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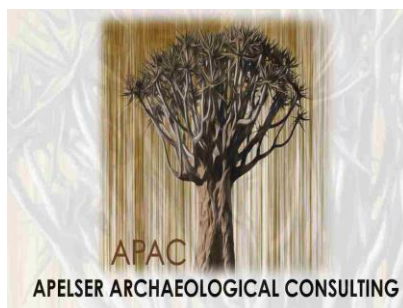
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2025-04-28

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RE: Motivation for Exemption from a full Phase I Heritage Impact Assessment – Rustenburg Platinum Mines - Mortimer Smelter ESIA (Project No. 41107629)

APelser Archaeological Consulting cc (APAC cc) was appointed by WSP Groups Africa (Pty) Ltd to provide a motivation for Exemption from a Full Phase 1 HIA for the Rustenburg Platinum Mines' Mortimer Smelter ESIA Project.

Background to the Project

Rustenburg Platinum Mines Limited (RPM) owns and operates three smelting complexes, namely Polokwane, Mortimer and Waterval. This project relates to the Mortimer Smelter situated in the North-West Province.

The Mortimer Smelter is an existing metallurgical industrial furnace where sulphide ores are smelted. Wet concentrate from the Concentrator is received and dried in flash dryers. The dry concentrate is smelted in an electric furnace, resulting in the recovery of platinum group metals (PGMs) and other base metals. The valuable product of the smelting process (referred to as 'matte') is then tapped from the furnace, cast and crushed. The "waste" product from the smelting process is referred to as slag. The resulting furnace slag is currently stockpiled.

The off gas from the process currently passes through an electrostatic precipitator (ESP) where the dust is removed prior to gas being vented into the atmosphere via a stack at 80m above the ground. The constituents in the emissions include particulate matter (PM), SO₂ and nitrogen oxide (NO_x).

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Beatrix Bed & Breakfast Trading as A Pelser Archaeological Consulting

In line with the National Environmental Management: Air Quality Act 39 of 2004 (NEMA: AQA) and the requirement to reduce emissions, RPM committed to construct and operate an SO₂ Abatement Plant at the Mortimer Smelter.

RPM: Mortimer Smelter obtained Environmental Authorisation (EA), via an Amendment of the Existing Environmental Management Programme Report (EMPr) (Reference NW30/5/1/2/3/2/1/366EM) on 12 March 2018 from the Department of Mineral Resources and Energy (DMRE) for the Proposed Installation of Sulphur Dioxide Abatement Plant at Mortimer Smelter.

RPM re-categorised / restricted the RPM: Union Section in 2017 and divested certain of its operations that were no longer considered to be “core” to the greater business considering its long-term goals. As such RPM: Union Section carved-out all Mines, Shafts and Concentrators and only retained the Mortimer Smelter. Due to this change the DMRE is no longer the competent authority and the North West Department of Economic Development, Environment, Conservation and Tourism (NWDEDECT) took over this responsibility.

Current Operations

The Mortimer Smelter is one of RPM's four primary smelters. It is understood that the Mortimer Smelter is under care and maintenance and is not currently operational. When operational, the site operates a single primary smelting furnace, which was upgraded to 38 MW in 2011. The wet concentrate from the RPM concentrators and third parties in the area is delivered to the Mortimer Smelter where it is dried in a 54 wet ton per hour (nominal at 16% moisture) flash dryer to produce the feed material. The furnace produces slag and matte products. The slag is granulated with high pressure water, dewatered in rake classifiers and sent to the slag mill for further processing. Slag that cannot be utilised is deposited onto an intermediate slag stockpile. The matte is cast into silica sand pits for cooling, after which it is crushed and transported to the Anglo Converter Plant (ACP) for further processing.

Proposed Operations

The Slag Cleaning Furnace (SCF) at Waterval Smelter provides a critical function for recovery of Platinum Group Metals and base metals from the Anglo Converter Plant converter slag (WACS). The SCF capacity has been constrained for many years and will continue to be under capacity pressure, despite a full furnace rebuild that was completed in 2023.

