



## Heritage Assessment

# HERITAGE

# UNIT

Leeuwfontein and Lakeside Collieries  
development of Shanduka on  
Portion 2 of the farm Welgelegen  
221 IR and Portions of the farm  
Leeuwfontein 219 IR , District Ogies,  
Mpumalanga

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Professional Grave  
Solutions (Pty)  
Limited

(Registration No: 2003/008940/07)

Bergarend St 906, Waverley, Pretoria, 0186

PO Box 32542, Totiusdal, 0134 South Africa

TEL: +27 12 332 5305,

FAX: 0866 580199

**ACKNOWLEDGEMENT OF RECEIPT**

**CLIENT:** Ground Water Consulting Services (Pty) Ltd

**CONTACT PERSON:** Ms. Selma nel, Tel +27(0)11 803 5726, Fax +27(0)11 803 5745, Fax to mail 0866584389, email: Selma@gcs-sa.biz

**SIGNATURE:** \_\_\_\_\_

**LEADING CONSULTANT:** Professional Grave Solutions - Heritage Unit

**CONTACT PERSON:** Wouter Fourie

**SIGNATURE:** \_\_\_\_\_

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- i. The results of the project;
- ii. The technology described in any report ; and,
- iii. The recommendations delivered to the Client.

## **EXECUTIVE SUMMARY**

Professional Grave Solutions Heritage Unit was appointed by GCS (Pty) Ltd to undertake a Phase 1 Heritage Impact Assessment that forms part of the Extension to the Environmental Management Programme for the Leeuwfontein and Lakeside Colliery development of Shanduka Coal on Portion 2 of the farm Welgelegen 221 IR and certain portions of the farm Leeuwfontein 219 IR, District Ogies, Mpumalanga.

During the survey two cemeteries were identified close to the proposed opencast section on Leeuwfontein Colliery.

It is recommended that the sites be fenced with a twenty meter buffer to protect against damage from mining machinery.

In the event that the sites are to be impacted on, a full grave relocation process must be followed and conditions adhered to as listed below.

The grave relocation process must contain the following|:

- A detailed social consultation process, that will trace the next-of-kin and obtain their consent for the relocation of the graves, that will be at least 60 days in length;
- Site notices indicating the intent of the relocation
- Newspaper Notice indicating the intent of the relocation
- A permit from the local authority;
- A permit from the Mpumalanga Department of health;
- A permit from the South African Heritage Resources Agency if the graves are older than 60 years or unidentified and thus presumed older than 60 years;
- An exhumation process that keeps the dignity of the remains and family intact;
- An exhumation process that will safeguard the legal implications towards the mining company;
- The whole process must be done by a reputable company that are well versed in relocations;
- The process must be conducted in such a manner as to safeguard the legal rights of the families as well as that of the mining company.

### ***General***

If during mining any possible finds are made, the operations must be stopped and a qualified archaeologist be contacted for an assessment of the find.

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## **1. INTRODUCTION**

Professional Grave Solutions Heritage Unit was appointed by GCS (Pty) Ltd to undertake a Phase 1 Heritage Impact Assessment that forms part of the Extension to the Environmental Management Programme for the Leeuwfontein and Lakeside Colliery development of Shanduka Coal on Portion 2 of the farm Welgelegen 221 IR and certain portions of the farm Leeuwfontein 219 IR, District Ogies, Mpumalanga.

The aim of the study is to identify all heritage sites, document, and assess their importance within Local, Provincial and National context. From this we aim to assist the developer in managing the discovered heritage resources in a responsible manner, in order to protect, preserve, and develop them within the framework provided by the National Heritage Resources Act of 1999 (Act 25 of 1999) (NHRA).

The report outlines the approach and methodology utilised before and during the survey, which includes in Phase 1: Information collection from various sources and public consultations; Phase 2: Physical surveying of the area on foot and by vehicle; and Phase 3: Reporting the outcome of the study.

During the survey two cemeteries were identified close to the proposed opencast section on Leeuwfontein Colliery.

General site conditions and features on site were recorded by means of photos, GPS location, and description. Possible impacts were identified and mitigation measures are proposed in the following report.

This report must also be submitted to SAHRA's provincial office for scrutiny.

## **2. APPROACH AND METHODOLOGY**

The aim of the study is to extensively cover all data available to compile a background history of the study area; this was accomplished by means of the following phases.

## **2.1. PROJECT DESCRIPTION**

### ***LAKESIDE COLLIERY***

Lakeside Colliery is an existing coal mining operation with an existing Environmental Management Programme Report (EMP) under the Mineral and Petroleum Resources Development Act (Act No. 28 of 2002) (MPRDA) and is operated by Shanduka Coal (Pty) Ltd. Lakeside Colliery has been in operation since 1990.

The current mining operation is situated on the farm Leeuwfontein 219 IR and Welgelegen 221 IR in the Nkangala District Municipality, within the Mpumalanga Province. The mine is located approximately 7 km south-west of Kendal Power Station and directly adjacent to the Leeuwfontein Colliery, another existing coal mining operation operated by Shanduka Coal (Pty) Ltd.

Lakeside Colliery intends to make changes to certain activities as well as the mining method. The following new activities will be undertaken:

- Change the mining method of areas previously earmarked for underground mining to opencast mining; and
- Opencast mining of the underground bord and pillars in the area previously mined by underground mining methods.

The new opencast mining area located to the west of the pan will cover an area of approximately 28.4 hectares.

As a result, Shanduka Coal needs to amend the existing approved EMP to reflect these changes and to obtain the necessary approval from the Mpumalanga Department of Minerals and Energy (DME).

