PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT REPORT FOR PROPOSED FRIERSDALE QUARRY MINING SITUATED IN THE MAGISTERIAL DISTRICT OF GORDONIA, NORTHERN CAPE PROVINCE.

Compiled by:

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Document Information

Item	Description
Proposed development and location	The mining of Gravel, aggregate and sand (general) on Portion 31 and the Remaining Extent of the farm Warm Zand 468 situated in the Magisterial District of Gordonia, Northern Cape Province.
Title	Proposed Friersdale Quarry Mining situated in the Magisterial district of Gordonia, Northern Cape Province: Archaeological and Heritage Impact Assessment Report
Purpose of the study	The purpose of this document is an Archaeological and Heritage Impact Assessment report that describes the cultural values and heritage factors that may be impacted on by the proposed Friersdale Quarry Mining and associated infrastructure located in the North Cape Province near Keimoes
1:50 000 Topographic Map	2820DA
Coordinates	See Figure 2
Municipalities	Kai!Garib Local Municipality.
Predominant land use of surrounding area	Mining and processing area and residential on the southern edge of the site
Developer	Afrimat Aggregate Operations (Pty) Ltd
Heritage Consultant	MSEI.135 Pitzer Road, Glen Austin, Midrand, 1685
Date of Report	Final Report 18 April 2017
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Project Number	DOE03NCAR001

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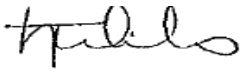
Geographic Co-ordinate Information: Geographic co-ordinates in this report were obtained using a hand-held Garmin Global Positioning System device. The manufacturer states that these devices are accurate to within +/- 5 m.

Maps: Maps included in this report use data extracted from the NTS Map and Google Earth Pro.

Disclaimer: The Authors are not responsible for omissions and inconsistencies that may result from information not available at the time this report was prepared.

The Archaeological and Heritage Impact Assessment Study was carried out within the context of tangible and intangible cultural heritage resources as defined by the SAHRA Regulations and Guidelines as to the authorisation of proposed mining development project being proposed by Afrimat Aggregates Operations (Pty) Ltd

Signed by



April 2017

Acknowledgement

The author acknowledges Afrimat Aggregates Operations (Pty) Ltd for their assistance with project information, and the associated project BID as well as responding to technical queries related to the project.

TABLE OF CONTENTS

TABLE OF PLATES [PHOTOGRAPHS]

TABLE OF FIGURES

EXECUTIVE SUMMARY

This Archaeological and Heritage Impact Assessment (AIA/HIA) Report has been prepared to address requirements of the National Heritage Resources Act, Act 25 of 1999, Section 38. Mbviseni Sustainable Environmental Management Initiative (MSEI) was commissioned by Afrimat Aggregates Operations (Pty) Ltd to conduct this Archaeological and Heritage Impact Assessment (AIA/HIA) Study for the proposed quarry and sand mining development. The proposed mining development is located at in the Magisterial district of Gordonia, Northern Cape Province. This report includes an impact study on potential archaeological and cultural heritage resources that may be associated with the proposed mining development project site. This study was conducted as part of the specialist input for the Basic Impact Assessment exercise. The proposed mining development consists of mining right application. The project information has been passed to Mbviseni sustainable Environmental Management Initiative (MSEI) research team by the project EAP. Analysis of the archaeological, cultural heritage, environmental and historic contexts of the study area predicted that archaeological sites, cultural heritage sites, burial grounds or isolated artefacts were likely to be present on the affected landscape. The field survey was conducted to test this proposition and verify this prediction within the proposed mining development site. The general project area is predominantly residential, agriculture and mining.

The report makes the following observations:

- The findings of this report have been informed by desktop data review, field survey and impact assessment reporting which include recommendations to guide heritage authorities in making decisions with regards to the proposed project.
- Most sections of the project area are very accessible and the field survey was effective enough to cover all sections of the project receiving environs. However, some small portions of the proposed mining development site had limited access because of the thick vegetation cover.
- The immediate project area is predominantly agricultural (grazing) and residential.
- Some sections of the proposed development site are severely degraded by auxiliary mining activities.
- The study recorded scatters of MSA and LSA Stone tools particularly on the southern edge of the site.

The report sets out the potential impacts of the proposed mining development on heritage matters and recommends appropriate safeguard and mitigation measures that are designed to reduce the impacts where appropriate. The report makes the following recommendations:

- ❖ The miners must be inducted on the possibility of encountering archaeological resources that may be accidentally exposed during subsurface construction prior to commencement of work on the site in order to ensure appropriate mitigation measures and that course of action is afforded to any chance finds.
- ❖ If archaeological materials are uncovered during clearing and excavation, work should cease immediately and the SAHRA be notified and activity should not resume until appropriate management provisions are in place.

- ❖ The findings of this report, with approval of the SAHRA, may be classified as accessible to any interested and affected parties within the limits of the legislations.

This report concludes that the impacts of the proposed mining development of the cultural environmental values are not likely to be significant on the entire development site if the EMP includes recommended safeguard and mitigation measures identified in this report.

ABBREVIATIONS

AIA	Archaeological Impact Assessment
ECO	Environmental Control Officer
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EM	Environmental Manager
EMP	Environmental Management Plan
HIA	Heritage Impact Assessment
IDT	Independent Development Trust
LIA	Late Iron Age
NHRA	Nation Heritage Resources Act, Act 25 of 1999
PM	Project Manager
PHRA	Provincial Heritage Agency
SM	Site Manager
SAHRA	South African Heritage Resources Agency

KEY CONCEPTS AND TERMS

Periodization Archaeologists divide the different cultural epochs according to the dominant material finds for the different time periods. This periodization is usually region-specific, such that the same label can have different dates for different areas. This makes it important to clarify and declare the periodization of the area one is studying. These periods are nothing a little more than convenient time brackets because their terminal and commencement are not absolute and there are several instances of overlap. In the present study, relevant archaeological periods are given below;

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

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

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

Early Iron Age (~ AD 200 to 1000)

Late Iron Age (~ AD1100-1840)

Historic (~ AD 1840 to 1950, but a Historic building is classified as over 60 years old)

Definitions Just like periodization, it is also critical to define key terms employed in this study. Most of these terms derive from South African heritage legislation and its ancillary laws, as well as international regulations and norms of best-practice. The following aspects have a direct bearing on the investigation and the resulting report:

Cultural (heritage) resources are all non-physical and physical human-made occurrences, and natural features that are associated with human activity. These can be singular or in groups and include significant sites, structures, features, ecofacts and artefacts of importance associated with the history, architecture or archaeology of human development.

Cultural significance is determined by means of aesthetic, historic, scientific, social or spiritual values for past, present or future generations.

Value is related to concepts such as worth, merit, attraction or appeal, concepts that are associated with the (current) usefulness and condition of a place or an object. Although significance and value are not mutually exclusive, in some cases the place may have a high level of significance but a lower level of value. Often, the evaluation of any feature is based on a combination or balance between the two.

Isolated finds are occurrences of artefacts or other remains that are not in-situ or are located apart from archaeological sites. Although these are noted and recorded, but do not usually constitute the core of an impact assessment, unless if they have intrinsic cultural significance and value.

