

ENVIRONMENTAL ASSURANCE (Pty) Ltd	Report Number
ENVIRONMENTAL ASSURANCE (Fty) Ltu	PROJ-20-HIA
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PHASE 1 HERITAGE IMPACT ASSESSMENT

AS PART OF THE

SCOPING REPORT FOR THE PROPOSED VOORSLAG SIDING

FOR

SA COAL MINING HOLDINGS

ON THE FARM

Farm Voorslag 274 IS
Portion 10
Ptn of Ptn 5

IN THE VICINITY OF

Local Municipality: Msukaligwa Local Municipality
District Municipality: Gert Sibande District
Municipality

SOUTH AFRICA

Compiled By		Supported By	
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Rep Name	PROJ-20-HIA		()")

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PHASE 1 HERITAGE IMPACT ASSESSMENT AS PART OF THE SCOPING REPORT FOR THE VOORSLAG SIDING

Executive Summary

Archaeology Africa cc was appointed by Environmental Assurance (Pty) Ltd to undertake a Phase 1 Heritage Impact Assessment for the proposed construction of the Voorslag Siding on Portion 10 and a Portion of Portion 5 of the farm Voorslag 274 IS.

The methodological approach consisted of an archival and historical desktop study as well as a foot survey of the study area. The results of the public participation undertaken by *Environmental Assurance (Pty) Ltd* were also included in the study.

No heritage sites were found within the study area, neither through fieldwork, the desktop study or public participation. As a result it can be stated that the proposed development will have no impact on the heritage fabric of the area. Subsequently, no heritage reasons can be given for the development to be halted or altered. No further mitigation, monitoring or management is also required.





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1 Introduction and background

1.1 Description of Study Area

The study area comprises a gently sloping portion of land which has the Breyten – Ermelo road (R36) as its eastern boundary and the railway line between these towns on its western boundary. It consists primarily of open grassland and has a blue gum plantation on its northern end. Topographically the area slopes down toward the centre where landscape characteristics associated with marshy areas can be found.

Refer Annexure A Locality Plan (S26 23.397 E29 58.869)

1.2 Description of proposed development

Refer Annexure B Proposed Development Layout Plan

1.3 Statement of independence and professional affiliation

The author of this report, Polke Doussy Birkholtz, is entirely independent from the outcome of the Environmental Scoping Report. He is registered with the Association for Southern African Archaeologists (ASAPA) as an Accredited Professional Archaeologist for the SADC Region and has the membership number 014.

1.4 Problem statement and study objective

The objective of this study is to locate any heritage sites which may be situated within the proposed development area, and assess what the impact of the proposed Voorslag Siding would be on the said heritage sites.

2 Name and Contact Details for the Environmental Consultant and Applicant

Environmental Consultant:	Environmental Assurance (Pty) Ltd Emile van Druten
Project Title:	Voorslag Coal Siding
Postal Address:	P.O. Box 13, Hartbeespoort, 0216

Project Applicant:	SA Coal Mining Operations
Project Title:	Voorslag Coal Siding
Physical Address:	1 Havenga Street Ermelo





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Panoramic view of the study area. The railway line is visible on the left with the road between Ermelo and Breyten on the right. Note the blue gum plantation in the distance.



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2.1 Nature of activity or development

SA Coal Mine Holdings operates a coal mine and beneficiation plant on the farm Mooifontein JQ near Breyten in the Mpumalanga Province. The area falls under Gert Sibande District Municipality. The mining operation comprises an open cast and underground mine as well as a beneficiation plant. Coal from the beneficiation plant is currently taken by road from the beneficiation plant to the surrounding sidings from where it is transported by rail or truck to various clients. It has become clear that this transportation system is neither suitable nor sustainable for the future of the operation and it will also not support the planned expansions at the Umlabu Mine. Therefore the consideration of the Voorslag Siding.