### ***LEEUFONTEIN COLLIERY***

Leeuwfontein Colliery is an existing coal mining operation operated by Shanduka Coal (Pty) Ltd, and has an approved Environmental Management Programme Report (EMPR) under the Minerals Act of 1991. An application for conversion to a new order right in terms of the Mineral and Petroleum Resources Development Act, Act 28 of 2002 (MPRDA) was submitted to the Department of Minerals and Energy (DME) in June 2006. DME has since requested that Leeuwfontein Colliery amend its EMPR in order to comply

with the MPRDA. In addition the mine wishes to make changes to certain activities as well as the mining method.

It is the intention of the mine to undertake the following new activities:

- Change the mining method of areas previously earmarked for underground mining to opencast mining.

The total mining area includes portions 5, 6, 7, 8, 9, 27, 28, 29, 30, 31, 32 and 33 of the farm Leeuwfontein 219 IR, which constitutes a total area of 834,1448 ha.

The mining operation at Leeuwfontein Colliery has been in operation since 1980, and it is mainly the No. 2 coal seam that is mined. The mining operation includes the plant areas, offices and related infrastructure and the underground and opencast mining areas.

The access to the mines by road is via the Johannesburg-Witbank N12 highway that connects with other provincial roads to the said mine.



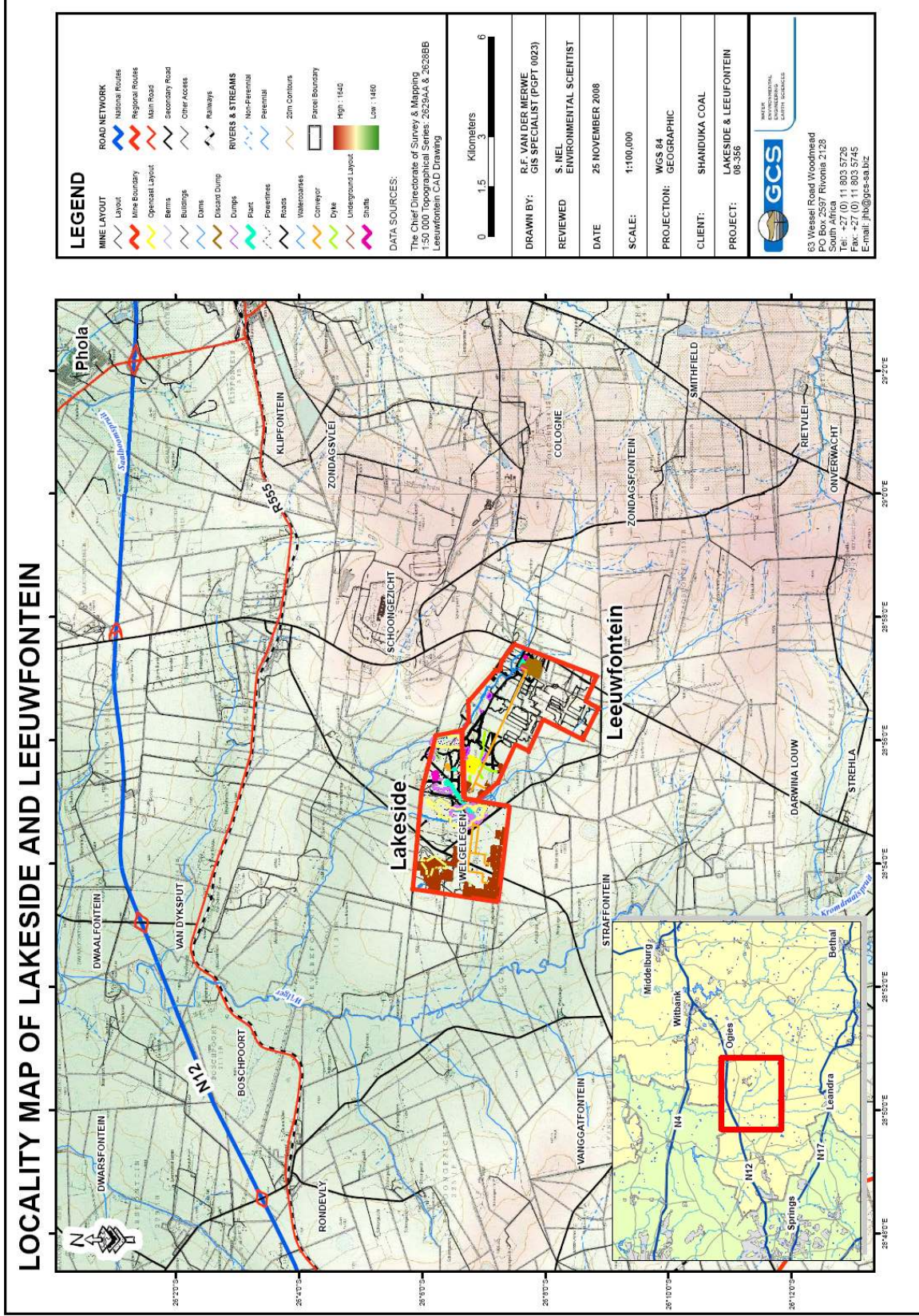


Figure 1 – Locality Map

## **2.2 PHYSICAL SURVEYING**

Due to the nature of cultural remains, the majority that occur below surface, a physical walk through of the study area was conducted. The total area of impact comprised an area of approximately 160 ha in total. The study area was surveyed over a period of one day, by means of vehicle and extensive surveys on foot by PGS.

Aerial photographs and 1:50 000 maps of the area were consulted and literature of the area were studied before undertaking the survey. The purpose of this was to identify topographical areas of possible historic and pre-historic activity. All sites discovered both inside and bordering the proposed development area was plotted on 1:50 000 maps and their GPS co-ordinates noted. 35mm photographs on digital film were taken at all the sites.