Historically, deficits in slag cleaning capacity have given rise to excess WACS stockpiles containing significant Precious Group Metals (PGM's). Crude milling and flotation campaigns of the excess WACS have been carried out for recovery of some metal to a concentrate, however, this resulted in a large WACS tailings (WACSt) stockpile at Waterval Smelter and also displaced significant quantities of mixed six-in-line and SCF slag also requiring stockpiling. The WACS flotation allows for substantial values of Platinum Group Metals and limited base metal sulphides to be recovered, however, base metal oxide recoveries are poor. The WACS and WACSt stockpiles contain significant quantities of base and precious metals, and it is important for overall smelting recoveries that there is sufficient slag cleaning capacity to process all the WACS and WACSt. Based on the requirements for reprocessing stockpiles and new WACS arisings, AAP are proposing an Additional Slag Cleaning (ASC) Project be constructed at the existing Mortimer Smelter to de-risk the metal flow processing circuit.

An associated SO₂ abatement plant is also proposed, which is required for the converted furnace to allow compliance of the SO₂ emissions with the National Environmental Management: Air Quality Act Minimum Emissions Standards when operating both in slag cleaning and primary smelting phases. Authorisation for the SO₂ abatement plant is already in place, however, construction of the Project was halted due to Mortimer smelter going on care and maintenance.

Mortimer Smelter is located on the farm Turfbult 404 KQ in close proximity to the provincial boundary between the North West and Limpopo Provinces. It is located at the boundary between the Thabazimbi Local Municipality in the Limpopo Province and Moses Kotane Local Municipality in the North West

Province. The mine areas are approximately 3 kilometres (km) to the north west of the Sifikile Village and 20 km west of Northam.

The development will be located within the existing Mortimer Smelter boundary, because the technology needs to be installed and connected to the existing gas cleaning equipment. As such, no site alternatives were considered.

CONSTRUCTION PHASE

The location of the contractor's facilities (offices, lay-down areas, ablutions etc.) was based on the required space, and providing efficient access to and from the construction site. In addition, the site was selected to ensure that the impact on existing operations is minimal i.e. the layout will enable the construction site to be fenced off from existing facilities (i.e. away from current operations).

A separate project entrance will be established via an existing road and will thus be within an area with an existing impact. The contractor's laydown areas will be within the Mortimer Smelter boundary. The proposed contractor facilities and project access road are illustrated in the layout attached in **Appendix C**.

OPERATIONAL PHASE

The area where the proposed development will take place have been extensively impacted by the existing developments on it, and as a result, the original natural and historical landscape has been severely altered. If any significant cultural heritage (archaeological and/or historical) sites, features or material did exist here in the past, it would have been heavily disturbed or destroyed. Based on this, a Motivation for Exemption from a Full Phase 1 HIA was decided upon by the Heritage Specialist.

"In terms of the National Heritage Resources Act, no 25 of 1999, heritage resources, including archaeological or palaeontological sites over 100 years old, graves older than 60 years, structures older than 60 years are protected. They may not be disturbed without a permit from the relevant heritage resources authority. This means that prior to development it is incumbent on the developer to ensure that a Heritage Impact Assessment is done. This must include the archaeological component (Phase 1) and any other applicable heritage components. Appropriate (Phase 2) mitigation, which involves recording, sampling and dating sites that are to be destroyed, must be done as required.

The quickest process to follow for the archaeological component is to contract an accredited specialist (see the web site of the Association of Southern African Professional Archaeologists www.asapa.org.za) to provide a Phase 1 Archaeological Impact Assessment Report. This must be done before any large development takes place. The Phase 1 Impact Assessment Report will identify the archaeological sites and assess their significance. It should also make recommendations (as indicated in section 38) about the process to be followed. For example, there may need to be a mitigation phase (Phase 2) where the specialist will collect or excavate material and date the site. At the end of the process the heritage authority may give permission for destruction of the sites.