SA Coal Mine Operations (Pty) Ltd is investigating the possibility of constructing a railway siding on mine owned land in order to simplify and improve the effect of the coal mining operation. The proposed railway siding is the subject to an environmental scoping report, EIA and supporting EMP. The local setting of the project is described in Table 1 and shown in Annexure A. The layout of the proposed development can be seen in Annexure B.

Table.1: Location of the SA Coal Mine Holdings proposed railway siding

Province	Mpumalanga
Magisterial district	Msukaligwa Local Municipality
Local authorities	Gert Sibande District Municipality
Farms on which the proposed siding is located	Farm Voorslag 274 IS Portion 10 Ptn of Ptn 5
Farms over which the proposed siding may pass	Farm Voorslag 274 IS Portion 10 Ptn of Ptn 5
Surrounding towns	Breyten

3 Identification of relevant legal requirements and guidelines

The significant legislation in terms of Heritage Impact Assessments and general Heritage Management is the National Heritage Resources Act 25 of 1999. The relevant aspects of this act are discussed in Annexure C.





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4 Scoping Methodology

4.1 Desktop Study

The primary aim of the desktop study is to compile as much available information as possible on the heritage resources of the area. Such a study also helps in providing historical context for any sites that are located.

4.2 Field Surveys

The field survey took place on Wednesday, 14 November 2007. It consisted of a foot survey of the study area.

No heritage sites were located.

4.3 Consulting with local Interested and/or Affected Parties

A public participation process was undertaken by *Environmental Assurance (Pty) Ltd.* It consisted of site notices, newspaper advertisements and public participation meetings. Newspaper advertisements were published in the *Hoëvelder* and the *Highveld Tribune* on the 23rd of August 2007, while Public Meetings took place on the 31st of August 2007 and the 24th of November 2007. Although the issue of heritage was placed on the agenda for both meetings, no issues with regards to heritage were raised.

4.4 Aspects regarding Visibility and Constraints

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.





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4.5 Findings

4.5.1 Desktop Study Findings

4.5.1.1 Cartographic Findings

Untitled Map, 1899 / 1900

The image depicted in Figure 1 below represents an enlarged section of the Carolina sheet. Although this map is presently undated, it is known that the map series from which it comes was compiled during 1899 and early 1900. The approximate position of the proposed Voorslag siding is shown.

While no heritage features are shown anywhere on the map, it does indicate that only a road existed at the time in the vicinity of the study area. In turn, this indicates that the railway line between Ermelo and Breyten must have been constructed after 1899 / 1900. The other observation to be made is that the town of Breyten did not exist at the time.

Ermelo Sheet, Undated

Figure 2 depicts an enlarged section from the Ermelo sheet of the Transvaal and Orange River Map Series. Although this map is presently undated, it is known that this map series was produced between c. 1911 and c. 1920.

For the first time the railway line between Breyten and Ermelo is shown, with the original wagon road to its west. While features such as farmhouses and huts are depicted in the wider area, none are shown for the study area or its direct surroundings.

Map of the Magisterial District of Ermelo, September 1917

Figure 3 depicts a section from the map depicting the Magisterial District of Ermelo (National Archives, Maps, 3/823). It was compiled for the Union of South Africa and printed at the Government Printing Works in Pretoria. The map is dated to September 1917.

The map does not depict any heritage features in the vicinity of the study area. It only shows the railway line and adjacent wagon road as well as the town of Breyten.





