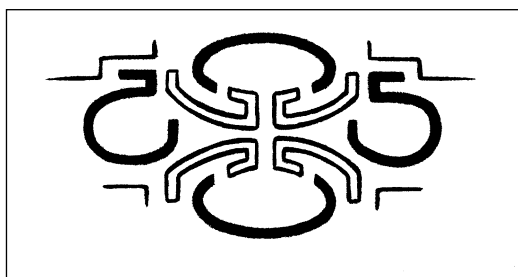


**Cultural Heritage Impact Assessment:
Phase 1 Investigation for the Proposed Mining on a Portion of the Farm Lesseyton 81,
Queenstown (Komani), Enoch Mgijima Local Municipality, Chris Hani District
Municipality, Eastern Cape Province**



For

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Executive Summary

This report contains a comprehensive heritage impact assessment investigation in accordance with the provisions of Sections 38(1) and 38(3) of the *National Heritage Resources Act* (Act No. 25 of 1999) (NHRA) and focuses on the survey results from a cultural heritage survey as requested by Greenmined Environmental (Pty) Ltd. Greenmined Environmental (Pty) Ltd was contracted by Queenstown Quarry (Pty) Ltd as the independent environmental consultant to undertake a Scoping EIA process for an application for environmental authorisation to expand the existing quarry, at the Queenstown Quarry on a portion of Lesseyton Farm 81, Queenstown, Enoch Mgijima Local Municipality, Chris Hani District Municipality, Eastern Cape Province. The property is situated approximately 9 kilometres west of Queenstown. The scoping process for environmental authorisation for the proposed mining expansion is conducted in terms of the National Environmental Management Act (Act No. 107 of 1998) (NEMA) and the Environmental Impact Assessment (EIA) Regulations 2014 (as amended 2017).

No archaeological (both Stone Age and Iron Age) artefacts, assemblages, features, structures or settlements were recorded during the survey of the project footprint. It is well known that Iron Age, especially Late Iron Age stone-walled settlements do not usually occur on steep mountainous slopes.

It is therefore recommended, from a cultural heritage perspective that the proposed mining activities may proceed. No further mitigation measures are required.

Also, please note:

Archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during development activities, such activities should be halted, and a university or museum notified in order for an investigation and evaluation of the find(s) to take place (**cf. NHRA (Act No. 25 of 1999), Section 36 (6)**).

Definitions and abbreviations

Midden:	Refuse that accumulates in a concentrated heap.
Stone Age:	An archaeological term used to define a period of stone tool use and manufacture
Iron Age:	An archaeological term used to define a period associated with domesticated livestock and grains, metal working and ceramic manufacture
LIA:	Late Iron Age sites are usually demarcated by stone-walled enclosures
NHRA:	National Heritage Resources Act (Act No. 25 of 1999)
SAHRA:	South African Heritage Resources Agency
SAHRIS:	South African Heritage Resources Information System
PHRA-G:	Provincial Heritage Resources Authority - Gauteng
HIA:	Heritage Impact Assessment
BAR:	Basic Assessment Report
EMPr:	Environmental Management Programme report
DMR:	Department of Mineral Resources
I&APs:	Interested and Affected Parties

I, Francois Coetzee, hereby confirm my independence as a cultural heritage specialist and declare that I do not have any interest, be it business, financial, personal or other, in any proposed activity, application or appeal in respect of the listed environmental processes, other than fair remuneration for work performed on this project.



Francois P Coetzee
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1. Introduction and Terms of Reference

Greenmind Environmental (Pty) Ltd was contracted by Queenstown Quarry (Pty) Ltd as the independent environmental consultant to undertake a Scoping EIA process for an application for environmental authorisation to expand the existing quarry at Queenstown Quarry on a portion of Lesseyton Farm 81, Queenstown, Enoch Mgijima Local Municipality, Chris Hani District Municipality, Eastern Cape Province. The property is situated approximately 9 kilometres west of Queenstown. The scoping application process for Environmental Authorisation for the proposed mining activities is conducted in terms of the National Environmental Management Act (Act No. 107 of 1998) (NEMA). A Cultural Heritage Impact Assessment (HIA) was requested by Greenmind Environmental (Pty) Ltd on behalf of the client to evaluate the potential impact on heritage remains by the proposed mining activities.

2. Objectives

The general objective of the cultural heritage survey is to record and document cultural heritage remains consisting of both tangible and intangible archaeological and historical artefacts, structures (including graves), settlements and oral traditions of cultural significance.

As such the terms of reference of this survey are as follows:

- Identify and provide a detailed description of all artefacts, assemblages, settlements and structures of an archaeological or historical nature (cultural heritage sites) located on the study area,
- Estimate the level of significance/importance of these remains in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value,
- Assess any impact on the archaeological and historical remains within the area emanating from the mining activities, and
- Propose recommendations to mitigate heritage resources where complete or partial conservation may not be possible and thereby limit or prevent any further impact.

3. Description of Physical Environment of Study Area

The heritage survey focussed on an area situated approximately 9 kilometres west from the town of Queenstown (Komani). Queenstown is roughly halfway between the smaller towns of Cathcart and Sterkstroom on the N6. The N6 forms the north eastern boundary of the survey area and a mountain range marks the south and eastern periphery. Informal settlements are located to the north and west of the survey footprint. Another quarry is situated on the eastern side of the mountain range.

Farm Name(s) and Portions	The following portions and farms: • Lesseyton 81 ○ Remaining extent (Portion)
Size of Survey Area	65 Ha
Magisterial District	Enoch Mgijima Local Municipality Chris Hani District Municipality
1:50 000 Map Sheet	3126DD
1:250 000 Map Sheet	3126
Central Coordinates of the Development	31.890465°S 26.794328°E

Table 1: Physical Environment

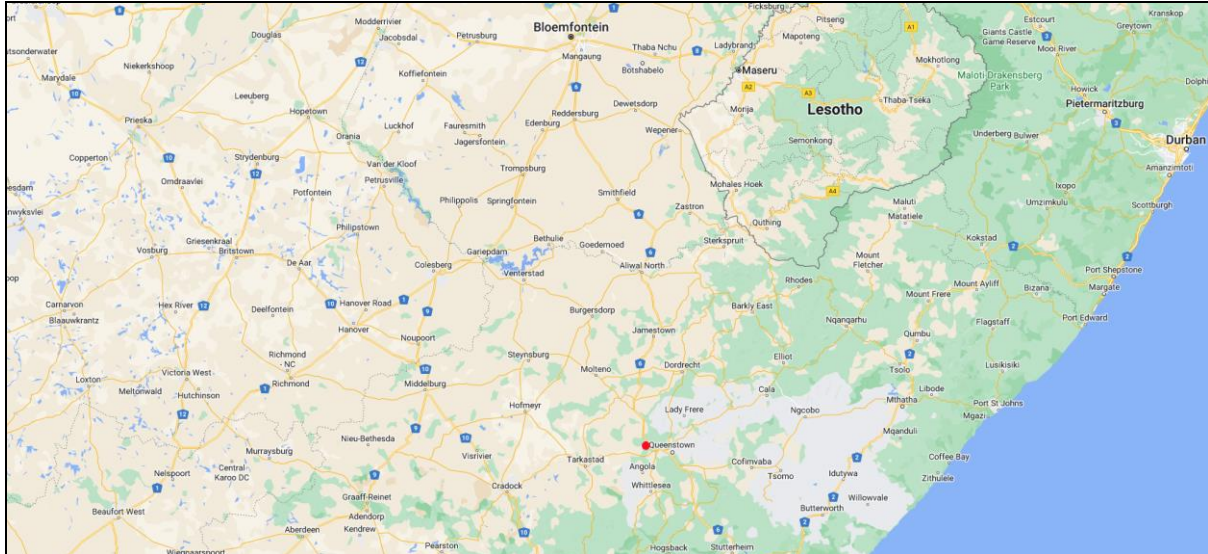
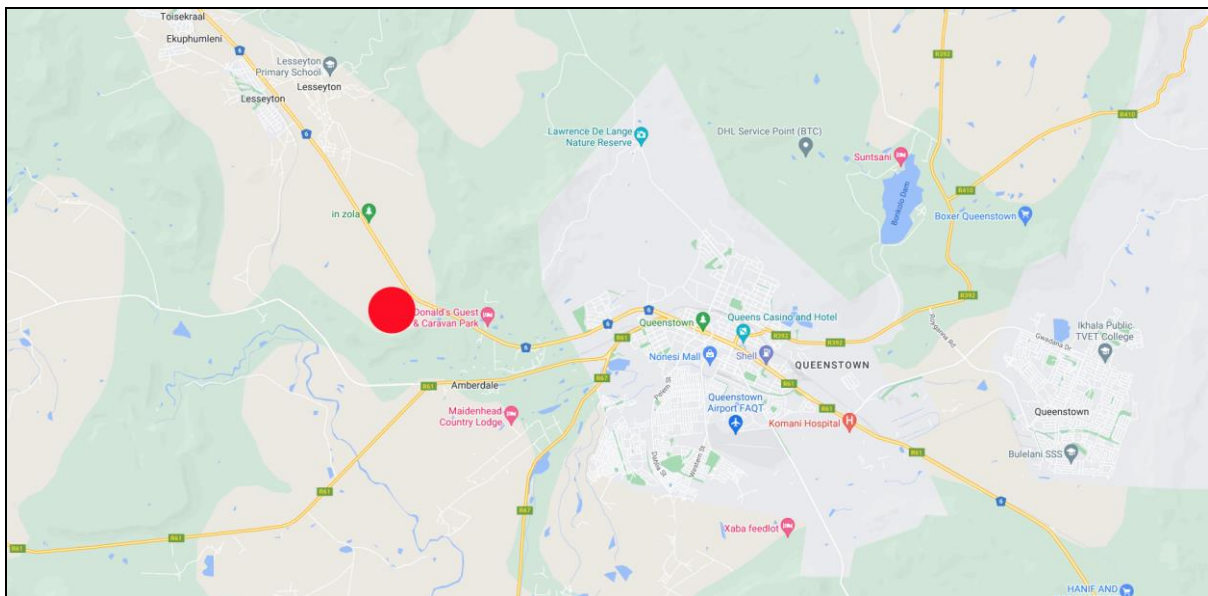
The northern section of the survey area falls within the Grassland Biome, particularly the Sub-Escarpment Grassland Bioregion and more specifically the Queenstown Thornveld (Gs 16) and the southern section (along the mountain range) falls within the Tarkastad Montane Shrubland (Gs 17). Queenstown Thornveld extends from the vicinity of Queenstown in the east to the vicinity of Tarkastad in the west, and Sterkstroom in the north. Tarkastad Montane Shrubland extends towards Noupoot, Middelburg and a point west of Cradock defines the western extent of this unit and Cathcart, Queenstown and Sterkstroom the eastern extent. The unit falls within the area between the Great Escarpment in the north, marked by the Bamboesberg and Stormberg Mountains, and the minor escarpment, marked by the Winterberg and Amathole Mountains in the south (Mucina & Rutherford 2006).

The western section of the survey footprint is characterised as an open and flat area dominated by clay soils covered mostly in grasses and sporadic tree clusters. The eastern and southern sections are demarcated by a mountain range rising approximately 100 metres from the surrounding plains. The landscape is dominated by extensive mining activities such as old shaft headgear, workshops, processing plants, administration buildings, dumps, dams and explosives magazine. Infrastructure includes dirt tracks, tar roads, fences, power lines and office and workshop buildings.

Queenstown (Komani) normally receives about 399 mm of rain per year, with most rainfall occurring mainly during summer. It receives the lowest rainfall (3 mm) in July and the highest (67 mm) in March. The monthly distribution of average daily maximum temperatures shows that the average midday temperatures for Queenstown range from 16.8°C in June to 27.6°C in January. The region is the coldest during July when the mercury drops to 2°C on average during the night (SAExplorer 2022).

