



Setjo Sesho Consultants



• • Application for the exemption to
conduct Phase 1 AIA for the Anglo
American–Rustenburg Base Metals
Refinery (RBMR) parking areas
expansion project, Rustenburg,
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Prepared by: **Setjo Sesho** Consultants

Prepared for:



Mr. Elijah Katsetse
SAHRA Case Officer North West Province
South African Heritage Resources Agency (SAHRA)
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4th of September 2023

Dear Mr. Katsese

Application for the exemption to conduct Phase 1 AIA for the Anglo American–Rustenburg Base Metals Refinery (RBMR) parking areas expansion project, Rustenburg, North West province.

1. INTRODUCTION

Anglo Americans Rustenburg Base Metals Refinery appointed Setjo Sesho Consultants to assess the potential impact on heritage resources due to the expansion of the Rustenburg Base Metals Refinery (RBMR) parking areas in North West province's Rustenburg. The development site is currently being used as a parking area and construction is already underway (as shown in Figure 4).

2. PROJECT DETAIL

Anglo American Platinum's (AAP) Rustenburg Base Metals Refinery (RBMR) operates the Refinery on Portions 5, 42 and 48 of the Farm Waterval, 303/JQ. RBMR's existing car park system servicing the operations cannot currently accommodate the operation's present and future requirements. All current parking areas for permanent employees, contracting partners and visitors are highly congested and not compliant with their internal procedural requirements. Thus, there is a need to expand the existing parking areas.

The following is proposed to expand on and alleviate the congestion at the RBMR operations:

-  Existing parking area A will remain unchanged.

- ✚ Existing employee parking areas will be extended into the existing visitor's car park. No expansion will occur outside the current parking boundary. This is not included in the Basic Assessment process and is purely background information to the project.

Four (4) new parking areas are proposed for employees, contractors, and visitors. These are for:

- ✚ RBMR contractors and visitors with an estimated footprint of 5 443 m².
- ✚ Employees and Contractors going to the Occupational Health Centre (OHC) with an estimated footprint of 2422m².
- ✚ Matte Concentrator (MC) Plant employees, contractors, and visitors parking area with an estimated footprint of 14 062m².
- ✚ Polishing Copper Leach (PCL) Plant employees, contractors, and visitors with an estimated footprint of 2409m².

The total footprint of this proposed expansion will be approximately 24 336 m² or 2.43 hectares.