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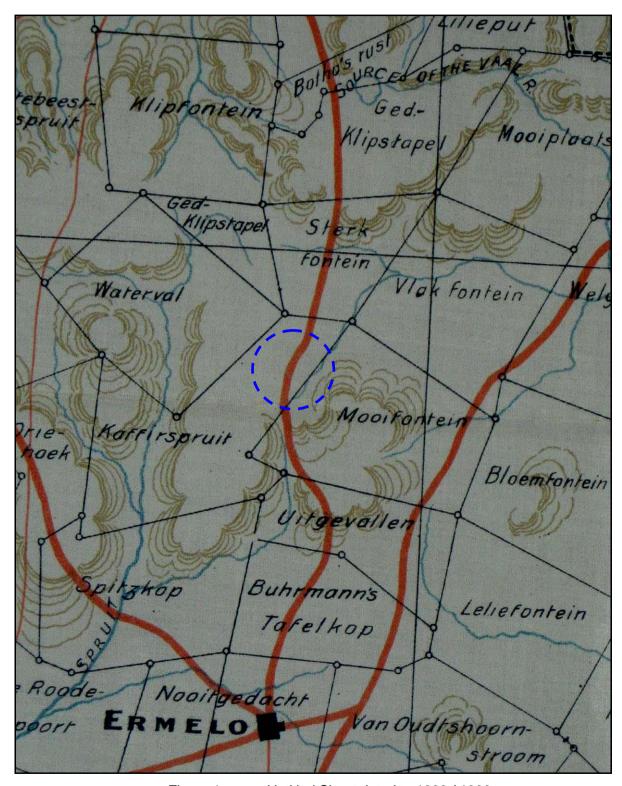


Figure 1 Untitled Sheet dated to 1899 / 1900





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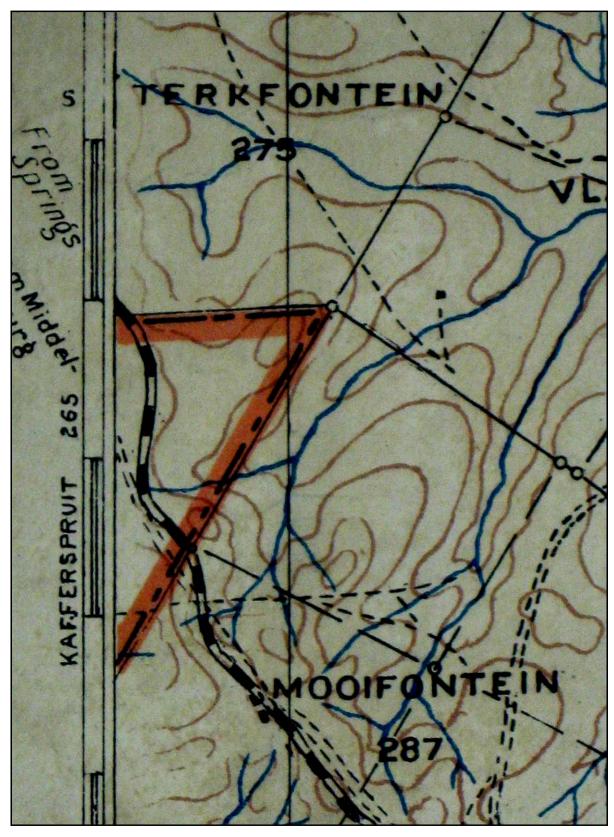


Figure 2 Ermelo Sheet of the Transvaal and Orange River Map Series





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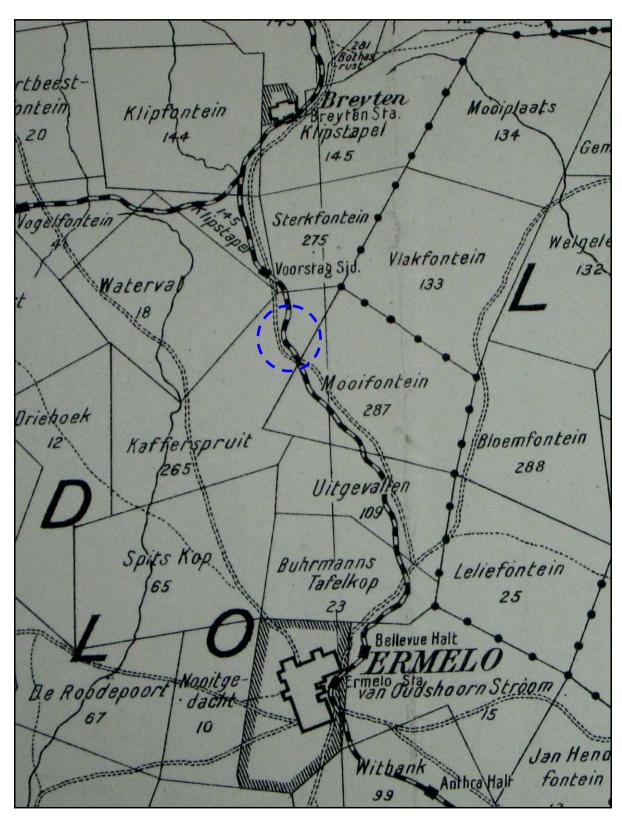