In-situ refers to material culture and surrounding deposits in their original location and context, for example an archaeological site that has not been disturbed by farming.

Archaeological site/materials are remains or traces of human activity that 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. According to the National Heritage Resources Act (NHRA) (Act No. 25 of 1999), no archaeological artefact, assemblage or settlement (site) and no historical building or structure older than 60 years may be altered, moved or destroyed without the necessary authorisation from the South African Heritage Resources Agency (SAHRA) or a provincial heritage resources authority.

Historic material are remains resulting from human activities, which are younger than 100 years, but no longer in use, including artefacts, human remains and artificial features and structures.

Chance finds means archaeological artefacts, features, structures or historical remains accidentally found during development.

A grave is a place of interment (variably referred to as burial) and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place. A grave may occur in isolation or in association with others where upon it is referred to as being situated in a cemetery (contemporary) or burial ground (historic).

A site is a distinct spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity.

Heritage Impact **Assessment (HIA)** refers to the process of identifying, predicting and assessing the potential positive and negative cultural, social, economic and biophysical impacts of any proposed project, which requires authorisation of permission by law and which may significantly affect the cultural and natural heritage resources. Accordingly, an HIA must include recommendations for appropriate mitigation measures for minimising or circumventing negative impacts, measures enhancing the positive aspects of the proposal and heritage management and monitoring measures.

Impact is the positive or negative effects on human well-being and / or on the environment.

Mitigation is the implementation of practical measures to reduce and circumvent adverse impacts or enhance beneficial impacts of an action.

Mining heritage sites refer to old, abandoned mining activities, underground or on the surface, which may date from the prehistorical, historical or the relatively recent past.

Study area or 'project area' refers to the area where the developer wants to focus its development activities (refer to plan).

Phase I studies refer to surveys using various sources of data and limited field walking in order to establish the presence of all possible types of heritage resources in any given area

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1 INTRODUCTION

Background

This Archaeological and Heritage Impact Assessment (AIA/HIA) Report has been prepared by MSEI (Pty) Ltd for the purpose of Basic Impact Assessment for Friersdale Quarry Mining situated in the Magisterial District of Gordonia, Northern Cape Province. Friersdale Quarry Mining is proposing to extend mining activities at the existing Friersdale Quarry Mine. This report details the field study, results of the study as well as discussion on the anticipated impacts of the proposed mining development as is required by the National Heritage Resources Act, Act 25 of 1999 Section 38. It focuses on identifying and assessing potential impacts on archaeological resources as well as on other physical cultural properties including historical heritage resources in relation to the proposed mining development. MSEI heritage specialists undertook the assessments, research and consultations required for the preparation of the report comprising archaeological and heritage impacts for the purpose of ensuring that the cultural environmental values are taken into consideration and reported into the EIA processes.

The study was designed to ensure that any significant archaeological or cultural physical property or sites are located and recorded, and site significance is evaluated to assess the nature and extent of expected impacts from the proposed mining development. The assessment includes recommendations to manage the expected impact of the proposed mining development. The report includes recommendations to guide heritage authorities in making appropriate decision with regards to the environmental approval process for the proposed mining development. The report concludes with detailed recommendations on heritage management associated with the mining development work. MSEI, an independent consulting firm, conducted the assessment; research and consultations required for the preparation of the archaeological and heritage impact report in accordance with its obligations set in the NHRA as well as the environmental management legislations.

In line with SAHRA guidelines, this report, not necessarily in that order, provides:

1) Management summary
2) Methodology
3) Information with reference to the desktop study
4) Map and relevant geodetic images and data
5) GPS co-ordinates
6) Directions to the site
7) Site description and interpretation of the cultural area where the project will take place
8) Management details, description of affected cultural environment, photographic records of the project area
9) Recommendations regarding the significance of the site and recommendations regarding further monitoring of the site.
10) Conclusion.

Location and Description of the proposed mining development site

The proposed development is located at the farm Warm Zand 468 situated in the Magisterial District of Gordonia, Northern Cape Province. The Warm Zand farm is situated in an agricultural setting approximately 18km west from the town Keimoes.The proposed project will entail opening of the surface through open cast mining methods. This therefore include the following activities:

- Drilling and blasting the hard rock after the topsoil of the area has been stripped and stockpiled
- loading and hauling the material out of the excavation to the crushing and screening plants,
- crush and screen the recovered material at the crusher plant in order to reduce it to various sizes (aggregate)
- Stockpile the aggregate at a stockpile area until it is collected by clients.

Afrimat Aggregates Operations (Pty) Ltd proposes to apply for a mining right to mine Dolerite on Portion 31 and the Remaining Extent of the farm Warm Zand 468. An approximately 55.2 ha area has been earmarked for development. Afrimat envisages that the surface infrastructure for the project will consist of the following:

- Site Office
- Site vehicles
- Site Storage Area
- Drilling Equipment (but not permanently required)
- Excavating Equipment
- Earth Moving Equipment
- Mobile crushers and mobile screens infrastructure
- Parking area for visitors and site vehicles
- Vehicle service area with wash bay
- Bunded diesel and oil storage facilities
- Generator on bunded area
- Ablution Facilities
- Weigh Bridge
- Demarcated general and hazardous waste area

Figure 1: Google Earth photo showing the proposed extension of the existing quarry on farm Warm Zand.