## **3. LEGISLATIVE REQUIREMENTS AND TERMINOLOGY**

### **3.1 Legislation**

The identification, evaluation and assessment of any cultural heritage site, artefact or find in the South African context is required and governed by the following legislation:

- i. National Environmental Management Act (NEMA) Act 107 of 1998
- ii. National Heritage Resources Act (NHRA) Act 25 of 1999
- iii. Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002
- iv. Development Facilitation Act (DFA) Act 67 of 1995

The following sections in each Act refer directly to the identification, evaluation and assessment of cultural heritage resources.

- i. National Environmental Management Act (NEMA) Act 107 of 1998
  - a. Basic Environmental Assessment (BEA) – Section (23)(2)(d)
  - b. Environmental Scoping Report (ESR) – Section (29)(1)(d)
  - c. Environmental Impacts Assessment (EIA) – Section (32)(2)(d)
  - d. Environmental Management Plan (EMP) – Section (34)(b)
- ii. National Heritage Resources Act (NHRA) Act 25 of 1999
  - a. Protection of Heritage resources – Sections 34 to 36; and
  - b. Heritage Resources Management – Section 38
- iii. Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002
  - a. Section 39(3)
- iv. Development Facilitation Act (DFA) Act 67 of 1995
  - a. The GNR.1 of 7 January 2000: Regulations and rules in terms of the Development Facilitation Act, 1995. Section 31.

### **3.2 Abbreviations and Terminology**

ASAPA: Association of South African Professional Archaeologists

CRM: Cultural Resource Management

DEAT: Department of Environmental Affairs and Tourism

DWAF: Department of Water Affairs and Forestry

EIA practitioner: Environmental Impact Assessment Practitioner

EIA: Environmental Impact Assessment

EIA: Early Iron Age

ESA: Early Stone Age

GPS: Global Positioning System

HIA: Heritage Impact Assessment

I&AP: Interested & Affected Party

LSA: Late Stone Age

LIA: Late Iron Age

MSA: Middle Stone Age

MIA: Middle Iron Age

NEMA: National Environmental Management Act

NHRA: National Heritage Resources Act

PHRA: Provincial Heritage Resources Agency

PSSA: Palaeontological Society of South Africa

ROD: Record of Decision

SAHRA: South African Heritage Resources Agency

### ***Archaeological resources***

This includes:

- i. material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years including artefacts, human and hominid remains and artificial features and structures;
- ii. rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;
- iii. wrecks, being any vessel or aircraft, or any part thereof which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the republic as defined in the Maritimes Zones Act, and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation;
- iv. features, structures and artefacts associated with military history which are older than 75 years and the site on which they are found.

***Cultural significance***

This means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance

***Development***

This means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of the heritage authority in any way result in the change to the nature, appearance or physical nature of a place or influence its stability and future well-being, including:

- i. construction, alteration, demolition, removal or change in use of a place or a structure at a place;
- ii. carrying out any works on or over or under a place;
- iii. subdivision or consolidation of land comprising a place, including the structures or airspace of a place;
- iv. constructing or putting up for display signs or boards;  
any change to the natural or existing condition or topography of land;
- v. any removal or destruction of trees, or removal of vegetation or topsoil

***Heritage resources***

This means any place or object of cultural significance

**4. ASSESSMENT CRITERIA**

This chapter describes the evaluation criteria used for the sites listed below.

The significance of archaeological sites was based on four main criteria:

- **site integrity** (i.e. primary vs. secondary context),
- **amount of deposit, range of features** (e.g., stonewalling, stone tools and enclosures),
- **uniqueness** and
- **potential** to answer present research questions.

Management actions and recommended mitigation, which will result in a reduction in the impact on the sites, will be expressed as follows:

A - No further action necessary;

B - Mapping of the site and controlled sampling required;

C - Preserve site, or extensive data collection and mapping of the site; and

D - Preserve site

Impacts on these sites by the development will be evaluated as follows

#### 4.1 IMPACT

The potential environmental impacts that may result from the proposed development activities.

##### 4.1.1 Nature and existing mitigation

Natural conditions and conditions inherent in the project design that alleviate (control, moderate, curb) impacts. All management actions, which are presently implemented, are considered part of the project design and therefore mitigate against impacts.

#### 4.2 EVALUATION

##### 4.2.1 Site Significance

Site significance classification standards prescribed by the South African Heritage Resources Agency (2006) and approved by the Association for Southern African Professional Archaeologists (ASAPA) for the Southern African Development Community (SADC) region, were used for the purpose 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

##### 4.2.2 Impact Rating

Each impact identified will be assessed in terms of probability (likelihood of occurring), extent (spatial scale), intensity (severity) and duration (temporal scale). To enable a scientific

approach to the determination of the impact significance (importance), a numerical value will be linked to each rating scale. The sum of the numerical values will define the significance. The following criteria will be applied to the impact assessment for the Ferreira Project EIA / EMP.

**Table 1: Probability**

Category	Rating	Description
Definite	3	More than 90 percent sure of a particular fact or of the likelihood of that impact occurring
Probable	2	70 to 90 percent sure of a particular fact or of the likelihood of that impact occurring
Possible	1	40 to 70 percent sure of a particular fact or of the likelihood of that impact occurring
Improbable	0	Less than 40 percent sure of a particular fact or of the likelihood of that impact occurring

**Table 2: Extent**

Category	Rating	Description
Site	1	Immediate project site
Local	2	Up to 5 km from the project site
Regional	3	20 km radius from the project site
Provincial	4	Provincial
National	5	South African
International	6	Neighbouring countries/overseas

**Table 3: Duration**

Category	Rating	Description
Very short-term	1	Less than 1 year
Short-term	2	1 to 5 years
Medium-term	3	5 to 10 years
Long-term	4	10 to 15 years
Very long-term	5	Greater than 15 years
Permanent	6	Permanent

**Table 4: Intensity**

Category	Rating	Description
Very low	0	Where the impact affects the environment in such a way that natural, cultural and social functions are not affected
Low	1	Where the impact affects the environment in such a way that natural, cultural and social functions are only marginally affected
Medium	2	Where the affected environment is altered but natural, cultural and social function and processes continue albeit in a modified way
High	3	Where natural, cultural or social functions or processes are altered to the extent that they will temporarily cease
Very high	4	Where natural, cultural or social functions or processes are altered to the extent that they will permanently cease

**Table 5: Significance Rating**

Score	Significance Rating
2 – 4	Low
5 – 7	Low to Moderate
8 – 10	Moderate
11 – 13	Moderate to High
14 – 16	High
17 – 19	Very High

## 5. BACKGROUND OF AREA

### 5.1 ARCHAEOLOGICAL BACKGROUND

The Stone Age is divided in Earlier; Middle and Later Stone Age and refers to the earliest people of South Africa who mainly relied on stone for their tools.