Where bedrock is to be affected, or where there are coastal sediments, or marine or river terraces and in potentially fossiliferous superficial deposits, a Palaeontological Desk Top study must be undertaken to assess whether or not the development will impact upon palaeontological resources - or at least a letter of exemption from a Palaeontologist is needed to indicate that this is unnecessary. If the area is deemed sensitive, a full Phase 1 Palaeontological Impact Assessment will be required and if necessary, a Phase 2 rescue operation might be necessary. Please note that a nationwide fossil sensitivity map is available on SAHRIS to assist applicants with determining the fossil sensitivity of a study area.

If the property is very small or disturbed and there is no significant site the heritage specialist may choose to send a letter to the heritage authority motivating for exemption from having to undertake further heritage assessments. Any other heritage resources that may be impacted such as built structures over 60 years old, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict, and cultural landscapes or viewsapes must also be assessed."

Last mentioned option was decided on for this project which entailed desktop research as part of the assessment.

Relevant Legalisation

Aspects concerning the conservation of cultural resources are dealt with mainly in two Acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

The National Heritage Resources Act (Act 25 of 1999)

According to the Act the following is protected as cultural heritage resources:

- a. Archaeological artefacts, structures and sites older than 100 years;
- b. Ethnographic art objects (e.g., prehistoric rock art) and ethnography;
- c. Objects of decorative and visual arts;
- d. Military objects, structures and sites older than 75 years;
- e. Historical objects, structures and sites older than 60 years;
- f. Proclaimed heritage sites;
- g. Grave yards and graves older than 60 years;
- h. Meteorites and fossils; and
- i. Objects, structures and sites of scientific or technological value.

The National Estate includes the following:

- a. Places, buildings, structures and equipment of cultural significance;
- b. Places to which oral traditions are attached or which are associated with living heritage;
- c. Historical settlements and townscapes;
- d. Landscapes and features of cultural significance;
- e. Geological sites of scientific or cultural importance;
- f. Sites of Archaeological and palaeontological importance;
- g. Graves and burial grounds;
- h. Sites of significance relating to the history of slavery; and
- i. Movable objects (e.g., archaeological, palaeontological, meteorites, geological specimens, military, ethnographic, books etc.).

The Heritage Impact Assessment (HIA) process is done to determine whether there are any heritage resources located within the area to be developed as well as to determine the possible impacts of the proposed development. An Archaeological Impact Assessment (AIA) only looks at archaeological resources, such as material remains of human life or activities which are at least 100 years of age, and which are of archaeological interest. A HIA must be done under the following circumstances:

- a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length
- b. The construction of a bridge or similar structure exceeding 50m in length
- c. Any development or other activity that will change the character of a site and exceed 5 000m² or involve three or more existing erven or subdivisions thereof
- d. Re-zoning of a site exceeding 10 000m²
- e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority

Structures

Section 34(1) of the Act state that no person may demolish any structure or part thereof that is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure refers to any building, works, device or other facility made by people, and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

To alter means any action taken that affects the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

Archaeology, palaeontology, and Meteorites

Section 35(4) of the Act deals with archaeology, palaeontology, and meteorites. The Act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial)

- a. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite;
- b. destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite;
- c. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or paleontological material or object, or any meteorite; or
- d. bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and paleontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

Human remains

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- i. 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;
- ii. destroy, damage, alter, exhume, or 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
- iii. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the Ordinance on Excavations (Ordinance no. 12 of 1980) (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province, and local police. Furthermore, permission must also be gained from the various landowners (i.e., where the graves are located and where they are to be relocated to) before exhumation can take place.

Human remains can only be handled by a registered undertaker, or an institution declared under the Human Tissues Act (Act 65 of 1983 as amended).

The National Environmental Management Act (No. 107 of 1998)

This Act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof are made.

Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized and remedied.

The specific requirements that specialist studies and reports must adhere to are contained in Appendix 6 of the EIA Regulations.