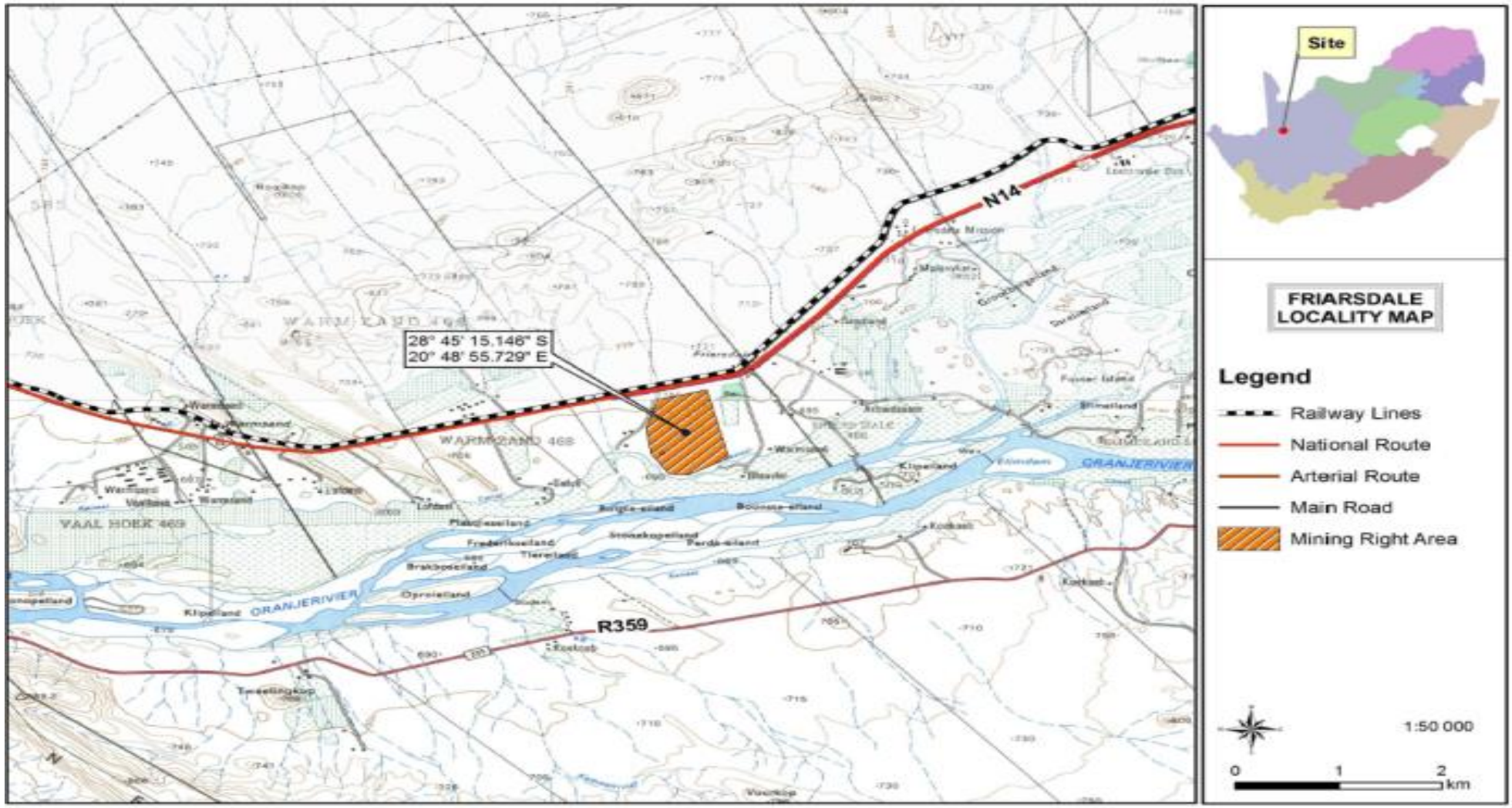

Figure 2: Topographic map showing the proposed extension of the existing quarry on farm Warm Zand (Afrimat 2017)

2 LEGAL REQUIREMENTS

This A/HIA report is a component of a broader Basic Assessment Report and addresses the requirements of Section 38 of the NHRA Act 25 of 1999 and EIA Terms of Reference in relation to the assessment of impacts of the proposed development on the cultural and heritage resources associated with the receiving environment. The statutory mandate of heritage impact assessment studies is to encourage and facilitate the protection and conservation of archaeological and cultural heritage sites, in accordance with the provisions of the National Heritage Resources Act, Act 25 of 1999 and auxiliary regulations. Therefore, in pre-development context, heritage impact assessment study is conducted to fulfil the requirements of Section 38 (1) of the National Heritage Resources Act (No 25 of 1999).

The legislation requires that when constructing a linear development exceeding 300m in length or developing an area exceeding 5000 m² in extent, the developer must notify the responsible heritage authority of the proposed development and they in turn must indicate within 14 days whether an impact assessment is required. The NHR Act notes that "any comments and recommendations of the relevant heritage resources authority with regard to such development have been taken into account prior to the granting of the consent", the heritage authority here being Provincial Authority (PHRA-NC).

Both the national legislations and provincial provisions provide protection for the following categories of heritage resources:

- Landscapes, cultural or natural;
- Buildings or structures older than 60 years;
- Archaeological Sites, palaeontological material and meteorites;
- Burial grounds and graves;
- Public monuments and memorials;
- Living heritage (defined as including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships) (Also see Appendix 4).

Terms of reference

The author was instructed to conduct an AIA/HIA study addressing the following issues:

- Archaeological and heritage potential of mining development area including any known data on affected areas;
- Provide details on methods of study; potential and recommendations to guide the PHRA provincial authority to make an informed with regards to authorization of the proposed development.

PHOTOGRAPHIC PRESENTATION OF THE PROJECT SITE

Plate 1: Photo 1: View of the road which leads to the quarry mine earmarked for expansion (Photograph © by Author 2017)

Plate 2: Photo 2: View of road leading to proposed mining development site (Photograph © by Author 2017

Plate 3: Photo 3: view of proposed mining development site (Photograph © by Author 2017)

Plate 4: Photo 4: South western view of the proposed mining project area (Photograph © by Author 2017)

Plate 5: Photo 5: View of northern section of the proposed development site (Photograph © by Author 2017).

Plate 6: Photo 6*:* View of western section of the proposed development site *(*Photograph © by Author 2017).

Plate 7: Photo 7 View of proposed mining development site north east of the quarry mine(Photograph © by Author 2017).

Plate 8: Photo 9 View of access road and powerline running through the proposed mining site (Photograph © by Author 2017).

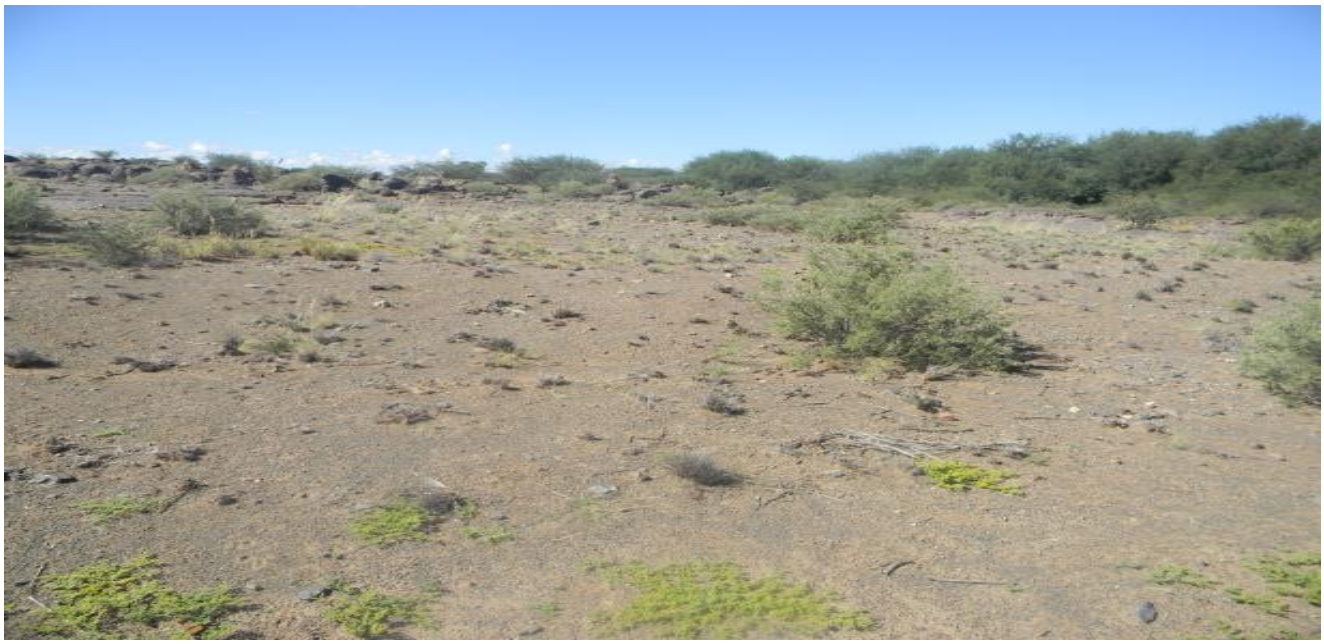

Plate 10: Photo 9 View of proposed mining development site on the southern side of the quarry mine (Photograph © by Author 2017).

