment
ASAPA: Association of South African Professional Archaeologists
BIA: Basic Impact Assessment
CRM: Cultural Resource Management
ECO: Environmental Control Officer
EIA: Environmental Impact Assessment*
EIA: Early Iron Age*
EIA Practitioner: Environmental Impact Assessment Practitioner
EMP: Environmental Management Plan
ESA: Early Stone Age
GPS: Global Positioning System
HIA: Heritage Impact Assessment
LIA: Late Iron Age
LSA: Late Stone Age
MEC: Member of the Executive Council
MIA: Middle Iron Age
MPRDA: Mineral and Petroleum Resources Development Act
MSA: Middle Stone Age
NEMA: National Environmental Management Act
PRHA: Provincial Heritage Resource Agency
SADC: Southern African Development Community
SAHRA: South African Heritage Resources Agency

**Although EIA refers to both Environmental Impact Assessment and the Early Iron Age both are internationally accepted abbreviations and must be read and interpreted in the context it is used.*

GLOSSARY

Archaeological site (remains of human activity over 100 years old)

Early Stone Age (~ 2.6 million to 250 000 years ago)

Middle Stone Age (~ 250 000 to 40-25 000 years ago)

Later Stone Age (~ 40-25 000, to recently, 100 years ago)

The Iron Age (~ AD 400 to 1840)

Historic (~ AD 1840 to 1950)

Historic building (over 60 years old)

1. BACKGROUND INFORMATION

Heritage Contracts and Archaeological Consulting CC (**HCAC**) was appointed to conduct an Archaeological Impact Assessment for the proposed Waterkloof Marina project as part of the Basic Assessment process.

The aim of the study is to identify cultural heritage sites, document, and assess their importance within local, provincial and national context. It serves to assess the impact of the proposed project on non-renewable heritage resources, and to submit appropriate recommendations with regard to the responsible cultural resources management measures that might be required to assist the developer in managing the discovered heritage resources in a responsible manner. It is also conducted to protect, preserve and develop such resources within the framework provided by the National Heritage Resources Act of 1999 (Act 25 of 1999).

The report outlines the approach and methodology utilized before and during the survey, which includes: Phase 1, a desktop study that includes collection from various sources and consultations; Phase 2, the physical surveying of the study area on foot and by vehicle; Phase 3, reporting the outcome of the study.

General site conditions were recorded by means of photographs, GPS locations and site descriptions. Possible impacts were identified and mitigation measures are proposed in the following report.

This report must also be submitted to the SAHRA for review.

1.1. Terms of Reference

Desktop study

Conduct a brief desktop study where information on the area is collected to provide a background setting of the archaeology that can be expected in the area.

Field study

Conduct a field study to: a) systematically survey the proposed project area to locate, identify, record, photograph and describe sites of archaeological, historical or cultural interest; b) record GPS points identified as significant areas; c) determine the levels of significance of the various types of heritage resources recorded in the project area.

Reporting

Report on the identification of anticipated and cumulative impacts the operational units of the proposed project activity may have on the identified heritage resources for all 3 phases of the project; i.e., construction, operation and decommissioning phases. Consider alternatives, should any significant sites be impacted adversely by the proposed project. Ensure that all studies and results comply with Heritage legislation and the code of ethics and guidelines of ASAPA.

To assist the developer in managing the discovered heritage resources in a responsible manner, and to protect, preserve, and develop them within the framework provided by the National Heritage Resources Act of 1999 (Act 25 of 1999).

1.2. Archaeological Legislation and Best Practice

Phase 1, an AIA or a HIA is a pre-requisite for development in South Africa as prescribed by SAHRA and stipulated by legislation. The overall purpose of a heritage specialist input is to:

- » Identify any heritage resources, which may be affected;
- » Assess the nature and degree of significance of such resources;
- » Establish heritage informants/constraints to guide the development process through establishing thresholds of impact significance;
- » Assess the negative and positive impact of the development on these resources;
- » Make recommendations for the appropriate heritage management of these impacts.

The AIA or HIA, as a specialist sub-section of the EIA, is required under the National Heritage Resources Act NHRA of 1999 (Act 25 of 1999), Section 23(2) (b) of the NEMA and section S. 39 (3) (b) (iii) of the MPRDA.

The AIA should be submitted, as part of the EIA, BIA or EMP, to the PHRA if established in the province or to SAHRA. SAHRA will be ultimately responsible for the professional evaluation of Phase 1 AIA reports upon which review comments will be issued. 'Best practice' requires Phase 1 AIA reports and additional development information, as per the EIA, BIA/EMP, to be submitted in duplicate to SAHRA after completion of the study. SAHRA accepts Phase 1 AIA reports authored by professional archaeologists, accredited with ASAPA or with a proven ability to do archaeological work.

Minimum accreditation requirements include an Honours degree in archaeology or related discipline and 3 years post-university CRM experience (field supervisor level).

Minimum standards for reports, site documentation and descriptions are set by ASAPA in collaboration with SAHRA. ASAPA is based in South Africa, representing professional archaeology in the SADC region. ASAPA is primarily involved in the overseeing of ethical practice and standards regarding the archaeological profession. Membership is based on proposal and secondment by other professional members.

Phase 1 AIA's are primarily concerned with the location and identification of sites situated within a proposed development area. Identified sites should be assessed according to their significance. Relevant conservation or Phase 2 mitigation recommendations should be made. Recommendations are subject to evaluation by SAHRA.

Conservation or Phase 2 mitigation recommendations, as approved by SAHRA, are to be used as guidelines in the developer's decision making process.

Phase 2 archaeological projects are primarily based on salvage/mitigation excavations preceding development destruction or impact on a site. Phase 2 excavations can only be conducted with a permit, issued by SAHRA to the appointed archaeologist. Permit conditions are prescribed by SAHRA and includes (as minimum requirements) reporting back strategies to SAHRA and deposition of excavated material at an accredited repository.

In the event of a site conservation option being preferred by the developer, a site management plan, prepared by a professional archaeologist and approved by SAHRA, will suffice as minimum requirement.

After mitigation of a site, a destruction permit must be applied for from SAHRA by the client before development may proceed.

Human remains older than 60 years are protected by the National Heritage Resources Act, with reference to Section 36. Graves older than 60 years, but younger than 100 years fall under Section 36 of Act 25 of 1999 (National Heritage Resources Act), as well as the Human Tissues Act (Act 65 of 1983), and are the jurisdiction of SAHRA. The procedure for Consultation Regarding Burial Grounds and Graves (Section 36[5]) of Act 25 of 1999) is applicable to graves older than 60 years that are situated outside a formal cemetery administrated by a local authority. Graves in this age category, located inside a formal cemetery administrated by a local authority, require the same authorisation as set out for graves younger than 60 years, in addition to SAHRA authorisation. If the grave is not situated inside a formal cemetery, but is to be relocated to one, permission from the local authority is required and all regulations, laws and by-laws, set by the cemetery authority, must be adhered to.

Human remains that are less than 60 years old are protected under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925), as well as the Human Tissues Act (Act 65 of 1983), and are the jurisdiction of the National Department of Health and the relevant Provincial Department of Health and must be submitted for final approval to the office of the relevant Provincial Premier. This function is usually delegated to the Provincial MEC for Local Government and Planning; or in some cases, the MEC for Housing and Welfare. Authorisation for exhumation and reinternment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. To handle and transport human remains, the institution conducting the relocation should be authorised under Section 24 of Act 65 of 1983 (Human Tissues Act).

1.3. Description of Study Area

1.3.1 Location Data

The Proposed Waterkloof Marina Retirement Village is located on the Remaining Extent of the Farm Waterkloof 428 J.R, Gauteng Province (Figure 1). The study area measures 54 ha and is centred at 25° 48' 21.6208" S, 28° 14' 13.8121" E. The site is accessible from Skilpad road that also forms the western border of the study area.