Figure 3 Map of the Magisterial District of Ermelo, dated to September 1917.





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4.5.1.2 The Farm Kafferspruit and its Early Ownership History

Even though the proposed development is situated at present on the farm Voorslag 274 IS, it used to be situated on the farm Kafferspruit. Kafferspruit (first numbered 522 as part of the Middelburg District, then numbered 265 of the Ermelo District) was first inspected on the 1st of December 1873 by Field Cornet Van Oudtshoorn. It was registered on the 20th of June 1876 in the name of Petrus Ignatius Krogh. On the same day the farm was transferred from P.I. Krogh to Hendrik Teodor Buhrmann. During the same year the farm was transferred from H.T. Buhrmann to Petrus Johannes Fourie. After this date the farm was subdivided.

4.5.1.3 Railway Line

In the decade following the South African War of 1899 to 1902, various agricultural areas in the then Eastern Transvaal were connected via rail. A line was constructed from Springs to Breyten, and later one from Ermelo over Breyten to Machadodorp (Bergh, 1999). This last line is the one under discussion. The fact that the line was constructed after the war has significance in that during the war blockhouses were often constructed along the railway lines.

Although the exact date for the construction of the Ermelo to Machadodorp line is not known, it is certain that it was constructed between 1904 and 1910 and very likely that it was undertaken in 1906 / 1907. In a financial statement showing the income and expenditure for the Brakpan – Machadodorp – Ermelo railway line, the earliest depicted date is July 1907 (National Archives, RRC, 43, RF48/06). This suggests that the line was constructed during 1906 and completed during the early part of 1907.

4.5.1.4 The town of Breyten

The town of Breyten was established on the farm Bothasrust by its owner and well-known farmer and businessman Nicholas Jacobus Breytenbach. It was established during December 1905 at the same time that the railway line between Springs and Breyten was completed. Although the town was only laid out during December 1905, stands were quickly sold and within a month the town had two hotels, several shops, a post and telegraph station as well as a railway station. Churches and schools were later constructed on a commonage granted by N.J. Breytenbach (Praagh, 1906).

4.5.2 Social Consultation Findings

No information with regards to the heritage of the affected area was obtained during the social consultation.

4.5.3 Survey Findings

No heritage sites were observed during the fieldwork.

5 Conclusion

It is the opinion of the author of this report that no negative impact on the heritage fabric of the affected area can be expected. As a result no reasons from a heritage perspective can be given for the development not to take place. No further mitigation or monitoring would also be required.





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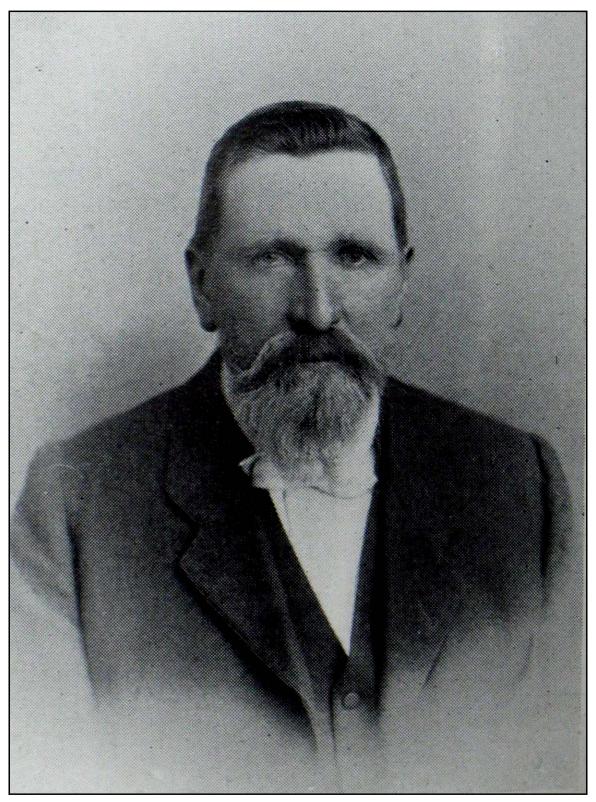