Plate 11: Photo 11 View of existing mining area (Photograph © by Author 2017).

Plate 12: Photo 12. View of North West of the proposed mining site (Photograph © by Author 2017).

Plate 13: Photo 13 View of proposed mining site (Photograph © by Author 2017).

Plate 14: Photo 14.Vew of bare ground and thorny bush in the western side of the quarry mine(Photograph © by Author 2017).

Plate 15: Photo 15 View of bare land in western side of the mine (Photograph © by Author 2017).

Plate 16: Photo 16 View of one homestead on fringes the proposed development site (Photograph © by Author 2017).

Plate 17: Photo 17 View of formal village cemetery within the proposed mining area (Photograph © by Author 2017).

Plate 18: Photo 18 View of land use disturbances in eastern side of the mine (Photograph © by Author 2017).

Plate 19: Photo 19. View of road developments on the southern side of the site(Photograph © by Author 2017).

Plate 20: Photo 20 *General view of southern section of site* (Photograph © by Author 2017)

3 METHODOLOGY

The proposed Mining Right Application requires clearance and authorisation from government compliance agencies including the heritage authority of SAHRA. Key AIA/HIA objectives for this project are to:

- Fulfil the statutory requirements of the National Heritage Resources Act, Act 25 of 1999.
- Identify and describe, (in terms of their conservation and / or preservation importance) sites of cultural and archaeological importance that may be affected by the proposed mining development project. This study searched for sites and features of traditional historical, social, scientific, cultural and aesthetic significance within the affected study area; the identification of gravesites.
- Assess the significance of the resources where they are identified.
- Evaluate the impact thereon with respect to the socio-economic opportunities and benefits that would be derived from the proposed development.
- Provide guidelines for protection and management of identified heritage sites and places (including associated intangible heritage resources management that may apply).
- Consult with the affected and other interested parties, where applicable, in regard to the impact on the heritage resources in the project's receiving environment.
- Make recommendations on mitigation measures with the view to reduce specific adverse impacts and enhance specific positive impacts on the heritage resources.
- Take responsibility for communicating with the SAHRA and other authorities in order to obtain the relevant permits and authorization with reference to heritage aspects.

In order to meet the objectives of the AIA/HIA Phase 1 study, the following tasks were conducted: 1) site file search, 2) limited literature review, 3) consultations with the affected communities, 4) completion of a field survey and assessment and 5) analysis of the acquired data and report production. The following tasks were undertaken:

- Preparation of a predictive model for archaeological heritage resources in the study area.
- A review and gap analysis of archaeological, historical and cultural background information, including possible previous heritage consultant reports specific to the affected project area, the context of the study area and previous land use history as well as a site search;
- Field survey of the proposed mining development site within the study area, in order to test the predictive model regarding that heritage sites in the area;
- Physical cultural property recording of any identified sites or cultural heritage places;
- Identification of heritage significance; and
- Preparation of AIA/HIA report with recommendation, planning constraints and opportunities associated with the proposed development.

Walking surveys were conducted in order to identify and document archaeological and cultural sites within the proposed mining development site. Formal settlements, grazing lands; railway line, village roads and main road infrastructures, distribution and other auxiliary infrastructures dominate the affected project area. The entire project area was accessible through a network of main roads, district roads and village tracks used to access the settlements. Although limited sections of

ground surface were covered with grass and thick bushes, this did not hinder identification of possible archaeological sites in surveyed areas particularly those earmarked for the mining development. Geographic coordinates were obtained with a handheld Garmin GPS global positioning unit. Photographs were taken as part of the documentation process during field study.

3.1 Assumptions and Limitations

The investigation has been influenced by the unpredictability of buried archaeological remains (absence of evidence does not mean evidence of absence) and the difficulty in establishing intangible heritage values. It should be noted that archaeological deposits (including graves and traces of archaeological heritage) usually occur below the ground level. Should artefacts or skeletal material be revealed at the site during construction, such activities should be halted immediately, and a competent heritage practitioner, SAHRA or PHRA must be notified in order for an investigation and evaluation of the find(s) to take place (see NHRA (Act No. 25 of 1999), Section 36 (6). Recommendations contained in this document do not exempt the developer from complying with any national, provincial and municipal legislation or other regulatory requirements, including any protection or management or general provision in terms of the NHRA. The author assumes no responsibility for compliance with conditions that may be required by SAHRA in terms of this report.

The field survey did not include any form of subsurface inspection beyond the inspection of burrows, road cut sections, and the sections exposed by erosion. Some assumptions were made as part of the study and therefore some limitations, uncertainties and gaps in information would apply. It should however, be noted that these do not invalidate the findings of this study in any significant way:

- The proposed mining development will be limited to specific right of site as detailed in the development layout (Figure 2 & 3).
- The mining teams on the proposed site will use the existing access roads and there will be no construction beyond the demarcated site.
- No excavations or sampling were undertaken, since a permit from heritage authorities is required to disturb a heritage resource. As such the results herein discussed are based on indicators observed on the surface. However, these surface observations concentrated on exposed sections such as road cuts and clear farmland.
- This study did not include any ethnographic and oral historical studies nor did it investigate the settlement history of the area.

3.2 Consultation

MSEI team consulted some residents who confirmed that the proposed mining development site has been used as grazing land and they are not aware of any cultural site or activity associated with the site. The study team also consulted the Mine manager for any reference to heritage material in the project site. The consultation assisted in verifying the potential of any archaeological and heritage resources on the proposed development site and the identification of village cemetery located within the proposed mining area.

4 CULTURE HISTORY BACKGROUND OF THE PROJECT AREA

Stone Age Archaeology

Introduction

Keimoes is situated alongside the Orange River, about 40 kms west of Upington. The site for the proposed extension on quarry mining is located on the farm Warm Zand 468 situated in the Magisterial District of Gordonia, Northern Cape Province. The Warm Zand farm is situated in an agricultural setting approximately 18km west from the town Keimoes. The town of Keimoes grew out of an irrigation scheme that was established in the larger Upington and Kakamas areas. It attained municipal status in 1949. The name of the town is of Khoikhoi origin and translates as "large eye", i.e. a natural fountain. According to the various databases that were consulted it has approximately 10 buildings and features that are listed as provincial heritage sites or are viewed to be of conservation worthy status. The area under study is approximately 52.2 hectors. The aim of the study is to locate and map archaeological sites/remains that may be impacted by the proposed project, to assess the significance of the potential impacts and to propose measures to mitigate the impacts.