*Earlier Stone Age:* The period from  $\pm$  2.5 million yrs -  $\pm$  250 000 yrs ago. Acheulean stone tools are dominant.

*Middle Stone Age:* Various lithic industries in SA dating from  $\pm$  250 000 yrs – 22 000 yrs

before present.

*Later Stone Age:* The period from  $\pm$  22 000-yrs before present to the period of contact with either Iron Age farmers or European colonists.

The Iron Age as a whole represents the spread of Bantu speaking people and includes both the Pre-Historic and Historic periods. Similar to the Stone Age it can be divided into three periods:

*The Early Iron Age:* Most of the first millennium AD.

*The Middle Iron Age:* 10th to 13th centuries AD

*The Late Iron Age:* 14th century to colonial period.

## 5.2 HISTORICAL BACKGROUND

### ***Major Jackson Series Sheet "Bethal", Revised Edition April 1901***

A section of the "Bethal" sheet from the Major Jackson Map Series is depicted in **Figure 1**. The map series was compiled, surveyed and produced during the Anglo Boer War of 1899 to 1902 (National Archives, Maps, 3/559). The "Bethal" sheet was first printed in June 1900, and was revised during February and April 1901.

The following observations can be made from the map:

- Five farmhouses are depicted in the study area. These features are distributed across four farms, with Klippoortje possessing two farmhouses and Zondagsvlei, Leeuwfontein and Schoongezicht each containing one farmhouse.
- The farm Smithfield is not depicted. The indication is that at the time it formed part of the farm Springboklaagte.
- At the time that this map was produced, a small triangular piece of land between Leeuwfontein and Cologne was government ground and named Droogebult. At present this portion forms part of the farm Cologne.



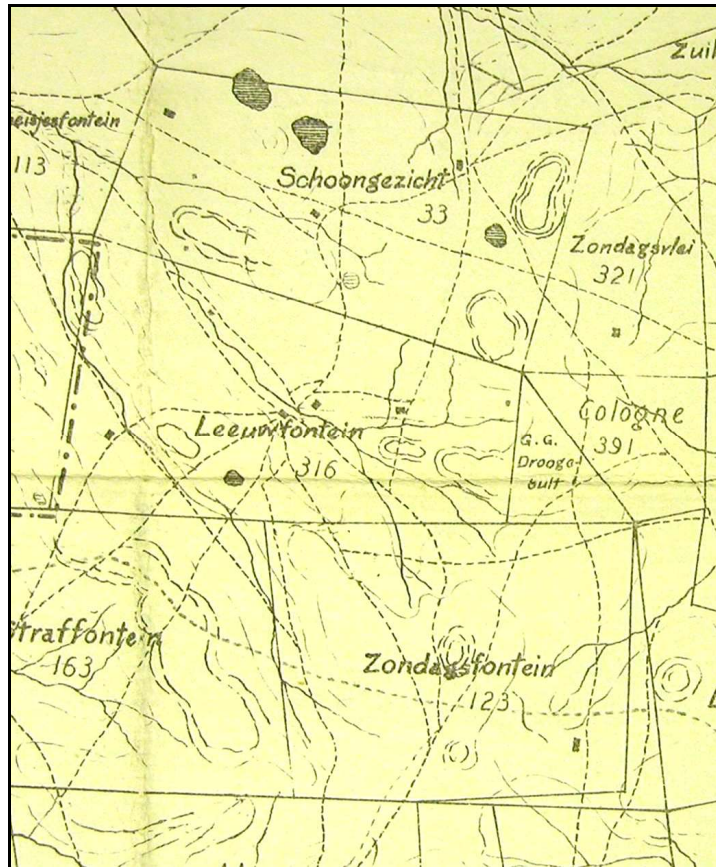


Figure 2 : A section of the 'Bethal' sheet of the Major Jackson Map Series dated to April 1901 is shown. The approximate boundaries of the study area are outlined in blue. Five farmhouses depicted within the study are also marked in red.