Figure 4 Nicholas Jacobus Breytenbach, the founder of Breyten (Praagh, 1906:380).





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Annexures

Annexure A Locality Plan





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Annexure B Proposed Development Layout Plan



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Annexure C Legislative Framework



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LEGISLATIVE FRAMEWORK

South Africa has a number of legislative measures in place aimed at protecting its heritage resources. Of these the most important is the National Heritage Resources Act 25 of 1999.

1. National Heritage Resources Act 25 of 1999

The promulgation of the National Heritage Resources Act 25 of 1999 brings the conservation and management of heritage resources in South Africa on par with international trends and standards.

Section 38 (3) of the act provides an outline of ideally what should be included in a heritage report. The act states:

- "(3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection (2) (a): Provided that the following must be included:
 - (a) The identification and mapping of all heritage resources in the area affected;
 - (b) an assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7;
 - (c) an assessment of the impact of the development on such heritage resources;
 - (d) an evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
 - (e) the results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
 - (f) if heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
 - (g) plans for mitigation of any adverse effects during and after the completion of the proposed development."

Replacing the old National Monuments Act 28 of 1969, the Heritage Resources Act offers general protection for a number of heritage related features and objects (see below).





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Structures are defined by the Heritage Resources Act as "...any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated with it." In section 34 of the Act the general protection for structures is stipulated. It is important to note that only structures older than 60 years are protected. Section 34(1) of the National Heritage Resources Act reads as follows: "No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority."

The second general protection offered by the Heritage Resources Act which is of relevance for this project, is the protection of **archaeological sites and objects (as well as paleontological sites and meteorites)**. Section 35(4) of the National Heritage Resources Act states that:

"No person may, without a permit issued by the responsible heritage resources authority-

- (a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
- (b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
- (c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
- (d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites."

In order to understand exactly what is protected, it is important to look at the definition of the concept "archaeological" set out in section 2(ii) of the Heritage Act:

"(a) 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;





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- (b) 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;
- (c) 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 respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), 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; and
- (d) features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found;..."

The third important general protection offered by the Heritage Resources Act that is of importance here, is the protection of **graves and burial grounds**. Section 36(3) of the National Heritage Resources Act states that:

"No person may, without a permit issued by SAHRA or a provincial heritage resources authority

- a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
- b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
- c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals."

Of importance as well is section 36 (5), which relates to the conditions under which permits will be issued by the relevant heritage authority should any action described in section 36 (3), be taken. Section 36(5) reads that:





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"SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection (3)(b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority –

- a) made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and
- b) reached agreements with such communities and individuals regarding the future of such grave or burial ground."

This section of the Act refers to graves and burial grounds which are older than 60 years and situated outside of a formal cemetery administered by a local authority.

Section 36 (6) of the act refers to instances where previously unknown graves are uncovered during development and other activities.

"Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority-

- a) carry out an investigation for the purpose of obtaining information on whether or not such a grave is protected in terms of the Act or is of significance to any community; and
- b) if such a grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangement for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any arrangements as it deems fit."

2. Other Legislation

In terms of graves, other legislative measures which may be of relevance include the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925), the Human Tissues Act 65 of 1983, the Ordinance on Excavations (Ordinance no. 12 of 1980) as well as any local and regional provisions, laws and by-laws that may be in place.