Current Zoning	Mining
Economic activities	Mining
Soil and basic geology	The geology of the study area comprises mostly sedimentary rock intersected by dolerite and overlain by a veneer of colluvial and alluvial soils. The main sedimentary units consist of red, purple, grey and bluegreen mudstone with subordinate sandstone in areas of high cut. The mudstone forms part of the Adelaide Subgroup, Beaufort Group, Karoo Sequence. This group of rocks forms part of the Katberg Formation, Tarkastad Subgroup, Beaufort Group, Karoo Sequence. The geological units everywhere are overlain by a veneer of clayey and silty colluvial and alluvial deposits. The soils of the study area consist: - mainly of soils of the Swartland-Adelaide soil form; and - of shallow to absent Mispah-Camavon soil form.
Prior activities	Livestock farming and agriculture
Socio Economic Environment	The proposed mining area is located on the border of ward 10 and 18 of the Enoch Mgijima Local Municipality (EMLM). The Enoch Mgijima local municipality is a Category B municipality located within the Chris Hani district in the Eastern Cape Province. The total population of the region is 245 975 of which 32% is younger than 14, 61% is aged between 15 and 64 and the elderly (65+) totals 21.6%. Of the total of 245 975 people, 91% is black, 5% is coloured, and 4% is white. The population is predominantly female dominated at 51% with males constituting 49% of the population. Approximately 28% of the combined population is employed, whilst 16% is unemployed, and 47% is not actively involved in any job search as they have either lost hope and/or are unemployable.

	The GDP (gross domestic product) contribution of the EMLM to the Chris Hani District Municipality's GDP was at R 5 072 million in 2011.
Evaluation of Impact	An evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits NHRA (Act No. 25 of 1999, Section 38(3d)): Positive

Table 2: Socio-economic environment**Figure 1: Regional context of the survey footprint located west of Queenstown (indicated by the red area)****Figure 2: Local context of the survey area located west of Queenstown (indicated by the red area)**

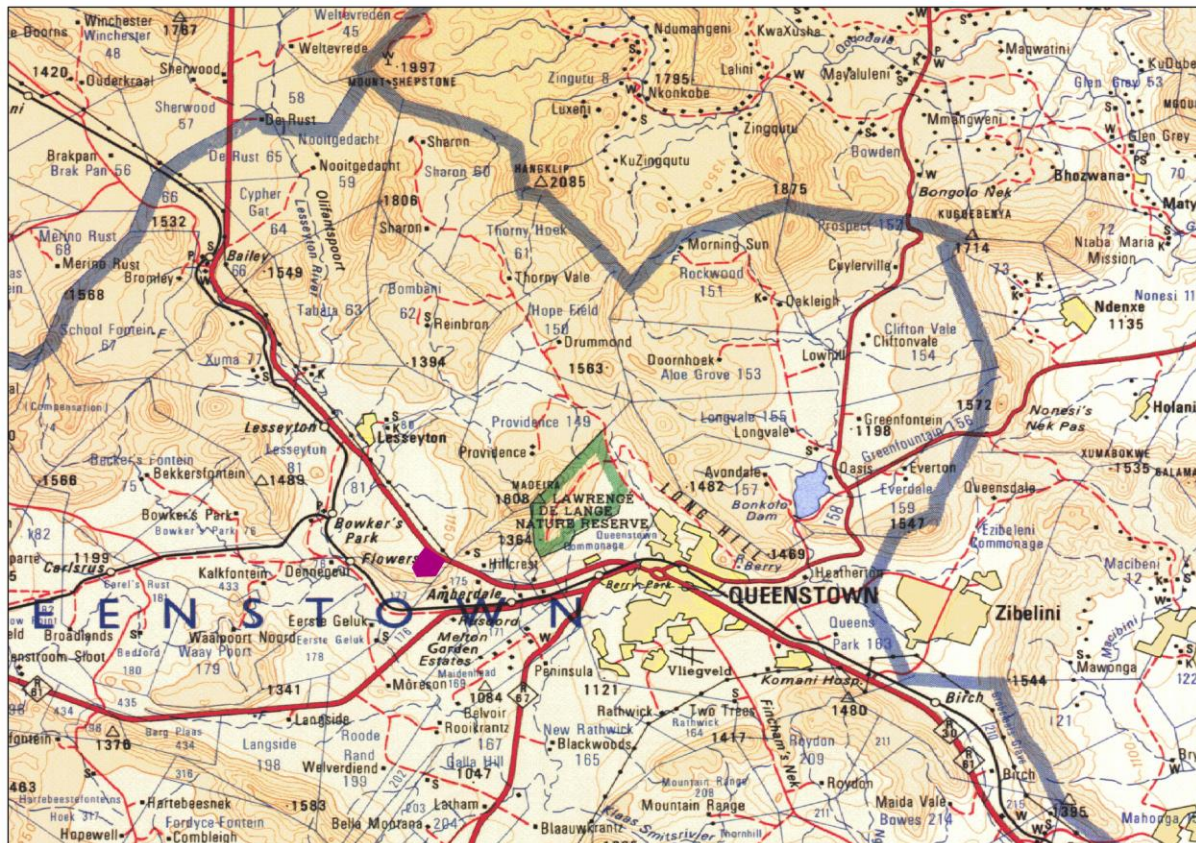


Figure 3: Local context of the survey footprint (1:250 000 Topographical Map 3126)

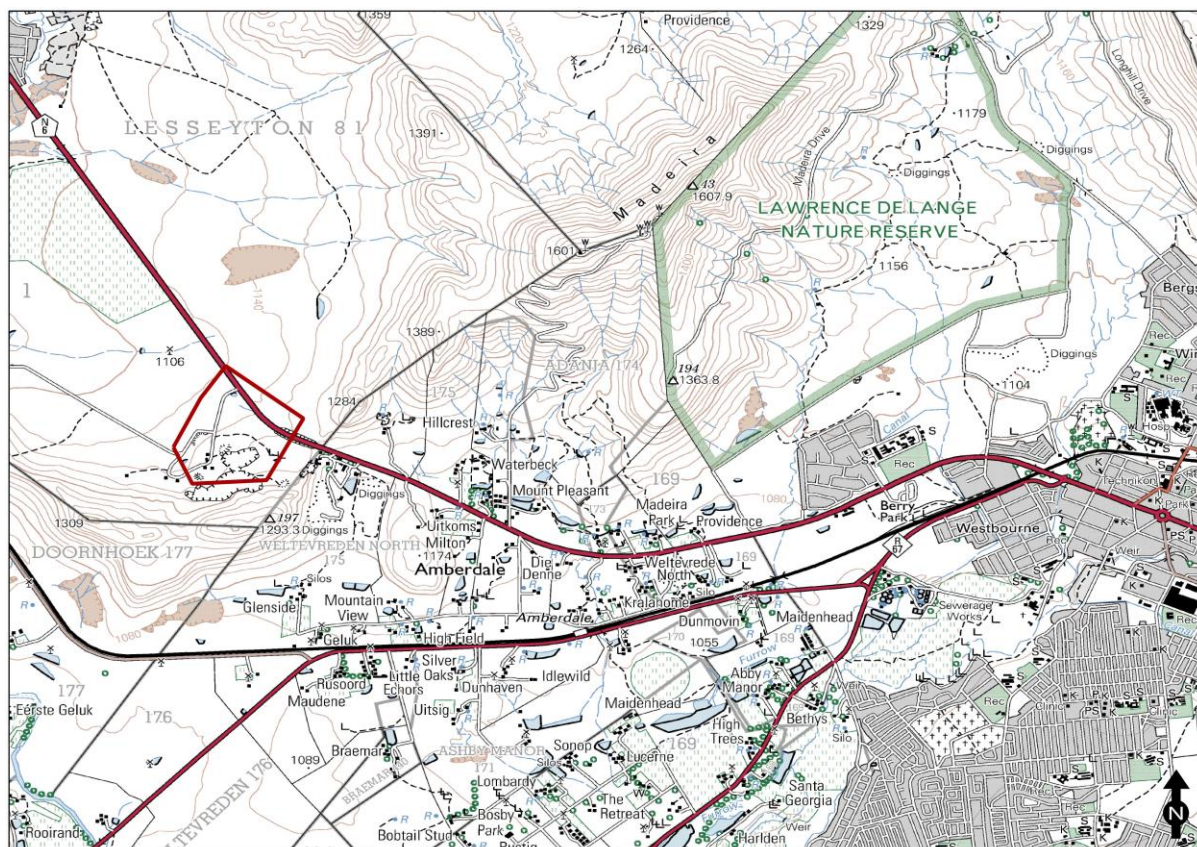


Figure 4: The regional context of the survey area as indicated on the 1:50 000 topographic map 3126DD (2012)

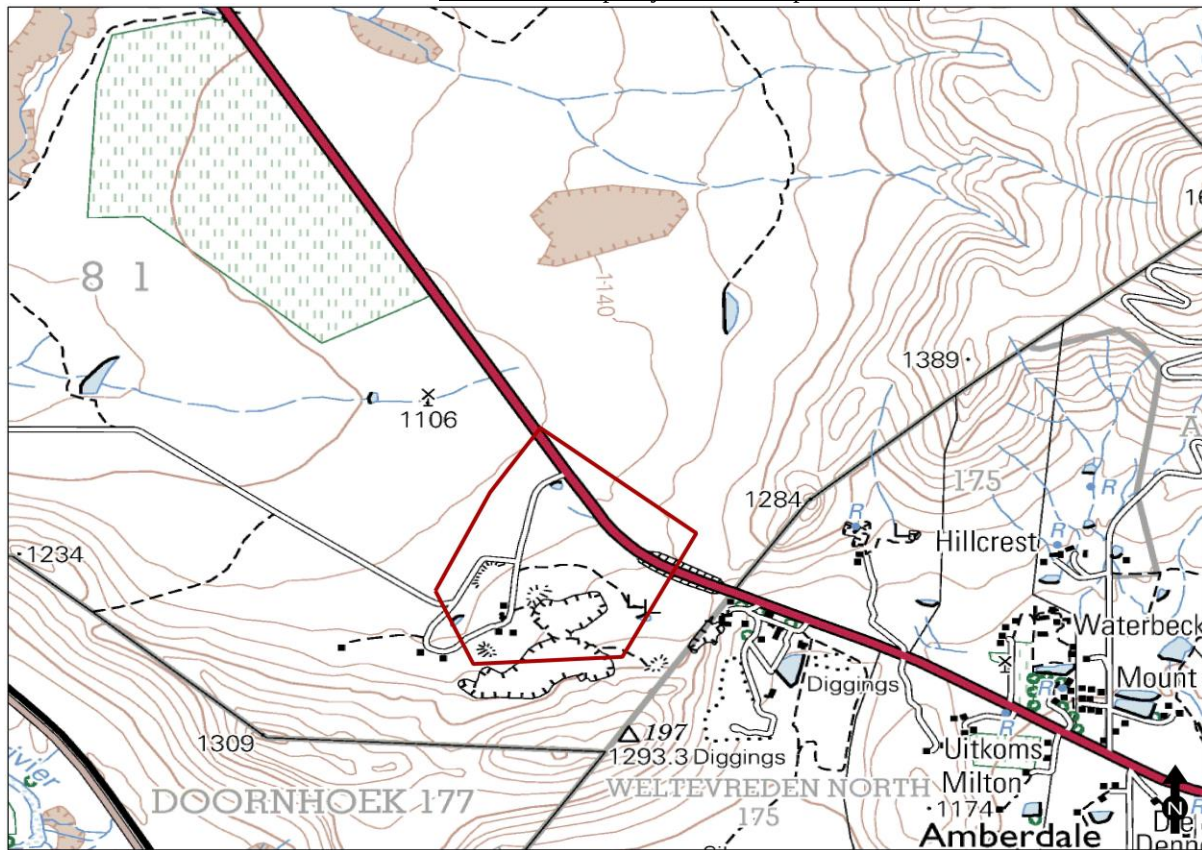


Figure 5: The survey area as indicated on the 1:50 000 topographic map 3126DD (2012)

