VOORSPOED MINE OFFICES - ARCHAEOLOGICAL EXCAVATION

Archaeological excavation of the ash middens associated with the old Voorspoed Mine offices situated on the farm Morgenster 772, Fezile Dabi District Municipality, Free State

Proposal Document

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Client:	De Beers (Pty) Ltd

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1 INTRODUCTION

PGS Heritage was appointed by De Beers to undertake archaeological excavations of the ash middens associated with the old Voorspoed Mine offices. This action forms part of the overall mitigation project which is aimed at obtaining a destruction permit for the old office building of Voorspoed Mine.

2 BACKGROUND TO PROJECT

The following list provides a chronological framework and background for the process which has been followed thus far, and which has led to this permit application. It must be noted that the framework provided here is based on known information only, and as such may not necessarily represent the entire framework.

- The site was first identified during September 2004 by Dr. Julius Pistorius as part of his work in terms of a heritage impact assessment for De Beers' proposed Voorspoed Mine. The site was included in his report as site number HB01 and apart from the fact that he refers to the building as a 'historic building, Dr. Pistorius also states that spokespersons had indicated that the building may have been a police station. Furthermore, Dr. Pistorius identified several large middens to the north, south and west of the building and indicated that these middens may have been associated with the original function of the building, or alternatively that they are associated with the more recent occupation of the building by farm labourers (Pistorius, 2004).

- On 7 December 2005 a Level 2 heritage impact assessment was undertaken by Dr. Robert de Jong of Cultmatrix (De Jong, 2005). Through archival research they established that the building in question was not the police station, but can plausibly be identified as mine offices for the old Voorspoed Mine. They also suggested a date of construction for the building between 1906 and 1907.

  The report by De Jong (2005) recommended that a destruction permit for the demolition of the building be granted by the Free State Provincial Heritage Resources Authority and that a number of conditions would likely be levied by the latter authority. In the words of the author of the report, these conditions are:

- *Complete documentation of the building* [done].
- *Research regarding architectural history and footprint of the mine, the site and the building in question...*
- *Archiving the documentation at Heritage Free State as well as at a reputable institution concerned with architectural heritage conservation...*
- *Sampling of middens (historic waste deposit areas) on site surrounding the building by a qualified archaeologist (test excavations to obtain any interesting samples of artefacts contained in the middens).*

It is the last item on this list which has special relevance for the present application. In this regard, the report of De Jong (2005) also recommended that the mine should "*...engage the services of a qualified archaeologist to sample the contents of the middens*".

- A permit application to have the building destroyed was applied for by the mine during February 2006.

- In April 2006 the mine received a permit to have the building demolished, but the one year duration period of the permit was not acted upon by the mine in part due to the halting (or reduction) of mining activities at the mine.

- During 2010 (possibly 2012) Sidney Miller visited the building to assess it and to investigate the viability of conducting archaeological excavations of the associated historic middens.

- During January 2013 (possibly before that date) the architectural firm Roodt Architects became involved and sent a letter to the Permit Committee of Heritage Free State to ask for the permit to be renewed.

- On Wednesday, 3 April 2013 a letter was written by Ms. Mariagrazia Galimberti of the South African Heritage Resources Agency in response to the abovementioned application for the renewal of the permit which had been issued by the Free State Provincial Heritage Resources Authority. In the letter a list was made of the requirements of the SAHRA Archaeology, Palaeontology, Meteorites, Heritage Objects and Burial Grounds and Graves permit committee, which includes, as item 2, the

following "...*test excavation of the identified archaeological midden/s in the area is requested. An archaeologist will need to apply for a Phase 2 excavation permit. In terms of s.38(4)(b&c) of the National Heritage Resources Act, the provisions of s. 35 apply. The specialist will require a mitigation permit from SAHRA. On receipt of a satisfactory mitigation (Phase 2) permit report from the archaeologist, the heritage authority will make further recommendations in terms of the site. If the significance of the site is medium-high further mitigation before destruction may be requested. If the site is of high heritage significance, SAHRA may request that it be conserved, that mini-site management plans, interpretive material and possibly protective infrastructure be established*."

The present archaeological permit application is for PGS Heritage to receive permission to undertake the archaeological mitigation as outlined and required in the letter by SAHRA.

- The mine contacted PGS Heritage on 24 April 2013 and asked us for assistance in addressing the points highlighted in the letter from SAHRA

3 SITE LOCATION AND DESCRIPTION

3.1 General description of site and its location

This report was compiled by PGS Heritage for the proposed consolidation of the Western Limb

The site is located on the farm Morgenster 772, Fezile Dabi District Municipality, Free State Province and the coordinates for its position are as follows: S 27° 24' 08.2" E 27° 11' 34.8". The nearest town is Kroonstad, which is 25km to the south.