Figure 1: RBMR site locality map © Google Earth

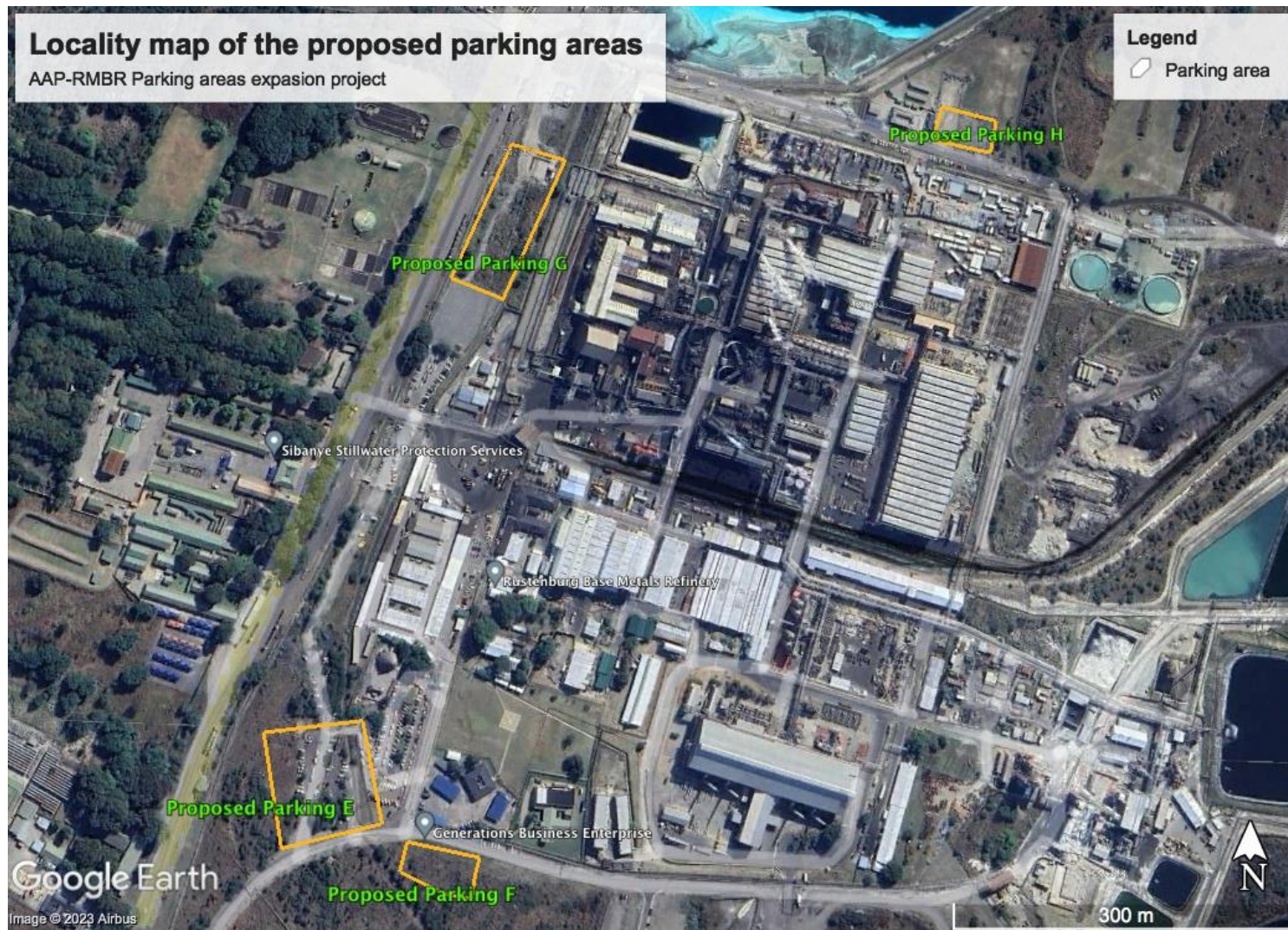


Figure 2: Locality map of the proposed parking areas © Google Earth







Figure 3: Overview of the proposed area of development











Figure 4: View of the developments in proposed parking G, E, H

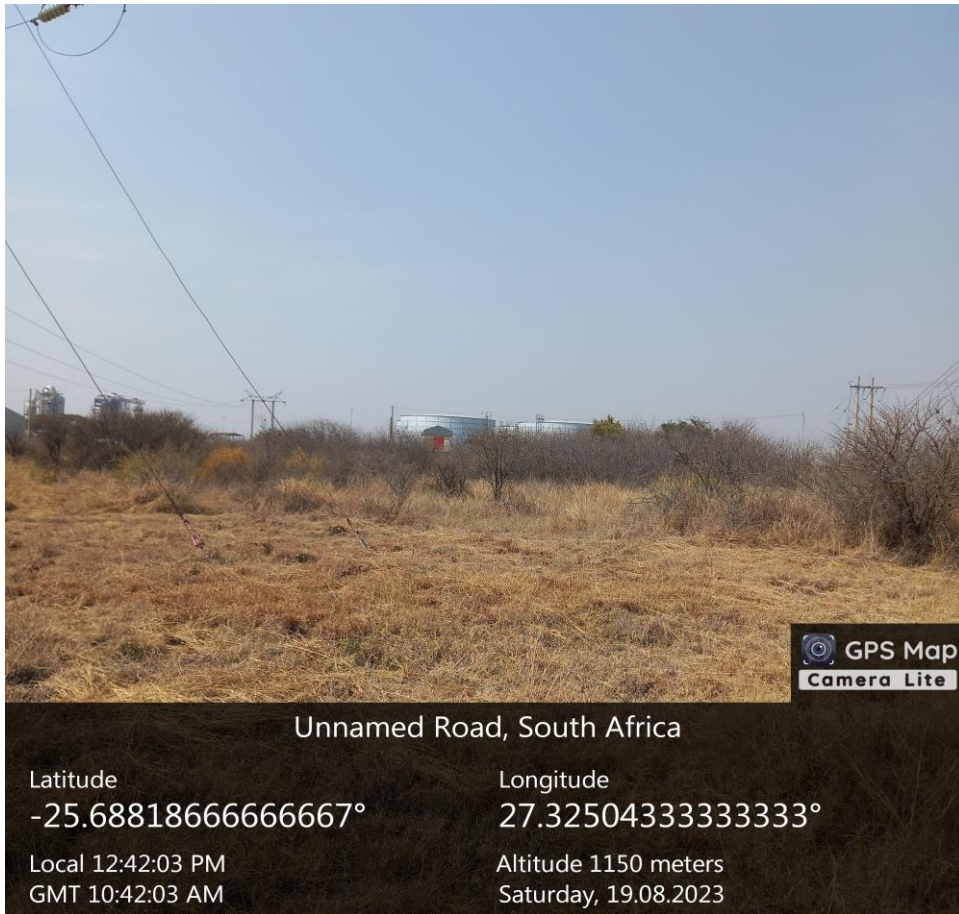


Figure 5: Overview of proposed Parking F

3. SOCIO-CULTURAL AND HISTORICAL BACKGROUND

This section provides insights into the archaeology and cultural heritage of the receiving environment. Where necessary, reference to archaeology and other heritage resources found within the broader region of the North West will be added.

Archaeology in Southern Africa is divided into the Stone Age, Iron Age, and the Historical Period. During these periods, diverse groups of people settled on the Southern African landscape. Most of the research on the culture, archaeology, and rock art in Southern Africa has been conducted by Huffman (2002; 2007); Mason (1968; 1982; 1986); Sutton (2012), Kuman & Field (2009) Kuman et al. (1997).

The Rustenburg landscape has always played a very crucial ecological and cultural role in the history of the Republic of South Africa. The natural environment of the realm has established itself as a perfect occupational terrain; large rivers provided water, the fertile soil provided food, and Magaliesberg sheltered many groups of individuals and generations. The area represents the foremost important periods within the history of the African country, the signs of which are still visible today within the many archaeological sites scattered across the landscape. These signs range from the hand axe from the earliest period, microlithic tools from the Later period, potsherds, grinding stones and spectacular stone walling of previous Tswana inhabitants, to rock paintings and engravings (Kruger 2015).