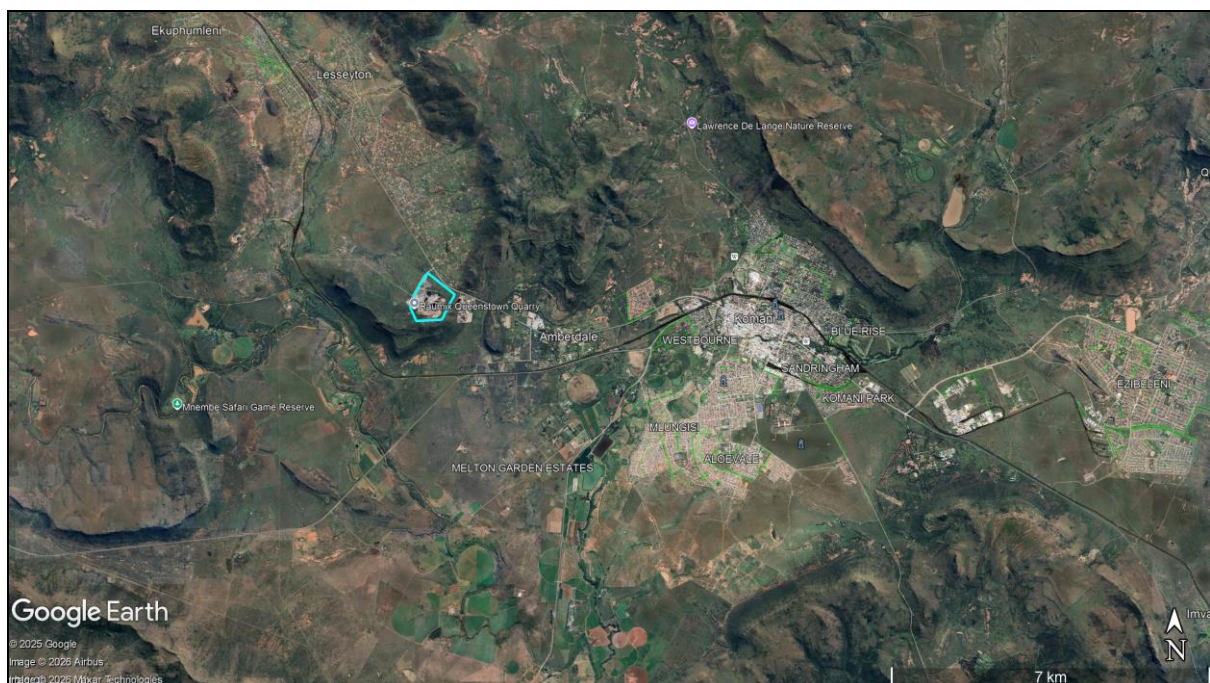


Figure 6: Survey area within general context (Google Earth Pro 2026)



Figure 7: Survey area within local context (Google Earth Pro 2026)



Figure 8: General view of the main active quarry to the east of the survey footprint



Figure 9: General view of one of the access roads to the quarry



Figure 10: General view of the processing area and central section of the mine



Figure 11: General view of the offices and associated infrastructure



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Figure 14: General view of the edge of the stockpiles in the mining footprint



Figure 15: General view of the magazine housing the explosives



Figure 16: General view of the southern slopes of the survey footprint



Figure 17: General view of the southern section of the survey footprint



Figure 18: General view of the southern section of the survey footprint

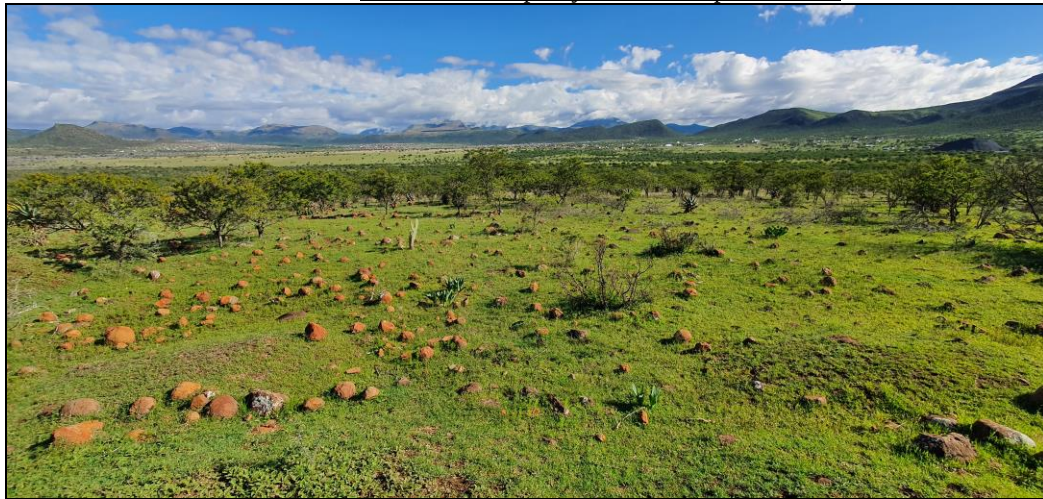


Figure 19: General view of the north western section of the survey footprint



Figure 20: General view of the section of the survey footprint (indicating surface disturbances)



Figure 21: General view of the central section of the survey footprint (access roads)



Figure 22: General view of the northern section of the survey footprint



Figure 23: General view of the western section of the survey footprint



Figure 24: General view of the eastern slopes of the survey footprint (access roads)



Figure 25: General view of the north eastern section of the survey footprint



Figure 26: General view of the north eastern section of the survey footprint

4. Proposed Project Description

Queenstown Quarry was established in the 1970's over a portion of the Farm Lesseyton No 81, within the Komani Municipal Area of the Eastern Cape. The old order mining licence (ML 15 / 96), was converted and a mining right was granted to Queenstown Quarry (Pty) Ltd in 2015. The protocol number of the mining right is 179/2015 and the file reference number is EC 30/5/1/2/2/009 MR. The right is valid until 24 March 2045 and extends over 36.2505 ha. A mining permit, with reference number EC 30/5/1/3/2/10498 MP ("10498MP"), was granted on 27 November 2020 to Komani Quarry (Pty) Ltd. The mining permit was 4.9 ha in extent and directly bordered the south-eastern boundary of the mining right. The mining permit was valid until 26 November 2025.

The proposed mining area was identified along the south, south-eastern boundary of the current mining right (EC 30/5/1/2/2/009 MR) on the same property. The aim is to include the new area into an existing mining right through a S102 process.

Therefore, Queenstown Quarry (Pty) Ltd, applied for a Section 102 (S102) amendment application to:

- update the EMPR, and
- expand the mining footprint.

The current mining right was approved over 36.2505 ha, and the Right Holder now desires to extent the mining area to 65.1985 ha.

Should the application be granted and the expansion of the mining footprint be allowed, the Queenstown Quarry project will comprise of activities that can be divided into three key phases namely the:

- Site establishment/construction phase which will involve the demarcation of the permitted mining area and required buffer no-go zones pertaining to areas of significant importance identified during the environmental impact assessment.
- Operational phase that is presently expected to entail the mining of dolerite from the approved footprint area via conventional open cast mining methods. The mining method will make use of blasting in order to loosen the hard rock; upon which the loosened material will be transported to the existing crushing and screening processing plant of Queenstown Quarry where it will be screened to various sized stockpiles, before it is sold and transported from site to clients.
- Decommissioning phase which entails the rehabilitation of the affected environment prior to the submission of a closure application to the Department of Mineral Resources (DMR). The permit holder will further be responsible for the seeding of all rehabilitated areas. Once the full mining area is rehabilitated, the mining permit holder will be required to submit a closure application to the DMR in accordance with section 43(4) of the MPRDA, 2002. The Closure Application will be submitted in terms of Regulation 62 of the MPRDA, 2002, and Government Notice 940 of NEMA, 1998 (as amended).

5. Legal Framework

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT	REFERENCE APPLIED
The Constitution of the Republic of South Africa (Act No. 108 of 1996)	
The National Environmental Management Act (Act No. 107 of 1998)	Section 24(1) Section 28(1)
The National Water Act (Act No. 36 of 1998)	Section 21 (a)(b)
Air Quality Act (Act No. 39 of 2004)	Section 21
National Forests Act, Act of 84 of 1998	-
The National Heritage Resources Act (Act No. 25 of 1999)	Section 38, 34, 35, 36
Conservation of Agricultural Resources Act (Act No. 85 of 1983)	
Mineral and Petroleum Resources Development Act (Act No. 28 of 2002)	Section 43(4)
The National Water Act (Act No. 36 of 1998);	
Mine Health and Safety Act (Act No. 29 of 1996) (MHSA)	
Biodiversity Act (Act 10 of 2004)	
Enoch Mgijima Local Municipality Integrated Development Plan (IDP)	

Table 3: Legal framework

Name of Activity (E.g. For prospecting – drill site, site camp, ablution facilities, accommodation, equipment storage, sample storage, site office, access route etc... etc... etc E.g. for mining – excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.)	Aerial extent of the activity Ha or m ²	Listed Activity Mark with an X where applicable or affected	Applicable Listing Notice (GNR 324, GNR 325, GNR 326 OR GNR 327)
Application for a Section 102 MPRDA, 2002 amendment of the mining right, as well as a Part 2 amendment of the EMPR in terms of GNR 326 Section 31.	65.1985 ha	X	GNR 983 Listing Notice 1 of 2014 (as amended) – Activity 21D
Demarcation of the extension area with visible beacons.	65.1985 ha	N/A	
Stripping and stockpiling of topsoil and/or overburden.	±19 ha	X	
Drilling and blasting of hard rock	±19 ha	X	
Excavation, loading and hauling to processing area.	±19 ha	X	
Sloping, landscaping, and rehabilitation of the affected areas upon closure of the mine	65.1985 ha	X	

Table 4: Listing activities

- Section 38 of the NHRA (Act No. 25 of 1999) stipulates that the following activities trigger a heritage survey:

Development criteria in terms of Section 38(1a-e) of the NHRA (Act No. 25 of 1999)	Yes/No
Construction of road, wall, powerline, pipeline, canal or other linear form of development or barrier exceeding 300m in length	No
Construction of bridge or similar structure exceeding 50m in length	No
Development exceeding 5000 m ² in extent	Yes
Development involving three or more existing erven or subdivisions	No
Development involving three or more erven or divisions that have been consolidated within past five years	No
Rezoning of site exceeding 10 000 m ²	No
Any other development category, public open space, squares, parks, recreation grounds	No

Table 5: Activities that trigger Section 38 of the NHRA

- Field rating system as recommended by SAHRA:

Field Rating	Grade	Significance	Recommended Mitigation
National Significance	Grade I	High significance	Conservation by SAHRA, national site nomination, mention any relevant international ranking. No alteration whatsoever without permit from SAHRA.
Provincial Significance	Grade II	High significance	Conservation by provincial heritage authority, provincial site nomination. No alteration whatsoever without permit from provincial heritage authority.
Local Significance	Grade III-A	High significance	Conservation by local authority, no alteration whatsoever without permit from provincial heritage authority. Mitigation as part of development process not advised.

Local Significance	Grade III-B	High significance	Conservation by local authority, no external alteration without permit from provincial heritage authority. Could be mitigated and (part) retained as heritage register site.
Generally Protected A	Grade IV-A	High/medium significance	Conservation by local authority. Site should be mitigated before destruction. Destruction permit required from provincial heritage authority.
Generally Protected B	Grade IV-B	Medium significance	Conservation by local authority. Site should be recorded before destruction. Destruction permit required from provincial heritage authority.
Generally Protected C	Grade IV-C	Low significance	Conservation by local authority. Site has been sufficiently recorded in the Phase 1 HIA. It requires no further recording before destruction. Destruction permit required from provincial heritage authority.