1.3.2. Location Map

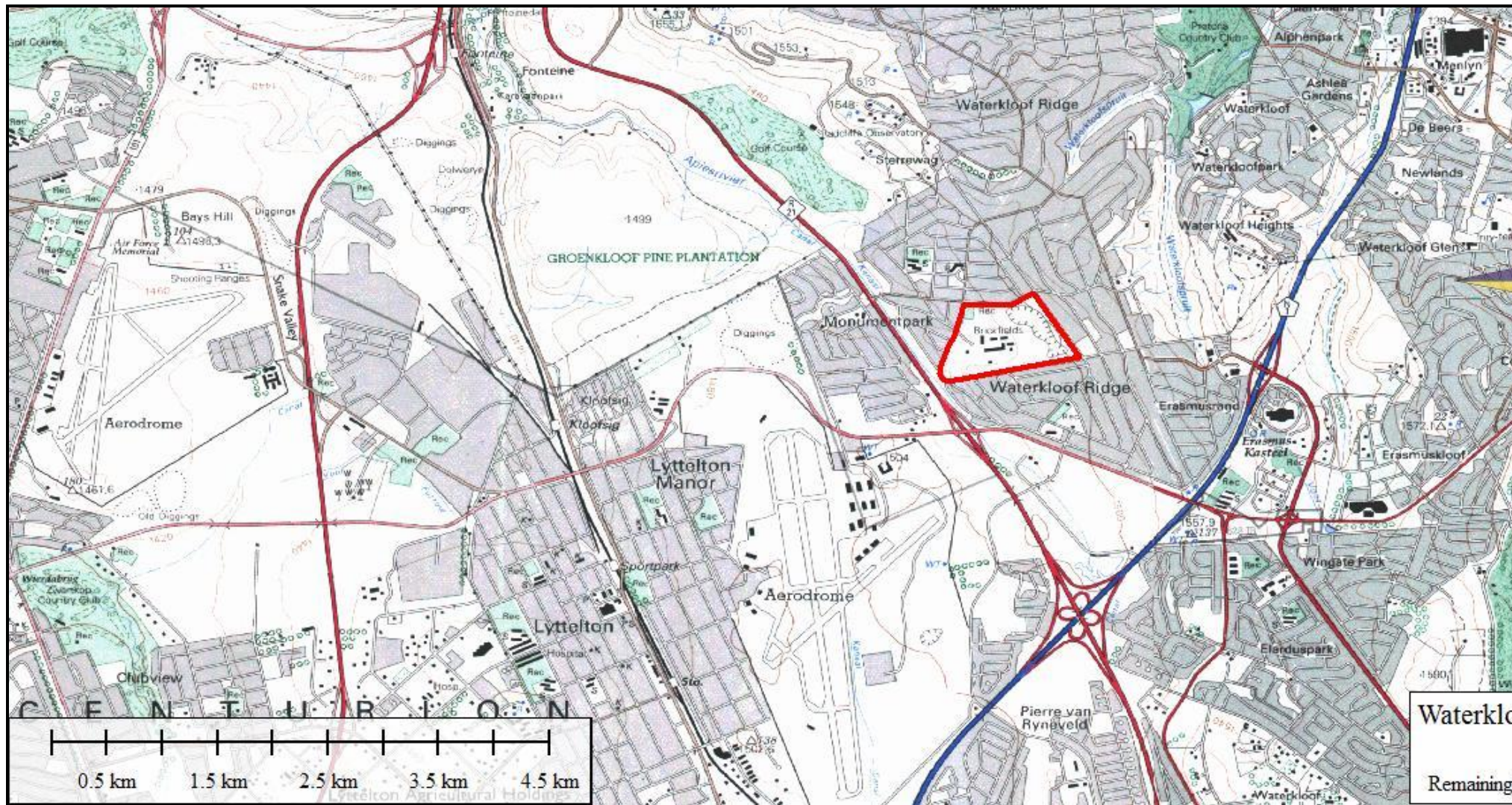


Figure 1: Location map

2. APPROACH AND METHODOLOGY

The aim of the study is to cover archaeological databases to compile a background of the archaeology that can be expected in the study area followed by field verification; this was accomplished by means of the following phases.

2.1 Phase 1 - Desktop Study

The first phase comprised desktop, scanning existing records for archaeological sites, historical sites, graves, architecture (structures older than 60 years) of the area. The following approach was followed:

2.1.1 Literature Search

This was conducted by utilising data stored in the national archives and published reports relevant to the area. The aim of this is to extract data and information on the area in question.

2.1.2 Information Collection

SAHRIS was consulted to collect data from previously conducted CRM projects in the region to provide a comprehensive account of the history of the study area.

2.1.3 Consultation

No public consultation was done by the author as this was done independently as part of the BA.

2.1.4 Google Earth and Mapping Survey

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

2.1.5 Genealogical Society of South Africa

The database of the Genealogical Society was consulted to collect data on any known graves in the area.

2.2 Phase 2 - Physical Surveying

Due to the nature of cultural remains, the majority of which occurs below surface, a field survey of the proposed development was conducted. The study area was surveyed by means of vehicle and extensive pedestrian surveys on 16 April 2016. The survey was aimed at covering the proposed development footprint, focussing on specific areas on the landscape that would be more likely to contain archaeological and/or other heritage remains like drainage lines, rocky outcrops as well as slight elevations in the natural topography. These areas were searched more intensively, but many other areas were walked in order to confirm expectations in those areas. Track logs of the areas covered were taken (Figure 2).



Figure 2: Track logs of the areas surveyed indicated in black with the development footprint indicated in red.

2.3. Restrictions

Due to the subsurface nature of archaeological artefacts, the possibility exists that some features or artefacts may not have been discovered/ recorded during the survey and the possible occurrence of unmarked graves and other cultural material cannot be excluded. This report only deals with the footprint area of the proposed development as indicated in the location map.

The study area has been extensively disturbed and any surface indicators of heritage resources would have been destroyed. Although HCAC surveyed the area as thoroughly as possible, it is incumbent upon the developer to stop operations and inform the relevant heritage agency should further cultural remains, such as graves, stone tool scatters, artefacts, bones or fossils, be exposed during the process of development.

3. NATURE OF THE DEVELOPMENT

The proposed development will comprise approximately 48, 8170 Hectares. The retirement village will include the required infrastructure such as roads and storm water, sewerage reticulation, electricity, and potable water.

4. HISTORICAL AND ARCHAEOLOGICAL BACKGROUND OF THE STUDY AREA

4.1 Databases Consulted

Several previous studies are on record for the general study area (van Schalkwyk *et al* 1992, van Schalkwyk 2014 & Coetzee 2008). Van Schalkwyk *et al* (1992) conducted excavations close to the Fountains on historical farmsteads. Van Schalkwyk (2014) conducted an assessment for the development of six dams in the Waterkloof Ridge Nature Reserve and recorded no sites in the study area. Coetzee (2008) conducted a study for the proposed upgrade of Hans Strijdom Drive and also recorded no sites of significance.

Genealogical Society and Google Earth Monuments

Neither the Genealogical Society nor the monuments database at Google Earth (Google Earth also include some archaeological sites and historical battlefields) have any recorded sites in the study area.

4.2. Brief background to the study area

This section will endeavour to give a brief overview of the history of the wider area and district in which the farm is located.

4.2.1. Historiography and Methodology

It was necessary to use a range of sources in order to give an account of the history of the property. Sources include secondary source material, maps and archival documents. This study should be viewed as an introduction to the history of the property under investigation.

Unfortunately not many documents could be found in the National Archives that specifically relate to the historical land use of the RE of Waterkloof 428 JR. All available information was however recorded and analysed. Archival and other maps help to draw a clearer picture of the historical landscape.

4.2.2. Maps of the Area under Investigation

Since the mid-1800s up until the present, South Africa has been divided and re-divided into various districts. The district of Pretoria was established in 1857, and the land that would later be known as a portion of Waterkloof 29, and eventually Waterkloof 428 JR, formed part thereof. This remained the case up until 1994. As of 1994 the farm was located in the new province of Gauteng, still in the Pretoria magisterial district (Gesiedenisatlas van Suid-Afrika 1999: 17, 20-27).

The property under investigation first formed part of the farm Waterkloof 29, later Waterkloof 378 JR and was only recently proclaimed as the Remaining Extent of Waterkloof 428 JR.

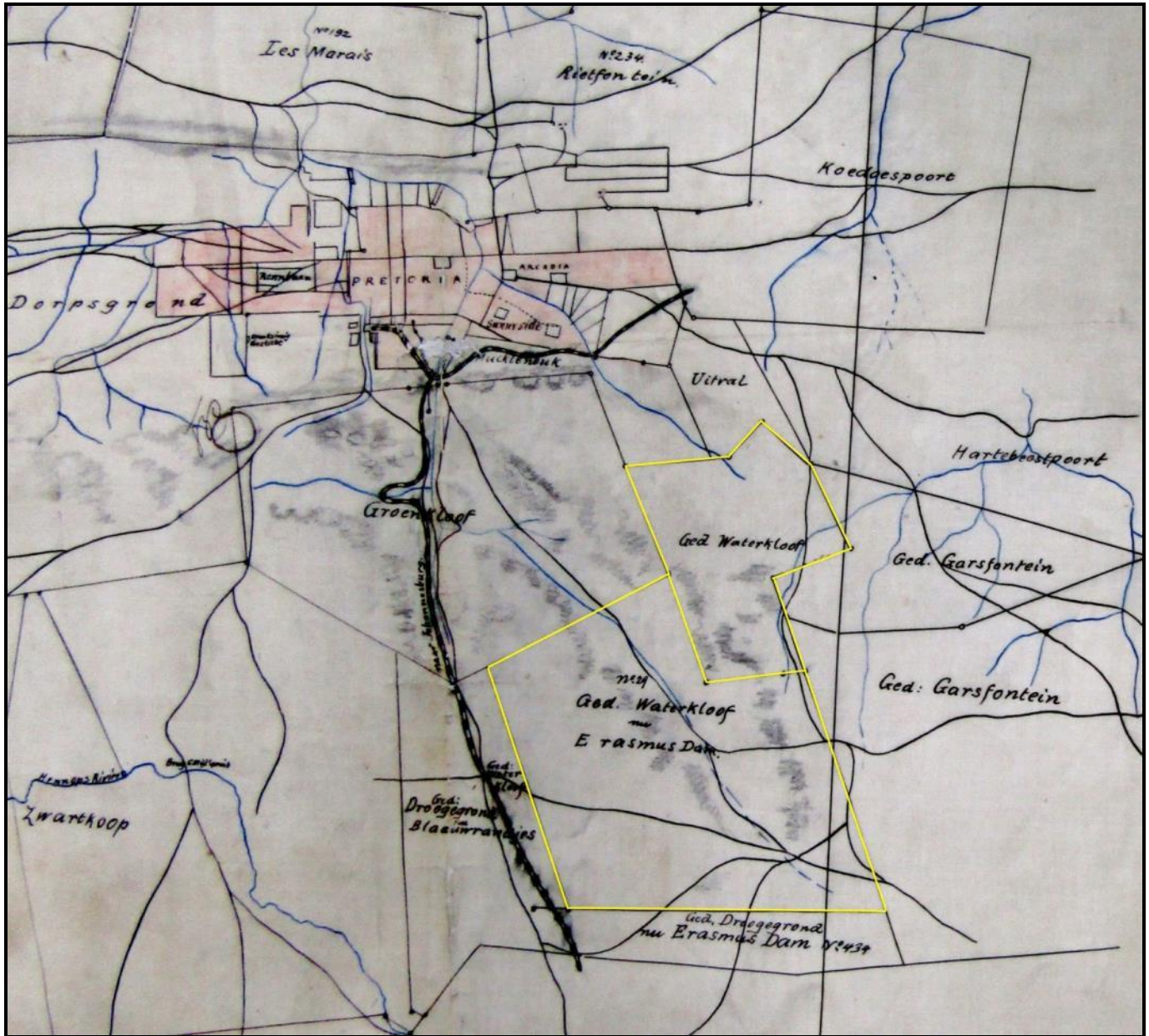


Figure 3. 1898 Map of Pretoria and the farms surrounding it. One can see Waterkloof 29 to the southeast of Pretoria. It was divided into a northern and a southern portion at the time. (NASA TAB, Maps: S3/1855)