Results of Desktop Heritage Assessment

Mortimer Smelter is located on the farm Turfbult 404 KQ in close proximity to the provincial boundary between the North West and Limpopo Provinces. It is located at the boundary between the Thabazimbi Local Municipality in the Limpopo Province and Moses Kotane Local Municipality in the North West Province. The mine areas are approximately 3 kilometres (km) to the north west of the Sifikile Village and 20 km west of Northam

The study and proposed development area have been extensively impacted by the existing operations, and as a result, the original natural and historical landscape has been severely altered. If any significant cultural heritage (archaeological and/or historical) sites, features or material did exist here in the past, it would have been heavily disturbed or destroyed. Although a physical assessment of the area under discussion was not undertaken by the Heritage Specialist, previous work for the proposed Mortimer Smelter SO₂ Abatement Project found no cultural heritage (archaeological and/or recent historical) sites in the study area, and it is therefore deemed highly unlikely that any significant cultural heritage resources would be present here. However, a number of measures to mitigate the potential impacts of activities related to the proposed development on unknown heritage resources will be provided at the end of this document.

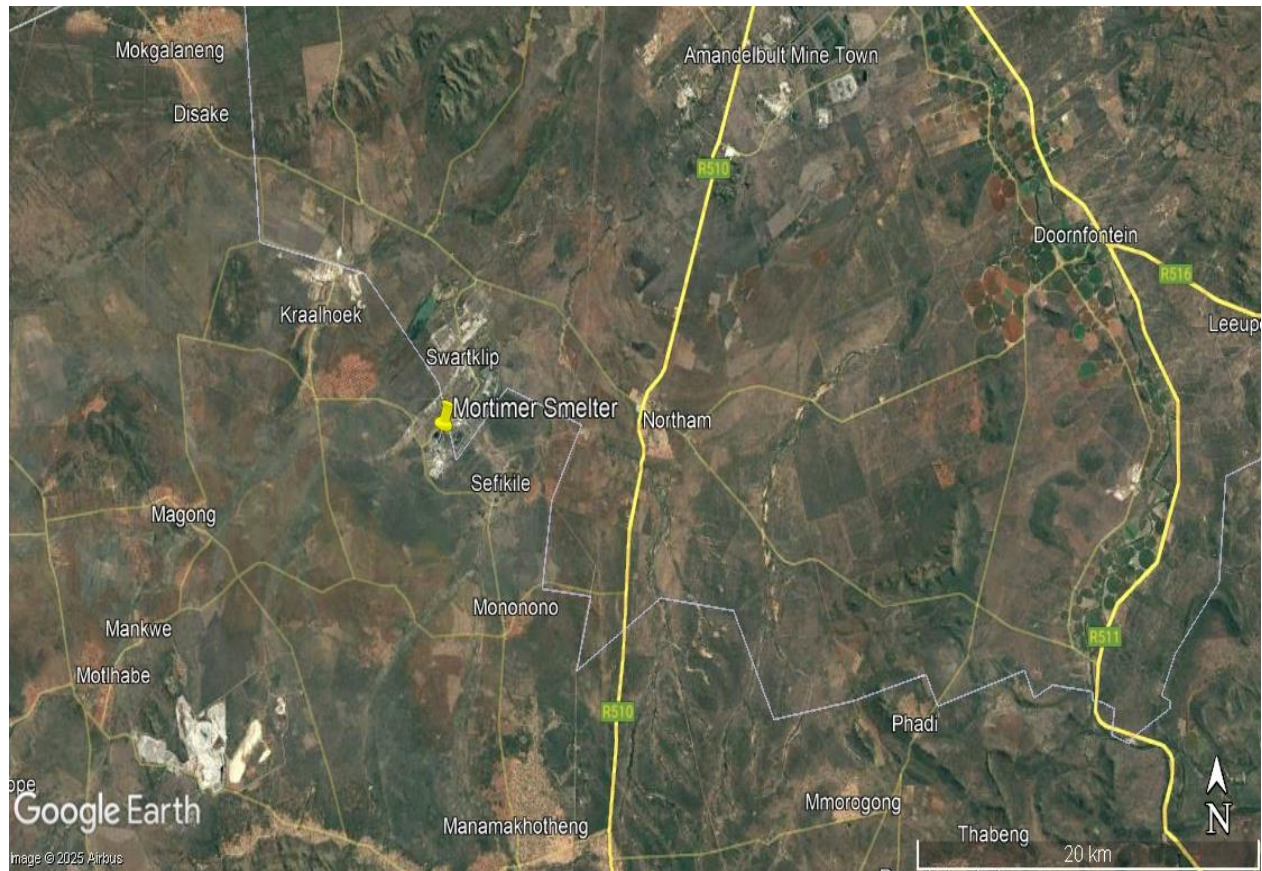


Figure 1: General view of the study & development area location (Google Earth 2025).



**Figure 2: Closer view of the study and proposed development area footprint (Google Earth 2025).
Note the heavily impacted and disturbed nature of the area**



Figure 3: Project Layout Map (provided by WSP Group Africa (Pty) Ltd).

The Stone Age is the period in human history when lithic (stone) material was mainly used to produce tools. In South Africa the Stone Age can be divided in basically into three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. A basic sequence for the South African Stone Age (Lombard et.al 2012) is as follows:

Earlier Stone Age (ESA) up to 2 million – more than 200 000 years ago

Middle Stone Age (MSA) less than 300 000 – 20 000 years ago

Later Stone Age (LSA) 40 000 years ago – 2000 years ago

It should also be noted that these dates are not a neat fit because of variability and overlapping ages between sites (Lombard et.al 2012: 125).

No Stone Age sites (including rock art) are known to occur in the immediate study area. The closest known Stone Age sites (Early to Later Stone Age) are found close to Rooiberg and Thabazimbi at sites called Blaauwbank & Olieboomspoort (Bergh 1999: 5).