Table 6: Field rating system to determine site significance

- Heritage resources have lasting value in their own right and provide evidence of the origins of South African society and they are valuable, finite, non-renewable and irreplaceable.
- All archaeological remains, features, structures and artefacts older than 100 years and historic structures older than 60 years are protected by the relevant legislation, in this case the **National Heritage Resources Act (NHRA) (Act No. 25 of 1999, Section 34 & 35)**. The Act makes an archaeological impact assessment as part of an EIA and EMPR mandatory (see **Section 38**). No archaeological artefact, assemblage or settlement (site) may be moved or destroyed without the necessary approval from the **South African Heritage Resources Agency (SAHRA)**. Full cognisance is taken of this Act in making recommendations in this report.
- Cognisance will also be taken of the Mineral and Petroleum Resources Development Act (Act No 28 of 2002) and the National Environmental Management Act (Act No 107 of 1998) when making any recommendations.
- Human remains older than 60 years are protected by the NHRA, with reference to Section 36. Human remains that are less than 60 years old are protected by the Regulations Relating to the Management of Human Remains (GNR 363 of 22 May 2013) made in terms of the National Health Act No. 61 of 2003 as well as local Ordinances and regulations.
- With reference to the evaluation of sites, the certainty of prediction is definite, unless stated otherwise.
- The guidelines as provided by the NHRA (Act No. 25 of 1999) in Section 3, with special reference to subsection 3, and the Australian ICOMOS (International Council on Monuments and Sites) Charter (also known as the Burra Charter) are used when determining the cultural significance or other special value of archaeological or historical sites.
- A copy of this report will be submitted on SAHRIS as stipulated by the National Heritage Resources Act (NHRA) (Act No. 25 of 1999), Section 38 (especially subsection 4) and the relevant Provincial Heritage Resources Authority (PHRA).
- Note that the final decision for the approval of permits, or the removal or destruction of sites, structures and artefacts identified in this report, rests with the SAHRA (or relevant PHRA).

6. Study Approach/Methodology

Geographical information (KML shapefiles) on the proposed mining activities was supplied by Greenmind Environmental (Pty) Ltd. The most up-to-date Google Earth images and topographic maps were used to indicate the survey area. Topographic maps were sources from the Surveyor General. Please note that all maps are orientated with north facing upwards (unless stated otherwise).

The strategy during this survey was to survey most of the footprint that form part of the application. However, certain areas were restricted by active mining and some areas were surveyed by detailed pedestrian (foot) survey techniques. The southern and eastern sections are characterised by extreme slopes that form part of the mountain range that form part of the periphery of the survey footprint.

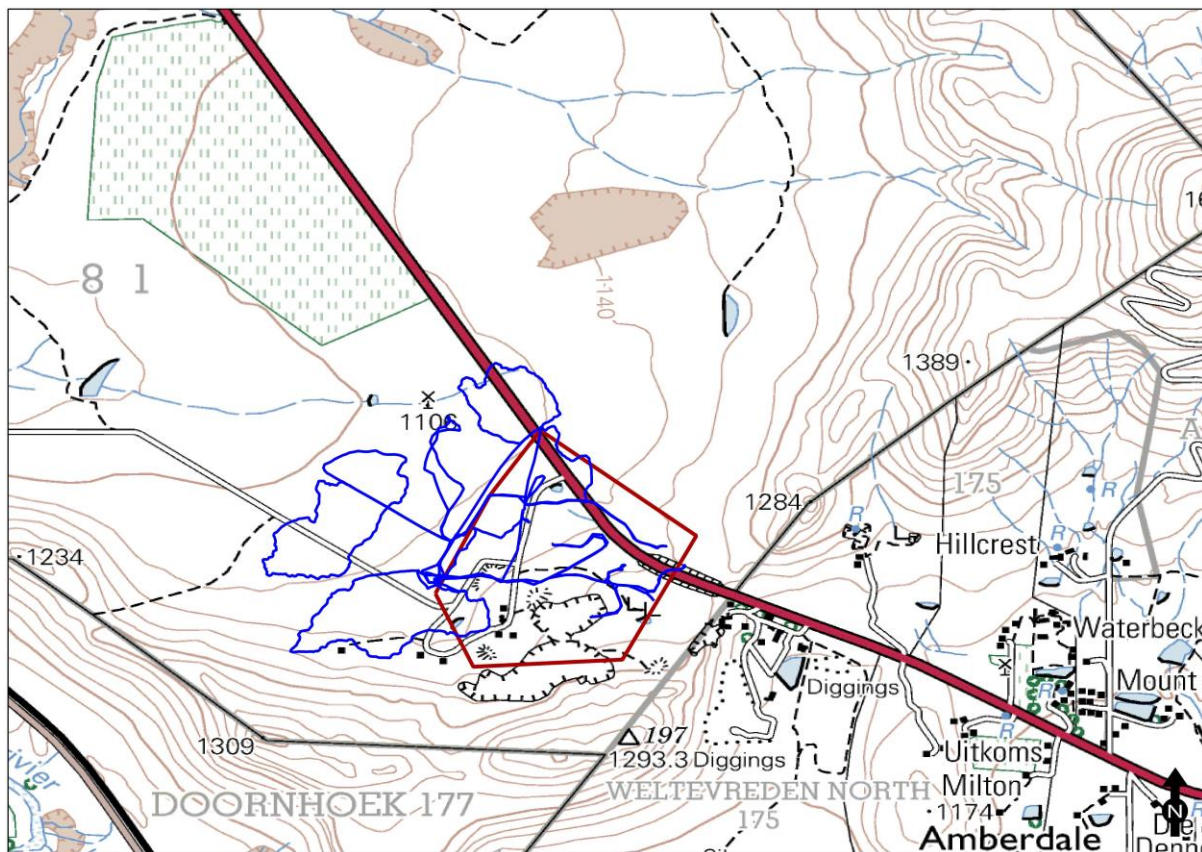


Figure 27: Recorded survey tracks for the project

6.1 Review of existing information/data

Additional information on the cultural heritage of the area was sourced from the following records:

- National Mapping Project by SAHRA (which lists heritage impact assessment reports submitted for South Africa);
- Environmental Potential Atlas (ENPAT);

- Online SAHRIS database;
- National Automated Archival Information retrieval System (NAAIRS);
- Maps and information documents supplied by the client; and
- Several heritage surveys have been conducted in the vicinity of the survey area (published and unpublished).

No archaeological Cultural Resources Management (CRM) reports are recorded in the SAHRA 2009 Mapping Project Database (MPD) situated near or within the survey footprint. Although several heritage surveys and research projects have been completed in the general vicinity of the project footprint during the last few years (registered on the SAHRIS database), no cultural heritage sites were recorded inside the current survey footprint (Booth 2012; Derricourt 1977; Dreyer & Looek 2014; Huffman 2011; Van Ryneveld 2011a, 2011b, 2012, 2014, 2015, 2016).

Five declared Provincial Heritage Sites (PHS) are recorded on the SAHRA online database for Queenstown in the Eastern Cape (SAHRIS 2022) which include the following:

- PHS 133 : SAHRA Identifier 9/2/077/0003 - Hexagon, Queenstown
- PHS 134 : SAHRA Identifier 9/2/077/0008 - Old municipal market, 5 Hexagon Str., Queenstown
- PHS 135 : SAHRA Identifier 9/2/077/0005 - Town Hall, Cathcart Rd., Queenstown
- PHS 136 : SAHRA Identifier 9/2/077/0008 - Museum, Naude Str., Queenstown
- PHS 137 : SAHRA Identifier 9/2/077/0009 - Queens College, Berry Str., Queenstown

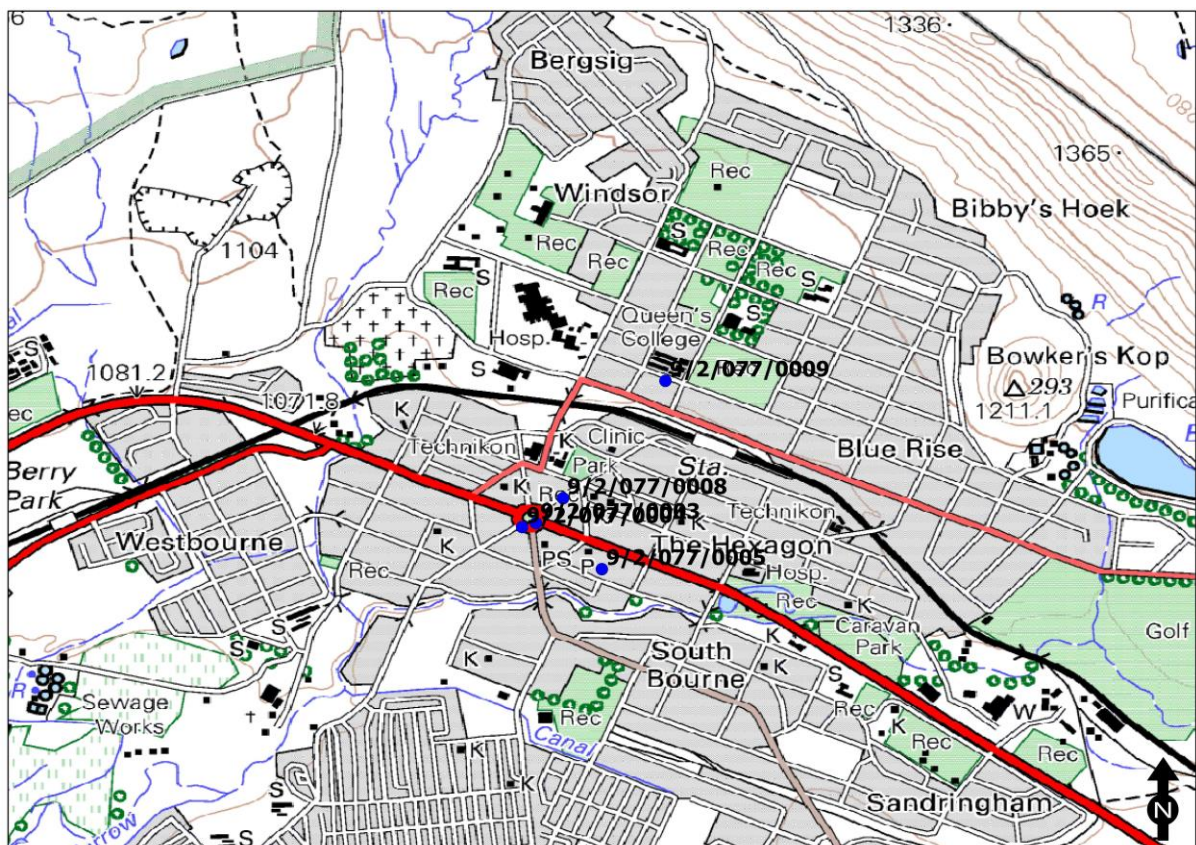


Figure 28: The location of the five declared Provincial Heritage Sites (PHS) in central Queenstown

All the surveys conducted in the region seem to confirm that no Early Stone Age (ESA) sites occur in the general area of the survey footprint. Middle Stone Age (MSA) sites to a lesser extent and Later Stone Age (LSA) deposits seem to dominate, and are characteristic of the greater Queenstown area at sites such as Rathwick in Queenstown. MSA and LSA artefacts were also identified along proposed bulk service lines, but with these in poorer contexts than at the Rathwick site itself. In Queenstown and surrounds significant MSA deposits were reported on from Xashimba. A number of MSA and LSA lithic occurrences, of varying significance were identified during the Penhoek Pass survey. A LSA lithic occurrence was reported on from the Dubeni area MSA deposits in proximity to the Lesseyton mining application site. Recorded Iron Age deposits are much scarcer with sites reported on from the Dubeni area.