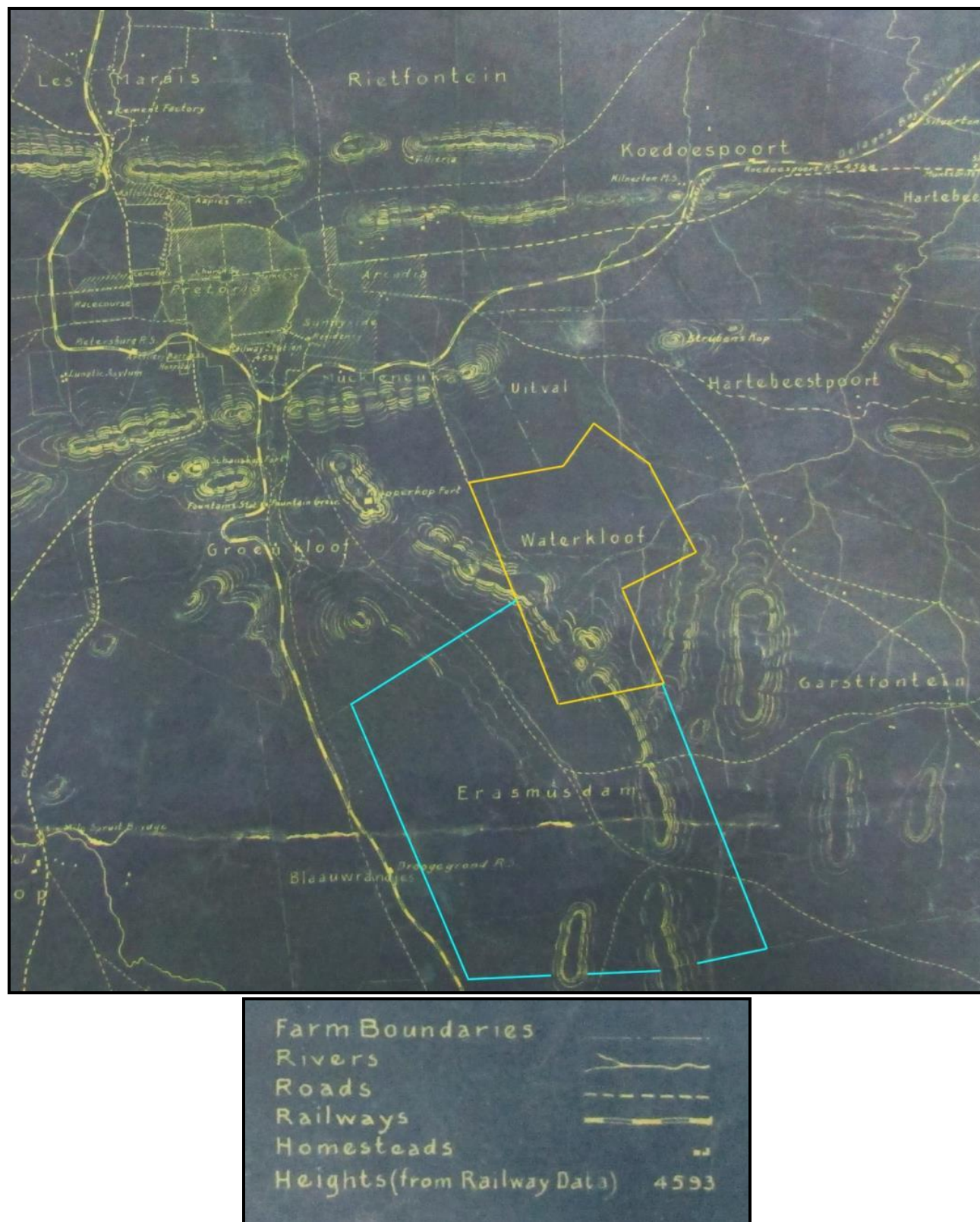
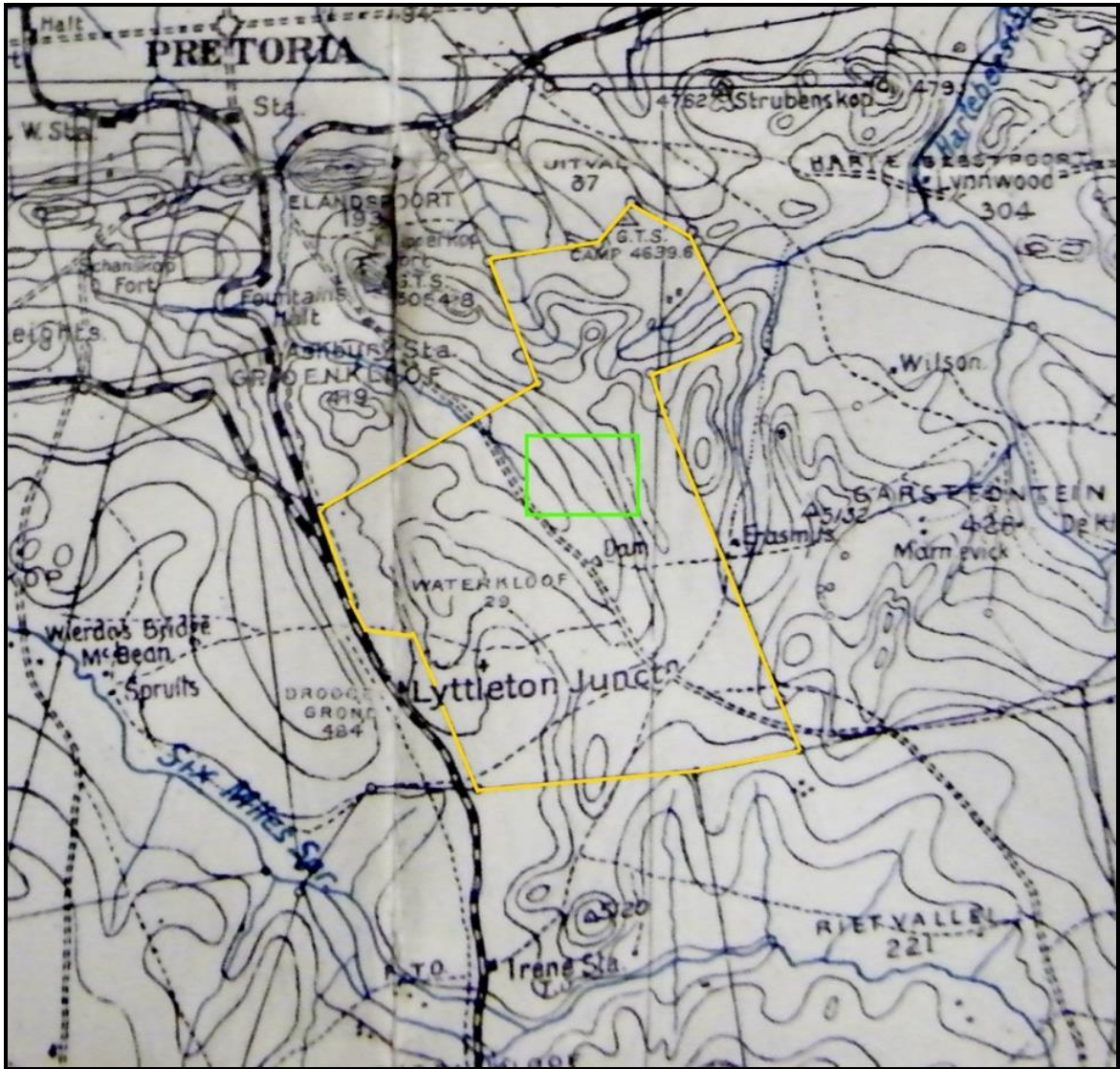


Figure 4. 1900 Map of Pretoria and its surrounds. The land that was known as the southern portion of Waterkloof by 1898 is now known as the farm Erasmusdam. (NASA TAB, Maps: 2/103)



References :

Provincial Boundaries	+++++	Farm Names, Beacons and Boundaries	
Magisterial District Boundaries	-----	Sub-divisions of Farms with names if any	
Ward Boundaries	-----	Unsurveyed Farms	(U)
Names	-----	Railways under Traffic	
Townlands projected or	
Native Location Boundaries under construction	
Mining District Boundaries	-----	Telegraph Lines	
Names	-----	Main Roads	
Government Ground Proclaimed		Farm Roads & Tracks	
Private Proclaimed Ground		Homesteads and Houses	
Discoverer's Rights	o D.R. 25	Kaffir Kraals	
		Post Offices	P.O.
		Post and Telegraph Offices	P.T.O.
		Stations of Geodetic Survey	△ G.T.S.
		Actual Heights above Mean Sea Level	4639.6
		Approx. Heights obtained from Aneroid readings	M.S.L.
		Mission Station	M.S.S.
		Police Posts	P.P.

Figure 5. 1913 Map of the Pretoria District, showing the farm Waterkloof 29. It seems that Erasmusdam once again formed part of the farm Waterkloof 29. A main road intersected the farm, and a number of farm roads can also be seen. Next to the main road, one can see a dam. Two homesteads can be seen in the northern section of the property, a small distance to the southeast of a Geodetic Survey Station. The green border shows the approximate location of the area that would later become known as Waterkloof 428 JR (Union of South Africa 1913).