If any Stone Age artifacts are to be found in the study and proposed development area then it would more than likely be single or small scatters of stone tools in an open-air surface context.

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artifacts. In South Africa it can be divided in two separate phases (Bergh 1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D

Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) however indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D.
 Middle Iron Age (MIA) 900 – 1300 A.D.
 Late Iron Age (LIA) 1300 – 1840 A.D.

There are no known Iron Age sites (EIA or LIA) in the immediate study area, although a large number of EIA to LIA sites are known to exist in the larger geographical landscape in which the study area falls. The closest and best-known Iron Age site is located at Rooiberg near Thabazimbi to the north of the study area (Bergh 1999: 7).

The closest Early Iron Age site is located at Broederstroom near Brits (Bergh 1999: 6). In a band stretching from Pretoria to Brits as many as 125 Late Iron Age sites have been identified and many more between Brits and Rustenburg (Bergh 1999: 7). Tswana chiefdoms flourished in the area during AD 1600 to 1840 (Pistorius 2009: 18). Late Iron Age sites are also known between Brits and Thabazimbi (Bergh 1999: 7).

At the beginning of the 19th century different Tswana groups settled in the larger area. It includes the Kwena, Po and Kgatla. During the so-called difaqane (period of war or stress) they fled to the north-west and the Ndebele of Mzilikazi settled in around the Brits area and further north between 1827 and 1832 (Bergh 1999: 10-11, 106-107, 111; Pistorius 2009: 18-19). A survey done by the National Cultural History Museum (1994) in the Amandelbult area found a number of LIA stone-walled sites in the larger geographical area (NCHM 1994), while various sites are also known to occur at Northam Platinum's Zondereinde Operations (Van der Walt 2019) and close to Northam (Pelser 2021).

Tom Huffman's research work shows that Iron Age sites, features or material could possibly be found in the area (based on pottery analysis combined with radiocarbon dates from related sites). This could include the so-called Moor Park facies of the Urewe Tradition dating to between AD1350 and AD1750 (Huffman 2007: 159); Uitkomst facies of the same tradition dating to between AD1650 and AD1820 (p.171); Rooiberg facies of Urewe dating to between AD1650 and AD1750 (p.175); the Olifantspoort & Madikwe facies of the Urewe tradition both dating to between AD1500 and AD1700 (p.191 & 199); the Buispoort facies of Urewe dating to between AD1700 and AD1840 (p.203); the Diamant facies of the Kalundu Tradition dating to between AD750 & AD1000 (p.223) and finally the Eiland facies of the same tradition dating to between AD1000 and AD1300 (Huffman 2007: 227).