An extensive archaeological survey was conducted by Derricourt focussing on the erstwhile homelands known as the Transkei and Ciskei in the Eastern Cape in the early 1970s. He recorded a number of open sites and caves associated with Early, Middle and Later Stone deposits as well as rock art. Paintings do not occur in the coastward side of the Amathole Range and is mainly located in the midlands and along the Kei River. Also paintings are known along the lower Fish River. Almost no rock art is recorded in the Tsolo and Umtata districts (Derricourt 1975:59).



Figure 29: Archaeological sites as recorded by Derricourt (1975)

Queenstown (Komani) was established in 1853 and is currently the commercial, administrative, and educational centre of the surrounding farming district. Queenstown was founded in early 1853 under the direction of Sir George Cathcart, who named the settlement, and then fort, after Queen Victoria. Work on its railway connection to East London on the coast was begun by the Cape government of John Molteno in 1876, and the line was officially opened on 19 May 1880. Also note that farms in the area were already surveyed by the Surveyor General's Office in 1856 (see Addendum 3).

Ethnography

The term Xhosa has often been erroneously used to refer to all the so-called Cape Nguni groups. Although often used as a linguistic term Xhosa also include groups such as Gcaleke,

Rarabe, Mpondo, Mpondomise, Thembu, Cwera, Xesibe, Qwathi, Mpinge, Fingo, Nhangwini and Hlangwini (and others) (see Jackson 1975). It would seem that the region around Queenstown is historically been settled by the amaThembu people (Van Warmelo 1935).

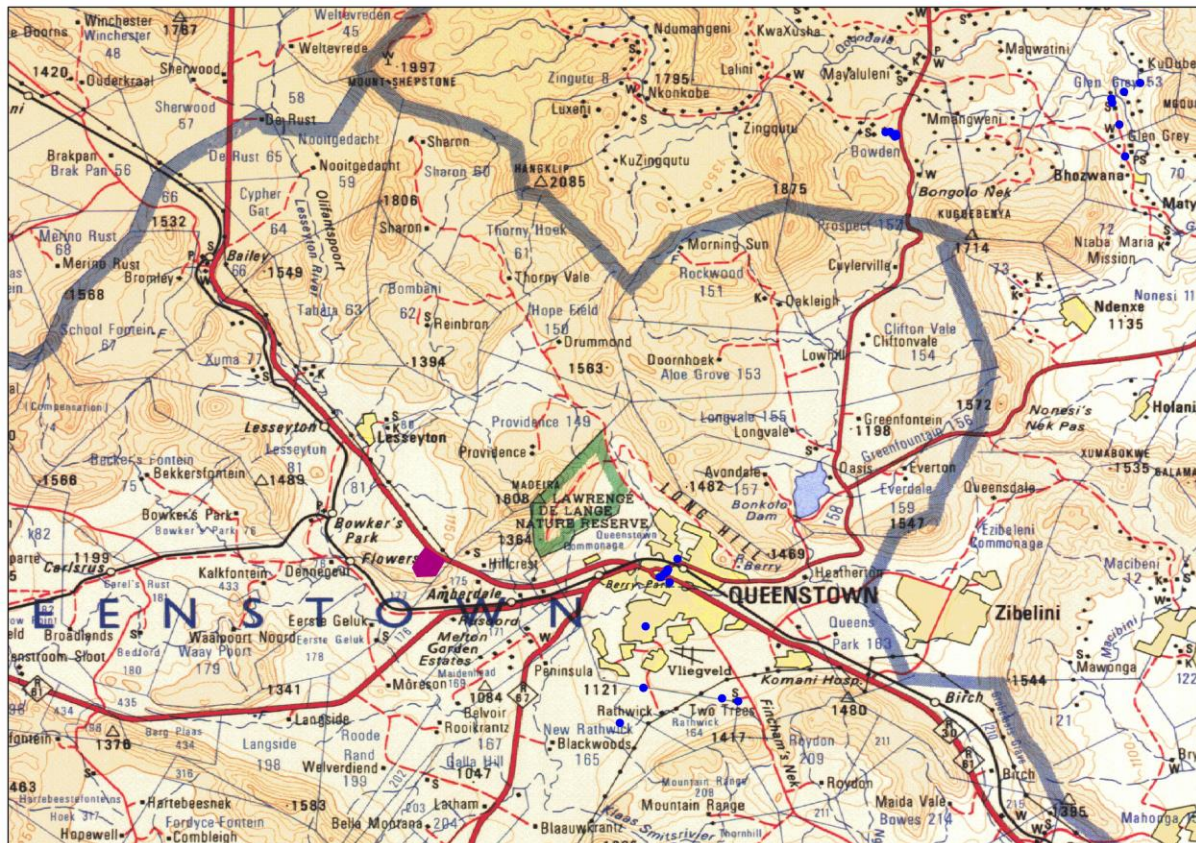


Figure 30: Recorded sites near the survey footprint as recorded on SAHRIS (as at April 2022)



Figure 31: Intelligence map of the general survey (Lesseyton) location east of Queenstown in 1901 (after Casgrain)

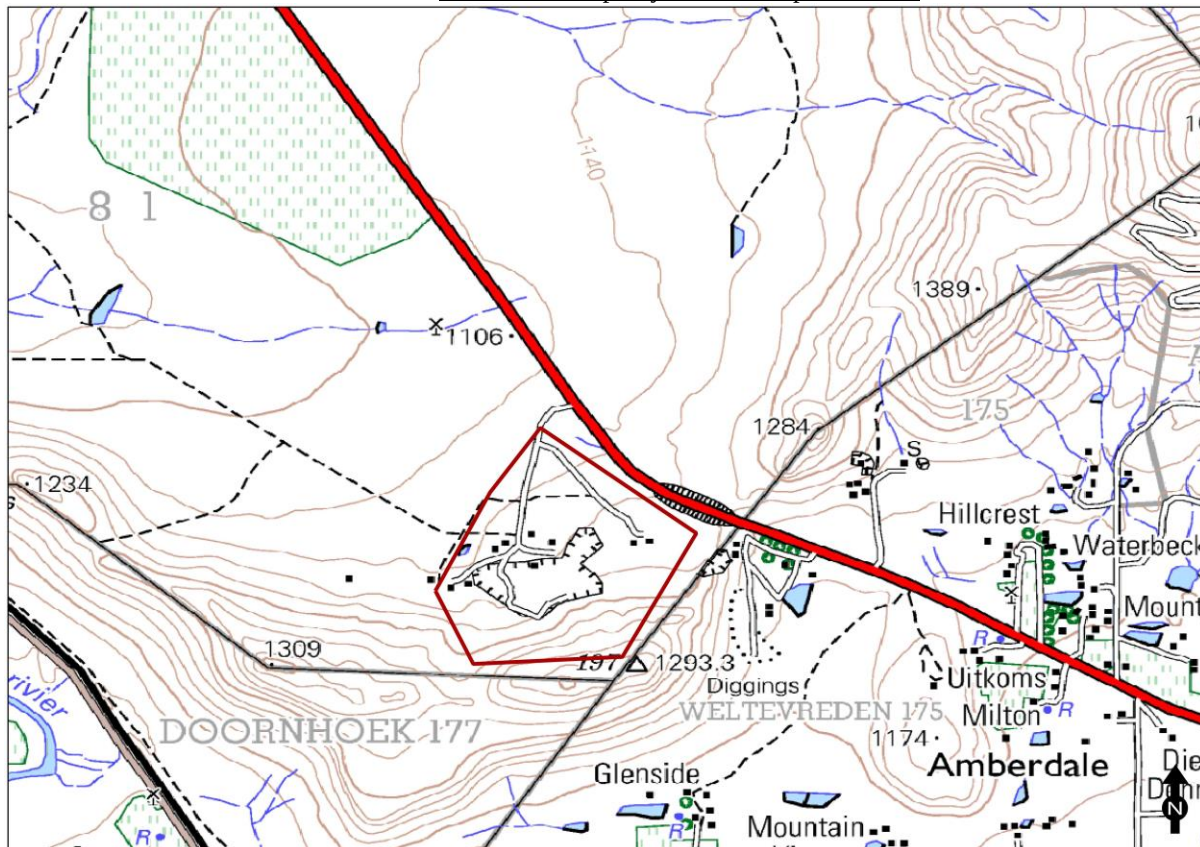


Figure 32: The survey area as indicated on the 1:50 000 topographic map 3126DD (2001)

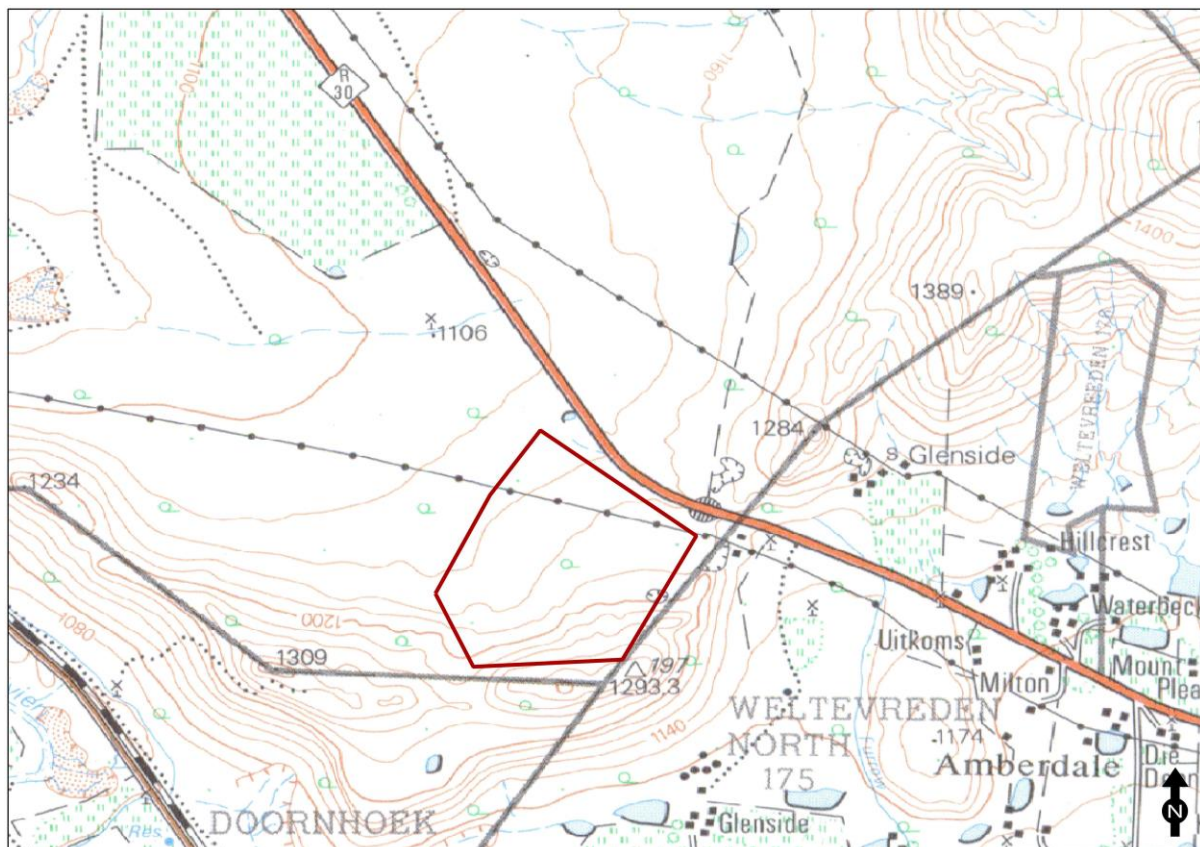


Figure 33: The survey area as indicated on the 1:50 000 topographic map 3126DD (1982)