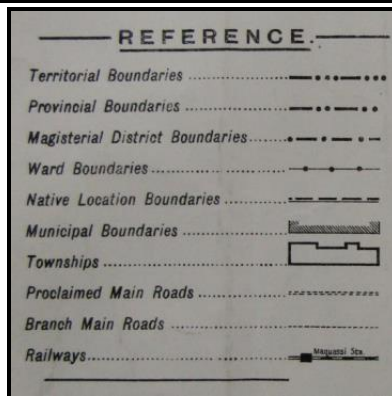
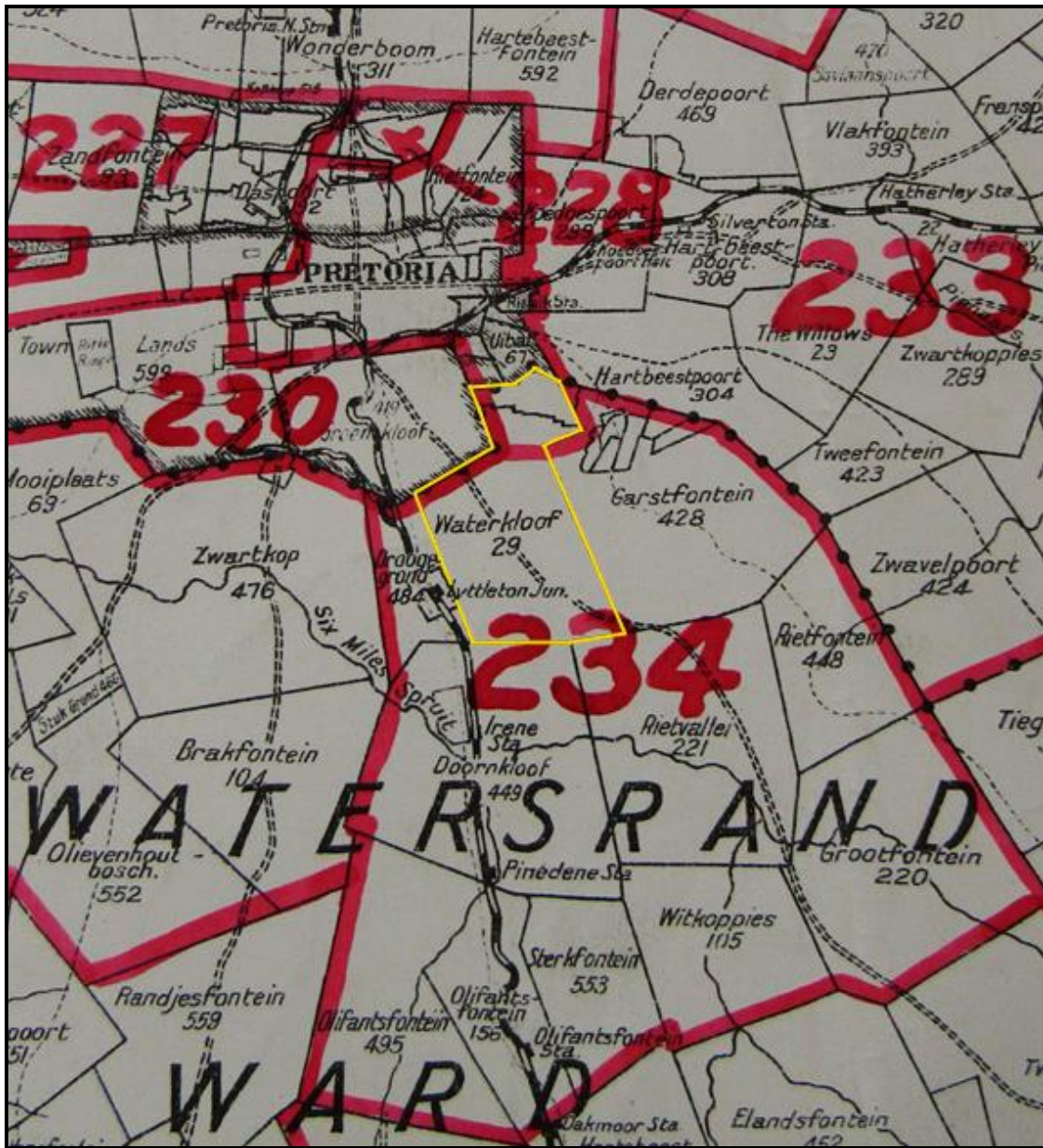


Figure 6. 1917 Map of Pretoria and farms surrounding it. (NASA TAB, Maps: 3/300)

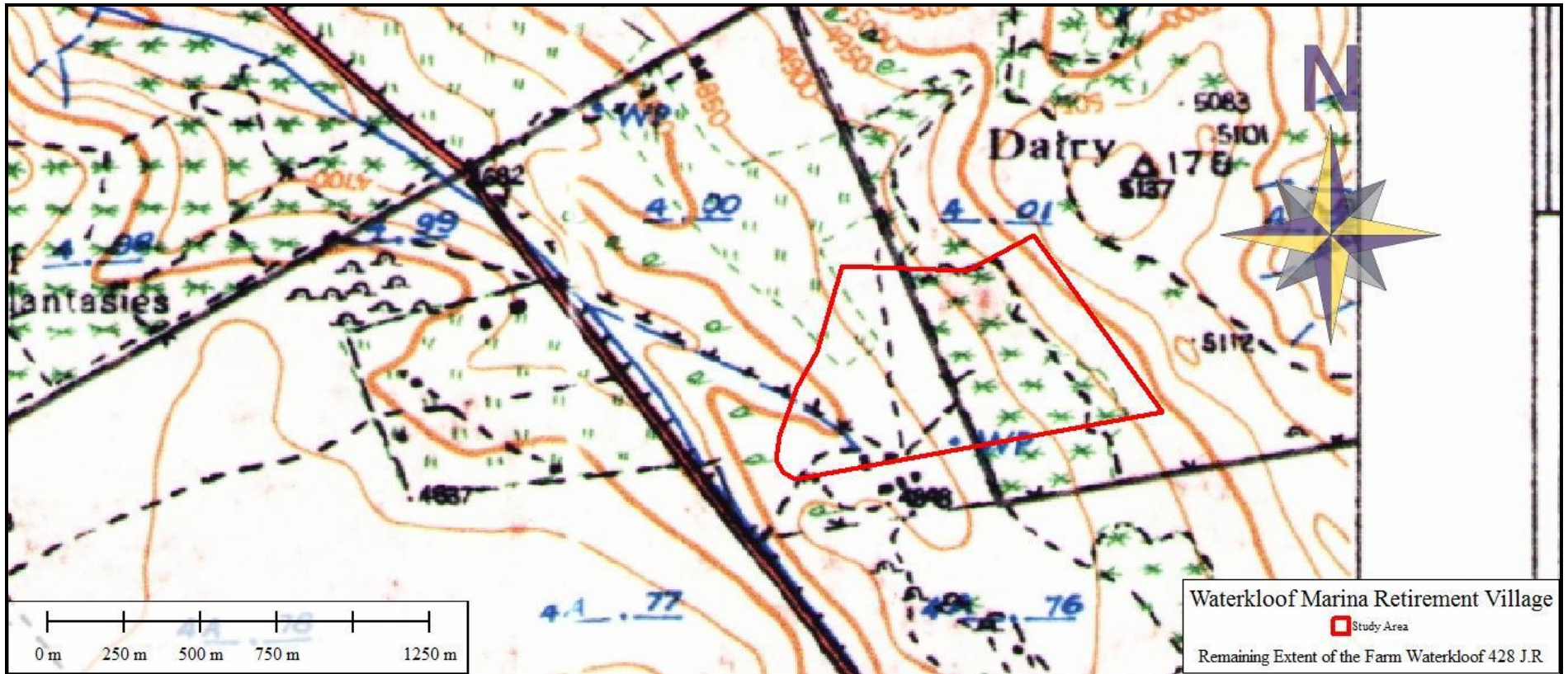


Figure 8. 1943 Topographic map showing the current study area. No buildings are visible at this time.