Traces of war and colonial influences also feature in the landscape around the area of Rustenburg. As a result of certain geo-processes, particularly the formation of the Bushveld complex, the Rustenburg landscape consists of a series of latitudinal hills and valleys that facilitated early human settlement and later hosted a variety of communities and cultures. In this way, heritage sites are known to spread over the wider area. These range from Stone Age sites, including rock engraving sites, to Iron Age sites, and a vast number of sites from historical periods.

Stone Age

The remnants of Stone Age hunter-gatherers' activities are customarily into the Early, Middle and Late Stone Age. According to Klein (2000) and Mitchell (2002), the ESA is comprised of the Oldowan stone tool complex (2 and 1.7-1.5 million years ago), and the Acheulean stone tool complex (1.7-1.5 million years ago and 250-200 thousand years ago). And is characterized by small flakes, flaked cobbles, and percussive tools (Klein 2000; Mitchell 2002; Diez-Martín et al.,2015; De La Torre 2016). Stone Age sites are usually associated with stone artefacts found scattered on the surface or as part of deposits in caves and rock art shelters.

The Early to Middle Stone Age transition includes a change in technology from large stone tools to good quality raw materials, bone tools, ochre, beads, and pendants (Clark, 1982; Deacon & Deacon, 1999, Wadley, 2007). Mason (1962) recorded and documented the Smithfield artefacts in the Magaliesberg Valley as well as the rock engraving sites in the Magaliesberg Valley at Doornhoek. These engravings were dominated by scenes depicting people, weapons, animals, skins tied to dry hides, and abstract geometric design figures. This painting has been documented on diabase dikes on the slopes and crests of small hills. No Stone Age materials were however noted on site during the field survey and in proximity through the archival search.