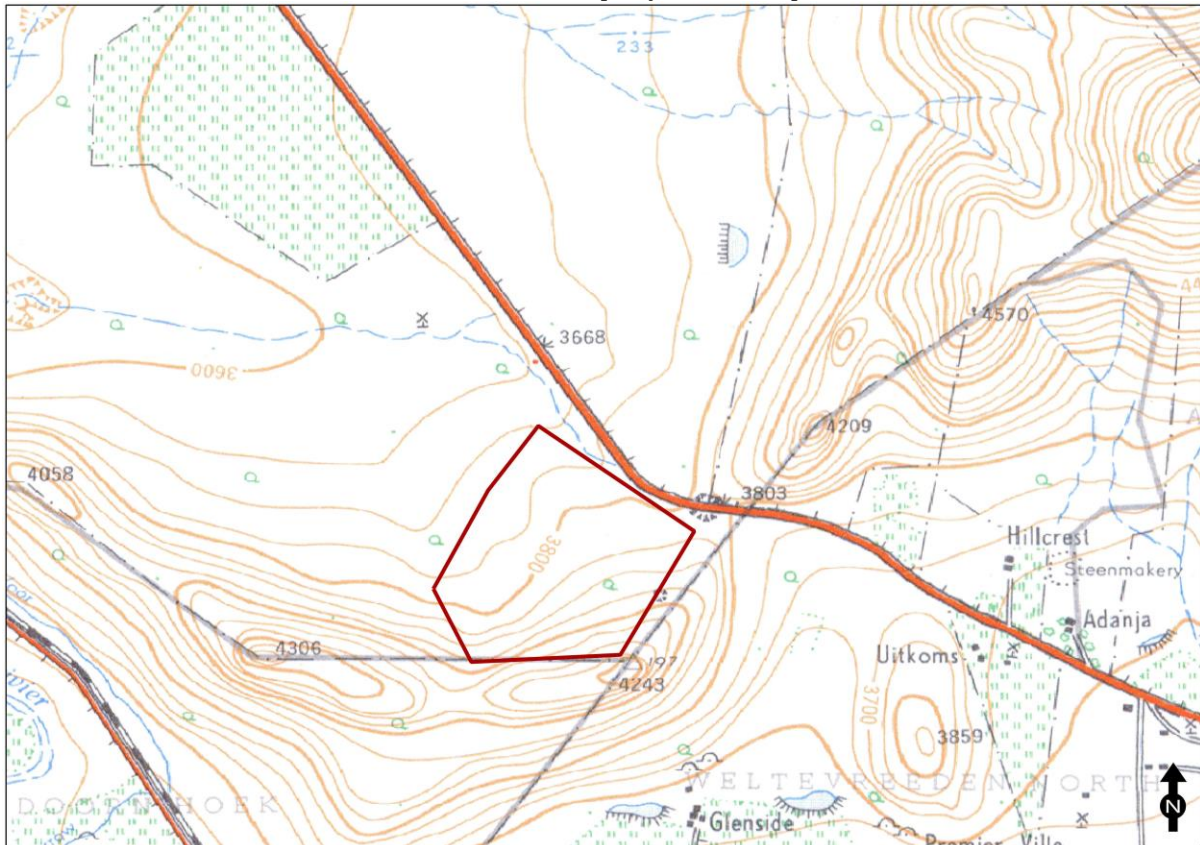


Figure 34: The survey area as indicated on the 1:50 000 topographic map 3126DD (1958)

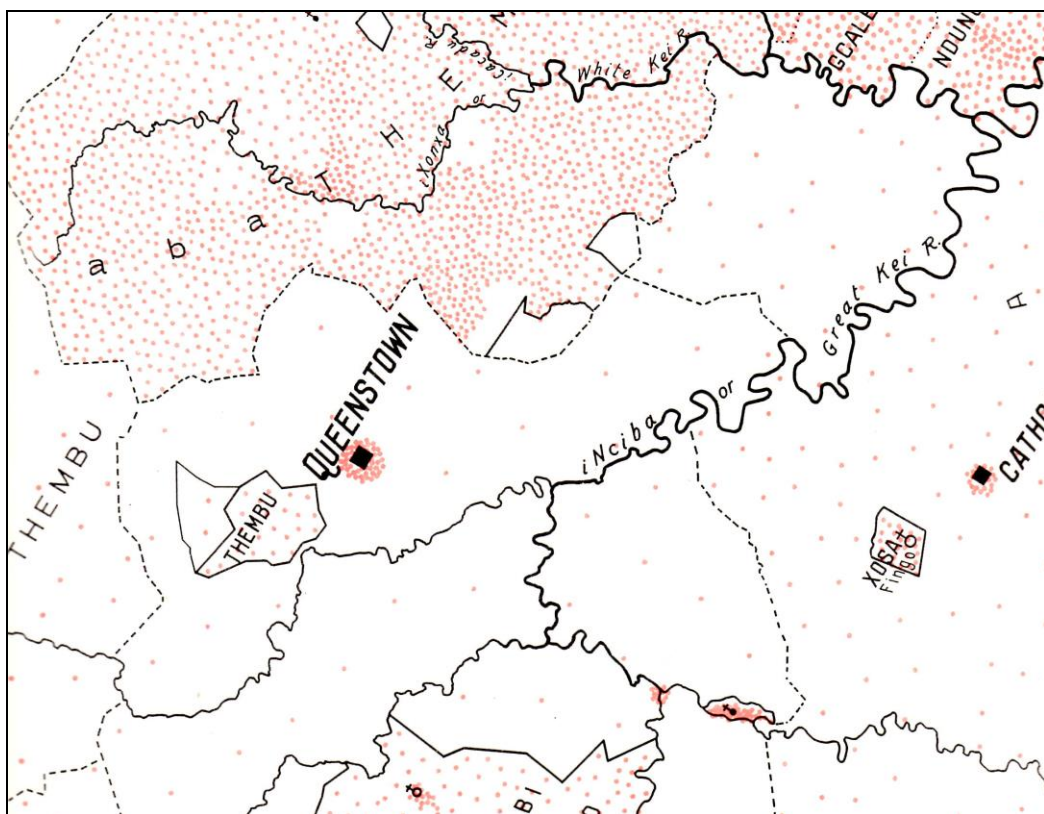


Figure 35: Ethnographic map representing the various amaThembu groups living in the survey area (after Van Warmelo 1935)

6.2 Palaeontological sensitivity



Figure 36: Palaeontological sensitivity zones as indicated for the survey footprint (SAHRIS 2022)

Colour	Sensitivity	Required Action
RED	VERY HIGH	Field assessment and protocol for finds is required
ORANGE/YELLOW	HIGH	Desktop study is required and based on the outcome of the desktop study, a field assessment is likely
GREEN	MODERATE	Desktop study is required
BLUE	LOW	No palaeontological studies are required however a protocol for finds is required
GREY	INSIGNIFICANT/ZERO	No palaeontological studies are required
WHITE/CLEAR	UNKNOWN	Will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map.

The palaeontological sensitivity map was extracted from the SAHRIS database and indicates a grey (Insignificant/zero) sensitivity. As a result no palaeontological study will be required for the survey footprint.

6.3 Site visits

The field survey was conducted on 14 December 2021.

6.4 Social interaction and current inhabitants

The mine manager and other employees were consulted during the survey to locate known heritage sites in the region.

6.5 Public Consultation and Stakeholder Engagement

During the initial public participation process the stakeholders and I&AP's were informed of the project by means of background information documents/pamphlets that were sent directly to the contact persons. An advertisement was placed in The Rep, and three (two English and

one Xhosa) on-site notices were placed at conspicuous places. A 30-days commenting period was allowed which expired on 12 April 2019. In accordance with the timeframes stipulated in the EIA Regulations, 2014 (as amended by GNR 326 effective 7 April 2017) the Draft Basic Assessment Report was compiled and distributed for perusal by the I&AP's and stakeholders. A 30-day commenting period, ending 20 May 2019, was allowed for perusal of the documentation and submission of comments. No additional comments were received on the DBAR that could be incorporated into the Final Basic Assessment Report (FBAR).

6.6 Assumptions, restrictions, gaps and limitations

No severe physical restrictions were encountered as the survey area was generally accessible. However, some of the mining areas were inaccessible and were therefore excluded from the survey. Also note that

6.7 Methodology for assessment of potential impacts

All impacts identified during the EIA stage of the study will be classified in terms of their significance. Issues were assessed in terms of the following criteria:

- The **nature**, a description of what causes the effect, what will be affected and how it will be affected;
- The **physical extent**, wherein it is indicated whether:
 - 1 - the impact will be limited to the site;
 - 2 - the impact will be limited to the local area;
 - 3 - the impact will be limited to the region;
 - 4 - the impact will be national; or
 - 5 - the impact will be international.
- The **duration**, wherein it is indicated whether the lifetime of the impact will be:
 - 1 - of a very short duration (0–1 years);
 - 2 - of a short duration (2-5 years);
 - 3 - of a medium-term (5–15 years);
 - 4 - of a long term (> 15 years); or
 - 5 - permanent.
- The **magnitude** of impact, quantified on a scale from 0-10, where a score is assigned:
 - 0 - small and will have no effect;
 - 2 - minor and will not result in an impact;
 - 4 - low and will cause a slight impact;
 - 6 - moderate and will result in processes continuing but in a modified way;
 - 8 - high, (processes are altered to the extent that they temporarily cease); or
 - 10 - very high and results in complete destruction of patterns and permanent cessation of processes;
- The **probability** of occurrence, which describes the likelihood of the impact actually occurring and is estimated on a scale where:
 - 1 - very improbable (probably will not happen);
 - 2 - improbable (some possibility, but low likelihood);
 - 3 - probable (distinct possibility);
 - 4 - highly probable (most likely); or
 - 5 - definite (impact will occur regardless of any prevention measures);
- The **significance**, which is determined through a synthesis of the characteristics described above (refer formula below) and can be assessed as low, medium or high;

- The **status**, which is described as either positive, negative or neutral;
 - The degree to which the impact can be reversed;
 - The degree to which the impact may cause irreplaceable loss of resources; and
 - The degree to which the impact can be mitigated.

The significance is determined by combining the criteria in the following formula:

$S = (E+D+M) \times P$; where:

S = Significance weighting

E = Extent

D = Duration

M = Magnitude

P = Probability

Points	Significance Weighting	Discussion
< 30 points	Low	Where this impact would not have a direct influence on the decision to develop in the area.
31-60 point	Medium	Where the impact could influence the decision to develop in the area unless it is effectively mitigated.
> 60 points	High	Where the impact must have an influence on the decision process to develop in the area.

7. The Cultural Heritage Sites

7.1. Isolated occurrences

Isolated occurrences are artefacts or small features recorded on the surface with no contextual information. No other associated material culture (in the form of structures or deposits) was noted that might provide any further context. This can be the result of various impacts and environmental factors such as erosion and modern developments. By contrast archaeological sites are often complex sites with evidence of archaeological deposit and various interrelated features such as complex deposits, stone walls and middens. However, these isolated occurrences are seen as remains of erstwhile complex or larger sites and they therefore provide a broad indication of possible types of sites or structures that might be expected to occur or have occurred in the survey footprint.

Throughout the survey footprint no isolated finds were recorded.

7.2 Heritage sites

No heritage sites, structures, features or artefacts (both Stone Age and Iron Age) were recorded during the survey.

8. Locations and Evaluation of Sites

None

9. Management Measures

Heritage sites are fixed features in the environment, occurring within specific spatial confines. Any impact upon them is permanent and non-reversible. Those resources that

cannot be avoided and that are directly impacted by the proposed development can be excavated/recorded and a management plan can be developed for future action. Those sites that are not impacted on can be written into the management plan, whence they can be avoided or cared for in the future.