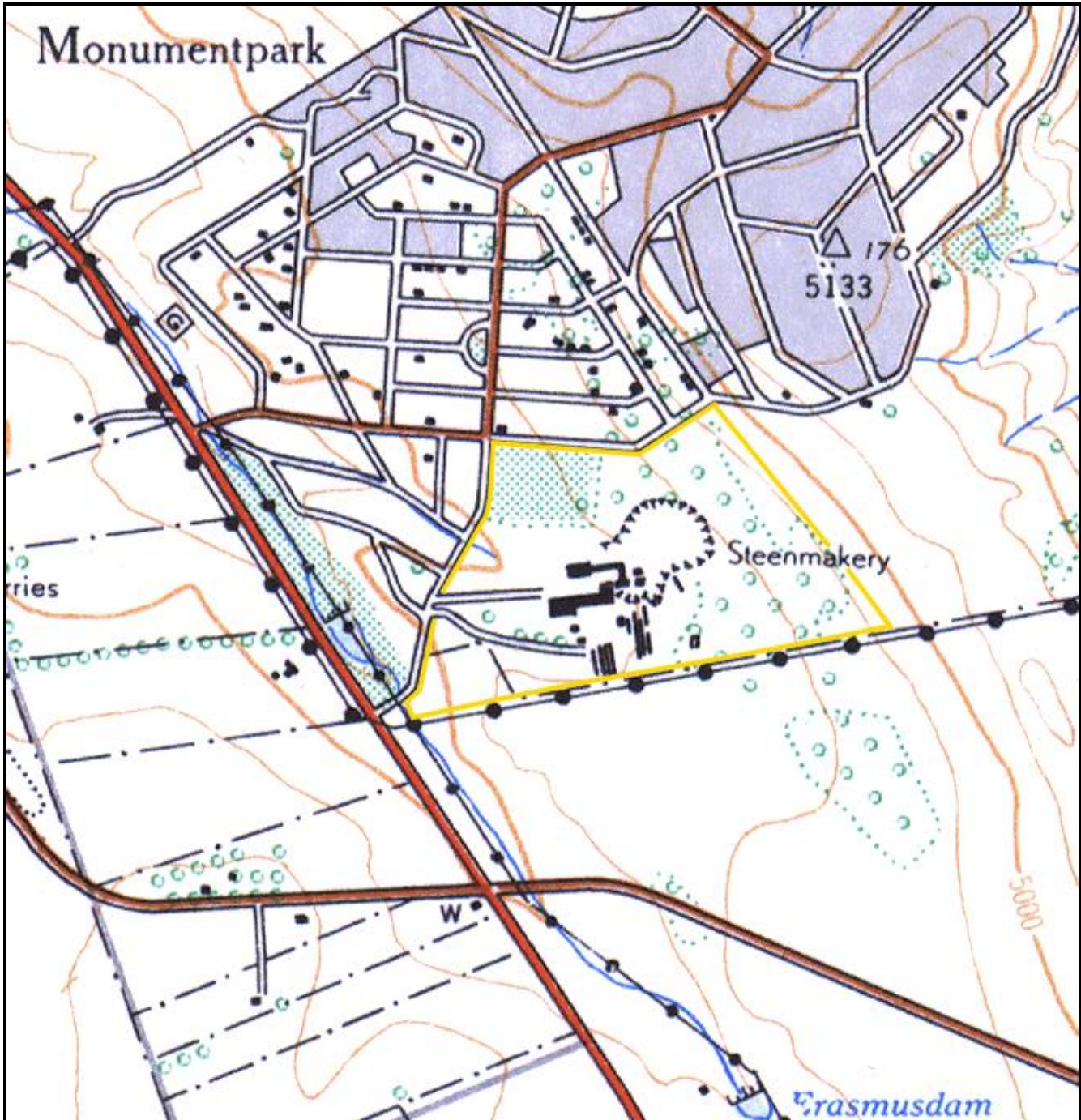


Figure 9.1964 Map of the area that would later be known as Waterkloof 428 JR, but still formed part of the farm Waterkloof 378 JR at the time. The eastern half of the farm was still used for forestry purposes, and one can see that the north-western corner of the property was used for orchards. A power line forms the southern boundary of the farm, and a national road is visible directly to the west of the land. In the centre of the property one can see buildings and excavations associated with a brickfield. About six small buildings and two large buildings are visible. The residential area of Monument Park had been established to the north of the property by 1964. (Topographical Map 1964)

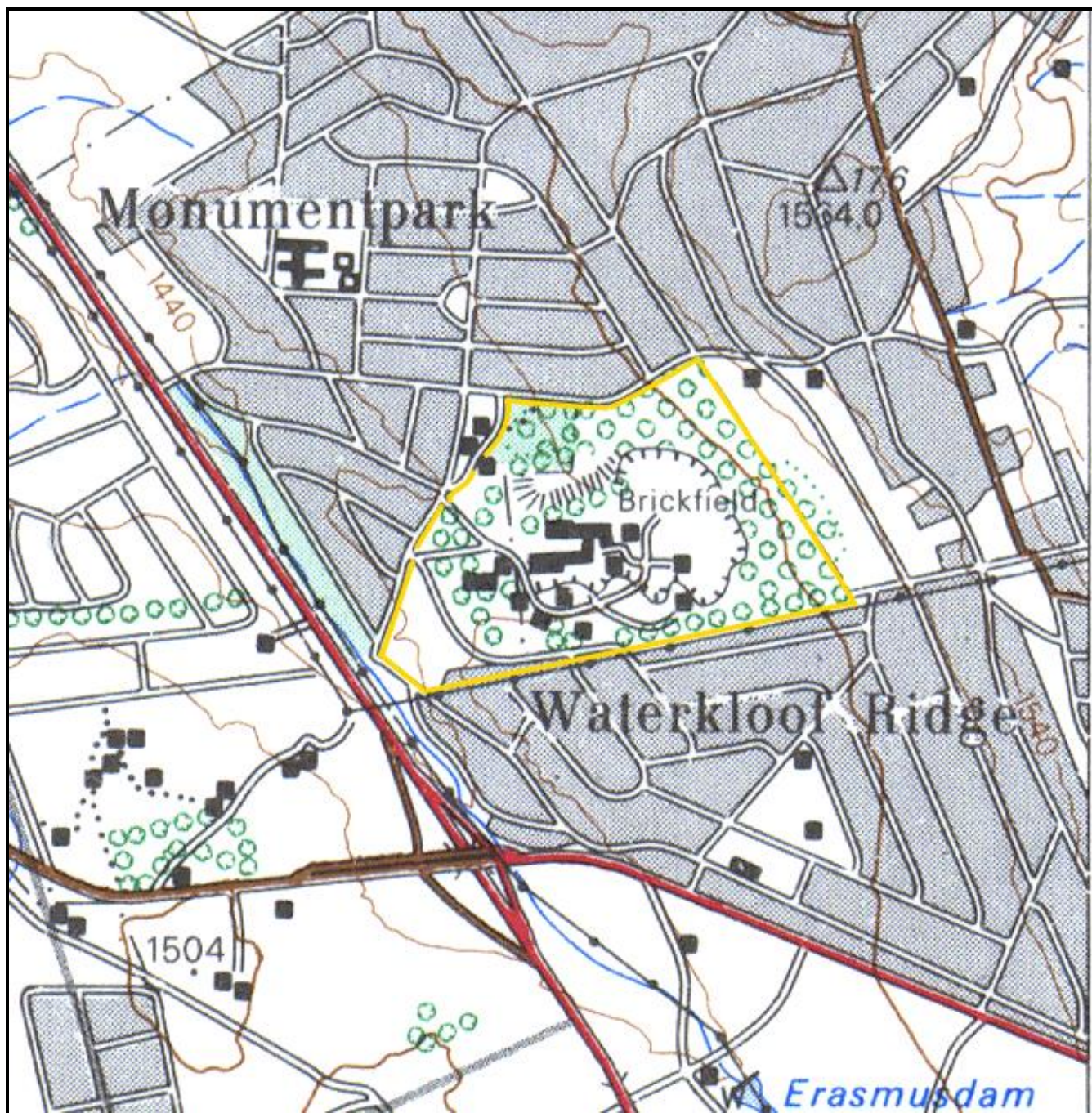


Figure 10.1975 Map of the area that would later be known as Waterkloof 428 JR, but still formed part of the farm Waterkloof 378 JR at the time. The brickfield in the centre of the property had been expanded since 1964 and about 13 buildings can be seen. These were all connected by secondary roads. The excavation site has also been expanded. Trees are visible in the area surrounding the brickfield. The residential areas of Waterkloof Ridge and Monument Park are visible adjacent to the property. (Topographical Map 1975).