Stone Age archaeology is prevalent in the larger geographical area such that archaeologists who have previously worked on Northern Cape documented several Stone Age sites in the area. It is not surprising to come across stone tools in the region. Banded ironstone is known to have been a favoured and desirable raw material for making stone artefacts and occurs on a number of sites that have been documented by archaeologists and others throughout the Northern Cape. Most of the tools are spread very thinly and unevenly over the surrounding region, but a low density scatter of tools can also be noticed. Previous researches on the province shows that Early Stone Age is very well represented at sites such as Kathu Pan 1, Kathu Townlands, Bestwood 1 (Wilkins and Chazan 2012; Chazan et al. 2012; Walker et al. 2014) and Wonderwerk Cave (Thackeray et al. 1981). All of the above sites produced well-made Acheulean hand axes and cleavers, as well as Fauresmith lithic materials that are transitional between the Acheulean (ESA) and the MSA.

The ESA is generally associated with the earlier Oldowan industry (marked by crude choppers and other unifacial core tools), followed by the still large but better fashioned hand axes and cleavers of the Acheulean techno-complex(Deacon and Deacon 1999). The Fauresmith Industry is characterized by a prepared core technology that produced both blades and points, making it transitional between the ESA and the MSA (~ 250 000 to 40-25 000 years ago) (Porat *et al*. 2010; Wilkins and Chazan 2012; Walter et al. 2014). Until recently, the Fauresmith Industry was poorly defined, being mostly identified based on the co-occurrence of Levallois points and hand axes (Beaumont and Vogel 2006: 224), and prepared cores, blades, and 'side-scrapers on flakes' (Beaumont 1990:79)

More technological and behavioural changes than those witnessed in the MSA, occurred during the LSA (~ 40-25 000, to recently, 100 years ago), which is also associated with Homo Sapiens (Barham and Mitchell 2008). For the first time there is evidence of people's activities derived from material other than stone tools (ostrich eggshell beads, ground bone arrowheads, small bored stones and wood fragments) (Deacon and Deacon 1999). The LSA people are also credited with the production of rock art (engravings and paintings), which is an expression of their complex social and spiritual beliefs (Parkington et al.

2008). The MSA is better understood as a flake-technological stage characterized by faceted platforms, produced from prepared cores, as distinct from the core tool-based ESA technology (Barham and Mitchell 2008). At Wonderwerk Cave, the MSA component was associated with pieces of haematite and several incised stone slabs, most with curved parallel lines that add to the behavioural shifts that went beyond stone tools and ushered in the appreciation of art (Beaumont and Vogel 2006). In terms of characterization, the lithic succession at Wonderwerk Cave serves as a benchmark for the Stone Age sequence of the Northern Cape (Beaumont and Vogel 2006; Kusel *et al*. 2009). The sequence comprises an uppermost LSA sequence that contains Ceramic LSA, Wilton and Oakhurst industries. Some researchers have named the earlier LSA industry of the region as the Oakhurst industry (some have labelled this local variant the Kuruman), characterized by rare retouched artefacts, most of which are large scrapers that are oblong with retouch on the side.

Intangible Heritage

As defined in terms of the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage (2003) intangible heritage includes oral traditions, knowledge and practices concerning nature, traditional craftsmanship and rituals and festive events, as well as the instruments, objects, artefacts and cultural spaces associated with group(s) of people. Thus intangible heritage is better defined and understood by the particular group of people that uphold it. In the present study area, very little intangible heritage is anticipated on the development footprint because most historical knowledge does not suggest a relationship with the study area per se, even though several other places in the general area such do have intangible heritage.

SAHRIS Database and Impact assessment reports in the proposed project area

At least sixteen previous CRM projects were conducted in the general vicinity of the study area. The studies include solar plants, powerline and other infrastructure development projects completed by Dreyer (2012), Fourie, (2011, 2013, 2014), Kaplan (2006, 2008, 2011a, 2011b, 2012a, 2012b, 2014),Van der Walt (2006, 2008a, 2008b, 2013, 2015); Engelbrecht (2015), Hutten, L. & Hutten, W. (2013) Morris (2011a, 2011b), Beamont (2005, 2005), Van Ryneveld (2007a, 2007b) Mlilo (2016), Kruger (2015a, 2015b), Pelser, A. & van Vollenhoven, A.C. 2011, Pelser, A.J (2012), Van Schalkwyk (2010, 2015a, 2015b, 2016), Van Vollenhoven, A.C. (2012) and Webley, L & Halkett, D. (2008). These recorded LSA, MSA and LSA sites of varying significance. These finding provided insights regarding the potential of the study site.

5 RESULTS OF THE ARCHAEOLOGICAL/HERITAGE ASSESSMENT STUDY

The proposed Friersdale Quarry Mining is located in the magisterial district of Gordonia, Northern Cape Province. The proposed mining development site has been established through consideration of biophysical, social, technical and cultural aspects. The Basic Assessment process will aim to provide a final site selection of the proposed development site based on biophysical, social, cultural and technical considerations. The following section presents results of the archaeological and Heritage survey conducted at proposed mining development site.

Heritage resource	Status/Findings
Buildings, structures, places and equipment of cultural significance	One homestead exists within the development footprint. The field survey concluded that the homestead s not of any heritage value.
Areas to which oral traditions are attached or which are associated with intangible heritage	None exists on the study area
Historical settlements and townscapes	None survives in the proposed area
Landscapes and natural features of cultural significance	None
Archaeological and palaeontological sites	Several scatters of MSA and LSA tools in secondary deposition.
Graves and burial grounds	Identified a formal cemetery within the proposed mining area.
Movable objects	None
Overall comment	Although disturbed the site has potential to yield significant archaeological remains.

5.1 Archaeological and Heritage Site

The proposed Friersdale Quarry Mining development site yielded confirmable archaeological material mostly in secondary deposition. The existing quarry mine is situated on area that is heavily degraded probably from previous and current land use and from infrastructure developments. It is assumed that the chances of recovering more significant archaeological materials *in situ* were seriously compromised and limited due to auxiliary mining activities around the existing mining site and clearance for access roads. Unquantifiable artefacts were mapped with a hand-held GPS unit. Most of the tools were assigned to the Middle Stone Age and Later Stone Age. Very few Early Stone Age implements were found in the project area. Most of the recorded tools are made from ironstone and a few in quartzite, silcrete and quartz. The majority of the lithics comprise flakes, flake blades and chunks most of which are utilised and/or retouched. At least 20 cores or minimal cores/flaked chunks were counted, indicating a fairly high level of stone fabrication on the site. The ratio of cores to flakes suggests that many of the final retouched or flaked artefacts were removed from the site by the toolmakers. The sparse distribution on stone tools around the site suggest that the tools were washed away by erosional processes and modern land use activities. Excessive erosion

and other earth moving activities significantly disturbed the provenance of artefacts. Frequencies of formal retouched tools are very low, but the numbers of miscellaneous retouched tools (nearly 60%) is high. More than five convex scrapers, six side scrapers, one possible end scraper, and three step retouched flakes were identified. No hammer stones were found on the project site. The site is covered in sparse grass cover with scattered clumps of thorn tree. Other than stone tools, no other evidence of ancient human settlement was identified during the survey. No organic remains such as bone, pottery, or ostrich eggshell were found within the proposed mining right area.