Iron Age

Using Huffman's (2007) definition, the Iron Age can be divided into Early Iron Age (EIA), Middle Iron Age (MIA), and finally Late Iron Age (LIA). The Iron Age is distinguished by farming communities that domesticated animals, manufactured ceramic vessels, melted iron for weapons, and manufactured tools. History has it that the Fokeng met several groups of Sotho-Tswana people in the greater Rustenburg area, resulting in the Fokeng group adopting the way of life of the Sotho-Tswana people. This adoption of the new lifestyle resulted in the change of the Fokeng Stone walling into Klipriviersburg and the pottery Uitkomst. Along with Fokeng, Tlokwa and BaPo are among the groups with this second complex of stonework and pottery today. In the early 19th century, the BaPo had their capital at the foot of Wolhuterskop, southeast of Rustenburg. Their historical leader, Mogale, gave the Magaliesberg its name (Carruthers 2000).

Due to this interaction, the Sotho-Tswana speakers adopted stonewalling and built the Molokwane type, named after a well-known settlement (also called Selonskraal) west of Rustenburg. In the late 19th century, Molokwane was the capital of the Modimosana Mmatau BaKwena and was home to up to 20,000 people.

Archaeologists have excavated a small part of Molokwane and most of a similar settlement near Olifantspoort Dam (Pistorius 1992). One of the wall differences has to do with the location of small stock kraals. In the two types of Fokeng settlements, sheep/goat kraals were attached to the outer wall and thus to the rear of the residential area. In contrast, sheep and goats were penned in front of residential areas in Sotho-Tswana settlements. In addition, stone arches in the outer wall marked the rear of a married woman's household at Molokwane and Olifantspoort. This bilobed arrangement characterizes all Sotho-Tswana settlement patterns, and Fokeng adopted this feature as they became more Sotho-like. The proposed area of development has no evidence of Iron Age materials.

Early History

The city of Rustenburg was founded in 1851 in what is now known as the North West Province of South Africa by the Voortrekker leader Andries Pretorius who named it Rustenburg meaning a place of rest. Due to the fertile land of the area, the native Bafokeng tribe and Dutch citizens settled there in search of a prosperous life. Rustenburg was the administrative centre to produce tobacco, peanuts, sunflower seeds, fruit, corn, and wheat, and is now famous for being the biggest mining province in South Africa.

The Anglo-Boer War took place near Rustenburg, Koster & Swartruggens. Other ethnic wars were also fought in the area and these battlefields can still be visited today. Sights that can be visited include memorial tombs and old forts, now in ruins, which tell stories about the tragedies that have played out in Rustenburg throughout history.


4. PREVIOUS RESEARCH WORKS

An archival search of the South African Heritage Resources Information System (SAHRIS) produced numerous studies conducted in the greater study area. Several assessments have been conducted in the greater area, however, only assessments that are of close range to the proposed area of development have been noted herein regardless of what was discovered on site and are in no alphabetical order. The proposed area of development falls under the North West Province of South Africa.

 Coetzee T. 2023 (Elemental Sustainability (Pty) Ltd)
Phase 1 Archaeological Impact Assessment for the Proposed Samancor WCM Millsell & Waterkloof Opencast Mine Project, Rustenburg, North West Province.

The author identified a total of 41 sites that were noted on historical aerial imagery, on topographical maps and during the site inspection: Four cemeteries, 19 historical building sites, and 18 contemporary building sites. The sensitive sites that could be impacted by the proposed mining development are Two cemeteries (Sites F02 & F05), three intact historical building sites (Sites B07, B08, B15),

and four demolished historical building sites (Sites B01, B12, B13, B19). He indicated the mitigation measures for the identified sites.

 Van de Walt, J. 2022 (Zitholele Consulting)
Application for exemption from a Heritage Impact Assessment for the expansion of the existing operations at the Blastrite site, Rustenburg, North West Province.

The author advised that the study area has been entirely transformed by a succession of development activities through the years that would have

impacted surface indicators of heritage sites if any ever occurred in the study area. He further alluded that the historical topographic maps indicate no settlement or surface structure pre-dating 1996 and the area is low of heritage significance.