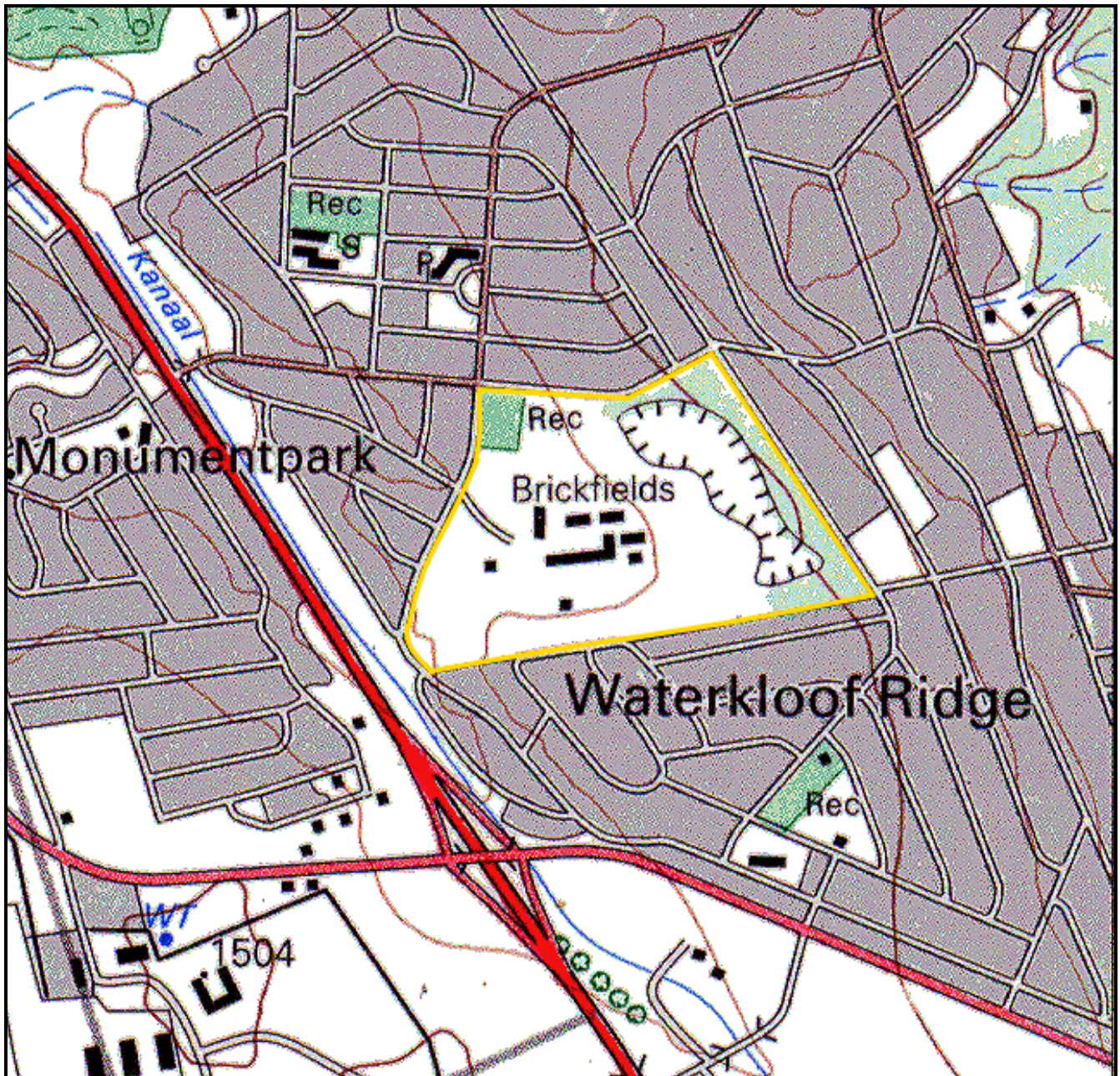
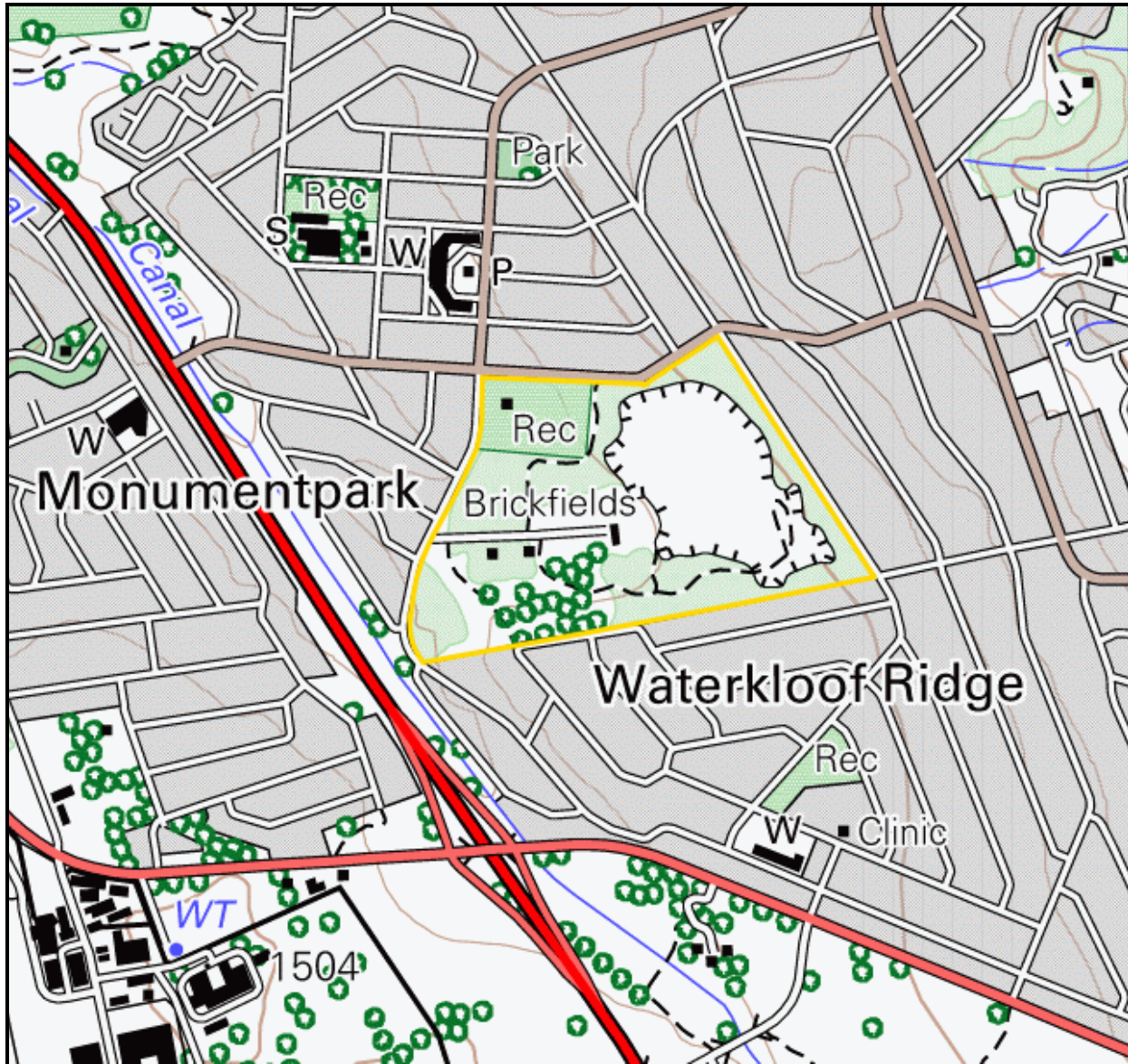


Figure 11. 1995 Map of the area that would later be known as Waterkloof 428 JR, but still formed part of the farm Waterkloof 378 JR at the time. Not much had changed since 1975, though it seems that there are slightly fewer buildings related to the brickfields operation. A recreational space can be seen in the north-western corner of the land. (Topographical Map 1995)



REFERENCE	VERKLARING	REFERENCE	VERKLARING
National Freeway; National Route	Nasionale Deurpad; Nasionale Roete	International Boundary and Beacon	Internasionale Grens en Baken
Arterial Route	Hooftverkeersroete	Provincial Boundary	Provinsiale Grens
Main Road	Hoofpad	Protected Area	Bewarings Gebied
Secondary Road; Bench Mark	Sekondêre Pad; Hoogte merk	Perennial River	Standhoudende Rivier
Other Road; Bridge	Ander Pad; Brug	Perennial Water	Standhoudende Water
Track and Hiking Trail	Dowwe Pad en Voetslaanpad	Non-perennial River	Nie-standhoudende Rivier
Railway; Station or Siding	Spoorweg; Stasie of Sylyn	Non-perennial Water	Nie-standhoudende Water
Other Railway; Tunnel	Ander Spoorweg; Tonnel	Dry Water Course	Droë Loop
Embankment; Cutting	Opvulling; Deurgrawing	Dry Pan	Droë Pan
Power Line	Kraglyn	Marsh and Vlei	Moeras en Vlei
Built-up Area (High, Low Density)	Beboude Gebied (Hoë, Lae Digtheid)	Pipeline (above ground)	Pyplyn (bo die grond)
Buildings; Ruin	Geboue; Ruïne	Water Tower; Reservoir; Water Point	Watertoring; Reservoir; Waterpunt
Post Office; Police Station; Store	Postkantoor; Polisie stasie; Winkel	Coastal Rocks	Kuslyntse
Place of Worship; School; Hotel	Plek van Aanbidding; Skool; Hotel	Prominent Rock Outcrop	Prominente Klipbank
Fence; Wall	Dradheining; Muur	Erosion; Sand	Erosie; Sand
Windpump; Monument	Windpomp; Monument	Woodland	Beboude Gebied
Communication Tower	Kommunikasietoring	Cultivated Land	Bewerkte Land
Mine Dump; Excavation	Mynhoop; Uitgraving	Orchard or Vineyard	Boord of Wingerd
Trigonometrical Station; Marine Beacon	Peilbaken; Seewaartbaken	Recreation Ground	Ontspanningsterrein
Lighthouse and Marine Light	Vuurtooring en Seewaartlig	Row of Trees	Rye Bome
Cemetery; Grave	Begraafplek; Graf		

Figure 12.2001 Map of the area under investigation. Even fewer buildings are now visible relating to the brickfields operation. The development is surrounded by woodland, and a recreational area can still be seen in the north-western part of the property (Topographical Map 2001).

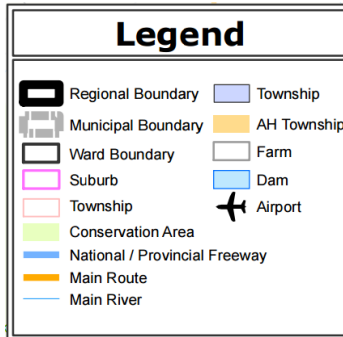
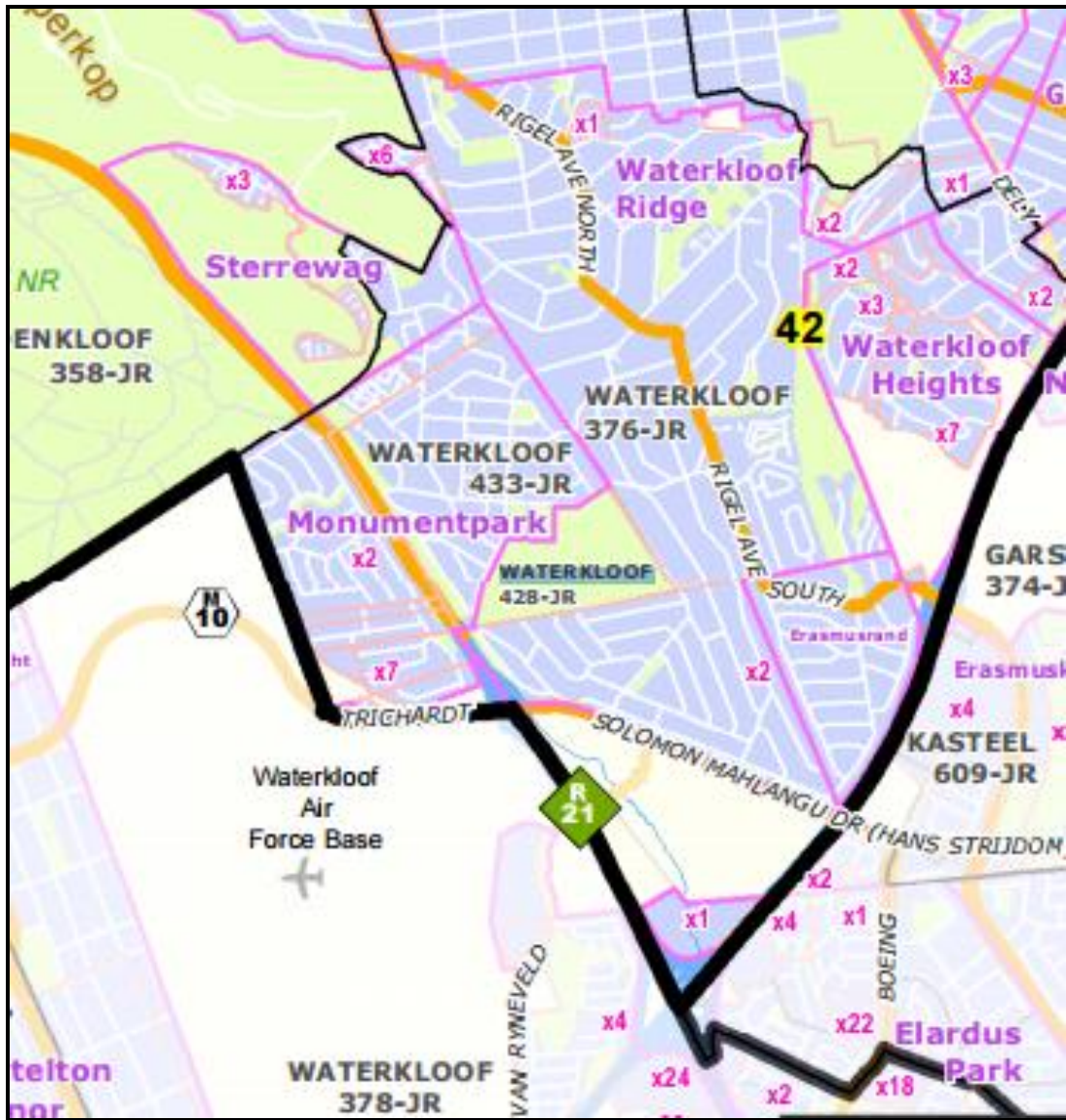