There is spatial patterning to the distribution of finds, it was noted that some of the lithics tended to cluster around the south western portion of the proposed site near the existing quarry site. However, the fairly small numbers and isolated context in which they were found means that the archaeological remains on Friersdale quarry mine have been rated as having low archaeological (Grade 3C) significance. On eroded surfaces, it was anticipated that the density will be generally be low although there were some cultural material scattering. While much of the area seems unlikely to have significant intangible heritage value, this would need to be verified on the ground.

Site name	Description	Photo
K1) a	S 28^0 45.008^1 E 020^0 48.765^1 Cores and scrapers	
K1) b	S 28^0 45.027^1 E 020^0 48.787^1 Flakes cleavers and scrapers	

K1) c	S 28^0 45.027^1 E 020^0 48.787^1 Southern edge of the mining site Highly populated by stone age tools	
K1) d	S 28^0 45.027^1 E 020^0 48.803^1 South western side of the quarry mine	
K1) e	S 28^0 45.046^1 E 020^0 48.816^1 Low density surface scatter. Flakes tools were identified	
K1) f	S 28^0 45.046^1 E 020^0 48.816^1 The site consists of high density surface scatter of Stone Age lithics.	

K1) g	S 28^0 45.028^1 E 020^0 48.830^1 Low density scatter of Later Stone Age lithics were identified.	
K1) h	S 28^0 45.089^1 E 020^0 48.836^1 Low density scatter of later stone age lithics were identified.	

Mitigation

Although most of the findings are located on secondary deposition site, we recommend that a professional archaeologist be retained to salvage the archaeological remains before mining activities begin.

5.2 Buildings and Structures older than 60 years

There is one homestead within the study area although few other homesteads are found in the vicinity of the quarry mining area. The proposed quarry mining project site did not yield any buildings or structures older than 60 years. There's only one homestead located in the area under study. In terms of the built environment, the area has no significance, as there is only one homestead younger than 60 years. There are no other structures, features or old equipment in the study area.

5.3 Burial grounds and graves

The field survey identified a village cemetery with more than 50 graves. The burial site is well protected and consist of grave older than 60 years. Most graves are marked by tombstones and inscribed headstones. Seven graves are marked by Oval shaped stone piles whereas the other 25 graves are marked by cement plaster and inscribed head markers. The identified formal cemetery located on the southern part of the existing quarry mine is one of the current peri-urban infrastructural features identified. It is important to note that burial sites are regarded as sacred and protected by the NHRA and other auxiliary legislations. The significance of burial grounds and gravesites is closely tied to their age and historical, cultural and social context. Nonetheless, every burial should be considered as of high socio-cultural significance protected by practices, a series

of legislations, and municipal ordinances. Although the possibility of encountering previously unidentified burial sites is low within the proposed quarry mine development site, should such sites be identified during subsurface construction work, they are still protected by applicable legislations and they should be protected (also see Appendixes for more details.

Mitigation

The recorded village cemetery must be preserved *in situ* and the mine must provide access to the site.

5.4 Historical Monuments and Memorials

The study did not record any historical monuments or memorials within the proposed mine development site.

5.5 Cumulative Impacts

Although the project area is degraded by overgrazing and infrastructure developments and mining activities, the proposed development will add to the cumulative impacts of the existing developments especially the visual impacts of the high standing stockpiled quarry.

6 DISCUSSION

The study recorded sparsely distributed archaeological materials within the proposed quarry mining site. However, it should be noted that the whole landscape in general yielded stone artefacts that are scattered especially on the western and south-western section of the site possibly due to erosional process. The distribution of stone implements may probably be due to previous land use activities such as agriculture and clearance around the existing mining area. Middle Stone Age tools are noticeable throughout the area but the south-western side of the proposed mine development site has more concentration of stone tools as compared to the eastern and northern side which have sparsely distribution (see Plate 1- 12)

Various specialists conducted several Phase 1 Archaeological/ Heritage studies for various infrastructure developments and mining developments since 2002. The current study should be read in conjunction with previous Phase 1 Impact Studies conducted in the general project area. These studies recorded sites of varying significance for example Kaplan (2006, 2008, 2011, 2014), van der Walt (2008, 2011, 2013, 2015); Morris (2011a 2011b), Van Ryneveld, K. (2007A, 2007B, 2007C) which testify that the Keimoes area is a cultural landscape with high potential to yield significant Stone Age sites. The study noted that the proposed mining development site is located within a degraded area, and have reduced sensitivity for the presence of high significance physical cultural site remains, be they archaeological, historical or burial sites, due to previous disturbances resulting from developments and other land uses in the project area. However, there is a high potential of recovering significant archaeological remains beneath the surface. The absence of *in situ* significant archaeological sites is not evidence in itself that such sites did not exist within the proposed mining development area. In addition, some sections were not accessible due to thick vegetation cover. Significance of the sites of Interest (mining development site) is not limited to presence or absence of physical archaeological sites.

Chance finds procedures

It has already been highlighted that sub-surface materials may still be lying hidden from surface surveys. Therefore, absence (during surface survey) is not evidence of absence all together. The following monitoring and reporting procedures must be followed in the event of a chance find, in order to ensure compliance with heritage laws and policies for best-practice. This procedure applies to the developer's permanent employees, its subsidiaries, contractors and subcontractors, and service providers. Accordingly, all mining teams must be properly inducted to ensure they are fully aware of the procedures regarding chance finds.

- If during the construction, operations or closure phases of this project, any person employed by the developer, one of its subsidiaries, contractors and subcontractors, or service provider, finds any artefact of cultural significance, work must cease at the site of the find and this person must report this find to their immediate supervisor, and through their supervisor to the senior on-site manager.
- The site manager must then make an initial assessment of the extent of the find, and confirm the extent of the work stoppage in that area before informing MSEI.
- The client will then contact a professional archaeologist for an assessment of the finds who will in turn inform SAHRA/PHRA.

7 CULTURAL HERITAGE SITE ASSESSMENTOF SIGNIFICANCE

The appropriate management of cultural heritage resources is usually determined on the basis of their assessed significance as well as the likely impacts of any proposed developments. Cultural significance is defined in the Burra Charter as meaning aesthetic, historic, scientific or social value for past, present or future generations (Article 1.2). Social, religious, cultural and public significance are currently identified as baseline elements of this assessment, and it is through the combination of these elements that the overall cultural heritage values of the site of interest, associated place or area are resolved.

Not all sites are equally significant and not all are worthy of equal consideration and management. The significance of a place is not fixed for all time, and what is considered of significance at the time of assessment may change as similar items are located, more research is undertaken and community values change. This does not lessen the value of the heritage approach, but enriches both the process and the long-term outcomes for future generations as the nature of what is conserved and why, also changes over time (Pearson and Sullivan 1995:7). This assessment of the Indigenous cultural heritage significance of the Site of Interest as its environments of the study area is based on the views expressed by the traditional authority and community representatives, consulted documentary review and physical integrity.

African indigenous cultural heritage significance is not limited to items, places or landscapes associated with pre-European contact. Indigenous cultural heritage significance is understood to encompass more than ancient archaeological sites and deposits, broad landscapes and environments. It also refers to sacred places and story sites, as well as historic sites, including mission sites, memorials, and contact sites. This can also refer to modern sites with particular resonance to the indigenous community. The site of interest considered in this project falls within this realm of broad significance.