There are no known Iron Age sites or material in the study & proposed development area, and none are evident on any of the aerial images for the area. If any did exist here in the recent past it would have been destroyed by the development of the current Mortimer Smelter Operations.

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. The first European group to pass close by the area were that of Cowan & Donovan in 1808, followed by Scoon & McLuckie in 1829, Hume & Scoon in 1835 and by the famous Dr. David Livingstone in 1847 (Bergh 1999: 12-14).

The information below was obtained from a HIA Report by Dr. Julius Pistorius done in 2013 for Samancor's proposed Mining Right Application for Portions of the farm Varkensvlei 403KQ and Nooitgedacht 406KQ near Northam (p.22-23).

"It is highly unlikely that the Project Area was occupied by Early Iron Age (EIA) Bantu- Negroid people who lived elsewhere in the Limpopo, Mpumalanga, KwaZulu-Natal and North-West Provinces of South Africa during the 3rd to 9th centuries AD. The earliest Iron Age settlers who moved into the larger project area were Late Iron Age Sotho-speaking groups who belonged to the Moloko tradition. These Kgatla and Kwena communities are associated with stone walled settlements which date from AD1600 although earlier settlements, devoid of any stone walls, also probably occur in the region. Moloko sites have been recorded in Rooiberg, north of the Project Area, at the Pilanesberg and in Madibeng and Rustenburg further to the south where these sites are associated with kopjes and randjes. Iron Age settlements occur in the Ben Alberts Nature Reserve and elsewhere in the Thabazimbi district.

The Rooiberg area is also renowned for early tin mining activities, possibly dating from the Late Iron Age. It seems as if large quantities of tin ore were mined from the Rooiberg and transported to an unknown destination. The abundance of iron ore in the area, particularly around Thabazimbi, also led to the smelting

of these ores by local Late Iron Age people in order to manufacture products such as weapons (spears) and tools (hoes, axes, etc.).

The closest towns to the Project Area are Thabazimbi and Northam. Thabazimbi's name is derived from the Tswana words for 'mountain of iron'. This was due to the discovery of the exceptionally rich iron ore deposits at Vliegpoort ('defile of flies') by the geologists J.H. Williams in 1919. The South African government bought the ore body and production for the Iscor Iron Ore mine in 1928. The mine started with its operations in 1931. A branch railway line was built from Northam to Thabazimbi on the Pretoria-Middelwit line. The town of Thabazimbi was laid out on the farm Kwaggashoek and proclaimed 23 on 4 May 1953. Millions of tons of iron ore are annually mined and hauled by train to Vanderbijlpark and New Castle.

The town of Northam was laid out by E.H. Fells on the farm Leeukoppie and formally proclaimed in 1946. This farm together with several others was owned by H. Herd who had purchased the properties from British soldiers to whom they have been allocated after the Anglo Boer War. Herd was allowed to choose the name for the new village which he called Northam after the village Northam in Devonshire, England".

There are no known sites or features of recent historical origin or significance in the study and proposed development area footprint.

Aerial images (Google Earth) of the study and proposed development area dating to between 2005 and 2025 clearly shows the impact of the existing Mortimer Smelter Operations on the area. No cultural heritage sites, features or remains (archaeological and/or historical) are visible on any of these images. It should also be noted that no existing structures at the Operations will be impacted or demolished. No further assessments or impact mitigation measures are therefore recommended.



Figure 6: Aerial view of the study & proposed development area in 2005 (Google Earth 2025).



Figure 7: The same area in 2010 (Google Earth 2025). The expansion of the existing operations is clear from this image.



Figure 8: The same area in 2020 (Google Earth 2025).