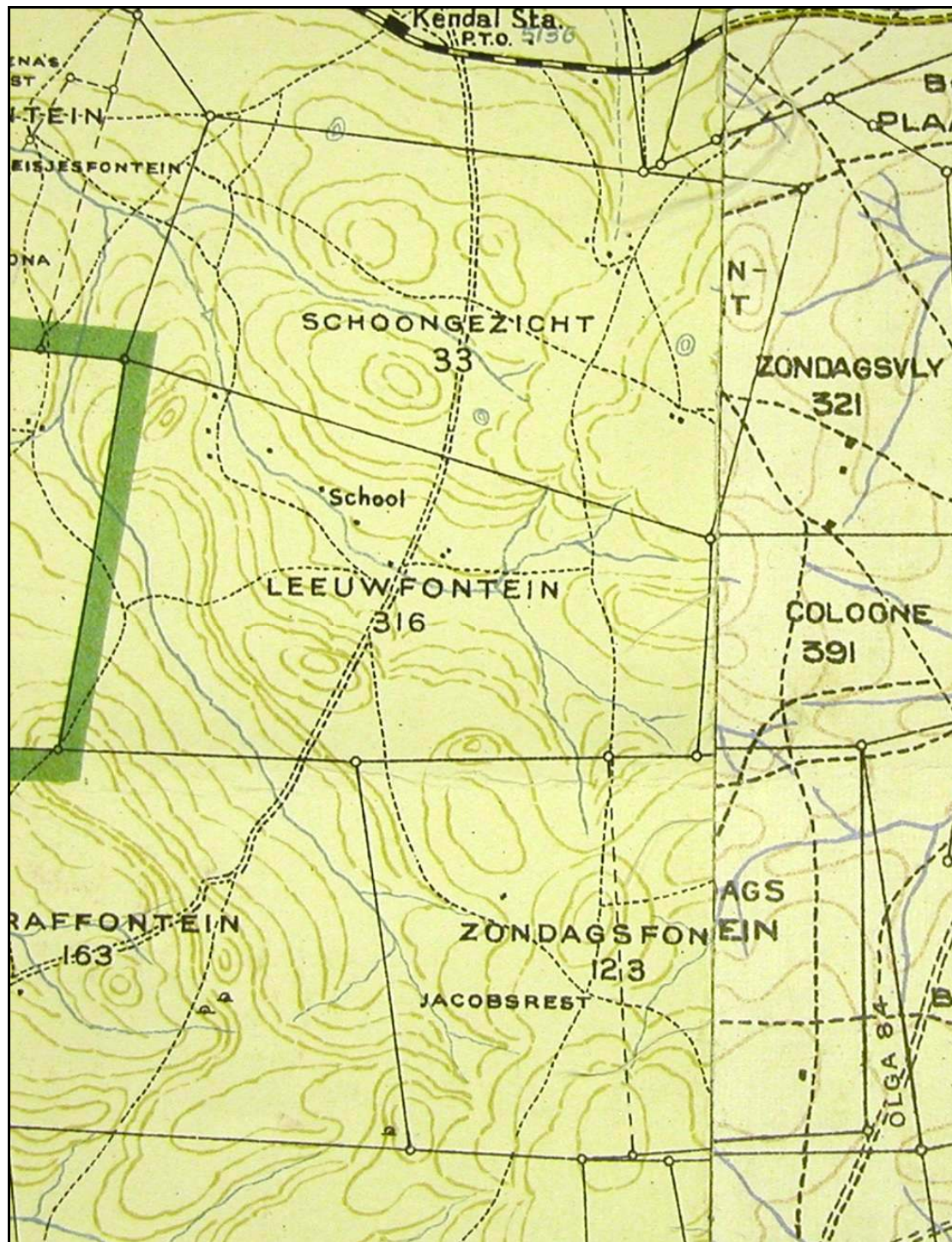


Figure 3 : A section of an untitled and undated map is shown.

#### **Untitled Map, possibly dated to c. 1913**

The map depicted in **Figure 2** was found in an archival file (JUS, 560, 1852/30) without any indication of its origin or exact age. However, the map's style conforms to a series of 1:125 000 scale topographical maps undertaken of the former Free State and

Transvaal areas during c. 1913. As the file itself dates from 1924, the map pre-dates this date. The following observations can be made:

- The map depicts nine farmhouse/building individual structures.

### *5.2.2 LEEUWFontein*

The farm Leeuwfontein (old farm number 316) was first inspected on the 22<sup>nd</sup> of October 1864 by C.A. van Niekerk. The first registered owner of the farm was Adriaan Jacobus de Lange. His title deed to the farm was registered on the 14<sup>th</sup> of March 1870.

On the 14<sup>th</sup> of March 1890 the western 1/8<sup>th</sup> portion of the farm was transferred from Wynand Wilhelmus Maré (on behalf of A.J. de Lange) to Cornelis Petrus de Lange. After the death of Cornelis Petrus de Lange, the same 1/8<sup>th</sup> portion of the farm was transferred from Wynand Wilhelmus Maré (on behalf of the Estate of A.J. de Lange) to Catharina Johanna Susanna de Lange (born Zukman) until such time that their children reached adulthood. This transfer took place on the 17<sup>th</sup> of March 1891.

### *5.2.3 THE STUDY AREA AND THE SOUTH AFRICAN WAR*

After the British occupation of Pretoria on the 5th of June 1900, the subsequent British victories at Diamond Hill and Dalmanutha and the retreat of the republican forces under General Louis Botha toward the eastern boundary of the Zuid-Afrikaansche Republiek (Z.A.R.), the large Boer commandoes started to reform themselves into smaller more mobile groups. This led to the guerrilla phase of the South African War which largely consisted of hit-and-run tactics. With one or two exceptions, this method of warfare by the republican forces lasted for the remaining two years of the war until the signing of the peace treaty at Melrose House on the 31st of May 1902. During this period of guerrilla warfare a number of small skirmishes took place in the general vicinity of the study area, but no indication could be found for any of these to have taken place within the study area itself.

One of the most important battles from the South African War to have taken place in the general vicinity of the study area, was the Battle of Bakenlaagte, approximately 15 kilometres to the south-east of the present study area.

The origins of this battle can be found in the tendency of the British forces in this part of Southern Africa to move columns between the British camps at Syferfontein (Bethal) in

the south and Brugspruit (Clewer) in the north. This movement of columns led General Louis Botha to plan a strategy whereby such a column could be successfully attacked. During the end of October 1900 he ascertained that another column was about to leave Bethal for Brugspruit and subsequently ordered all available small commandos in the general vicinity to gather at a pre-destined place, from where a massed force of some 2000 horsemen could attack the column.