Figure 13. Present day map of the farm Waterkloof 428 JR, showing its relation to the farms Waterkloof 378 JR and Waterkloof 433 JR, the R21 National Freeway, Monument Park, Waterkloof Ridge and other sites. (City of Tshwane 2016)



Figure 14. 2015 Google Earth image of the site under investigation, currently known as the Remaining Extent of Waterkloof 428 JR. Monument Park is visible to the north of the property, and Waterkloof Ridge extends from the northeast of the property to the southeast. (Google Earth 2015)



Figure 15. 2015 Google Earth image giving one a more close-up view of the RE of Waterkloof 428 JR. The area that was once a brickfield excavation site is now a dam surrounded by woodland. (Google Earth 2015)

4.2.3. Historical Overview Of The Ownership And Development Of The Remaining Extent Of Waterkloof 428 Jr

Record of historical owners:

The farm Waterkloof 29, Ward Witwatersrand, was inspected on 8 December 1859 by the Inspector A. P. van der Walt. The farm, measuring 2500 morgen, was sold by Government Transport to Lucas Cornelis Bronkhorst on 21 September 1861.

Date of transport	Portion	Landowner	New landowner	Price
1861/09/23	A	Lucas Cornelis Bronkhorst	Andries Francois du Toit	-
1865/04/25	A	A. F. du Toit	Jacobus Cornelis Rademeyer	-
1868/01/23	A	J. C. Rademeyer	Cornelis Moll Senior	£187.10
1869/11/23	A1	C. Moll Senior	Albert Brodrick	£300
1872/04/29	A2	C. Moll Senior	Albert Brodrick	£250
1887/02/23	A1&2	A. Brodrick	William Robertson Keet	£150
1891/09/23	A1&2	W. R. Keet	William Emil Hollard	£150
1864/03/17	RE	Lucas Cornelis Bronkhorst	Carel Jacobus Erasmus	-
1899/04/21	A1&2	W. M. Hollard	A. Brodrick	£1500
1902/09/11	A1&2	A. Brodrick	African Farms Ltd	£5500
1903/03/04	B	Estate C. J. Erasmus	Jochemus Johannes Petrus Erasmus	-
1909/11/03	A1&2	Certificate of Township Title issued under Section 50 of Township Amendment Act 1908	African Farms Ltd.	-
1910/02/09	A1&2	African Farms Ltd	Pretoria Townships Ltd	£5000
1910/02/09	A1&2	African Farms Ltd	Pretoria Townships Ltd	-

** Note that some sections of the pages have been torn out and are missing. Therefore this record is not entirely complete. Also note that no record could be found of the landowners of the property for the period 1910 to 1942.*

1942/08/07	Portion 43 from entry 22 & 26	Consolidation of Portions B & E	Albert White	-
1942/08/07	RE of Portion 43	A. White	Rosema & Klaver Pty Ltd	Unknown
-	RE	-	City Lake Marina Pty Ltd	Unknown
2016	RE	Abland Pty Ltd	Stone Arch Development Co Pty Ltd	R130,000,000

(NASA TAB, RAK: 2990; NASA TAB, RAK: 2998; Windeed Search Engine 2016)

The portion of interest for this report is currently known as the Remaining Extent of the farm Waterkloof 428 JR, and forms part of the City of Tshwane Metropolitan Municipality in Gauteng Province. The property is 48.8170 hectares in extent. (Windeed Search Engine 2016)

4.2.4. History of land use:

By the late 1940s, the government was in the process of moving black squatters off a section of Waterkloof 29. The occupied land was far to the west of the portion under investigation, near the Waterkloof Airport and the western border of the Groenkloof State Plantation. By 1948 this land belonged to the African Townships, Mining & Finance Corporation Ltd. (NASA SAB, NTS: 6485 87/313S [3])

By 1955 the settlement had grown immensely, to about 400 dwellings, and most of those people living in this area were deemed to be illegal squatters. By June 1956, all of the squatters in this area had received notice to move from the premises. (NASA SAB, NTS: 6485 87/313S [3])



Figure 16. The yellow line on this map indicates the northern boundary of the farm portion under investigation. It seems that, by 1951, our portion was still known as the Remainder of Portion 43 of Waterkloof 29. (NASA SAB, CDB: 7157 PB4/2/2/896)

By December 1958 the removal of squatters from Waterkloof 29 was well underway. About 400 squatters had been removed from the land of nine different landowners on the farm, but this did not include the portion under investigation. Most of these people were moved to the Kaalfontein District Location. (NASA SAB, NTS: 7153 971/323/6[12])

The Monument Park residential area was proclaimed On 22 April 1960 on Portion 72 of Waterkloof 29, Pretoria District. (NASA SAB, CDB: 7157 PB4/2/2/896)

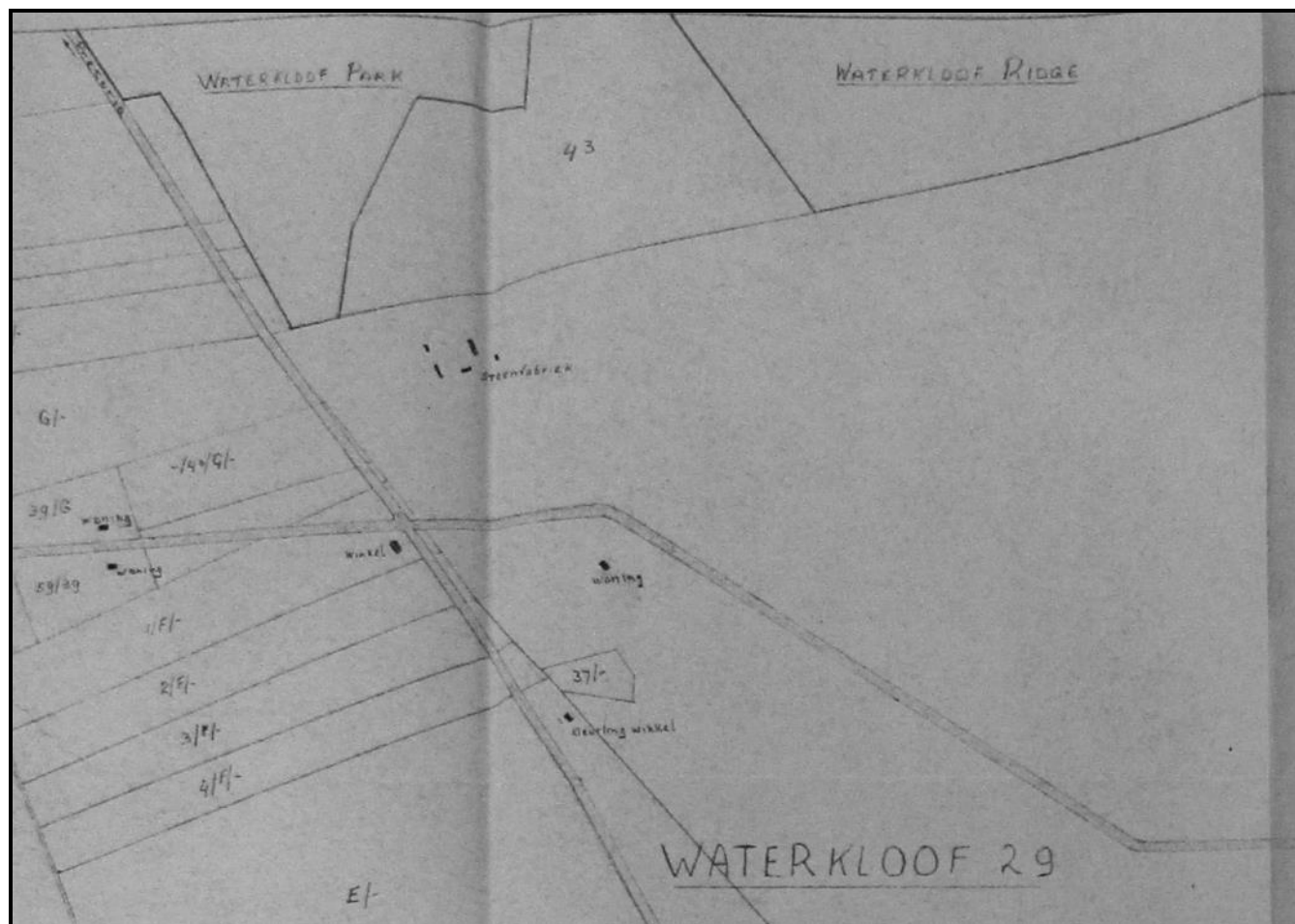


Figure 17.1961 Map of Waterkloof 29. The brickworks site on the portion under investigation is visible to the south of Portion 43 of Waterkloof 29. (This is probably a mistake, since the brickworks would have formed part of this portion). (NASA SAB, BAO: 2484 C31/3/932/1)

5. HERITAGE SITE SIGNIFICANCE AND MITIGATION MEASURES

The presence and distribution of heritage resources define a 'heritage landscape'. In this landscape, every site is relevant. In addition, because heritage resources are non-renewable, heritage surveys need to investigate an entire project area, or a representative sample, depending on the nature of the project. In the case of the proposed project the local extent of its impact necessitates a representative sample and only the footprint of the areas demarcated for development were surveyed. In all initial investigations, however, the specialists are responsible only for the identification of resources visible on the surface.