It comprises the old office building of the Voorspoed Mine as well as the associated archaeological deposit. As indicated above, the building was likely constructed during 1906/7 (De Jong, 2005) which indicates that it is older than 100 years. As a result, both the building and the associated ash middens resulting from the use of the building between construction and the cessation of mining activities in 1912 can be considered as part of the same archaeological site.

The site is situated a short distance south-west of the Voorspoed Mine pit, and has an avenue of trees directly adjacent to it on its eastern end running in a north-western by south-eastern direction.

In the sections that follow a description of the building will be provided, followed by a description of the associated ash middens. The description of the building was compiled by the project architectural historian Mr. Mauritz Naudé (Naudé, 2013).

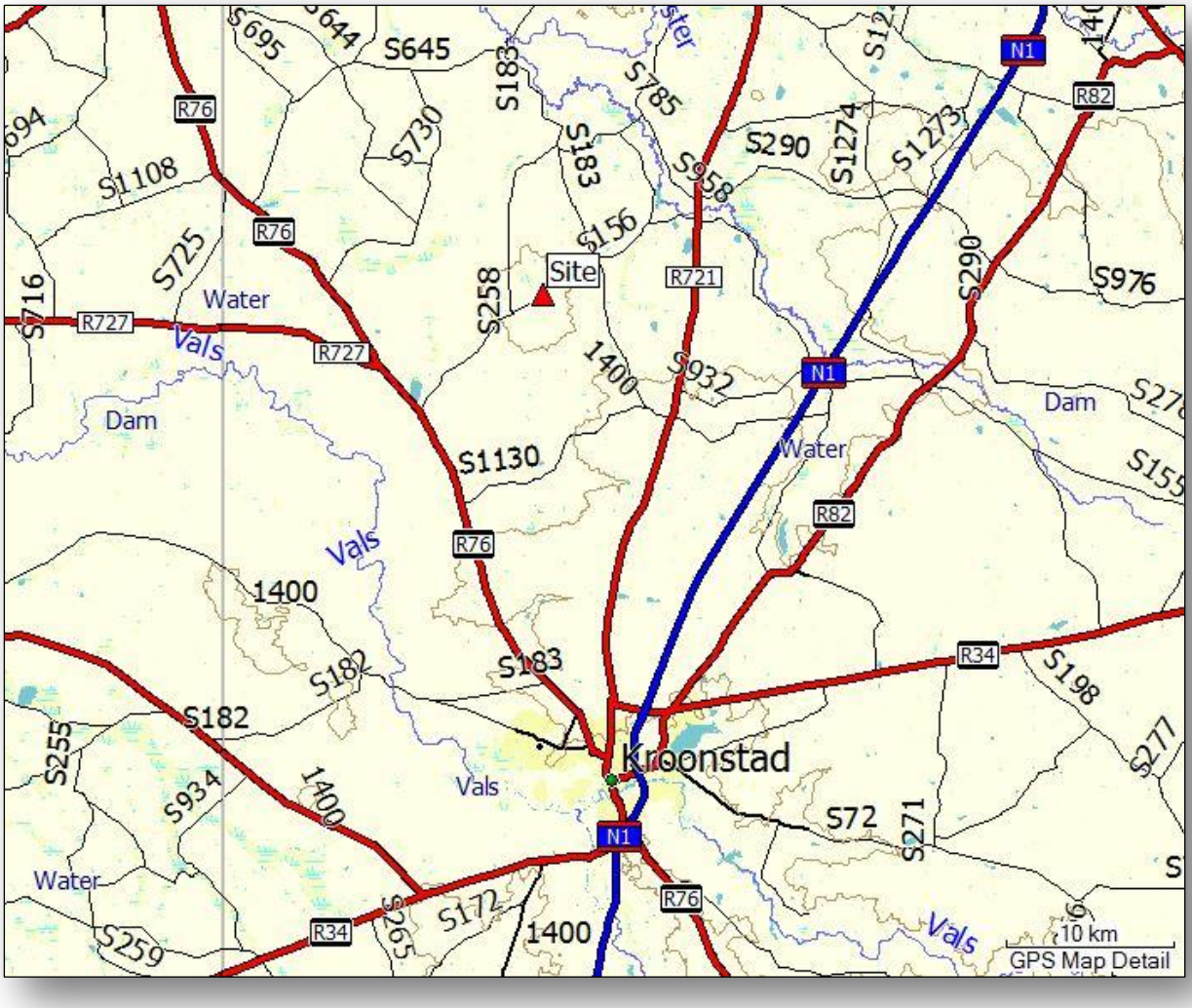

Figure 1 –This figure depicts the site within its regional context.