The column that General Louis Botha got wind of was a reasonably large force consisting of the 3rd Mounted Infantry (501 men), 25th Mounted Infantry (462 men), 2nd Scottish Horse (434 men), 84th Battery of the Royal Field Artillery (comprised of four guns and 84 men), CC and R sections of Vickers-Maxims (36), 1st Field Troop Royal Engineers (14 men) and the 2nd Battalion The Buffs (650 men). The column was commanded by Lieutenant-Colonel G.E. Benson.

At 5 AM on the morning of the 30th October 1901 Benson's column left the camp at Syferfontein near Bethal and started moving in a north-western direction. Their aim was to camp on the farm Bakenlaagte between Brugspruit and Bethal. However, the numerous drifts and watercourses which the units had to negotiate caused the entire column to be spread out over a large area in a reasonably short period of time. Therefore, although Benson and his advance guard reached Bakenlaagte at 9 AM, the remainder of the column was still far behind. During the afternoon the rearguard became even more isolated from the remainder of the column when one of their wagons got embedded in the mud of a river crossing. This rearguard group consisted of two companies of the 3rd Mounted Infantry, one company of The Buffs and a Vickers-Maxim gun. At this point the republican forces that had followed the column all the way from Bethal started to press closer to the rearguard. This led the rearguard's commanding officer Brevet Major F.G. Anley to order that the wagon be abandoned and the men to push hard for Bakenlaagte.

Meanwhile, Benson had ordered two of the artillery guns onto a ridge between Bakenlaagte camp and the rearguard units, to provide support for the latter. However, when he heard of the rearguard's retreat back to camp he ordered two squadrons of the 2nd Scottish Horse to accompany him toward the rearguard to rescue the abandoned wagon. At this opportune moment General Louis Botha ordered his men to attack. Twelve hundred armed horsemen appeared on the scene and decimated the retreating units of the rearguard. The advance of the Boer horsemen was so severe that Benson ordered the two artillery pieces onto a ridge closer to Bakenlaagte. The Boer attack also stopped Benson's advance and he and the men of the 2nd Scottish Horse who was



accompanying him were forced to make for the same ridge. At this point the force on this ridge consisted of two guns of the 84th Royal Field Artillery, 25 men of the 25th Mounted Infantry, a company of the 3rd Mounted Infantry, 20 men of the 2nd Scottish Horse and 70 men of The Buffs.

The republican forces now charged towards the British position on the ridge. In the words of Grant (1910:310):

"On came the federal regiments, their outriders swarming over the heels of the hindmost men of the Scottish Horse. As they galloped their numbers swelled...Two thousand horsemen raced down upon Benson and the men with him around the guns. So grand and terrible a spectacle had not been seen nor had the earth so shaken on a battlefield in South Africa...Alone on the gigantic bosom of the veld the little knot with Benson calmly faced the approaching catastrophe."

As the Boer horsemen approached the occupied ridge they dismounted and crawled toward the summit. Within a short while a fierce fighting broke out and before long the Boer forces occupied the ridge. The losses on British side were catastrophic. Of the 280 officers and men who had occupied the ridge, 66 had been killed and 165 wounded. The losses on Boer side were not recorded.

Although their successful assault on the ridge left the camp at Bakenlaagte largely undefended, the Boer forces did not attack it and subsequently withdrew from the battlefield (Grant, 1910).

## **6. SITES OF SIGNIFICANCE**

The study area is located on topographical sheet 2628BB.

The two mines are in existence since 1980 and 1990 respectively.

The landscape on the two mines has extensively been altered by mining operations. The current vegetation and maize fields made surveying of the area extremely difficult. The area concentrated on was the proposed opencast section on both mines as depicted in Figure 4

During the survey two cemeteries were identified on the Leeuwfontein Colliery close to the proposed opencast area.

**6.1 2628BB-PGS001**


<b>Description of Site:</b>		
<b>Site Number</b>	2628BB-PGS001	
<b>Map reference</b>	<b>Topo-sheet number</b>	<b>Number of Map in report</b>
	<b>2628BB</b>	<b>Annexure A</b>
<b>GPS coordinates:</b> <i>Indicate Model and datum - WGS 84</i>	X	Y
Garmin 60Csx, WGS 84	S26.11518	E28.93303
<b>Site Data</b>	<b>Description</b>	
<b>Type of site</b> (e.g. open scatter; shell midden, cave /shelter);	<p>The site consists of at least 15 marked graves. The grave headstone inscriptions indicate that to be the family cemetery of the Bezuidenhout and Strydom families and most date from the late 1930's towards the 1950's. The cemetery has a dilapidated fence around and is currently heavily over grown.</p> <p>The cemetery is situated on the side of the main haul road of the Leeuwfontein pit.</p>	
<b>Site categories</b> (e.g. Earlier Stone Age, Late Iron Age);	Recent Historic	
<b>Estimation or measurement of the extent</b> (maximum dimensions) and orientation of the site(s);	20x20m	
<b>Photographs and diagrams</b> (Figure numbers)		