This section describes the evaluation criteria used for determining the significance of archaeological and heritage sites. The following criteria were used to establish site significance:

- » The unique nature of a site;
- » The integrity of the archaeological/cultural heritage deposits;
- » The wider historic, archaeological and geographic context of the site;
- » The location of the site in relation to other similar sites or features;
- » The depth of the archaeological deposit (when it can be determined/is known);
- » The preservation condition of the sites;
- » Potential to answer present research questions.

Furthermore, The National Heritage Resources Act (Act No 25 of 1999, Sec 3) distinguishes nine criteria for places and objects to qualify as 'part of the national estate' if they have cultural significance or other special value. These criteria are:

- » Its importance in/to the community, or pattern of South Africa's history;
- » Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- » Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
- » Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- » Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- » Its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- » Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- » Its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa;
- » Sites of significance relating to the history of slavery in South Africa.

5.1. Field Rating of Sites

Site significance classification standards prescribed by SAHRA (2006), and acknowledged by ASAPA for the SADC region, were used for the purpose of this report. The recommendations for each site should be read in conjunction with section 7 of this report.

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION
National Significance (NS)	Grade 1	-	Conservation; national site nomination
Provincial Significance (PS)	Grade 2	-	Conservation; provincial site nomination
Local Significance (LS)	Grade 3A	High significance	Conservation; mitigation not advised
Local Significance (LS)	Grade 3B	High significance	Mitigation (part of site should be retained)
Generally Protected A (GP.A)	-	High/medium significance	Mitigation before destruction
Generally Protected B (GP.B)	-	Medium significance	Recording before destruction
Generally Protected C (GP.C)	-	Low significance	Destruction

6. BASELINE STUDY-DESCRIPTION OF SITES

It is important to note that the entire farm was not surveyed but only the development footprint located on Remaining Extent of the Farm Waterkloof 428 J.R. (Figure 1 & 2). The topography of the study area is undulating, extensively mined, and disturbed. Clusters of wattles, high grass cover and weeds limit archaeological visibility (Figure 3 & 4). The mine pit is filled with water (Figure 5) and the profiles of the mined area clearly show the shale substrata (Figure 6). Quartzite cap the shale substrata and although quartzite was often used as raw material for the manufacture of Stone Tools. The site is so extensively disturbed that it was not possible to identify any Stone Age material. Similarly no Iron Age material was recorded in the study area or on any of the other surveys conducted in the immediate vicinity of the study area (van Schalkwyk 2014 & Coetzee 2008).

The study area is surrounded by a densely developed urban area and construction activities would have impacted on surface indications of archaeological material in the wider area. Three ruins (Figure 26) and a guard house occur in the study area. Ruin 1 is located at 25° 48' 29.6388" S, 28° 14' 12.4369" E, Ruin 2 at 25° 48' 24.8687" S, 28° 14' 16.4761" E and Ruin 3 at 25° 48' 24.5447" S, 28° 14' 08.3147" E. The structure used as a guard house is located at 25° 48' 28.1832" S, 28° 14' 04.6977" E.

Ruin 1 consists of a partially demolished brick and plaster structure. The roof, doors and fittings have all been removed. The structure is associated with the brick making activities in the study area and is considered to be of low significance.

Ruin 2 forms part of the brick making activities and of a large area with demolished buildings and cement slabs.

Ruin 3 consists of a cement slab of and a rectangular structure. Nothing is left of the structure apart from a cement slab and it is therefore of low significance.



Figure 18: Water logged mine pit.



Figure 19. Mined shale substrata.



Figure 20. Dumping of building rubble



Figure 21. High vegetation growth.



Figure 22: Ruin 1.



Figure 23: Site condition at Ruin 2.



Figure 24: Ruin 2.



Figure 25: Cement slab marking Ruin 3.



Figure 26. Location of ruins in the study area.

7. CONCLUSIONS AND RECOMMENDATIONS

This report endeavoured to provide information regarding the history of the Remaining Extent of the farm Waterkloof 428 JR. This included the history of land ownership, as well as the development of the property. It seems that the farm, which was first known as a portion of Waterkloof 29, had been surveyed by 1861. A number of buildings had already been constructed on the farm by 1939, although nothing was constructed in the study area by 1943 (Figure 8). The property was purchased by Rosema and Klaver Pty Ltd in 1942, but it is not known if this company started the brick fields on the portion under investigation. By 1951, the property was known as the Remainder of Portion 43 of Waterkloof 29. By 1964 the brickworks business was in operation, a number of buildings had been constructed and excavations were underway. As a result of the brickwork operations the site is extensively disturbed and these activities would have impacted on surface indicators of archaeological sites.

HCAC was appointed to assess the study area in terms of the archaeological component of Section 35 of the NHRA. Excavated profiles of the mined area clearly show shale substrata that are capped by quartzite and although quartzite was often used as raw material for the manufacture of Stone Tools the site is so extensively disturbed that it was not possible to identify any Stone Age material. Similarly no Iron Age material was recorded in the study area neither were any archaeological sites recorded in any of the other surveys conducted in the immediate vicinity of the study area (van Schalkwyk 2014 & Coetzee 2008).

In terms of the built environment of the area (Section 34), three ruins with associated outbuildings occur in the study area. The heritage significance of these structures is determined to be of low significance because of the following criteria.

Criteria	Applicability
Is the site/ building associated with a historic person or group?	NA
Is the site/ building associated with a historic, religious, economic, social, educational or political activity?	Y. Industrial workers in the 1960's.
Is the site/ building associated with a historic event?	NA
Is the site/ building of archaeological significance?	NA
Is the building (man-made structure) older than 60 years?	UnAkknown

These buildings were constructed between 1943 and 1964. The exact age of these structures area unknown but if they are older than 60 years they are subject to the Act in terms of age. It is therefore recommended that the age of these structures is established. If older than 60 years they must be assessed by a conservation architect. If younger than 60 no further action is necessary

In terms of Section 36 of the Act no grave sites were recorded in the study area. If any graves are found in the future, these will have to be dealt with subject to the applicable legislation.

The study area is surrounded by high density industrial and residential developments and no significant cultural landscapes or viewsapes were noted during the fieldwork.

Due to the subsurface nature of archaeological remains and the fact that graves can occur anywhere on the landscape, it is recommended that a chance find procedure is implemented for the project as part of the EMP:

Chance find procedure

This procedure applies to the developer's permanent employees, its subsidiaries, contractors and subcontractors, and service providers. The aim of this procedure is to establish monitoring and reporting procedures to ensure compliance with this policy and its associated procedures. Construction crews must be properly inducted to ensure they are fully aware of the procedures regarding chance finds as discussed below.

- If during the pre-construction phase, construction, operations or closure phases of this project, any person employed by the developer, one of its subsidiaries, contractors and subcontractors, or service provider, finds any artefact of cultural significance or heritage site, this person must cease work at the site of the find and report this find to their immediate supervisor, and through their supervisor to the senior on-site manager.
- It is the responsibility of the senior on-site Manager to make an initial assessment of the extent of the find, and confirm the extent of the work stoppage in that area.
- The senior on-site Manager will inform the ECO of the chance find and its immediate impact on operations. The ECO will then contact a professional archaeologist for an assessment of the finds who will notify the SAHRA.

7.1 Reasoned Opinion

From a heritage perspective the proposed project is acceptable from a heritage point of view. If the above recommendations are adhered to and based on approval from SAHRA, HCAC is of the opinion that the development can continue as the development will not impact negatively on the archaeological record of the area. If during the pre-construction phase or during construction, any archaeological finds are made (e.g. graves, stone tools, and skeletal material), the operations must be stopped, and the archaeologist must be contacted for an assessment of the finds. Due to the subsurface nature of archaeological material and graves the possibility of the occurrence of unmarked or informal graves and subsurface finds cannot be excluded, but can be easily mitigated by preserving the sites *in-situ* within the development.

8. PROJECT TEAM

Jaco van der Walt, Project Manager

9. STATEMENT OF COMPETENCY

I (Jaco van der Walt) am a member of ASAPA (no 159), and accredited in the following fields of the CRM Section of the association: Iron Age Archaeology, Colonial Period Archaeology, Stone Age Archaeology and Grave Relocation. This accreditation is also acknowledged by SAHRA and AMAFA.

I have been involved in research and contract work in South Africa, Botswana, Zimbabwe, Mozambique, Tanzania and the DRC; having conducted more than 300 AIA's since 2000.

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