3.2 The office building

The main feature of the site is the building, which is rectangular in shape, with a central wall dividing it into two sections along the entire length of the structure. All the rooms (offices?) are

arranged along this internal spine with doors opening outwards onto the narrow verandah that runs along all four sides of the building. Each room is relatively small with a single exterior door and window. No doors connect the interior spaces and there is no interface between individual rooms.

Figure 2 –General view of the building as seen from the north. Note the avenue of trees on the left. A low ash heap is located directly in front of the building.

One of the exceptional elements of the building is the foundation. This is constructed with neatly dressed bluish granite stone and projects above the surface to form a narrow plinth. Two rows of baked bricks were laid on top of the stone masonry foundation. The most striking structural element of the foundation is the wide galvanized sheet iron that was installed on top of these two layers of brick. It is so wide that the exterior ends could project outwards for approximately 7cms before it was bent downwards to about 45 degrees. One of the questions arising from this structural element and the way it was treated concerns its unusual width as the building has an extensive verandah along all four sides making it unnecessary for such a prominent damp course.

The floors consist of a compacted mixture of ash and fine gravel which were covered with a cement screed about 3cm thick. The floor was not designed to carry heavy loads and over time this screed was destroyed, exposing the compacted gravel fill. The stoep around the building was defined by a neatly constructed row of dressed granite but no evidence of a formal floor screed or concrete could be found.

The building is constructed with baked bricks and may have been plastered with a clay mortar, but this has been replaced, washed away or chipped-off by some of the previous tenants. The exterior has been replastered with a clay plaster along the entire eastern façade while the plaster has been removed along all other walls. The bricks are identified as commercial stock bricks usually used for plastered walls and the degradation of these indicate that they were not intended to be left unplastered and unprotected. They are badly eroded and have become brittle due to exposure to environmental elements.

The building has a hipped corrugated iron roof with wide eaves resulting in the creation of a verandah roof structure along all four sides of the building. The roof structure was constructed with Oregon pine trusses with long tie beams completing the design at the bottom and hanebalke supporting and reinforcing the trusses at the top near the ridging. Diagonal trusses serving as queen posts were installed in the centre preventing any sagging in the centre of the main side rafters of each truss. Some of these have been cut off and removed. The roof had no gutters and down pipes when the building was investigated. No evidence could be found that the wide eaves or verandah roof were supported by timber or cast iron columns along the periphery of the verandah.

Most of the doors and windows have been removed while some of the door frames and windows frames have remained intact. In one of the rooms sections of a sash window have been retained although the window is broken and dilapidated.

All the rooms had ceilings but in only two rooms has the timber planking of the original ceilings been left intact (or partly intact). Each of these ceilings has an attic door. The original cornices of the ceiling have remained in some of the rooms.

No evidence of other structural elements was found but in some rooms wooden strips containing metal hooks for suspending jackets have remained fixed to the walls.

Figure 3 –General view of the building as seen from the south. The avenue of trees is visible on the right. A low ash heap is located to the left of the vehicle wreck.

3.3 The associated ash middens

An investigation of the direct surroundings of the building has revealed slightly raised ash heaps to the north and south of the building, with historic waste material exposed by a road a short distance west of the building. This latter material appears to form part of an extensive ash midden located on this side of the site. While sections of the middens are evidently disturbed, significant sections of the ash middens appear to be preserved well enough to warrant archaeological investigation and assessment.

As mentioned by authors such as Pistorius (2004) and De Jong (2005), the site has a multi-component history in that it had at least two distinct phases of use over its lifespan. The first period of use took place during the years 1906 to 1912 and can be associated with the original core function of the building i.e. assuming that the building was indeed the old mine offices for the Voorspoed Mine, this period was characterised by the use of the building for this purpose.

The second defined phase took place at a more recent (albeit unknown) period and entailed the occupation of the building by farm workers. It follows that the ash middens associated with the building would be representative of these two phases in the history of the site.

Artefacts and ecofacts exposed by disturbances such as the road and burrowing animals include imported ceramics, glass fragments and metal pieces as well as bone. These artefacts were also observed on the surface of undisturbed sections of the ash middens. The ceramics appear to be mainly from plates, although some fragments of cups were also observed. The glass fragments observed on the site appear to be mainly from bottles. One possible mineral water bottle fragment that was embossed with a "J" was identified. Furthermore, a number of different closures were observed on the glass fragments, including screw (external threaded) tops, crown tops and cork closures. The metal artefacts observed at the site include a rail spike (also known as a cut spike or crampon), which was used on railway lines. The rail spikes were used to secure rails and base plates to the railway sleepers. Within the context of the site, this artefact must be associated with the early mining activities at Voorspoed Mine.