9.1 Objectives

- Protection of archaeological, historical and any other site or land considered being of cultural value within the project boundary against vandalism, destruction and theft.
- The preservation and appropriate management of new discoveries in accordance with the NHRA, should these be discovered during construction activities

The following shall apply:

- Known sites should be clearly marked in order that they can be avoided during construction activities.
- The contractors and workers should be notified that archaeological sites might be exposed during the construction activities.
- Should any heritage artefacts be exposed during excavation, work on the area where the artefacts were discovered, shall cease immediately and the Environmental Control Officer shall be notified as soon as possible;
- All discoveries shall be reported immediately to a heritage practitioner so that an investigation and evaluation of the finds can be made. Acting upon advice from these specialists, the Environmental Control Officer will advise the necessary actions to be taken;
- Under no circumstances shall any artefacts be removed, destroyed or interfered with by anyone on the site; and
- Contractors and workers shall be advised of the penalties associated with the unlawful removal of cultural, historical, archaeological or palaeontological artefacts, as set out in the NHRA (Act No. 25 of 1999), Section 51. (1).

9.2 Control

In order to achieve this, the following should be in place:

- A person or entity, e.g. the Environmental Control Officer, should be tasked to take responsibility for the heritage sites and should be held accountable for any damage.
- Known sites should be located and isolated, e.g. by fencing them off. All construction workers should be informed that these are no-go areas, unless accompanied by the individual or persons representing the Environmental Control Officer as identified above.
- In areas where the vegetation is threatening the heritage sites, e.g. growing trees pushing walls over, it should be removed, but only after permission for the methods proposed has been granted by SAHRA. A heritage official should be part of the team executing these measures.

10. Recommendations and Conclusions

No archaeological (both Stone Age and Iron Age) artefacts, assemblages, features, structures or settlements were recorded during the survey of the project footprint. It is well known that Iron Age, especially Late Iron Age stone-walled settlements do not usually occur on steep mountainous slopes.

It is therefore recommended, from a cultural heritage perspective that the proposed mining activities may proceed. No further mitigation measures are required.

Also, please note:

Archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during development activities, such activities should be halted, and a university or museum notified in order for an investigation and evaluation of the find(s) to take place (**cf. NHRA (Act No. 25 of 1999)**, Section 36 (6)).

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Addendum 1: Archaeological and Historical Sequence

The table provides a general overview of the chronological sequence of the archaeological periods in South Africa.

PERIOD	APPROXIMATE DATES
Earlier Stone Age	more than 2 million years ago to >200 000 years ago
Middle Stone Age	<300 000 years ago to >20 000 years ago
Later Stone Age (Includes hunter-gatherer rock art)	<40 000 years ago up to historical times in certain areas
Early Iron Age	c. AD 200 - c. AD 900
Middle Iron Age	c. AD 900 – c. AD 1300
Late Iron Age (Stonewalled sites)	c. AD 1300 - c. AD 1840 (c. AD 1640 - c. AD 1840)

< = less than; > = greater than

Archaeological Context**Stone Age Sequence**

Concentrations of Early Stone Age (ESA) sites are usually present on the flood-plains of perennial rivers and may date to over 2 million years ago. These ESA open sites may contain scatters of stone tools and manufacturing debris and secondly, large concentrated deposits ranging from pebble tool choppers to core tools such as handaxes and cleavers. The earliest hominins who made these stone tools, probably not always actively hunted, instead relying on the opportunistic scavenging of meat from carnivore kill sites.

Middle Stone Age (MSA) sites also occur on flood plains, but are also associated with caves and rock shelters (overhangs). Sites usually consist of large concentrations of knapped stone flakes such as scrapers, points and blades and associated manufacturing debris. Tools may have been hafted but organic materials, such as those used in hafting, seldom preserve. Limited drive-hunting activities are also associated with this period.

Sites dating to the Later Stone Age (LSA) are better preserved in rock shelters, although open sites with scatters of mainly stone tools can occur. Well-protected deposits in shelters allow for stable conditions that result in the preservation of organic materials such as wood, bone, hearths, ostrich eggshell beads and even bedding material. By using San (Bushman) ethnographic data a better understanding of this period is possible. South African rock art is also associated with the LSA.

The following chronological sequence was recently established by prominent Stone Age archaeologists (Lombard et al 2012):

Later Stone Age

- Age Range: recent to 20-40 thousand years ago

- General characteristics: expect variability between assemblages, a wide range of formal tools, particularly scrapers (microlithic and macrolithic), backed artefacts, evidence of hafted stone and bone tools, borers, bored stones, upper and lower grindstones, grooved stones, ostrich eggshell (OES) beads and other ornaments, undecorated/decorated OES fragments, flasks/flask fragments, bone tools (sometimes with decoration), fishing equipment, rock art, and ceramics in the final phase.
 - **Ceramic or Final Later Stone Age**
 - Generally < 2 thousand years ago
 - MIS 1
 - Contemporaneous with, and broadly similar to, final Later Stone Age, but includes ceramics
 - Economy may be associated with hunter-gatherers or herders

Technological characteristics

- Stone tool assemblages are often microlithic
- In some areas they are dominated by long end scrapers and few backed microliths; in others formal tools are absent or rare
- Grindstones are common, ground stone artefacts, stone bowls and boat-shaped grinding grooves may occur
- Includes grit- or grass-tempered pottery
- Ceramics can be coarse, or well-fired and thin-walled; some times with lugs, spouts and conical bases; sometimes with decoration; sometimes shaped as bowls
- Ochre is common
- Ostrich eggshell (OES) is common
- Metal objects, glass beads and glass artefacts also occur

- **Final Later Stone Age**
 - 100 – 4000 years ago
 - MIS 1
 - Hunter-gatherer economy

Technological characteristics

- Much variability can be expected
- Variants include macrolithic (similar to Smithfield [Sampson 1974]) and/or microlithic (similar to Wilton) assemblages
- Assemblages are mostly informal (Smithfield)
- Often characterised by large untrimmed flakes (Smithfield)
- Sometimes microlithic with scrapers, blades and bladelets, backed tools and adzes (Wilton-like)
- Worked bone is common
- OES is common
- Ochre is common
- Iron objects are rare
- Ceramics are absent

- **Wilton**
 - 4000 – 8000 years ago

- MIS 1
- At some sites continues into the final Later Stone Age as regional variants (e.g. Wilton Large Rock Shelter and Cave James)

Technological characteristics

- Fully developed microlithic tradition with numerous formal tools
 - Highly standardised backed microliths and small convex scrapers (for definition of standardisation see Eerkens & Bettinger 2001)
 - OES is common
 - Ochre is common
 - Bone, shell and wooden artefacts occur
- **Oakhurst**
 - 7000 – 12 000 years ago
 - MIS 1
 - Includes Albany, Lockshoek and Kuruman as regional variants

Technological characteristics

- Flake based industry
 - Characterised by round, end, and D-shaped scrapers and adzes
 - Wide range of polished bone tools
 - Few or no microliths
- **Robberg**
 - 12 000 to 18 000 years ago
 - MIS 2

Technological characteristics

- Characterised by systematic bladelet (<26mm) production and the occurrence of outils ecaillés or scaled pieces
 - Significant numbers of unretouched bladelets and bladelet cores
 - Few formal tools
 - Some sites have significant macrolithic elements
- **Early Late Stone Age**
 - 18 000 – 40 000 years ago
 - MIS 2-3
 - Informal designation
 - Also known as transitional MSA-LSA
 - Overlapping in time with final Middle Stone Age

Technological Characteristics

- Characterised by unstandardised, often microlithic, pieces and includes the bipolar technique
- Described at some sites, but not always clear whether assemblages represent a real archaeological phase or a mixture of LSA/MSA artefacts

Middle Stone Age

- Age Range: 20 000 – 30 000 years ago
- General characteristics: Levallois or prepared core techniques (for definitions see Van Peer 1992; Boeda 1995; Pleurdeau 2005) occur in which triangular flakes with convergent dorsal scars, often with faceted striking platforms, are produced. Discoidal systems (for definition see Inizan et al. 1999) and intentional blade production from volumetric cores (for definition see Pleurdeau 2005) also occur; formal tools may include unifacially and bifacially retouched points, backed artefacts, scrapers, and denticulates (for definition see Bisson 2000); evidence of hafted tools; occasionally includes marine shell beads, bone points, engraved ochre nodules, engraved OES fragments, engraved bone fragments, and grindstones.
- In the sequence below we highlight differences or characteristics that may be used to refine interpretations depending on context.
- **Final Middle Stone Age**
 - 20 000 – 40 000 years ago
 - MIS 3
 - Informal designation partly based on the Sibudu sequence

Technological characteristics

- Characterised by high regional variability that may include, e.g. bifacial tools, bifacially retouched points, hollow-based points
- Triangular flake and blade industries (similar to Strathalan and Melikane)
- Small bifacial and unifacial points (similar to Sibudu and Rose Cottage Cave)
- Sibudu point characteristics: short, stout, lighter in mass compared to points from the Sibudu technocomplex, but heavier than those from the Still Bay
- Can be microlithic
- Can include bipolar technology
- Could include backed geometric shapes such as segments, as well as side scrapers

Sibudu

- 45 000 – 58 000 years ago
- MIS 3
- Previously published as informal late Middle Stone Age and post-Howieson's Poort at Sibudu
- Formerly known post-Howieson's Poort, MSA 3 generally, and MSA III at Klasies River

Technological characteristics

- Most points are produced using Levallois technique
- Most formal retouch aimed at producing unifacial points
- Sibudu unifacial point (type fossil) characteristics: faceted platform; shape is somewhat elongated with a mean length of 43.9 mm), a mean breadth of 26.8 mm and mean thickness of 8.8 mm (L/B ratio 1.7); their mean mass is 11.8 g (Mohapi, 2012)
- Some plain butts
- Rare bifacially retouched points
- Some side scrapers are present
- Backed pieces are rare

- **Howieson's Poort**

- 58 000 – 66 000 years ago
- MIS 3-4

Technological characteristics

- Characterised by blade technology
- Includes small (<4 cm) backed tools, e.g. segments, scrapers, trapezes and backed blades
- Some denticulate blades
- Pointed forms are rare or absent

- **Still Bay**

- 70 000 – 77 000 years ago
- MIS 4-5a

Technological characteristics

- Characterised by thin (<10 mm), bifacially worked foliate or lanceolate points
- Semi-circular or wide-angled pointed butts
- Could include blades and finely serrated points (Lombard et al. 2010)

- **Pre-Still Bay**

- 72 000 – 96 000 years ago
- MIS 4-5

Technological characteristics

- Characteristics currently being determined / studied

- **Mossel Bay**

- 77 000 to —105 000 years ago
- MIS 5a-4
- Also known as MSA II at Klasies River or MSA 2b generally

Technological characteristics

- Characterised by recurrent unipolar Levallois point and blade reduction
- Products have straight profiles; percussion bulbs are prominent and often splintered or ring-cracked
- Formal retouch is infrequent and restricted to sharpening the tip or shaping the butt

- **Klasies River**

- 105 000 to —130 000 years ago
- MIS 5d-5e
- Also referred to as MSA I at Klasies River or MSA 2a generally

Technological characteristics

- Recurrent blade and convergent flake production
- End products are elongated and relatively thin, often with curved profiles
- Platforms are often small with diffused bulbs
- Low frequencies of retouch
- Denticulate pieces

- **Early Middle Stone Age**

- Suggested age MIS 6 to MIS 8 (130 000 to —300 000 years ago)
- Informal designation

Technological characteristics

- This phase needs future clarification regarding the designation of cultural material and sequencing
- Includes discoidal and Levallois flake technologies, blades from volumetric cores and a generalised toolkit

- **Earlier Stone Age**

- Age range: >200 000 to 2 000 000 years ago
- General characteristics: early stages include simple flakes struck from cobbles, core and pebble tools; later stages include intentionally shaped handaxes, cleavers and picks; final or transitional stages have tools that are smaller than the preceding stages and include large blades.
- In the sequence below we highlight differences or characteristics that may be used to refine interpretations depending on context.