8 ASSESSMENT CRITERIA

The Guidelines to the SAHRA Guidelines and the Burra Charter define the following criterion for the assessment of cultural significance:

Aesthetic Value

Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture and material of the fabric; sense of place, the smells and sounds associated with the place and its use.

Historic Value

Historic value encompasses the history of aesthetics, science and society, and therefore to a large extent underlies all of the terms set out in this section. A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives in situ, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment.

Scientific value

The scientific or research value of a place will depend upon the importance of the data involved, on its rarity, quality or representativeness, and on the degree to which the place may contribute further substantial information. Scientific value is also enshrined in natural resources that have significant social value. For example, pockets of forests and bushvelds have high ethnobotany value.

Social Value

Social value embraces the qualities for which a place has become a focus of spiritual, religious, political, local, national or other cultural sentiment to a majority or minority group. Social value also extends to natural resources such as bushes, trees and herbs that are collected and harvested from nature for herbal and medicinal purposes.

9 STATEMENT OF SIGNIFICANCE

Aesthetic Value

The aesthetic values of the AIA Study Area and the overall project area are contained in the valley bushveld environment and landscape typical of this part of the Northern Cape Province. The visual and physical relationship between AIA study area and the surrounding historical Cultural Landscape demonstrates the connection of place to the local and oral historical stories of the African communities who populated this region going back into prehistory.

The proposed mining development will be situated within an environment and associated cultural landscape, which, although developed by existing settlements, remains representative of the original historical environment and cultural landscape of this part of Northern Cape Province. The local communities consider the project area a cultural landscape linked to their ancestors and history. However, the proposed development will not alter this aesthetic value in any radical way since it will add to the constantly changing and developing settlements.

Historic Value

The Indigenous historic values of the Site of Interest and overall study area are contained in the claim of possible historic homesteads being located on the affected area. The history of generations of the local clans is tied to this geographical region. Such history goes back to the pre-colonial period, through the colonial era, the colonial wars and subsequent colonial rule up to modern day Northern Cape Province.

Scientific value

Past settlements and associated roads and other auxiliary infrastructure developments and disturbance within the HIA Study Area associated with the proposed mining development has resulted in limited intact landscape with the potential to retain intact large scale or highly significant open archaeological site deposits.

Social Value

The project sites fall within a larger and an extensive Northern Cape cultural landscape that is integrated with the wider inland. The overall area has social value for the local community, as is the case with any populated landscape. Literature review suggests that social value of the overall project area is also demonstrated through local history which associates the area with the coming of European missionaries, explorers and colonialists and the African struggle against settler colonialism in the second half of the 1800s and at the end of the 1800s, the colonial wars of resistance, the century long struggle for democracy that followed colonial subjugation. Several generations of communities originate from the project area and continue to call it home. As such, they have ancestral ties to the area. The land also provides the canvas upon which daily socio-cultural activities are painted. All these factors put together confirms the social significance of the project area. However, this social significance is unlikely to be negatively impacted by the proposed mining development especially given the fact that the development will add value to the human settlements and activities already taking place. Sections of the mining development area are covered in thick bushes and vegetation retains social value as sources of important herbs and traditional medicines. As such, they must be considered as significant social value sites

10 RECOMMENDATIONS

The study did not find any permanent barriers to the proposed quarry mine extension. The following recommendations are based on the results of the AIA/HIA research, cultural heritage background review, site inspection and assessment of significance.

Recommendation 1

Based on the findings of this study, A professional archaeologist should be retained to salvage the scatter of recorded stone tools before mining activities commence on the new site. The salvaged stone implements must be documented and curated at the Upington Museum.

Recommendation 2

Should any unmarked human burials/remains or ostrich eggshell water flask caches be uncovered, or exposed during mining activities, work must stop immediately and the findings must be reported to SAHRA

Recommendation 3

The recorded village cemetery is very significant and therefore must not be tempered with during any mining activities around the site. The site must be preserved *in situ* and the mine must provide uninterrupted access to the site.

Recommendation 4

Should it become necessary to relocate the site, the affected communities must be consulted to provide their consent and the mandatory burial permit application processes must be conducted in accordance with the NHRA.

Recommendation 5

The Project Public Participation Process should ensure that any cultural heritage related matters for this project are given due attention whenever they arise and are communicated PHRA throughout the proposed project development. This form of extended community involvement would pre-empty any potential disruptions that may arise from previously unknown cultural heritage matter that may have escaped the attention of this study.

Recommendation 6

The foot print impact of the proposed mining development should be kept to minimal to limit the possibility of encountering chance finds within servitude.

Recommendation 7

In situations where unpredicted impacts occur (such as accidentally disturbing a previously unknown grave), construction activities should be stopped and the heritage authority notified immediately. In the unlikely event of chance archaeological material or previously unknown human remains being disturbed during subsurface construction, the finds should be left *in situ* subject to further instruction from the project archaeologist or heritage authorities (refer to Appendixes 1 - 4 for additional details). The overriding objective, where remedial action is warranted, is to minimize disruption in construction scheduling while recovering archaeological and any affected cultural heritage data as stipulated by the NHRA regulations.

11 CONCLUDING REMARKS

The literature review and field study confirmed that the project area is situated within a contemporary cultural landscape dotted with settlements with long local history. The results of the study indicate that the proposed extension of the existing mining area will not introduce new impacts to the development site. Indications are that in terms of archaeological heritage, the proposed activity (i.e. the extension of mining activity) is viable and no fatal flaws have been identified. A professional archaeologist is required to salvage the scatters of stone tools before any mining activities commence on the mining extension site. Although the area is degraded, there is a possibility that the HIA Study Area Site of Interest is part of a wider archaeological and historical site within a significant cultural landscape. This report concludes that the proposed mining development may be approved by SAHRA to proceed as planned subject to recommendations herein made and heritage monitoring plan being incorporated into the mining EMP (also see Appendices). The measures are informed by the results of the HIA study and principles of heritage management enshrined in the NHRA, Act 25 of 1999.

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Objectiv e	• Protection of archaeological sites and land considered to be of cultural value; • Protection of known physical cultural property sites against vandalism, destruction and theft; and • The preservation and appropriate management of new archaeological finds should these be discovered during construction.							
No.	Activity	Mitigation Measures	Duration	Frequency	Responsibility	Accountable	Contacted	Informed
Pre-Construction Phase								
1	Planning	Ensure all known sites of cultural, archaeological, and historical significance are demarcated on the site layout plan, and marked as no-go areas.	Throughout Project	Weekly Inspection	Contractor [C] CECO	SM	ECO	EA EM PM
Construction Phase								
1	Emergency Response	Should any archaeological or physical cultural property heritage resources be exposed during excavation for the purpose of construction, construction in the vicinity of the finding must be stopped until heritage authority has cleared the development to continue.	N/A	Throughout	C CECO	SM	ECO	EA EM PM
		Should any archaeological, cultural property heritage resources be exposed during excavation or be found on development site, a registered heritage specialist or PHRA official must be called to site for inspection.		Throughout	C CECO	SM	ECO	EA EM PM
		Under no circumstances may any archaeological, historical or any physical cultural property heritage material be destroyed or removed form site;		Throughout	C CECO	SM	ECO	EA EM PM
		Should remains and/or artefacts be discovered on the development site during earthworks, all work will cease in the area affected and the Contractor will immediately inform the Construction Manager who in turn will inform PHRA.		When necessary	C CECO	SM	ECO	EA EM PM
		Should any remains be found on site that is potentially human remains, the PHRA and South African Police Service should be contacted.		When necessary	C CECO	SM	ECO	EA EM PM
Rehabilitation Phase								
		Same as construction phase.						
Operational Phase								

		Same as construction phase.