Figure 4 - Photo of cemetery

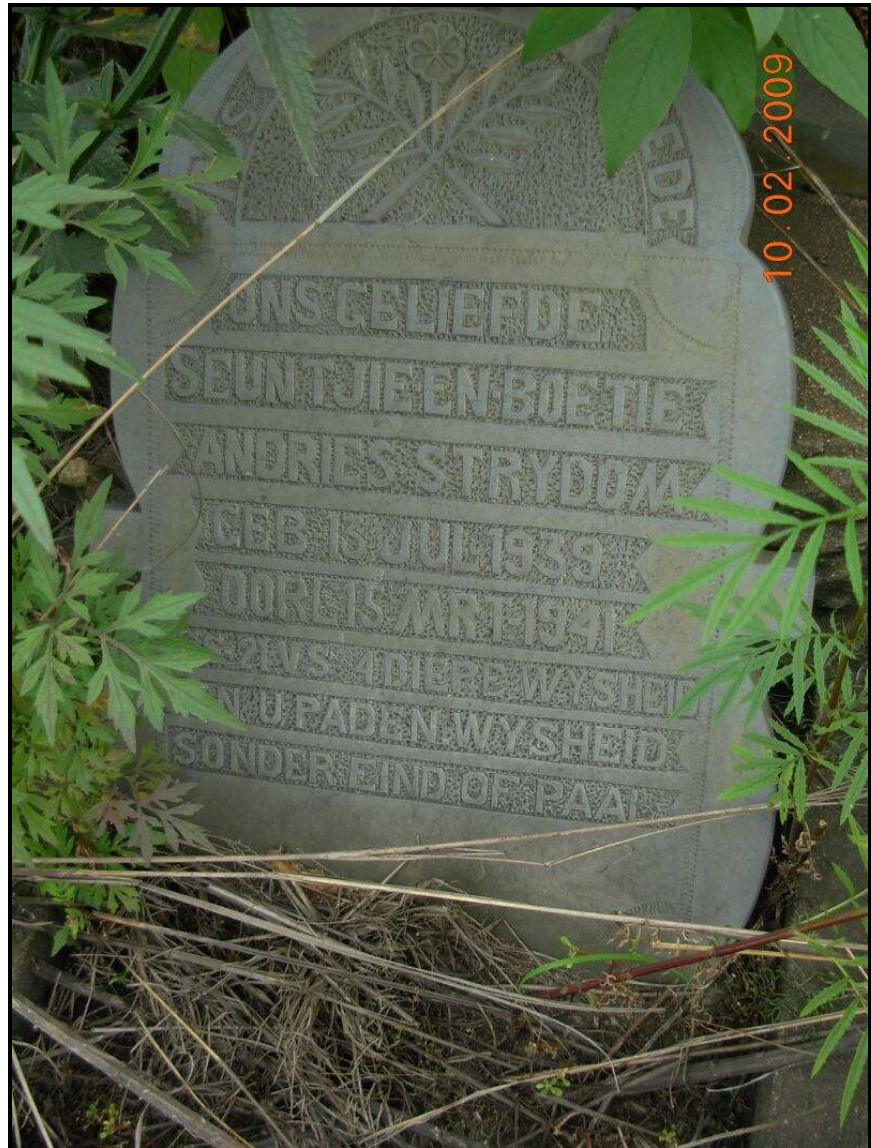


Figure 5 - Photo of headstone

<b>Statement of Significance</b> (Heritage Value)	The site is of high significance.
<b>Field Rating</b> (Recommended grading or field significance) of the site:	Generally protected (GP.A)
<b>Impact Evaluation</b> of development on site	Impact on site is seen as high negative.
<b>Recommendations</b> including:	It is recommended that the site be fenced with a twenty meter buffer to protect against damaged from mining machinery. In the event that the site is to be impacted on, a full grave



	relocation process must be followed and conditions adhered to as listed in Section 9 of this report.				
<b>Summary</b>					
<b>Significance Rating</b>	<b>Field Rating</b>	<b>Probability</b>	<b>Extent</b>	<b>Duration</b>	<b>Intensity</b>
14	GP.A	3	1	6	4

## 6.2 2628BB-PGS002

<b>Description of Site:</b>		
<b>Site Number</b>	2628BB-PGS002	
<b>Map reference</b>	<b>Topo-sheet number</b>	<b>Number of Map in report</b>
	<b>2628BB</b>	<b>Annexure A</b>
<b>GPS coordinates:</b> <i>Indicate Model and datum - WGS 84</i>	X	Y
Garmin 60Csx, WGS 84	S26.11911	E28.92824
<b>Site Data</b>	<b>Description</b>	
<b>Type of site</b> (e.g. open scatter; shell midden, cave /shelter);	<p>The site consists of at least 30 marked graves. The graves date from the early 1930's. The cemetery has a temporary fence around and is currently heavily over grown. Some graves do occur outside the fenced area.</p> <p>The cemetery is situated on the side of the proposed opencast pit of the Leeuwfontein Colliery.</p>	
<b>Site categories</b> (e.g. Earlier Stone Age, Late Iron Age);	Recent Historic	
<b>Estimation or measurement of the extent</b> (maximum dimensions) and orientation of the site(s);	20x20m	
<b>Photographs and diagrams</b> (Figure numbers)		



Figure 6 - Photo of cemetery

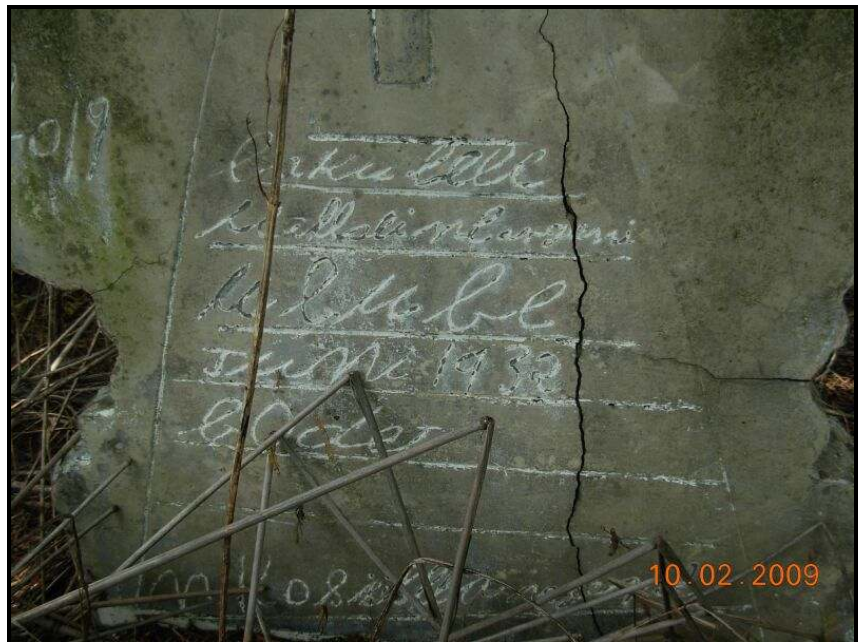


Figure 7 - Photo of headstone

<b>Statement of Significance</b> (Heritage Value)	The site is of high significance.
<b>Field Rating</b> (Recommended grading or field significance) of the site:	Generally protected (GP.A)
<b>Impact Evaluation</b> of development on site	Impact on site is seen as high negative.