- **ESA-MSA transition**

- 200 to —600 thousand years ago
- MIS 7-15

Technological characteristics

- Described at some sites as Fauresmith or Sangoan
- Relationships, descriptions, issues of mixing and ages yet to be clarified
- Fauresmith assemblages have large blades, points, Levallois technology, and the remaining ESA components have small bifaces
- The Sangoan contains small bifaces (<100 mm), picks, heavy and light-duty denticulated and notched scrapers
- The Sangoan is less well described than the Fauresmith

- **Acheulean**

- 300 thousand to —1.5 million years ago
- MIS 8-50

Technological characteristics

- Bifacially worked handaxes and cleavers, large flakes > 10 cm
- Some flakes with deliberate retouch, sometimes classified as scrapers
- Gives impression of being deliberately shaped, but could indicate result of knapping strategy
- Sometimes shows core preparation
- Generally found in disturbed open-air locations

- **Oldowan**

- 1.5 to >2 million years ago
- MIS 50-75

Technological characteristics

- Cobble, core or flake tools with little retouch and no flaking to predetermined patterns
- Hammerstones, manuports, cores
- Polished bone fragments/tools

Iron Age Sequence

In the northern regions of South Africa at least three settlement phases have been distinguished for early prehistoric agropastoralist settlements during the **Early Iron Age** (EIA). Diagnostic pottery assemblages can be used to infer group identities and to trace movements across the landscape. The first phase of the Early Iron Age, known as **Happy Rest** (named after the site where the ceramics were first identified), is representative of the Western Stream of migrations, and dates to AD 400 - AD 600. The second phase of **Diamant** is dated to AD 600 - AD 900 and was first recognized at the eponymous site of Diamant in the western Waterberg. The third phase, characterised by herringbone-decorated pottery of the **Eiland** tradition, is regarded as the final expression of the Early Iron Age (EIA) and occurs over large parts of the North West Province, Northern Province, Gauteng and Mpumalanga. This phase has been dated to about AD 900 - AD 1200. These sites are usually located on low-lying spurs close to water.

Diagnostic pottery assemblages are mainly used to construct a temporal-spatial framework which can be used to infer group identities and to trace movements across the landscape. In the eastern coastal regions of South Africa at least three settlement phases have been distinguished for early prehistoric agropastoralist settlements during the **Early Iron Age** (EIA). The first phase of the Early Iron Age, known as **Msuluzi** (named after the site where the ceramics were first identified). The second phase namely, **Ndondondwane** developed from Msuluzi. The third phase is called **Ntshekane** and is regarded as the final expression of the Early Iron Age (EIA) in the area. This phase has been dated to about AD 900 - AD 1200. These sites are usually located on low-lying spurs close to water.

The **Late Iron Age** (LIA) settlements are classified as Blackburn (c. AD 1050) and later Moor Park (c. AD 1350) typify this period. Later sites (such as Umgazana c. AD 1700) are characterised by stone-walled enclosures situated on defensive hilltops. This occupation phase has been linked to the arrival of ancestral Zulu and Xhosa (Nguni-speaking) people in the region. These settlements can in many instances be correlated with oral traditions and population movements.

The Late Iron Age (LIA) settlements are characterised by stone-walled enclosures situated on defensive hilltops c. AD 1640 - AD 1830). This occupation phase has been linked to the arrival of ancestral Northern Sotho, Tswana and Ndebele (Nguni-speakers) in the central regions of South Africa with associated sites dating between the sixteenth and seventeenth centuries AD.

Addendum 2: Description of the Recorded Sites

A system for grading the significance of heritage sites was established by the NHRA (Act No. 25 of 1999) and further developed by the South African Heritage Resources Agency (SAHRA 2007) and has been approved by ASAPA for use in southern Africa and was utilised during this assessment.

Example of site recording form

A. GENERAL SITE DESCRIPTION				
Site type				
Site Period				
Physical description				
Integrity of deposits or structures				
Site extent				
B. SITE EVALUATION				
B1. HERITAGE VALUE			Yes	No
Historic Value				
It has importance to the community or pattern of South Africa's history or precolonial history.				
It has strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa.				
It has significance relating to the history of slavery in South Africa.				
Aesthetic Value				
It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.				
Scientific Value				
It has potential to yield information that will contribute to an understanding of South Africa's natural and cultural heritage.				
It has importance in demonstrating a high degree of creative or technical achievement at a particular period.				
It has importance to the wider understanding of the temporal change of cultural landscapes, settlement patterns and human occupation.				
Social Value				
It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).				
Tourism Value				
It has significance through its contribution towards the promotion of a local sociocultural identity and can be developed as tourist destination.				
Rarity Value				
It possesses unique, uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.				
Representative Value				
It is importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.				
B2. REGIONAL CONTEXT				
Other similar sites in the regional landscape.				
C. SPHERE OF SIGNIFICANCE		High	Medium	Low
International				
National				
Provincial				
Local				
Specific community				
D. FIELD REGISTER RATING				
National/Grade 1 [should be registered, retained]				
Provincial/Grade 2 [should be registered, retained]				
Local/Grade 3A [should be registered, mitigation not advised]				

Local/Grade 3B [High significance; mitigation, partly retained]	
Generally Protected A [High/Medium significance, mitigation]	
Generally protected B [Medium significance, to be recorded]	
Generally Protected C [Low significance, no further action]	
E. GENERAL STATEMENT OF SITE SIGNIFICANCE	
Low	
Medium	
High	
F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT	
None	
Peripheral	
Destruction	
Uncertain	
G. RECOMMENDED MITIGATION	
•	
H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS	
•	
I. PHOTOGRAPHS	

Addendum 3: Surveyor General Farm Diagram

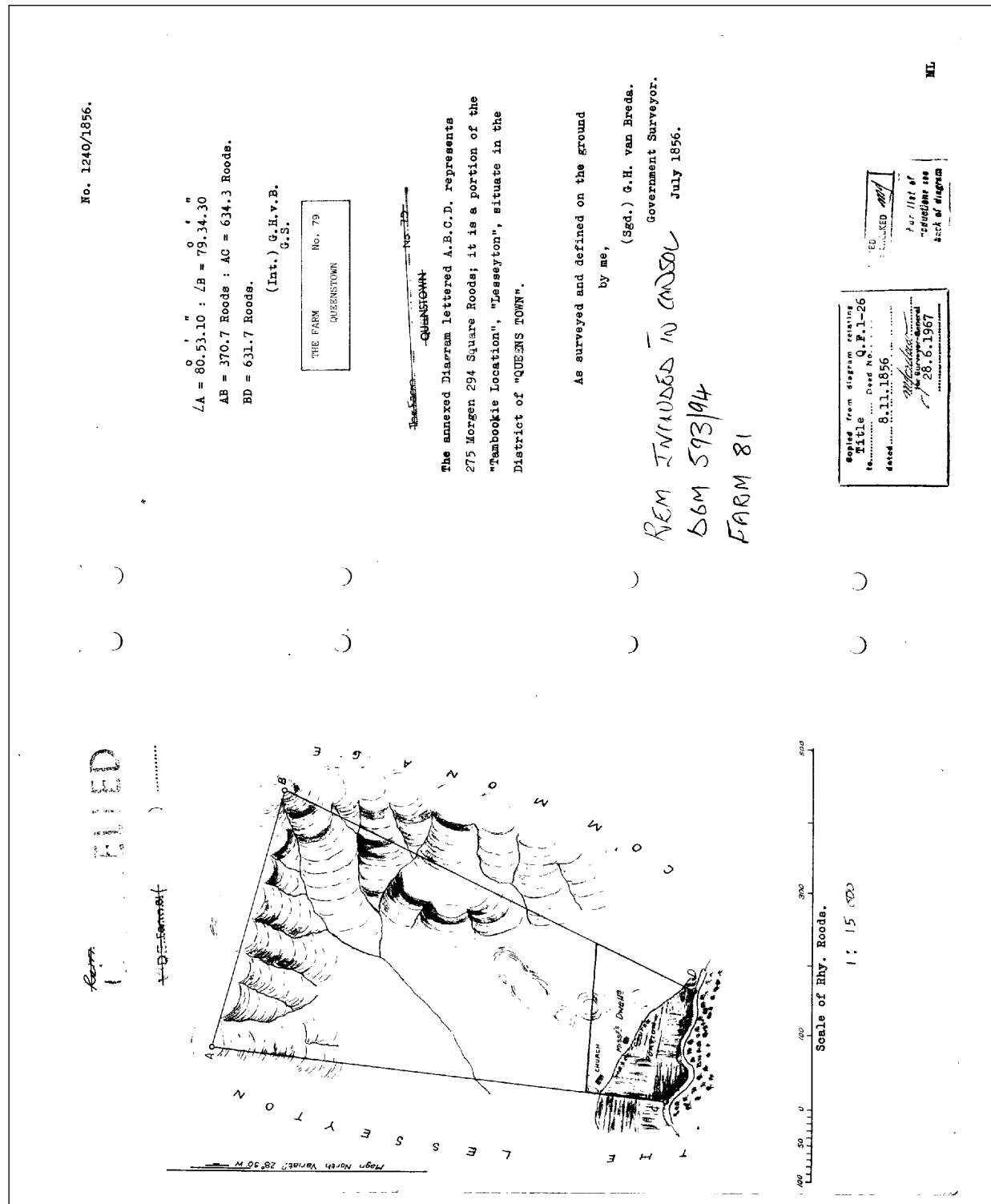


Figure 37: The surveyor General's map of the area indicating the farm Lesseyton were already surveyed by 1856

Addendum 4: Relocation of Graves

Marked graves younger than 60 years do not fall under the protection of the NHRA (Act No. 25 of 1999) with the result that exhumation, relocation and reburial can be conducted by an undertaker. This will include logistical aspects such as social consultation, purchasing of plots in cemeteries, procurement of coffins, etc. Other legislative measures which may be pertinent include the Removal of Graves and Dead Bodies Ordinance (Ordinance No. 7 of 1925), Regulations Relating to the Management of Human Remains (GNR 363 of 22 May 2013) made in terms of the National Health Act No. 61 of 2003, Ordinance on Exhumations (Ordinance No. 12 of 1980) as well as any local and regional provisions, laws and by-laws that may be in place.

Marked graves older than 60 years are protected by the NHRA (Act No. 25 of 1999) as a result an archaeologist must be in attendance to assist with the exhumation and documentation of the graves. Note that unmarked graves are by default regarded as older than 60 years and therefore also falls under the NHRA (Act No. 25 of 1999, Section 36).

The relocation of graves entails the following procedure:

- Notices of intent to relocate the graves must be put up at the burial site for a period of 60 days. This should contain contact information where communities and family members can register as interested and affected parties. All information pertaining to the identification of the graves must be documented for the application of a SAHRA permit. All notices must be in at least 3 languages, of which English is one. This is a requirement by law.
- These notices of intention must also be placed in at least two local newspapers and have the same information as above.
- Local radio stations can also be used to try contact family members. This is not required by law, but can be helpful.
- During this time (60 days) a suitable cemetery must be identified near to the development or otherwise one specified by the family of the deceased.
- An open day for family members should be arranged after the period of 60 days so that they can gather to discuss the way forward, and to sort out any problems. The developer needs to take the families requirements into account.
- Once the 60 days have passed and all the information from the family members have been received, a permit can be requested from SAHRA. This is a requirement by law.
- Once the permit has been issued, the graves may be exhumed and relocated.
- All headstones must be relocated with the graves as well as any remains and any additional objects found in the grave.

Information needed for the SAHRA permit application

- The permit application must be done by an archaeologist.
- A map of the area where the graves have been located.
- A survey report of the area prepared by an archaeologist.
- All the information on the families that have identified graves.
- A letter of permission from the landowner granting permission to the developer to exhume and relocate the graves.

- A letter (or proof of purchase of the plots) from the new cemetery confirming that the graves will be reburied there.
- Details of the farm name and number, magisterial district and GPS coordinates of the gravesite.

Graves are generally be classified into four categories. These are:

- Graves younger than 60 years;
- Graves older than 60 years, but younger than 100 years;
- Graves older than 100 years; and
- Graves of victims of conflict or of individuals of royal descent.