Appendix 2: Heritage mitigation measures table

SITE REF	HERITAGE ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	RESPONSIBLE PARTY	PENALTY	METHOD STATEMENT REQUIRED
Chance Archaeological and Burial Sites	General area where the proposed project is situated is a historic landscape, which may yield archaeological, cultural property, remains. There are possibilities of encountering unknown archaeological sites during subsurface construction work which may disturb previously unidentified chance finds.	Possible damage to previously unidentified archaeological and burial sites during construction phase. • Unanticipated impacts on archaeological sites where project actions inadvertently uncovered significant archaeological sites. • Loss of historic cultural landscape; • Destruction of burial sites and associated graves • Loss of aesthetic value due to construction work • Loss of sense of place Loss of intangible heritage value due to change in land use	In situations where unpredicted impacts occur construction activities must be stopped and the heritage authority should be notified immediately. Where remedial action is warranted, minimize disruption in construction scheduling while recovering archaeological data. Where necessary, implement emergency measures to mitigate. • Where burial sites are accidentally disturbed during construction, the affected area should be demarcated as no-go zone by use of fencing during construction, and access thereto by the construction team must be denied. • Accidentally discovered burials in development context should be salvaged and rescued to safe sites as may be directed by relevant heritage authority. The heritage officer responsible should secure relevant heritage and health authorities permits for possible relocation of affected graves accidentally encountered during construction work.	• Contractor / • Project Manager • Archaeologist • Project EO	Fine and or imprisonment under the PHRA-G Act & NHRA	Monitoring measures should be issued as instruction within the project EMP. PM/EO/Archaeologists Monitor construction work on sites where such development projects commences within the farm.

Appendix 3: Legal background in South Africa

Extracts relevant to this report from the National Heritage Resources Act No. 25 of 1999, (Sections 5, 36 and 47):

General principles for heritage resources management

5. (1) All authorities, bodies and persons performing functions and exercising powers in terms of this Act for the management of heritage resources must recognise the following principles:

(a) Heritage resources have lasting value in their own right and provide evidence of the origins of South African society and as they are valuable, finite, non-renewable and irreplaceable they must be carefully managed to ensure their survival;

(b) every generation has a moral responsibility to act as trustee of the national heritage for succeeding generations and the State has an obligation to manage heritage resources in the interests of all South Africans;

(c) heritage resources have the capacity to promote reconciliation, understanding and respect, and contribute to the development of a unifying South African identity; and

(d) heritage resources management must guard against the use of heritage for sectarian purposes or political gain.

(2) To ensure that heritage resources are effectively managed—

(a) the skills and capacities of persons and communities involved in heritage resources management must be developed; and

(b) provision must be made for the ongoing education and training of existing and new heritage resources management workers.

(3) Laws, procedures and administrative practices must—

(a) be clear and generally available to those affected thereby;

(b) in addition to serving as regulatory measures, also provide guidance and information to those affected thereby; and

(c) give further content to the fundamental rights set out in the Constitution.

(4) Heritage resources form an important part of the history and beliefs of communities and must be managed in a way that acknowledges the right of affected communities to be consulted and to participate in their management.

(5) Heritage resources contribute significantly to research, education and tourism and they must be developed and presented for these purposes in a way that ensures dignity and respect for cultural values.

(6) Policy, administrative practice and legislation must promote the integration of heritage resources conservation in urban and rural planning and social and economic development.

(7) The identification, assessment and management of the heritage resources of South Africa must—

(a) take account of all relevant cultural values and indigenous knowledge systems;

(b) take account of material or cultural heritage value and involve the least possible alteration or loss of it;

(c) promote the use and enjoyment of and access to heritage resources, in a way consistent with their cultural significance and conservation needs;

(d) contribute to social and economic development;

(e) safeguard the options of present and future generations; and

(f) be fully researched, documented and recorded.

Burial grounds and graves

36. (1) Where it is not the responsibility of any other authority, SAHRA must conserve and generally care for burial grounds and graves protected in terms of this section, and it may make such arrangements for their conservation as it sees fit.

(2) SAHRA must identify and record the graves of victims of conflict and any other graves which it deems to be of cultural significance and may erect memorials associated with the grave referred to in subsection (1), and must maintain such memorials.

(3) (a) 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.

(4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction or damage of any burial ground or grave referred to in subsection (3)(a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources
authority.

(5) 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.

(6) 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 grave is protected in terms of this Act or is of significance to any community; and

(b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.

(7) (a) SAHRA must, over a period of five years from the commencement of this Act, submit to the Minister for his or her approval lists of graves and burial grounds of persons connected with the liberation struggle and who died in exile or as a result of the action of State security forces or agents provocateur and which, after a process of public consultation, it believes should be included among those protected under this section.

(b) The Minister must publish such lists as he or she approves in the Gazette.

(8) Subject to section 56(2), SAHRA has the power, with respect to the graves of victims of conflict outside the Republic, to perform any function of a provincial heritage resources authority in terms of this section.
(9) SAHRA must assist other State Departments in identifying graves in a foreign country of victims of conflict connected with the liberation struggle and, following negotiations with the next of kin, or relevant authorities, it may re-inter the remains of that person in a prominent place in the capital of the Republic.

General policy
47. (1) SAHRA and a provincial heritage resources authority—
(a) must, within three years after the commencement of this Act, adopt statements of general policy for the management of all heritage resources owned or controlled by it or vested in it; and
(b) may from time to time amend such statements so that they are adapted to changing circumstances or in accordance with increased knowledge; and
(c) must review any such statement within 10 years after its adoption.
(2) Each heritage resources authority must adopt for any place which is protected in terms of this Act and is owned or controlled by it or vested in it, a plan for the management of such place in accordance with the best environmental, heritage conservation, scientific and educational principles that can reasonably be applied taking into account the location, size and nature of the place and the resources of the authority concerned, and may from time to time review any such plan.
(3) A conservation management plan may at the discretion of the heritage resources authority concerned and for a period not exceeding 10 years, be operated either solely by the heritage resources authority or in conjunction with an environmental or tourism authority or under contractual arrangements, on such terms and conditions as the heritage resources authority may determine.
(4) Regulations by the heritage resources authority concerned must provide for a process whereby, prior to the adoption or amendment of any statement of general policy or any conservation management plan, the public and interested organisations are notified of the availability of a draft statement or plan for inspection, and comment is invited and considered by the heritage resources authority concerned.
(5) A heritage resources authority may not act in any manner inconsistent with any statement of general policy or conservation management plan.
(6) All current statements of general policy and conservation management plans adopted by a heritage resources authority must be available for public inspection on request.