<b>Recommendations</b> <i>including:</i>	<p>It is recommended that the site be fenced with a twenty meter buffer to protect against damaged from mining machinery.</p> <p>In the event that the site is to be impacted on, a full grave relocation process must be followed and conditions adhered to as listed in Section 9 of this report.</p>				
<b>Summary</b>					
<b>Significance Rating</b>	<b>Field Rating</b>	<b>Probability</b>	<b>Extent</b>	<b>Duration</b>	<b>Intensity</b>
14	GP.A	3	1	6	4

## 7. ASSUMPTIONS AND LIMITATIONS

Not subtracting in any way from the comprehensiveness of the fieldwork undertaken, it is necessary to realise that the heritage resources located during the fieldwork do not necessarily represent all the heritage resources located there. This may be due to various reasons, including the subterranean nature of some archaeological sites and dense vegetation cover. As such, should any heritage features and/or objects not included in the present inventory be located or observed, a heritage specialist must immediately be contacted. Such observed or located heritage features and/or objects may not be disturbed or removed in any way until such time that the heritage specialist has been able to make an assessment as to the significance of the site (or material) in question. This is true for graves and cemeteries as well.

Survey conditions were seriously hampered by excessive vegetation growth that made surveying of the area difficult.

## 8. LEGAL AND POLICY REQUIREMENTS

### 8.1 General principles

In areas where there has not yet been a systematic survey to identify conservation worthy places, a permit is required to alter or demolish any structure older than 60 years. This will apply until a survey has been done and identified heritage resources are formally protected.

Archaeological and palaeontological sites, materials, and meteorites are the source of our understanding of the evolution of the earth, life on earth and the history of people. In the new legislation, permits are required to damage, destroy, alter, or disturb them. People who already possess material are required to register it.

The management of heritage resources are integrated with environmental resources and this means that before development takes place heritage resources are assessed and, if necessary, rescued.

In addition to the formal protection of culturally significant graves, all graves, which are older than 60 years and are not in a cemetery (such as ancestral graves in rural areas), are protected. The legislation protects the interests of communities that have interest in the graves: they may be consulted before any disturbance takes place.

The graves of victims of conflict and those associated with the liberation struggle will be identified, cared for, protected and memorials erected in their honour.

Anyone who intends to undertake a development must notify the heritage resource authority and if there is reason to believe that heritage resources will be affected, an impact assessment report must be compiled at the developer's cost. Thus developers will be able to proceed without uncertainty about whether work will have to be stopped if a heritage resource is discovered.

According to the National Heritage Act (Act 25 of 1999 section 32) it is stated that:

An object or collection of objects, or a type of object or a list of objects, whether specific or generic, that is part of the national estate and the export of which SAHRA deems it necessary to control, may be declared a heritage object, including –

- objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects, meteorites and rare geological specimens;
- visual art objects;
- military objects;
- numismatic objects;
- objects of cultural and historical significance;
- objects to which oral traditions are attached and which are associated with living heritage;
- objects of scientific or technological interest;
- books, records, documents, photographic positives and negatives, graphic material, film or video or sound recordings, excluding those that are public records as defined in section 1 (xiv) of the National Archives of South Africa Act, 1996 ( Act No. 43 of 1996), or in a provincial law pertaining to records or archives; and
- any other prescribed category.

Under the National Heritage Resources Act (Act No. 25 of 1999), provisions are made that deal with, and offer protection, to all historic and pre-historic cultural remains, including graves and human remains.

### **8.1 Graves and cemeteries**

Graves younger than 60 years fall 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 reinterment 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. In order 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).

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 the South African Heritage Resource Agency (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 the category located inside a formal cemetery administrated by a local authority will also require the same authorisation as set out for graves younger than 60 years over and above 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.

## **9. ASSESSMENT AND RECOMMENDATIONS**

*A locality map is provided in **Annexure A***

During the survey two cemeteries were identified close to the proposed opencast section on Leeuwfontein Colliery.

It is recommended that the sites be fenced with a twenty meter buffer to protect against damaged from mining machinery.

In the event that the sites are to be impacted on, a full grave relocation process must be followed and conditions adhered to as listed below.

The grave relocation process must contain the following|:

- A detailed social consultation process, that will trace the next-of-kin and obtain their consent for the relocation of the graves, that will be at least 60 days in length;
- Site notices indicating the intent of the relocation
- Newspaper Notice indicating the intent of the relocation
- A permit from the local authority;
- A permit from the Mpumalanga Department of health;
- A permit from the South African Heritage Resources Agency if the graves are older than 60 years or unidentified and thus presumed older than 60 years;
- An exhumation process that keeps the dignity of the remains and family intact;
- An exhumation process that will safeguard the legal implications towards the mining company;
- The whole process must be done by a reputable company that are well versed in relocations;
- The process must be conducted in such a manner as to safeguard the legal rights of the families as well as that of the mining company.

### **General**

If during mining any possible finds are made, the operations must be stopped and a qualified archaeologist be contacted for an assessment of the find.

## **10. LIST OF PREPARES**

Wouter Fourie, BA (Hon) Archaeology (UP)

## **11. REFERENCES**

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**ANNEXURE A:**  
**Study area**