Figure 4 –Examples of the imported ceramics observed at the site. These artefacts were all found in disturbed contexts.

Figure 5 –Examples of the glass artefacts observed at the site. These artefacts were all found in disturbed contexts.

The archaeological mitigation undertaken on the ash middens will also attempt to discern between the original use of the building during the period c. 1906 to c. 1912, and the more recent occupation of the building by farm workers.

4 OBJECTIVES

The objectives of the proposed archaeological mitigation are as follows:

- **Assessing Archaeological Significance of Site**

  The archaeological mitigation measures proposed here are firstly aimed at assessing the archaeological significance of the site. This includes aspects such as the context of the archaeological deposit and its uniqueness, as well as the type and kind of artefacts found within it. Should the research indicate that the site is endowed with a valuable and unique archaeological deposit that is still in undisturbed context, further mitigation

work may be required. In the same way should the work reveal that the archaeological significance of the site is low and/or that a representative sample of the archaeological material found at the site has been retrieved, the destruction of the site will be allowed.

- **Destruction of Site**

The site will be impacted by the expansion of the Voorspoed Mine pit, which cannot be undertaken without destroying the site. The future life of the mine is dependent upon this expansion. As a result, one of the objectives of the proposed archaeological mitigation is to thoroughly document the archaeology of the site and to obtain a representative sample of material so that a destruction permit can be issued by SAHRA.

- **Interpreting the Site**

The archaeological mitigation measures proposed here are of course also aimed at interpreting the site. Although the indication is that the building associated with the archaeological deposit was likely mine offices, archaeological excavation and investigation can throw more light on the original function and use of the building. In the same way information about the daily life of the individuals who made use of the building can also be obtained.

5 PROPOSED METHODOLOGY

The methodology for the proposed mitigation work will comprise the following:

- **Recording of Site Layout Plan**

A site layout plan of the building, associated features and trees, as well as archaeological middens will be recorded using a Total Station. This layout plan will be used to plot the subsequent archaeological mitigation measures such as the positions of the Shovel Test Pits, excavation blocks and the like.

- **Assessing the Archaeological Context and Depth of the Middens**

  As the entire surroundings of the building is characterised by the presence of archaeological material and middens, this step will comprise the plotting and excavation of Shovel Test Pits across the area where archaeological middens and material are found. This activity will facilitate the assessment and comparison of the context, content and quality of the archaeological deposits at various points across the site, which in turn will establish whether further archaeological mitigation work in the form of block excavations will be required, and if so where such excavations should be undertaken.

- **Archaeological Excavations of Identified Areas**

  Any areas of the site containing high archaeological potential, as revealed during the STP process, will be investigated further by archaeological test excavations. These will in all likelihood not be extensive excavations, but will be limited excavation blocks roughly 1m x 1m or 1m x 2m in extent. Although it is impossible to state at present what the stratigraphy and stratigraphic context of the deposit will be, the excavations will in all likelihood be undertaken using the arbitrary spit technique.

  Excavated soil will be screened and sorted after which the recovered archaeological material from each unit will be labelled and bagged separately.

- **Laboratory Analysis of Archaeological Material**

  The packaged material from the site will be taken to the offices of PGS Heritage where the laboratory work will be undertaken. The first step will be the cleaning of the material, followed by the compilation of an inventory of all excavated material and the identification of material. Photographic recording will also take place.

  Once the laboratory work is complete, the archaeological collection from the site will be packaged and taken to the museum at the Department of Archaeology and Anthropology at UNISA for long-term storage and curation.

- **Compilation of Report**

  An archaeological mitigation report will be written and will contain the information recorded from the site as well as from the analyses of the archaeological material. Possible dates and interpretations of the site will be made in the report. An assessment of the archaeological significance of the site will also be made, and recommendations as to whether further work will or will not be required.

- **Destruction Permit Application**

  Assuming that the proposed archaeological research is deemed sufficient for the site's designated significance, the final step in this process will be the compilation and submission of a permit application to have the archaeological component of the site destroyed.

6 PROJECT TEAM

The project team will comprise the following individuals:

- Polke Birkholtz – Project Manager and Archaeologist
- Joanna Behrens – Principal Investigator
- John Anderson – Field Assistant
- Thomas Mulaudzi – Field Assistant
- Edward Mukosi Khorommbi – Field Assistant