Conclusions & Recommendations

Based on the aerial images of the area and the heritage desktop study, it is deemed unlikely that any significant sites, features or material of cultural heritage (archaeological and/or historical) origin and/or significance will exist in the RPM's Mortimer Smelter study & development Project Area. The development of the existing Operations in the area in the recent past would have extensively disturbed or destroyed any sites or features of cultural heritage origin or significance if they did exist here in the past. Previous heritage assessments in the development area also did not identify any cultural heritage resources here.

Although there are no known archaeological and historical sites, features and material in the specific area, some have however been identified in the larger geographical area. This aspect needs to be taken into consideration during activities related to the proposed Mortimer Smelter Development Project. It is therefore recommended that a Chance Find Protocol for future activities in the area be drafted and implemented as mitigation measure. This will ensure that if any previously unknown cultural heritage (archaeological and/or historical) sites, features or material are exposed in future, that these could be investigated by a Heritage Specialist, who will then provide recommendation on the way forward in terms of the best suitable mitigation measures required.

The subterranean nature of cultural heritage (archaeological and/or historical) resources must always be kept in mind. This could include previously unknown and unmarked graves/burials and/or cemeteries.

Finally, it is recommended that Exemption from a Full Phase 1 Heritage Impact Assessment (HIA) for the RPM's Mortimer Smelter ESIA Project be granted to the applicants taking into consideration the above measures.

Should there be any questions or comments on the contents of this document please contact the author as soon as possible.

Kind regards



Anton Pelser

References

1. General & Closer Views of Study & Proposed Development Area footprint: Google Earth 2025.
2. Project Layout Plan & Project Information: Provided by WSP Group Africa (Pty) Ltd.
3. Bergh, J.S. (red.). 1999. **Geskiedenisatlas van Suid-Afrika. Die vier noordelike provinsies.** Pretoria: J.L. van Schaik.
4. Huffman, T.N. 2007. **Handbook to the Iron Age: The Archaeology of Pre-Colonial Farming Societies in Southern Africa.** Scottsville: University of KwaZulu-Natal Press.
5. Lombard, M., L. Wadley, J. Deacon, S. Wurz, I. Parsons, M. Mohapi, J. Swart & P. Mitchell. 2012. South African and Lesotho Stone Age Sequence Updated (I). **South African Archaeological Bulletin 67 (195): 120–144, 2012.**
6. Pelsers, A.J. 2021. **A Phase 1 HIA Report for the Ikwezi Vanadium Project located on Portions of the farms Haakdoornfontein 12JQ, Varkfontein 13JQ & Morewag 921JQ near Northam in the Limpopo Province.** Unpublished Report APelsers Archaeological Consulting APAC021/42. For: Ikwezi Vanadium (Pty) Ltd. May 2021.
7. Pistorius, Julius C.C. 2013 **A Phase I Heritage Impact Assessment Study for Samancor's Proposed Mining Right Application for portions of the farms Varkensvlei 403KQ and Nooitgedacht 406KQ near Northam in the Northwest and Limpopo Provinces.** Unpublished Report. For: Golder Associates Africa (Pty) Ltd. March 2013.
8. National Cultural History Museum. 1994. **A Survey of Archaeological and Cultural Historical Resources In The Amandelbult Mining Lease Area.** Unpublished Report NCHM.
9. Republic of South Africa. 1999. National Heritage Resources Act (No 25 of 1999). Pretoria: The Government Printer.
10. Republic of South Africa. 1998. National Environmental Management Act (no 107 of 1998). Pretoria: The Government Printer.
11. Van der Walt, J. 2019. **Heritage Impact Assessment Report for the Proposed Northam Zondereinde 3 Shaft, Limpopo Province.** Unpublished Report HCAC – Heritage Consultants Project No.21863. For: Prism EMS. October 2019.
12. Van Vollenhoven, A.C. **A Report on a Cultural Heritage Impact Assessment for the Proposed Mortimer Smelter SO2 Abatement Project, North West Province.** Unpublished Report Archaeos Culture & Cultural Resource Consultants AE1715V. For: WSP. April 2017.