✚ Pelsler, A, J 2019(AB Enviro Consult)

Phase 1 HIA for the proposed Township establishment on a portion of the remaining extent of portion 399 on portions 450 and 451 of the farm Waterkloof 305 JQ near Rustenburg in the Rustenburg Local Municipality of North West.

The author noted that based on background research, the larger geographic area in which the study area falls contains some cultural heritage sites. During the assessment of the specific study area, no cultural heritage sites, features, or materials were identified. The author, therefore, recommended that the proposed development be given the green light to proceed.

✚ Coetzee, F.P, 2020(NuLeaf Planning and Environmental (Pty) Ltd)

Phase 1 Investigation of the Proposed Holiday Resort Development, Finfoot Lake Reserve, Vaalkop Dam, Rustenburg Local Municipality, Bojanala Platinum District Municipality, North West Province.

The author indicated that a thorough investigation of the survey footprint revealed no archaeological (Stone Age and Iron Age) or historical settlements, structures, features, artefacts, or assemblages recorded during the survey. Accordingly, the proposed chalets and holiday homes development and related infrastructure may proceed from a cultural heritage perspective.

✚ Kruger N. 2015(Delron Environmental).

Archaeological Impact Assessment (AIA) of the remaining extent portion 1 of the farm town and townlands of Rustenburg 272-JQ for the proposed Rustenburg extension 30 township establishment, Rustenburg Local Municipality, North West Province.


Mr. Kruger identified and documented no heritage resources in the proposed study area. Although he endorsed the continuation of the development, he also recommended that a knowledgeable ECO inspect the construction site regularly to monitor the possible impact on heritage resources based on the archaeological landscape of the area.

✚ Coetzee F, P2021 (Milnex CC).

Phase 1 Investigation for the Proposed Prospecting Right Application without Bulk Sampling for the Prospecting of Chrome Ore (Cr) and Platinum Group Metals (PGM) on the Remaining Extent of the farm Doornspruit 106 JQ, Rustenburg Local Municipality, Bojanala Platinum District Municipality, North West Province.

A total of three active cemeteries (Sites 1 –3) were recorded during the survey. The sites are probably associated with a mid-20th starting phase of two

townships called Mogono and Ga-Luka and have been in use since. No archaeological (both Stone Age and Iron Age) artefacts, assemblages, features, structures, or settlements were recorded during the survey of the project footprint. It is well known that Late Iron Age stone-walled settlements do not usually occur in open low-lying grasslands.

 Mngomezulu M. 2021 (Humba Environmental Consultancy). *Phase 1 Heritage Impact Assessment for the proposed construction of the Bafokeng-Ararat 88kv powerline. The project falls under Rustenburg Local Municipality in the North West Province.*

The authors of this report identified no heritage resources on the proposed site and routes. The proposed site and routes are all viable for the proposed project in terms of heritage; however, proposed mitigation measures must be adhered to.

5. FINDINGS

The site survey was limited to the expansion of the Rustenburg Base Metals Refinery (RBMR) parking areas in North West province's Rustenburg. The proposed areas of development have suffered negative impacts across all sections over the years, which has resulted in the surface indicators of archaeological sites being negatively impacted as well.

Proposed Parking G is an extension of an already existing parking, the extended area is demarcated, and construction is in the process. Proposed Parking E is already informally used as a parking area, some sites were cleared up while others still have vegetation around them. Proposed parking H is cleared up and currently used as storage. The last proposed parking F, which still has vegetation on it showed no sign of ever being an occupation both on site and on archival search. The survey yielded nothing of archaeological significance on it. All proposed parking sites have nothing that can inform the reader of the archaeological history of the area or whatever that might have been there previously was destroyed.

6. CONCLUSION

Based on the developments that are already underway in the study area, it is evident that most if not all the archaeological materials that would have been located there are already damaged. An application for exemption from further heritage studies is supported for this project based on the findings of the site.

Any further queries can be forwarded to Jennifer Munyai on 0763821892 or jennifer@setjosesho.co.za

Jennifer Munyai

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A handwritten signature in black ink, appearing to read 'Setjo Sesho', with a circular scribble to the left of the text.

7. REFERENCES

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